



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

**SUBJECT: NOTICE OF COMPLETION OF A DRAFT ENVIRONMENTAL
IMPACT REPORT AND OPPORTUNITY FOR PUBLIC COMMENT**

PROJECT TITLE: QUEMETCO CAPACITY UPGRADE PROJECT

PROJECT APPLICANT: QUEMETCO, INC.

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (South Coast AQMD) is the Lead Agency and has prepared a Draft Environmental Impact Report (Draft EIR) for the proposed Project identified above. The Draft EIR includes a project description and analysis of the proposed Project's potential environmental impacts. The purpose of this letter, the attached Notice of Completion (NOC), and the Draft EIR, is to allow public agencies and the public the opportunity to review and comment on the environmental analysis in the Draft EIR.

This letter and the attached NOC for the Draft EIR are not South Coast AQMD applications or forms requiring a response from you. Their purpose is to provide information on the proposed Project. The Draft EIR and other relevant documents, may be obtained by accessing the South Coast AQMD's website at: <http://www.aqmd.gov/home/research/documents-reports/lead-agency-permit-projects> or by contacting South Coast AQMD's Public Information Center by email at PICrequests@aqmd.gov or by calling (909) 396-2039. The NOC and Draft EIR will also be electronically filed with the State Clearinghouse of the Governor's Office of Planning and Research to be posted on their CEQAnet Web Portal which, upon posting, may be accessed via the following weblink: <https://ceqanet.opr.ca.gov/search/recent>. The NOC will also be filed for posting with the Los Angeles County clerk. Additional information about the Quemetco facility, including information about the draft permits, is available from South Coast AQMD's website at: <http://www.aqmd.gov/home/news-events/community-investigations/quemetco>.

Comments focusing on your area of expertise, your agency's area of jurisdiction, if applicable, or issues relative to the environmental analysis for the proposed Project will be accepted during a 61-day public review and comment period beginning October 14, 2021 and ending at 5:00 p.m. on December 14, 2021. **Please send any comments relative to the CEQA analysis in the Draft EIR to Kevin Ni (c/o CEQA) via email to kni@aqmd.gov, via facsimile to (909) 396-3982, or by mail to the address shown above.** Please include the name, phone number and email address of the contact person, and the organization name, if applicable.

The public is invited to attend an informational meeting for the proposed Project on November 10, 2021 at 6:00 p.m. which will be conducted remotely via video conferencing and by telephone, as follows:

Zoom Webinar Link: <https://scaqmd.zoom.us/j/95404102896>

Zoom Webinar ID: 954 0410 2896

Teleconference Dial-In: +1 (669) 900-6833

Spanish Language Webinar ID: 963 4776 6450

Chinese Language Webinar ID: 917 4731 7413

**NOTICE OF COMPLETION (NOC) OF A DRAFT ENVIRONMENTAL IMPACT REPORT
(EIR) AND OPPORTUNITY FOR PUBLIC COMMENT**

To: Governor's Office of Planning and Research
- State Clearinghouse
1400 Tenth St, Suite 222
Sacramento, CA 95814-5502

From: South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765

Project Title: Quemetco Capacity Upgrade Project

Project Applicant: Quemetco, Inc. **South Coast AQMD Facility ID Number:** 8547

Project Location: 720 S. 7th Avenue, City of Industry, CA 91746 (Los Angeles County)

Description of Nature, Purpose, and Beneficiaries of Project: The project applicant, Quemetco, Inc. is seeking modifications to existing South Coast Air Quality Management District (South Coast AQMD) permits for the Quemetco facility to increase the amount of lead product from approximately 460 tons per day (tpd) to 575 tpd and allow the facility to: 1) increase the throughput limit to the rotary/kiln feed dryer and reverberatory furnace from 600 tons per day (tpd) to 750 tpd; 2) increase the temperature of the exhaust from the rotary/kiln feed dryer from 330 degrees Fahrenheit (F) to 450 degrees F; 3) increase the amount of coke material (e.g., calcined coke, petroleum coke, or a combination thereof) processed in the rotary/kiln feed dryer and reverberatory furnace from 600,000 pounds per month (lbs/month) to 750,000 lbs/month; and 4) allow the use of petroleum coke, in lieu of or in addition to calcined coke, as a smelting reagent in the reverberatory furnace and electric arc furnace. Quemetco currently operates the facility and most equipment 24 hours per day except that the rotary/kiln feed dryer and reverberatory furnace operate between 18 and 23 hours per day. The proposed Project would allow the rotary/kiln feed dryer and reverberatory furnace to operate up to 24 hours per day. Potential impacts to air quality and greenhouse gas emissions, energy, hazards and hazardous materials, hydrology and water quality, and transportation were evaluated in the Draft EIR and the analysis concluded that the proposed Project would have less than significant impacts in each of these environmental topic areas. This facility is not identified on lists compiled by the California Department of Toxic Substances Control per Government Code Section 65962.5.

Lead Agency: South Coast Air Quality Management District **Division:** Planning, Rule Development and Area Sources

The NOC, Draft EIR and all supporting documentation are available at:

- 1) **South Coast AQMD CEQA webpage:**
<http://www.aqmd.gov/home/research/documents-reports/lead-agency-permit-projects>
- 2) **South Coast AQMD Public Information Center:**
by email at PICrequests@aqmd.gov and by phone at (909) 396-2039
- 3) **State Clearinghouse of the Governor's Office of Planning and Research website at:**
<https://ceqanet.opr.ca.gov/search/recent>
- 4) **La Puente Library**, 15920 Central Avenue, La Puente, CA 91744
- 5) **Hacienda Heights Library**, 16010 La Monde St, Hacienda Heights, CA 91745

Additional information about the Quemetco facility, including information about the draft permits, is available from South Coast AQMD's website at: <http://www.aqmd.gov/home/news-events/community-investigations/quemetco>.

The NOC is provided to the public through the following:

- Los Angeles Times (October 14, 2021)
 - South Coast AQMD Mailing List & Interested Parties
 - South Coast AQMD Website
 - South Coast AQMD Public Information Center
 - Los Angeles County Clerk
 - La Puente Library and Hacienda Heights Library
 - State Clearinghouse of the Governor's Office of Planning and Research Website
-

Draft EIR Review Period (61 days): October 14, 2021 to December 14, 2021

Scheduled Public Meeting Date(s) (subject to change):

The public is invited to attend an informational meeting for the proposed Project on November 10, 2021 at 6:00 p.m. which will be conducted remotely via video conferencing and by telephone, as follows:

Zoom Webinar Link: <https://scaqmd.zoom.us/j/95404102896>

Zoom Webinar ID: 954 0410 2896

Teleconference Dial-In: +1 (669) 900-6833

Spanish Language Webinar ID: 963 4776 6450

Chinese Language Webinar ID: 917 4731 7413

| | | | |
|---|----------------|--|----------------|
| Send CEQA Comments to South Coast AQMD Contact Person: | Phone: | Email: | Fax: |
| Kevin Ni | (909) 396-2462 | kni@aqmd.gov | (909) 396-3982 |
| Project Proponent/Facility Contact Person: | Phone: | Email: | Fax: |
| Bruce Davis | (626) 937-3221 | Bruce.Davis@ecobat.com | (626) 330-2502 |

Date: October 12, 2021

Signature:



Barbara Radlein
Program Supervisor, CEQA
Planning, Rule Development, and Area Sources

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Draft Environmental Impact Report for Quemetco Capacity Upgrade Project

October 2021

State Clearinghouse No. 2018081096

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EXECUTIVE SUMMARY

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EXECUTIVE SUMMARY

This Executive Summary chapter provides a summary of the proposed Project and its related potential environmental consequences as required by California Environmental Quality Act (CEQA) Guidelines Section 15123. The following sections briefly summarize each chapter of this Environmental Impact Report (EIR).

ES.1 – CHAPTER 1: BACKGROUND

The Quemetco, Inc. (Quemetco) facility processes used lead-based batteries from vehicles and other lead-bearing scrap in order to reclaim lead and recyclable materials. Quemetco currently operates an existing secondary lead smelting facility¹ in the City of Industry, Los Angeles County, California. At this facility, used batteries are received and fragmented, and the lead containing materials are then stored, recovered, purified, and sold to customers for reuse.

The South Coast AQMD permit contains a condition which limits the amount of feed that can be fed to the rotary/kiln feed dryer and reverberatory furnace to 600 tons per day (tpd), referred to as a throughput limit. After this permit was issued, Quemetco made several major improvements to its operations which included enclosing the battery wrecker building and installing air pollution control equipment such as the wet electrostatic precipitator (WESP), Low Temperature Oxidation (LOTOX[®]) and regenerative thermal oxidizer (RTO) which have reduced the facility's overall emissions of air pollutants.

Quemetco is seeking modifications to its existing South Coast AQMD permits for the Quemetco facility to increase the amount of lead product from approximately 460 tons per day (tpd) to 575 tpd and allow the facility to: 1) increase the throughput limit to the rotary/kiln feed dryer and reverberatory furnace from 600 tpd to 750 tpd; 2) increase the temperature of the exhaust from the rotary/kiln feed dryer from 330 degrees Fahrenheit (°F) to 450 °F; 3) increase the amount of coke material (e.g., calcined coke, petroleum coke, or a combination thereof) processed in the rotary/kiln feed dryer and reverberatory furnace from 600,000 pounds per month (lbs/month) to 750,000 lbs/month; and 4) allow the use of petroleum coke, in lieu of or in addition to calcined coke, as a smelting reagent in the reverberatory furnace and electric arc furnace. Quemetco currently operates the facility and most equipment 24 hours per day except that the rotary/kiln feed dryer and reverberatory furnace operate between 18 and 23 hours per day. The proposed Project would allow the rotary/kiln feed dryer and reverberatory furnace to operate up to 24 hours per day.

¹ Primary lead production removes lead from raw ore materials. Secondary lead production reclaims lead from previously manufactured products, such as used car batteries.

CEQA [Public Resources Code Section 21000 et seq., and California Code of Regulations, Title 14, Division 6, Chapter 3] require the evaluation of potential environmental impacts associated with proposed projects and the identification and implementation of feasible methods to reduce, avoid, or eliminate significant adverse impacts that may result from proposed projects.

To fulfill the purpose and intent of CEQA, the South Coast AQMD as lead agency for the proposed Project, prepared and released a Notice of Preparation/Initial Study (NOP/IS) for a 56-day public review and comment period from August 31, 2018 to October 25, 2018 (see Appendix A of this EIR). The NOP/IS was distributed to responsible agencies, neighboring jurisdictions, other public agencies, and interested individuals in order to solicit input on the scope of the environmental analysis to be included in the EIR. During the NOP/IS comment period, the South Coast AQMD held two CEQA Scoping Meetings at the Hacienda Heights Community Center, on September 13, 2018 and October 11, 2018. The South Coast AQMD received a total of 183 comments regarding the NOP/IS during the public comment period as follows: 125 oral comments during CEQA Scoping Meeting #1; 28 oral comments during CEQA Scoping Meeting #2; and 30 written comments. A copy of the written and oral comments received in the form of letters, emails, comment cards, and transcripts, and the responses to those comments are provided in Appendix B.

ES.2 – CHAPTER 2: PROPOSED PROJECT

In order to increase the amount of batteries processed for recycling at the facility and to eliminate the existing Compliance Stop Period of the rotary/kiln feed dryer and reverberatory furnace, Quemetco has applied to modify its existing South Coast AQMD permits to: 1) increase the throughput limit to the rotary/kiln feed dryer and reverberatory furnace from 600 tpd to 750 tpd; 2) increase the temperature of the exhaust from the rotary/kiln feed dryer from 330 °F to 450 °F; 3) increase the amount of coke material (e.g., calcined coke, petroleum coke, or a combination thereof) processed in the rotary/kiln feed dryer and reverberatory furnace from 600,000 lbs/month to 750,000 lbs/month; and 4) allow the use of petroleum coke, in lieu of or in addition to calcined coke, as a smelting reagent in the reverberatory furnace and electric arc furnace.

Currently, due to the existing permit limit, the rotary/kiln feed dryer and reverberatory furnace typically operate approximately 18 to 23 hours per day. With the proposed increase in the amount of batteries the rotary/kiln feed dryer and reverberatory furnace can process, however, the rotary/kiln feed dryer and reverberatory furnace could operate up to 24 hours per day under normal operating conditions. The refined lead product output would increase from approximately 460 tpd to 575 tpd. While the daily throughput will increase, the hourly throughput is expected to stay the same. The type and composition of feed stock received for processing is not expected to change.

The proposed Project also includes the following minor permit modifications which will have no effect on facility emissions or other environmental topic areas:

- Add a new permit condition that would require Quemetco to maintain a differential pressure monitor on the WESP as an additional compliance assurance monitoring parameter;
- Update WESP permit conditions include a requirement to measure pressure drop across the WESP ;
- Add a carbon monoxide (CO) continuous emissions monitoring system (CEMS) to the WESP stack to measure compliance with CO emission limits from the WESP stack as requested by South Coast AQMD; and
- Remove permit conditions that reference obsolete South Coast AQMD compliance requirements.

Quemetco, as part of periodic maintenance, anticipates replacing the rotary/kiln feed dryer baghouse (Device C182) in late 2021; permit condition C6.1 was updated to limit the temperature of exhaust gas entering the rotary/kiln feed dryer baghouse to 450 °F. Permit condition C6.4 currently limits the temperature of exhaust gas exiting the rotary/kiln feed dryer (Device D3) to 330 °F. Quemetco has requested that permit condition C6.4 be updated from 330 °F to 450 °F to increase the bag life and reduce opportunities for incidental lead releases during bag replacement. This proposed exhaust temperature of 450 °F is less than the rotary/kiln feed dryer baghouse bag temperature rating of 500 °F and will have no effect on the facility's emissions as well as no environmental impacts.

Given these minor permit modifications will have no effect on facility emissions as well as no environmental impacts, they will not be evaluated further in Chapter 4 – Environmental Impact Analysis.

This chapter also contains a summary of the facility's existing operations for baseline year 2014. Year 2014 is the most representative baseline data at the time of the preparation of this Draft EIR because it represents the lowest level of baseline operations since Quemetco submitted the permit applications in 2013. Using 2014 as the baseline year, rather than any year since 2013, results in the largest operational change from baseline to proposed Project conditions and therefore, results in a conservative analysis.

ES.3 – CHAPTER 3: ENVIRONMENTAL SETTING

The NOP/IS identified the topics of air quality and greenhouse gas (GHG) emissions, energy, hazards and hazardous materials, and hydrology and water quality as having potentially significant impacts requiring further evaluation in the EIR. In addition, based on a comment on the NOP/IS from Caltrans requesting an analysis of transportation impacts, transportation is also analyzed in this EIR (see Appendix B, comment NOP-5). As such, Chapter 3 of this EIR provides the environmental setting for the following environmental topic areas: air quality and GHG emissions, energy, hazards and hazardous materials, hydrology and water quality, and transportation.

ES.4 – CHAPTER 4: ENVIRONMENTAL IMPACT ANALYSIS

Chapter 4 of this EIR analyzes all potential environmental impacts in the following environmental topic areas: air quality and GHG emissions, energy, hazards and hazardous materials, hydrology and water quality, and transportation. Table ES-1 summarizes all of the proposed Project’s potential impacts in each environmental topic area identified in the NOP/IS as having potentially significant impacts, in addition to transportation (refer to Appendix B, comment NOP-5). Table ES-1 also indicates whether mitigation measures are required.

Table ES-1 Summary of Environmental Impacts, Mitigation Measures and Conclusions

| IMPACT ANALYSIS | CONCLUSION | MITIGATION MEASURES |
|--|-----------------------|---------------------|
| Air Quality and Greenhouse Gases | | |
| <p>Impact AQ-1: Criteria Air Pollutant Analysis: Mass Daily Emissions</p> <p>The proposed Project’s daily criteria pollutant emissions are less than South Coast AQMD’s Air Quality Significance Thresholds for mass daily emissions.</p> | Less Than Significant | None Required |
| <p>Impact AQ-2: Ambient Air Quality Impacts Analysis</p> <p>Air dispersion modeling was conducted based on parameters that correlate to the maximum impacts of the proposed Project. The predicted ambient air quality impacts are less than the applicable ambient air quality standards for all criteria pollutants. Therefore, the proposed Project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation.</p> | Less Than Significant | None Required. |
| <p>Impact AQ-3: Health Risk Assessment Analysis</p> <p>The results of the mobile and stationary source Health Risk Assessments indicate the cancer risk due to the operation of the proposed Project would be less than the significance criterion of 10 cases in one million. The cancer burden due to the operation of the proposed Project is expected to be less than 0.5 cases in one million. The proposed Project’s impacts associated with exposure to non-carcinogenic compounds are expected to be less than the chronic and acute hazard index incremental significance criterion of 1.0. Therefore, cancer risk and non-carcinogenic health impacts from the proposed Project would not expose sensitive receptors to adverse pollutant concentrations.</p> | Less Than Significant | None Required |
| <p>Impact AQ-4: Greenhouse Gas (GHG) Emissions Analysis</p> <p>For the portion of Quemetco’s GHG emissions that are regulated by the California Air Resources Board (CARB) Cap-and-Trade Program, the</p> | Less Than Significant | None Required |

| IMPACT ANALYSIS | CONCLUSION | MITIGATION MEASURES |
|---|--------------------------------------|----------------------|
| <p>proposed Project will result in an increase of approximately 19,761 metric tons per year of carbon dioxide equivalent emissions (MT CO₂e/year). Quemetco’s credit allocation varies each year based on a formula that includes the level of production and the obligation to purchase offsets is based on the credit allocation each year rather than based on the 2014 baseline year emissions. If the proposed Project causes the facility to exceed the number of CO₂e emission credits it has under CARB’s Cap-and-Trade program, Quemetco will be required to purchase offsets to account for the increase. The purchase of offsets would ensure that the potential GHG emissions increase is less than significant. For GHG emissions that are not regulated by CARB’s Cap-and-Trade program (e.g., emissions from mobile sources and indirect electricity sources), the proposed project will increase GHG emissions by approximately 4,373 MT CO₂e/year which is less than South Coast AQMD’s significance threshold of 10,000 MT/year for GHGs.</p> | | |
| <p>Cumulative Air Quality and GHG Impacts</p> <p><u>AQ-1 Criteria Air Pollutants Analysis: Mass Daily Emissions</u></p> <p>The proposed Project’s incremental contribution of criteria pollutants to regional air pollution is not considered cumulatively considerable because each emissions increase is less than the applicable significance threshold. The significance thresholds, by their very nature, are designed to assess whether a project’s incremental contribution to Basin-wide levels of air pollution is cumulatively considerable. (South Coast AQMD 1993 § 6.2.) The proposed Project’s contribution to an existing and projected significant cumulative regional air quality impact will not be cumulatively considerable</p> <p><u>AQ-2: Ambient Air Quality Impacts Analysis</u></p> <p>The air quality modeling demonstrated that the proposed Project’s increased emission of attainment pollutants, when combined with background levels of attainment pollutants, would not cause an exceedance of any NAAQS or CAAQS. Thus, the proposed Project will not have a cumulative impact on attainment pollutants based on violation of an air quality standard. The proposed Project will, however, contribute additional non-attainment pollutants to a basin that is already designated nonattainment. Thus, for non-attainment pollutants, the proposed Project will contribute to an existing significant cumulative impact. The proposed Project’s incremental contribution of non-attainment pollutants, however, is not considered cumulatively considerable because dispersion modeling demonstrated that each incremental contribution was less than the applicable significant change threshold. See Table 4.2-7. Like the mass daily significance thresholds applied to impact AQ-1, the significant change thresholds by</p> | <p>Not cumulatively considerable</p> | <p>None Required</p> |

| IMPACT ANALYSIS | CONCLUSION | MITIGATION MEASURES |
|--|------------------------------|----------------------|
| <p>their nature assess whether a project’s contribution to a significant cumulative impact is cumulatively considerable.</p> <p><u>AQ-3 Health Risk Assessment Analysis</u></p> <p>The proposed Project’s contribution to an assumed significant cumulative health risk, is not cumulatively considerable because the proposed Project will comply with the requirements set forth in the 2016 AQMP. As explained in the 2016 AQMP, the South Coast AQMD has a “robust, multifaceted, and comprehensive air toxics regulatory program” consisting of rules, permitting requirements, the AB 2588 program for existing sources of air toxics, and some source-specific rules. As described in Section 3.2.2.3.1, Rules 1401 and 212 apply to new and modified sources of toxic air contaminants, and Rule 1402 applies toxic air contaminants from existing sources. Rule 1420 imposes a variety of requirements on facilities that process or use lead-containing materials. Rule 1420.1 entitled “Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities” applies exclusively to the Quemetco facility (because Quemetco is the only large lead-acid battery recycler in the Basin). Rule 1420.1 imposes a variety of requirements on Quemetco designed to limit public exposure to lead and other toxic air contaminants.</p> <p><u>AQ-4 GHG Emissions Analysis</u></p> <p>Based on the effects of global climate change, the cumulative effect of all GHG emissions is considered to be significant. The proposed Project’s incremental contribution of GHG emissions, however, is not considered to be cumulatively considerable. Like the significance thresholds applied in the AQ-1 and AQ-2 analyses, the thresholds applied to increased GHG emissions by their nature assess whether a project’s incremental contribution to a significant cumulative impact is cumulatively considerable. Since the threshold is not exceeded, the proposed Project will not have a significant cumulative impact on GHG emissions.</p> | | |
| Energy | | |
| <p>Impact EN-1: Project Impacts on Electricity Loads for Peak and Base Periods</p> <p>The proposed Project’s anticipated electricity usage increase would constitute 0.0096% of all sectors and 0.034% of the industrial sector. The anticipated increase in electricity usage from implementing the proposed Project would not exceed South Coast AQMD’s significance threshold for energy.</p> | <p>Less Than Significant</p> | <p>None Required</p> |

| IMPACT ANALYSIS | CONCLUSION | MITIGATION MEASURES |
|---|-------------------------------|---------------------|
| <p>Impact EN-2: Wasteful Energy Consumption</p> <p>The proposed Project will not involve construction activities, but operation of the proposed Project will consume additional electricity to allow for processing the additional feed stock. While operation of the proposed Project will increase energy consumption over the existing baseline, this energy use would not be wasteful or inefficient because: (1) the existing facility’s infrastructure will be used to increase an existing facility’s efficiency and output, reducing the need to construct new facilities elsewhere; and (2) regional energy resources currently utilized to divert used lead-acid batteries to destinations outside the region, state and country would be reduced.</p> | Less Than Significant | None Required |
| <p>Impact EN-3: New or Expanded Utility Facilities</p> <p>The proposed Project is not anticipated to have any impact on telecommunication facilities, and the facility’s natural gas and electricity providers have indicated that they can and will serve the expanded demand for natural gas and electricity with the existing utility infrastructures. Therefore, the proposed Project would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunication facilities.</p> | Less Than Significant | None Required |
| <p>Cumulative Energy Impacts</p> <p>The proposed Project’s contribution to the cumulative energy impact is not considered cumulatively considerable. The proposed Project will only increase electricity use at SCE by 0.0096% for all sectors and 0.034% for the industrial sector. This increase is a very small fraction of the 1% significance threshold. In addition, SCE has confirmed its ability to meet the proposed Project’s increased demand for electricity.</p> | Not Cumulatively Considerable | None Required |
| Hazards and Hazardous Materials | | |
| <p>Impact HAZ-1: Transport, Use and Disposal of Hazardous Materials and Hazardous Waste</p> <p>The proposed Project would increase the feed stock throughput limit for the rotary/kiln feed dryer and the reveratory furnace, which would increase the amount of received feed stock, used additives (primarily smelting reagent, limestone, and cobbled steel), recycled metals and plastics, and landfilled slag. Under the proposed Project, the same regulations, plans and procedures for the transport and use of hazardous materials as well as the handling, transport, and disposal of hazardous waste will continue to apply to the Quemetco facility if the proposed Project is implemented. Quemetco</p> | Less Than Significant | None Required |

| IMPACT ANALYSIS | CONCLUSION | MITIGATION MEASURES |
|---|------------------------------|----------------------|
| <p>will continue to comply with all applicable design codes and regulations, and conform to federal, state, and local rules, regulations, policies, and procedures concerning transport, use, and storage of hazardous materials; and the transport, generation, storage, and disposal of hazardous wastes. Thus, the proposed Project is not expected to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials and hazardous waste.</p> | | |
| <p>Impact HAZ-2: Potential Release of Hazardous Materials and Hazardous Waste</p> <p>The proposed Project will result in additional hazardous materials being stored, used, and transported (including raw material scrap, additives, recycled waste, landfilled waste, discharged waste and finished product). The proposed Project would neither change any physical structures, equipment, or operations, nor require the application of any new regulatory programs to the facility’s operations. The same programs, plans, and regulations regarding prevention and response to accidental release of chemicals, and the potential release of hazardous materials will continue to apply to the Quemetco facility if the proposed Project is implemented. Moreover, the analysis indicates that no exceedances of the ERPG-2 concentration level are expected to occur as a result of the proposed Project. Therefore, the proposed Project is not expected to create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.</p> | <p>Less Than Significant</p> | <p>None Required</p> |
| <p>Impact HAZ-3: Hazardous Materials Site</p> <p>At the time of publication of the NOP/IS for the proposed Project (refer to Appendix A), it was assumed that Quemetco was included on DTSC’s Cortese List. However, at the time of publication of this EIR, Quemetco is not included on the Cortese list. Therefore, the proposed Project would not create a significant hazard to the public or the environment due to being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5.</p> | <p>Less Than Significant</p> | <p>None Required</p> |
| <p>Impact HAZ-4: Potential Fire Hazards</p> <p>The proposed Project does not include any new types of flammable materials onsite nor does it involve physical facility modifications or new activities which could contribute to a change in fire hazards. There are no new regulations or requirements regarding flammable materials which would be triggered due to the proposed Project. The Quemetco facility is</p> | <p>Less Than Significant</p> | <p>None Required</p> |

| IMPACT ANALYSIS | CONCLUSION | MITIGATION MEASURES |
|---|--------------------------------------|----------------------|
| <p>expected to continue to operate in accordance with the same applicable fire protection standards, codes, and regulations for potential fire hazards if the proposed Project is implemented. Therefore, the proposed Project is not expected to adversely increase fire hazard in areas with flammable materials.</p> | | |
| <p>Cumulative Hazards and Hazardous Materials Impacts</p> <p>The proposed Project’s contribution to cumulative hazards impacts is not considered cumulatively considerable. South Coast AQMD considers projects that do not conform with hazards and hazardous materials regulations or that generate exposure greater than ERPG-2 level as presented in Table 4.4-3 to exceed project-specific significance thresholds and therefore to be cumulatively considerable. The Quemetco operation already involves the transportation and handling of hazardous materials and hazardous waste, and the incremental increase will not substantially increase the risks of upset or other hazards. In addition, the transportation and handling of hazardous materials and waste is heavily regulated at the federal, state, and local level. .</p> | <p>Not cumulatively considerable</p> | <p>None Required</p> |
| <p>Hydrology and Water Quality</p> | | |
| <p>Impact HYD-1: Wastewater Discharge and Surface and Groundwater Quality Impacts</p> <p>The proposed Project would increase the feed rate, which would result in an increase in the water demand and amount of wastewater generated at the facility. The facility would not require additional stormwater collection under the proposed Project, and the composition of the effluent wastewater would remain essentially the same as the pre-Project values. The proposed Project would not exceed the permitted wastewater discharge rate or concentration limits. Additionally, the proposed Project does not affect the units involved in the groundwater monitoring program and is not expected to have an impact on groundwater quality. Therefore, the proposed Project is not expected to violate any water quality standards, waste discharge requirements, or otherwise substantially degrade surface or ground water quality.</p> | <p>Less Than Significant</p> | <p>None Required</p> |

| IMPACT ANALYSIS | CONCLUSION | MITIGATION MEASURES |
|---|--------------------------------------|----------------------|
| <p>Impact HYD-2: Applicable Water Quality Control Plans or Sustainable Groundwater Management Plans Impacts</p> <p>The proposed Project will increase the quantity of wastewater discharged, and will have a less than significant impact on water supply and water quality. The same hydrology and water quality rules, regulations, standards, and plans will continue to apply to the Quemetco facility if the proposed project is implemented. For these reasons, the proposed Project would not conflict with or obstruct implementation of a sustainable groundwater management plan</p> | <p>Less Than Significant</p> | <p>None Required</p> |
| <p>Cumulative Hydrology and Water Quality Impacts</p> <p>The proposed Project’s contribution to the cumulative impact is not considered cumulatively considerable. The increase in wastewater discharge to LACSD is within the limits of the facility’s existing discharge permit. In addition, the facility collects stormwater runoff and will add no new impervious surfaces.</p> | <p>Not Cumulatively Considerable</p> | <p>None Required</p> |
| Transportation | | |
| <p>Impact TRANS-1: Potential VMT Impacts</p> <p>The proposed Project will result in an increase of six daily employee commute trips by automobile (passenger vehicles and light trucks). Consequently, for the purpose of automobile VMT, the proposed Project is expected to generate less than the 110 trips per day for employee commute trips and can be screened out from requiring a further VMT analysis for employee commute trips in accordance with OPR's guidance for small projects. The proposed Project will result in an increase of 15 new daily round trip truck trips which will cause an overall increase in localized VMT and trip generation. Thus, on a regional basis, the proposed Project operations could potentially reduce regional and statewide truck VMT.</p> | <p>Less Than Significant</p> | <p>None Required</p> |
| <p>Impact TRANS-2: Project Impacts for Ramp Turning Radius for Trucks</p> <p>The proposed Project will increase daily truck traffic by up to 15 trucks. An evaluation of the truck turn movements for the northbound and southbound on- and off-ramps at the interchange of State Route 60 and S. 7th Avenue was prepared to address impacts. The analysis determined that the existing ramp geometrics and turning radii are adequate for the existing and proposed truck movements through these on- and off-ramps.</p> | <p>Less Than Significant</p> | <p>None Required</p> |

| IMPACT ANALYSIS | CONCLUSION | MITIGATION MEASURES |
|--|-----------------------------|----------------------|
| <p>Cumulative Transportation Impacts</p> <p>The turning movements of the on- and off-ramps with 7th Avenue and SR-60 intersections are functional and therefore, based on this assessment, cumulative baseline turning radii are not cumulatively significant. Thus, no further analysis is required.</p> | <p>No Cumulative Impact</p> | <p>None Required</p> |

ES.5 – CHAPTER 5: PROJECT ALTERNATIVES

This EIR provides a discussion of alternatives to the Quemetco Capacity Upgrade Project. Although all potential impacts were found to be less-than-significant, the South Coast AQMD has included an evaluation of project alternatives.

According to the CEQA Guidelines, alternatives should include realistic measures to attain the basic objectives of the proposed Project and provide means for evaluating the comparative merits of each alternative. In addition, though the range of alternatives must be sufficient to permit a reasoned choice, they need not include every conceivable project alternative. Alternatives presented in this chapter were developed by reviewing alternative options to reduce the proposed Project’s potential air quality, energy, hazards and hazardous wastes, hydrology and water quality and transportation impacts.

The primary purpose of the Quemetco facility and the Capacity Upgrade Project is to allow the facility to recycle more batteries to accommodate the existing and future demand for local and regional lead-acid battery and secondary scrap recycling services, and to eliminate the existing daily Compliance Stop Period, which requires shutting down of the rotary/kiln feed dryer and idling of the reverberatory furnace. Thus, the objectives of the proposed Project are to:

1. Accommodate the existing and future need for local, regional, and state lead-acid battery and secondary scrap recycling services, to reduce diversion of lead-acid battery and lead scrap materials out of state.
2. Minimize the need to import calcined coke, if local supplies are not available as a smelting reagent, by allowing the substitution of locally available petroleum coke.
3. Maximize facility productivity and efficiency by more efficiently utilizing existing equipment and reducing inefficient fuel consumption, while assuring compliance with all applicable regulatory requirements.
4. Protect local jobs, including and especially union jobs, within the City of Industry through continued operation of the existing Quemetco facility.
5. Reduce the need for the construction and operation of new battery recycling facilities elsewhere in the region, state, or country by improving the efficiency of an existing facility.

ES.6 – CHAPTER 6: OTHER CEQA CONSIDERATIONS

As required by CEQA, Chapter 6 of the EIR includes a discussion of the following: (1) significant environmental effects of the proposed Project; (2) significant environmental effects that cannot be avoided if the proposed Project is implemented; (3) significant irreversible environmental changes which would be involved in the proposed Project should it be implemented; and (4) growth-inducing impacts.

ES.7 – CHAPTER 7: ACRONYMS AND ABBREVIATIONS

Information on the acronyms and glossary are presented in Chapter 7.

ES.8 – CHAPTER 8: REFERENCES

Information on references cited (including organizations and persons consulted) is presented in Chapter 8.

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CHAPTER 1

BACKGROUND

Introduction

California Environmental Quality Act and Basis for Decision to Prepare an Environmental
Impact Report

Scope and Content

Areas of Controversy and Environmental Concern

1.0 BACKGROUND

1.1 INTRODUCTION

Nearly 85% of all the lead in use today goes into the production of lead-acid batteries, most of which are automobile batteries (WHO, 2017). When these lead-acid batteries are expended, the majority of them are recycled to make new batteries. The demand for battery recycling has grown concurrently with the escalating demand for automobile batteries. As of 2019, there were approximately 1.4 billion vehicles in operation, and it is estimated there will be 1.8 billion vehicles in use in 2035 (Wards, 2020). Additionally, the growing telecommunications industry, energy storage industry, and data industry are expected to be the most significant catalyst driving the growing demand in the lead-acid battery market (Market and Markets, 2019).

Lead-acid battery recycling reduces potential impacts to landfills and reduces the potential for toxic components of lead-acid batteries to contaminate soil and water resources if not properly recycled. Lead-acid batteries are 99% recyclable, avoiding the environmental impacts from landfilling, but can still lead to lead contamination if recycled improperly (Forbes, 2020).

On a global scale, lead-acid battery recycling is often performed informally where environmental regulations are less stringent, and enforcement is lacking. Much of this recycling is performed without official oversight or regulation. In such countries, lead-acid battery recycling is often carried out without the necessary processes and technologies to control lead emissions. The export of lead-acid batteries from the United States to other international facilities could potentially result in increased environmental impacts, including air toxic emissions, due to less stringent environmental regulations, leading to potential lead exposure and poisoning (WHO, 2017).

Quemetco is the sole lead-acid battery recycling facility in California. Quemetco purchases used batteries in a competitive open market. The global battery recycling market is projected to increase at a compound annual growth rate of 5.3% between 2019 and 2027 (Emergen Research, 2020). Currently, there are more used batteries generated annually within California than there is in-state capacity to process and recycle them. Approximately 30-40% of lead scrap and spent lead-acid batteries that are not locally recycled in the state are exported out of California (Appendix E). The most common domestic destinations are battery recycling facilities in Texas or further east; however, significant tonnage is also sent to Mexico, Canada, and Korea.

Quemetco operates an existing secondary lead smelting facility in the City of Industry, Los Angeles County, California. The Quemetco facility processes used lead-acid batteries from vehicles and other lead bearing scrap in order to reclaim lead and recyclable materials. At this facility, used batteries are received, fragmented, and the lead containing materials are then stored, recovered, purified, and sold to customers for reuse.

The Quemetco facility is subject to increasingly stringent federal, state, and regional regulations. It is subject to oversight from a number of regulatory agencies including, among others, the South Coast AQMD, the California Environmental Protection Agency, Department of Toxic Substances

Control, the Regional Water Quality Control Board, the Los Angeles County Fire Department, and the Los Angeles County Sanitation District.

The facility is operated pursuant to permits issued by the South Coast AQMD. Quemetco has applied to the South Coast AQMD for a modification to its permits that would increase the amount of batteries that can be processed at its facility for recycling (referred to as the “Quemetco Capacity Upgrade Project” or the “proposed Project”). This increase is designed to accommodate the existing and future demand for local, regional, and state lead-acid battery recycling services. This increase will reduce the diversion of lead-acid battery and other lead scrap materials out of state and the corresponding environmental impacts of that diversion such as increased vehicle miles traveled, greenhouse gas emissions, and other environmental impacts that could occur at facilities with less stringent regulatory oversight. It will also reduce the need for the construction and operation of new battery recycling facilities elsewhere, including within the region or state and the corresponding environmental impacts of that construction and operation.

The South Coast AQMD permit contains a condition which limits the amount of feed that can be fed to the reverberatory furnace to 600 tons per day (tpd). After this permit was issued, Quemetco made several major improvements to its operations which included enclosing the battery wrecker building and installing the WESP, LOTOX[®], and RTO to control lead emissions. Because these improvements have reduced the facility’s overall air pollutant emissions, Quemetco is requesting to increase the throughput to the rotary/kiln feed dryer and reverberatory furnace.

The facility’s permit currently includes a maximum daily throughput limit. When the maximum daily throughput limit is met, the facility stops processing feed and certain equipment is reduced to an idling mode. This is known as the Compliance Stop Period. The facility has also applied to the South Coast AQMD to modify its permits to eliminate the existing Compliance Stop Period. This will allow the facility to utilize existing equipment more efficiently and to reduce inefficient fuel consumption while recycling more batteries and lead scrap.

The facility currently uses calcined coke as a smelting reagent. There are a limited number of calciners in California and aluminum smelters take priority (based on their ability to buy in volume and consume most if not all available calcined coke) in this market. Some years there is calcined coke for Quemetco to purchase; some years, there is no calcined coke available for Quemetco to purchase. Calcined coke has become less available and, in many cases, must be imported from outside the South Coast Air Basin including from Northern California. For this reason, the facility has further applied to the South Coast AQMD to modify its permits to allow petroleum coke to be used as a smelting reagent in lieu of or in addition to calcined coke. This would minimize the need to import calcined coke, if local supplies are not available, by allowing the substitution of locally available petroleum coke. The facility already uses petroleum coke as a purifying agent in the refining process.

Thus, the objectives of the proposed Project are to:

1. Accommodate the existing and future need for local, regional, and state lead-acid battery and secondary scrap recycling services, to reduce diversion of lead-acid battery and lead scrap materials out of state.

2. Minimize the need to import calcined coke, if local supplies are not available as a smelting reagent, by allowing the substitution of locally available petroleum coke.
3. Maximize facility productivity and efficiency by more efficiently utilizing existing equipment and reducing inefficient fuel consumption, while assuring compliance with all applicable regulatory requirements.
4. Protect local jobs, including and especially union jobs, within the City of Industry through continued operation of the existing Quemetco facility.
5. Reduce the need for construction and operation of new battery recycling facilities elsewhere in the region, state, or country by improving the efficiency of an existing facility.

The facility has also applied for further permit modifications that would aid in implementing these changes. A detailed Project Description is set forth in Chapter 2.

The type and composition of feed stock received for processing would not change as a result of the proposed Project. Also, implementation of the proposed Project would not require any physical changes to existing equipment. In other words, no construction will be required to implement the proposed Project. See Chapter 2 for more detailed proposed Project and facility information.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT AND BASIS FOR DECISION TO PREPARE AN ENVIRONMENTAL IMPACT REPORT

The California Environmental Quality Act (CEQA) [Public Resources Code Section 21000 et seq., and California Code of Regulations (CCR), Title 14, Division 6, Chapter 3] requires that the potential environmental impacts of proposed projects be evaluated and that feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects be identified and implemented. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant effect upon the environment [Public Resources Code Section 21067]. The proposed modifications at the Quemetco facility constitute a project as defined by CEQA.

The proposed modifications to the existing stationary source equipment permits issued by the South Coast AQMD require discretionary approval. Therefore, the South Coast AQMD is the most appropriate public agency to act as lead agency and is responsible for preparing the Environmental Impact Report (EIR) for the proposed Project [CEQA Guidelines Section 15051(b)]. In accordance with CEQA Guidelines Section 15121(a), the purpose of an EIR is to serve as an informational document that: “will inform public agency decision-makers and the public generally of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project.”

To fulfill the purpose and intent of CEQA, the South Coast AQMD as the lead agency for the proposed Project, prepared and released a Notice of Preparation/Initial Study (NOP/IS) for a 56-day public review and comment period from August 31, 2018 to October 25, 2018 (see Appendix A). The NOP/IS was distributed to responsible agencies, neighboring jurisdictions, other public

agencies, and interested individuals in order to solicit input on the scope of the environmental analysis to be included in the EIR. As part of releasing this CEQA document for public review and comment, the South Coast AQMD also provided a formal notice of the proposed Project to all California Native American Tribes (Tribes) that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code Section 21080.3.1(b)(1). In addition, Public Resources Code Section 21080.3.1(d) provides a 30-day period during which a Tribe may respond to the formal notice, in writing, requesting consultation on the proposed Project. No tribal consultations were requested. During the NOP/IS comment period, the South Coast AQMD held two CEQA Scoping Meetings at the Hacienda Heights Community Center, on September 13, 2018 and October 11, 2018.

The NOP/IS provided a preliminary analysis of the proposed Project's potential environmental impacts. The potentially significant environmental impacts identified in the NOP/IS form the basis for and focus of the technical analyses in this EIR. The NOP/IS concluded that the proposed Project had the potential to create significant environmental impacts in the following environmental topic areas: air quality and greenhouse gas (GHG), energy, hazards and hazardous materials, and hydrology and water quality. The NOP/IS also dismissed the following environmental topics areas as having either no impact or less than significant impacts: aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and oils, land use planning, mineral resources, noise, population and housing, public services, recreation, solid and hazardous waste, and transportation.

The South Coast AQMD received a total of 183 comments regarding the NOP/IS during the public comment period as follows: 125 oral comments during CEQA Scoping Meeting #1; 28 oral comments during CEQA Scoping Meeting #2; and 30 written comments. A copy of the comments received (in the form of letters, emails, comment cards, and transcripts of oral comments made at the second, more formal scoping hearing), and the responses to those comments are provided in Appendix B.

In a comment on the NOP/IS, Caltrans requested a further analysis of specified transportation impacts. Thus, transportation is also analyzed in this EIR (See Appendix B, Comment NOP-5).

Additionally, since the release of the NOP/IS, the Environmental Checklist Form as provided in CEQA Guidelines Appendix G was updated in January 2019. The updated checklist included new impact areas and updated checklist questions. In response to these changes, the South Coast AQMD updated its Lead Agency Environmental Checklist.

Chapter 4 - Environmental Impact Analysis, provides an assessment of these updated South Coast AQMD's Lead Agency Environmental Checklist questions for those environmental topics that were deemed potentially significant in the IS/NOP.

Further, Chapter 6 - Other CEQA Considerations, Section 6.1: Environmental Effects Found Not to Be Significant, includes a summary of the new and/or updated checklist questions for those environmental topics that were deemed to have less than significant impacts in the IS/NOP. Otherwise, no changes to the scope of this EIR have been implemented as a result in the changes

made to South Coast AQMD's Lead Agency CEQA Environmental Checklist implemented in early 2019.

1.3 SCOPE AND CONTENT

The following discussion summarizes the scope and content of this EIR. This chapter contains a summary of the proposed actions and its consequences [CEQA Guidelines Section 15123], Chapter 2 contains a complete and comprehensive project description [CEQA Guidelines Section 15124], and Chapter 3 contains the environmental setting which describes the physical environmental condition in the vicinity of the proposed Project which normally constitutes the baseline physical conditions by which a lead agency determines whether an impact is significant [CEQA Guidelines Section 15125].

The following environmental topic areas were deemed to be potentially significant in the NOP/IS and are further analyzed [CEQA Guidelines Section 15126.2] in Chapter 4 of this document: air quality and GHG emissions, energy, hazards and hazardous materials, and hydrology and water quality. Additionally, in response to a comment from Caltrans, the proposed Project's transportation impacts are evaluated in Chapter 4. As detailed in the introduction of each impact area, some of the environmental checklist questions were evaluated and determined to be less than significant in the NOP/IS and not further analyzed in the EIR. Additionally, changes in the environmental checklist in 2019, after the release of the NOP/IS, were considered and some new questions were added to the scope of this EIR for the topic areas which were evaluated in Chapter 4 of this document.

CEQA Guidelines Section 15126.4 requires the consideration and discussion of mitigation measures proposed to minimize potentially significant impacts. Based on the evaluation in Chapter 4, however, none of the proposed Project's impacts are potentially significant. Pursuant to CEQA Guidelines Section 15130, a discussion of potential cumulative impacts is required and provided in Chapter 4. The analysis identified the proposed Project would also not have significant cumulative impacts. For this reason, mitigation measures are not required for the proposed Project.

CEQA Guidelines Section 15126.6 requires the consideration and discussion of a range of reasonable alternatives to the proposed Project or to the location of the proposed Project, which would feasibly attain most of the basic objectives of the proposed Project but would avoid or substantially lessen any of the proposed Project's potentially significant effects and evaluate the comparative merits of the alternatives. Based on the analysis of the potential impacts in Chapter 4 the proposed Project would not result in any potentially significant impacts. Nonetheless, Chapter 5 of this EIR analyzes a range of reasonable alternatives to aid the public and decisionmakers in understanding the proposed Project.

A discussion of environmental topics that were not further analyzed in this EIR, is provided in Chapter 6 and in the NOP/IS (see Appendix A).

1.4 AREAS OF CONTROVERSY AND ENVIRONMENTAL CONCERN

In accordance with CEQA Guidelines Section 15123(b)(2), the areas of controversy known to the lead agency, including issues raised by agencies and the public, shall be identified in the CEQA document. The NOP/IS was circulated in the City of Industry and to neighboring jurisdictions, responsible agencies, other public agencies, and interested individuals in order to solicit input on the scope of the environmental analysis to be included in the EIR. The South Coast AQMD also held two CEQA Scoping Meetings for the proposed Project at the Hacienda Heights Community Center (1234 Valencia Avenue, Hacienda Heights, California 91745) and both of which were attended by various agency representatives, public officials and members of the public on: 1) September 13, 2018 and 2) October 11, 2018. The attendees were provided an opportunity to comment on the proposed Project.

The South Coast AQMD received a total of 183 comments relative to the NOP/IS during the public comment period as follows: 125 oral comments during CEQA Scoping Meeting #1; 28 oral comments during CEQA Scoping Meeting #2; and 30 written comments. A copy of the comments received (in the form of letters, emails, comment cards, and transcripts of oral comments made at the second, more formal scoping meeting), and the responses to those comments are provided in Appendix B of this EIR. Issues raised during the NOP/IS in the comments relative to potential impacts from the proposed Project were addressed in the EIR.

South Coast AQMD received a letter from Caltrans, a commenting agency, requesting a further evaluation of transportation impacts. Thus, in response to this comment, the environmental topic area of transportation has been evaluated further in this EIR.

Several comments on the NOP/IS raised similar issues. As such, these issues have been identified as areas of controversy which are provided in Table 1-1. No other areas of controversy have been communicated to the South Coast AQMD prior to release of this EIR for public review and comment.

Table 1-1 Areas of Controversy Raised During NOP/IS Comment Period

| | Issue of Controversy | Topics Raised by the Public | South Coast AQMD Staff Evaluation |
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| 1 | South Coast AQMD's evaluation of the project, and the CEQA process. | South Coast AQMD should not begin evaluating this project under CEQA until after the compliance issues are resolved. | <ul style="list-style-type: none"> • Preparation of the NOP/IS was the first step in the CEQA process for this proposed Project. The NOP/IS described the proposed Project and identified the environmental topic areas that could potentially be adversely affected by the Project and that required further review in an EIR. The South Coast AQMD circulated the NOP/IS for public review and comment and held two CEQA scoping meetings to notify the community of the proposed Project, the permit evaluation process, the CEQA review process, and to discuss the contents of the NOP/IS and the next steps. • South Coast AQMD then prepared a Draft EIR. The purpose of the EIR is to evaluate the environmental topic areas identified in the NOP/IS and additional topic areas identified during the public review of the NOP/IS. The South Coast AQMD's Draft EIR identifies and discloses to the public and decision makers the proposed Project's potentially significant environmental impacts as compared to the existing physical conditions in the environment (known as baseline conditions). South Coast AQMD circulated the Draft EIR for public review and comment and will hold a public meeting to alert the community to the proposed Project, the permit evaluation process, the CEQA review process, and to receive comments on the contents of the Draft EIR and its conclusions. • Prior to issuing a permit, Health and Safety Code Section 42301(b) requires that an established air district permit system prohibit a facility from receiving a permit unless the air district is satisfied that the project being permitted will comply with all South Coast AQMD, California Air Resources Board, and EPA regulatory requirements. The South Coast AQMD performs a thorough permit analysis to evaluate the maximum potential emissions from the permitted equipment and the resulting potential health risk impacts. Permit conditions are developed to provide operating parameters to ensure emissions stay below acceptable permit limits and risk levels as |

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| | | | <p>established through regulatory requirements. As a result of the permitting analysis, if a permit is issued, it is expected that the facility is or will be able to meet all air quality related regulatory requirements and operate in a manner that is protective of public health. The South Coast AQMD Executive Officer or designee will consider whether to approve the project after considering the permit evaluation and the CEQA analysis. (Health and Safety Code Section 42300(a); South Coast AQMD Administrative Code, Section 15.3.)</p> |
| 2 | <p>South Coast AQMD's independent judgement and oversight of the project.</p> | <p>South Coast AQMD personnel and decision-makers are being financially influenced by the applicant.</p> | <ul style="list-style-type: none"> • South Coast AQMD's evaluation of the proposed Project is based on an independent review of the evidence which includes, but is not limited to, emissions monitoring data, source test data, evaluation of the applicable rules and regulations, and consultation and cooperation with other agencies which have oversight over the facility's operations. The applicant, Quemetco, is required to pay fees associated with submitting applications for the proposed Project and is responsible for paying the costs associated with South Coast AQMD staff time and materials utilized to evaluate the proposed Project and prepare the necessary CEQA documentation. All applicants seeking new or modified permits are required to pay these fees pursuant to South Coast AQMD Regulation III – Fees. This funding approach is used by public agencies throughout California. Moreover, the process of evaluating the proposed Project and the decision to either approve or deny the proposed Project must be based on the independent judgment of the South Coast AQMD. |

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| 3 | Potential Environmental Impacts | a. An increase in any environmental impacts to the local community and the region should not be allowed. | <ul style="list-style-type: none"> • The permitting process, including the CEQA process, requires an evaluation of the proposed Project’s potential impacts but does not prohibit increases in environmental impacts. • Pursuant to its authority under federal and state environmental laws, the South Coast AQMD has imposed stringent regulations on the Quemetco facility. Specifically, as part of the permitting process, all permit modifications are reviewed for compliance with, among others, South Coast AQMD Rule 1401. A detailed discussion of the rules and regulations which are applicable to the proposed Project are presented in EIR Chapter 3 – Environmental Setting. • The NOP/IS analyzed the proposed Project’s potential impacts to aesthetics, agriculture and forestry resources, biological resources, cultural resources, geology and soils, land use and planning, mineral resources, noise, population and housing, public services, recreation, and solid and hazardous waste, and found they would be less than significant; therefore, they are not analyzed further in the EIR. • The EIR analyzed the proposed Project’s potential air quality and GHG emissions, energy, hazards and hazardous materials, hydrology and water quality, and transportation impacts as well as cumulative impacts in Chapter 4 – Environmental Impact Analysis. • The EIR evaluated the topics added to the South Coast AQMD CEQA environmental checklist since the release of the NOP/IS (see Chapter 6 of the EIR) and found no new potentially significant impacts. • The analysis in the EIR concluded that all environmental topic areas would have less than significant impacts such that mitigation measures are not required. |
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| | | <p>b. Analysis of sensitive receptors (schools) and the distances from the facility was inconsistent.</p> | <ul style="list-style-type: none"> The map of schools attached to the NOP/IS identified those sensitive receptors within a two-mile radius of the Quemetco facility and was not intended to be a comprehensive map of all sensitive receptors included in the impact assessments for the various impact areas. The proposed Project’s environmental impacts in both the NOP/IS and EIR were analyzed according to the significance criteria for each environmental topic area. For example, the HRA in Section 4.2 (as supported in Appendix D.1) of the EIR utilizes a 10-kilometer grid (equivalent to 6.2 miles), while some of the other environmental checklist questions from the Appendix G checklist for hazards and hazardous materials refer to impacts within one-quarter mile of a school or two miles of an airport. |
| | | <p>c. The project proposes to increase the throughput limit by 25 percent which means emissions will increase by 25 percent.</p> | <ul style="list-style-type: none"> As described in the Draft EIR (Chapter 2 – Project Description), Quemetco operates multiple air pollution control systems comprised of the following equipment: baghouses, scrubbers, low temperature oxidation of nitrogen oxides (LOTOX[®]), a wet electrostatic precipitator (WESP) to reduce metal toxic air contaminant emissions including lead, and a regenerative thermal oxidizer (RTO) to reduce volatile organic compound (VOC) emissions, including gaseous toxic air contaminants from the rotary feed drying furnace. The facility also operates continuous emissions monitoring (CEMS) for CO₂, NO_x, SO_x and arsenic and, as required by Rule 1420.1, there are four (4) fence-line monitors that continuously monitor lead and arsenic in ambient air to ensure control equipment is operating properly and controlling emissions. Due to the facility’s complex air pollution control systems, the proposed throughput increase is not directly proportional to a potential emissions increase. Specifically, while there may be a 25% increase in the permit throughput limit on the rotary/kiln feed dryer and reverberatory furnace as well as in refined lead, with the existing air pollution control systems in place, the analysis in the EIR indicates that the potential increase emissions is not directly proportional to the throughput increase (refer to Chapter 4 – |

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| | | | <p>Environmental Impact Analysis in the EIR). Moreover, the potential increase in emissions would not exceed South Coast AQMD’s air quality significance thresholds (see Tables 4.2-5, 4.2-7, 4.2-8 and 4.2-9 in the EIR) including Rule 1420.1, which establishes lead, benzene, 1,3 butadiene, and arsenic emission limits from the stack and ambient monitoring requirements and limits for lead and arsenic. Since the proposed Project’s potential air quality and GHG impacts would be less than significant, mitigation measures are not required.</p> <ul style="list-style-type: none"> • Draft EIR Section 3.2 reports Quemetco’s most recent emissions for criteria and air toxic pollutants. • Section 4.2 and Appendix D of the Draft EIR includes an assessment of regional and localized air quality impacts (including air toxics such as lead, arsenic, 1,3-butadiene, benzene, and diesel particulate matter under normal operating conditions) to the surrounding community, including schools, and concludes that the proposed Project’s potential impacts would be less than significant. |
| | | <p>d. The project should not be evaluated until after the soils testing of the potential toxic metals in the soil is completed and the soil around the plant is cleaned up.</p> | <ul style="list-style-type: none"> • The DTSC soils remediation activities, as described in detail in Section 3.4 of the EIR, address historic soil contamination. DTSC has been working with Quemetco to address historic soils contamination through collection of soil samples, establishment of a work plan for corrective action and implementation of that workplan. The area designated as the “Quemetco Impacted Area” has been remediated, reviewed by DTSC and approved (refer to Section 3.4). • DTSC has oversight of the treatment, transfer, and storage of hazardous waste at the facility pursuant to California Health and Safety Code, Division 20, Chapter 6.5 and its Hazardous Waste Operation and Post-Closure Permit. DTSC’s soil remediation activities are guided by its rules, regulations, and permit with Quemetco. DTSC has separate and independent authority from South Coast AQMD’s oversight for air permitting rules and regulations. For these reasons, South Coast AQMD can proceed with its permitting |

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| | | <p>activities in parallel to DTSC managing Quemetco’s soil remediation activities.</p> <ul style="list-style-type: none"> • The proposed Project assessed in this EIR does not result in any soils disturbance; therefore, no new soils contamination would be exposed by ground disturbance. • The facility emits air toxics, and there is public concern about new toxic metal deposits on offsite property from the facility air emissions. As described in Section 3c of this table, to ensure compliance with permit conditions including South Coast AQMD Rule 1420.1 which establishes lead, benzene, 1,3 butadiene, and arsenic emission limits, Quemetco is required to conduct source tests and has extensive emissions control equipment, CEMS and fence-line monitors in place. • As shown in Section 4.2 and Tables 4.2-8 and 4.2-9 in this document, the health risk assessment included the proposed Project’s potential soil deposition impacts and found they would be less than the South Coast AQMD maximum residential cancer risk threshold. The potential soil deposition impacts from the proposed Project would be less than the South Coast AQMD maximum residential cancer risk threshold and the proposed Project would not generate significant soil deposition impacts. • The proposed Project does not require any soils movement. Nonetheless, it should be noted that Quemetco operates pursuant to a South Coast AQMD Rule 1466 Work Plan to manage any soils movement that contains toxic air contaminants. Rule 1466 requires additional monitoring, measures to contain fugitive toxic air emissions contamination and a requirement to cease operations if monitoring levels are exceeded. DTSC also oversees soils movement and cleanup activities. • More information about DTSC's soils investigations is available from DTSC’s website: https://dtsc.ca.gov/hw-projects/quemetco-battery-recycling/. Questions about the soils testing may also be directed to Elsa Lopez at Elsa.Lopez@DTSC.CA.GOV. |
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| | | <p>e. Historic emissions from the facility from when it first started operating should be considered as part of the proposed Project.</p> | <ul style="list-style-type: none"> • At its most basic level, CEQA requires an analysis of how a proposed project will change the existing environmental conditions, also known as the environmental baseline. (CEQA Guidelines Section 15125(a); <i>Neighbors for Smart Rail v. Exposition Metro Line Construction Authority</i> (2013) 57 Cal.4th 439, 447; see also CEQA Guidelines Section 15378(a) [“ ‘Project’ means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment...”].) The proposed Project’s existing environmental conditions are described in detail in Chapter 3. Historic facility emissions are part of the proposed Project’s existing environmental conditions. • In accordance with CEQA Guidelines Section 15125, a project’s baseline is normally the existing environmental setting or physical environmental conditions at the time the NOP is published. Year 2014 was selected as the baseline year for the proposed Project because it represents the lowest level of baseline operations since submittal of the permit applications. By comparing the potential emission increases of the proposed Project to baseline year 2014, the analysis in the EIR presents the largest incremental effects and results in a conservative analysis. • A detailed discussion regarding the selection of the baseline year for the proposed Project is located in Section 2.6 of the EIR. • It is worth noting that, historically, lead emissions have decreased at Quemetco including significant decreases resulting from implementation of the WESP and implementation of a potential to emit (PTE) limit. |
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| 4 | Public health effects from release of toxics. | a. The proposed Project will increase emissions of toxic air contaminants, including lead, arsenic, 1,3-butadiene, benzene, and diesel particulate matter from increased truck activities in an area that is already burdened with heavy industry and truck traffic. | <ul style="list-style-type: none"> • The EIR includes a health risk assessment (HRA) which analyzes the proposed Project’s potential public health impacts and health risks based on air toxics emissions under normal operating conditions. This includes potential impacts to the surrounding areas in accordance with the South Coast AQMD’s methodology (see Section 4.2 and Appendix D.1 – Technical Air Quality Methods and Emissions Assumptions). • Separate HRAs were conducted for the baseline and proposed Project conditions to determine the potential net increase in health risk from mobile and stationary sources under normal operating conditions. Sensitive receptors located within a 5,000-meter radius distance from the facility were included in the residential receptor analysis (also referred to as a 10-kilometer grid which is equivalent to 6.2 miles). Table 4.2-8 in the EIR shows that the proposed Project’s potential net cancer risk impacts, inclusive of both stationary and mobile sources, would be less than the South Coast AQMD air quality significance threshold of 10 in one million for maximum exposed individual resident (MEIR) and maximum exposed individual worker (MEIW) receptors. Note that MEIW receptors are off-site workers. The proposed Project’s non-cancer risk net impacts, which are represented as Maximum Chronic Hazard Index and Maximum Acute Hazard Index, would also be less than the corresponding South Coast AQMD air quality significance thresholds of one in a million. As summarized in Table 4.2-8, the proposed Project’s potential total and net health risk impacts would not generate significant adverse public health impacts from toxic air emissions under normal operating conditions. • Analysis in the Draft EIR concluded that all potential impacts identified for any environmental topic area including potential impacts to public health (specifically including air quality and GHGs, and hazards and hazardous materials, accidental releases, or fire hazards) meet the requirements of South Coast AQMD Rule 1420.1 and are below (less than significant) all public health related thresholds of significance. |
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| | | | <p>Mitigation measures are therefore not required. There are additional permit requirements and mandatory curtailments to further ensure operational compliance with all rules and regulations as described in detail in Chapter 3, Section 3.2.</p> <ul style="list-style-type: none"> • Quemetco is required to comply with South Coast AQMD Rule 1402 - Control of Toxic Air Contaminants From Existing Sources, which applies to facilities subject to the Air Toxics “Hot Spots” Information and Assessment Act (AB2588) and facilities with emissions that exceed significant or action risk levels. Rule 1402 requires public notification and specifies limits to reduce health risks if emissions of toxic air contaminants from existing sources under normal operating conditions exceed thresholds for the maximum individual cancer risk (MICR), cancer burden, or non-cancer acute and chronic hazard index (HI). Quemetco has prepared and implemented a Risk Reduction Plan (RRP) to achieve these risk limits, as required by AB2588 and Rule 1402; its RRP contains an annual arsenic emission limit of 6.5 pounds and requires continuous monitoring of arsenic emissions from the WESP. Consistent with Health and Safety Code Section 44362(b), as required by South Coast AQMD Rule 1402, Quemetco in June 2016 provided notice to all exposed persons for exceeding South Coast AQMD’s Rule 1402 health risk thresholds for public notification and risk reduction. Quemetco’s proposed Project would also be subject to AB 2588 and South Coast AQMDs Rules 1402 and 1420.1. |
| | | <p>b. The facility should have disaster preparedness plans.</p> | <ul style="list-style-type: none"> • The facility maintains a contingency plan and fire prevention plan which is approved by the Los Angeles County Fire Department as the CUPA agency, an UST Monitoring and Emergency Plan which is approved by Los Angeles County Fire Department and Los Angeles County Public Works Department. In addition, the facility provides emergency preparedness training to its staff. It should also be noted that the facility is strictly regulated by multiple agencies (e.g., DTSC, CalEPA, Los Angeles County Fire Department and Los Angeles County Public |

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| | | <p>Works Department) to ensure that hazardous materials are not released, whether from a geologic event or otherwise.</p> |
| | <p>c. The EIR should also analyze the public health impacts from Exide and the effects the Exide facility had on its employees.</p> | <ul style="list-style-type: none"> • Although Exide was a lead-acid battery recycling facility, Exide was a facility located in the City of Vernon and has since gone out of business. The Exide facility is not related to Quemetco and is not relevant to the proposed Project as further explained below and in Appendix B. • Quemetco has a WESP and much lower lead emissions from its point sources as compared to lead emissions from Exide. Exide's emissions levels generated a number of violations which are not applicable to or representative of the Quemetco facility. Therefore, health-related impacts associated with Exide employees or any other information pertaining to the Exide's emissions levels are not applicable to Quemetco's operations or the proposed Project. • As such, the suggestion to include prior health-related deaths associated with Exide employees or any other information pertaining to the Exide facility is not applicable to the Quemetco facility and is not germane to the health risk analysis conducted in the EIR for the proposed Project. • For these reasons, information pertaining to the Exide facility and its previous operations are not included in this EIR. |
| | <p>d. The community's blood should be tested for lead and/or review/report employees' lead blood levels.</p> | <ul style="list-style-type: none"> • Quemetco has safety measures and practices in place for its employees to follow to prevent worker exposure to toxic materials. Employees working inside the operations (battery wrecker building, containment building, the furnace building and the refinery) are required to wear protective uniforms (e.g., Tyvek® suits) and respirators to protect them from lead exposure. Additionally, the facility conducts mandatory health and safety training for employees on an annual basis. Because of the importance of personal hygiene in the control of ingestion of lead, more frequent training and coaching is implemented to control personal habits that may increase exposure. As required by CalOSHA and Department of Public Health, Quemetco administers blood lead tests to permanent |

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| | | | <p>employees every three (3) months to screen for elevated lead levels. In addition, to ensure effectiveness of training, Quemetco conducts more frequent (monthly) blood lead monitoring of new hire employees. If an employee’s blood levels exceed any action thresholds, that employee repeats monthly blood tests and enters a coaching program. If blood levels are elevated, Quemetco voluntarily uses an outside specialist to investigate issues and identify the potential source of the contamination. The blood testing results are protected under the Health Insurance Portability and Accountability Act (HIPAA).</p> <ul style="list-style-type: none"> • Quemetco actively partners with Los Angeles County Department of Public Health to pay for blood tests for members of the public including those who live or work near the facility. For more information about free blood lead testing, please call Los Angeles County Department of Public Health’s Quemetco Hotline at (213) 738-3232. For more information about Los Angeles County Department of Public Health’s on-going support for the Quemetco community, click Protect Your Health Living Near Quemetco (lacounty.gov). |
| | | <p>e. The facility’s air toxic emissions are contaminating surface water, groundwater and in the facility’s wastewater discharges.</p> | <ul style="list-style-type: none"> • The proposed Project’s potential to violate any water quality standards, waste discharge requirements or substantially degrade surface or water quality is assessed in Section 4.5.2 under Impact HYD-1: Wastewater Discharge and Surface and Groundwater Quality Impacts as summarized in Table 4.5-2, Table 4.5-3, and Table 4.5-4. The proposed Project would not cause the facility to exceed the allowed wastewater discharge rate and would not exceed the allowed concentration limits. Additionally, no onsite water interferes with or is discharged directly to any surface water bodies. Finally, because the proposed Project does not involve the closed surface impoundment or former raw materials storage area, it would not alter these historical patterns of compliance and is not expected to have an impact on groundwater quality. For these reasons, the proposed Project would have a less than significant impact on wastewater discharge requirements, surface water |

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| | | | <p>quality and groundwater quality; mitigation measures are therefore not required.</p> <ul style="list-style-type: none"> • Portions of the Main San Gabriel Basin are designated as a CERCLA Superfund site by the federal EPA. The groundwater contamination was the result of historical practices by industrial uses and agricultural operations occurring within the Main San Gabriel Basin area, not Quemetco. As described in Section 3.4 of the EIR, the soils/groundwater contamination zones around the plant are in the upper 1-6 feet and do not reach the Main San Gabriel Basin. Refer to the Main San Gabriel Basin Watermaster’s Five-Year Water Quality and Supply Plan (Five-Year Plan), which provides a comprehensive water quality cleanup and water supply plan for the Main San Gabriel Basin.¹ • The facility is located in Site Area 4 – Puente Valley, the contamination of which was attributed to past contamination stemming from the former Northrop Grumman Benchmark Technology facility in the City of Industry. In 2011, the EPA officially ordered Northrop Grumman to undertake actions to remediate past contamination, including constructing wells and a treatment plant to contain and treat contaminated groundwater. The treated water is then being discharged back to surface water or injected back into the underground aquifer, providing additional water resources to San Gabriel Valley residents.² Through the future actions of Northrop Grumman and the Main San Gabriel Basin Watermaster, the Main Basin is subject to robust cleanup activities and SGVWC is ensured (consistent with its UWMP) adequate supplies of water. • The proposed Project would have less than significant impacts and would not cause the need for local water clean-up. Further, Quemetco is |
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¹ Main San Gabriel Basin Watermaster’s Five-Year Water Quality and Supply Plan (available at https://rauch.egnyte.com/dl/gDgrOKZhQZ/V8_WEB_5_year_plan_10_22_18.pdf).

² See <https://www.epa.gov/enforcement/case-summary-epa-issues-order-san-gabriel-valley-superfund-site-area-4-puente-valley#agreement>, <https://www.epa.gov/enforcement/reference-news-release-epa-orders-20-million-northrop-cleanup-san-gabriel-valley>, and <https://www.epa.gov/sites/production/files/2013-08/documents/puentevalley-order.pdf>.

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| | | | required to operate in accordance with DTSC and LACSD permit conditions. |
| 5 | Project Alternatives | a. The EIR should analyze an alternative to address the public’s opposition to continuing existing plant operations. | <ul style="list-style-type: none"> Chapter 5 of the EIR analyzes the following alternatives to the proposed Project: Alternative 1 - No Project (e.g., not going forward with the proposed Project), Alternative 2 - Reduced Capacity Project, Alternative 3 - Offsite Facility, and Alternative 4 - Close the Facility. The primary purposes of the Quemetco facility and the Capacity Upgrade Project are to reduce the impact of lead-acid batteries on landfills, reduce the potential for toxic components of lead-acid batteries to contaminate soil and water resources, and reduce the export of lead-acid batteries out of California and/or overseas. The project objectives include avoiding additional impacts from diverting batteries out of state which would cause new long haul truck trips, new construction impacts and new potential public health impacts in areas with less stringent controls on air toxics emissions and hazards materials handling. The feasibility of this suggested alternative was evaluated against the proposed Project’s purpose and objectives; facility closure would not meet the purpose and objectives and would likely cause new environmental impacts from diversion out of state and overseas. Further, South Coast AQMD does not have the authority to require the facility to shutdown unless there is an imminent substantial endangerment to public health. Therefore, facility closure was found not feasible. |
| | | b. The EIR should analyze an alternative that considers moving the proposed Project elsewhere. | <ul style="list-style-type: none"> Chapter 5 of the EIR analyzes the following alternatives to the proposed Project: Alternative 1 - No Project (e.g., not going forward with the proposed Project), Alternative 2 - Reduced Capacity Project, Alternative 3 - Offsite Facility, and Alternative 4 - Close the Facility. The primary purposes of the Quemetco facility and the Capacity Upgrade Project are to reduce the impact of lead-acid batteries on landfills, reduce the potential for toxic components of lead-acid batteries to contaminate soil and water resources, and reduce the export of lead-acid batteries out of California and/or overseas. The project objectives include avoiding additional impacts from |

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| | | | <p>diverting batteries out of state which would cause new long haul truck trips, new construction impacts and new potential public health impacts in areas with less stringent controls on air toxics emissions and hazards materials handling. The feasibility of each of these alternatives was evaluated against the proposed Project’s purpose and project objectives; relocating the facility would not meet the purpose and objectives and would cause new environmental impacts. Relocating the proposed Project was therefore found not to be feasible in the EIR.</p> |
| | | <p>c. The EIR should analyze an alternative to address the public’s opposition to the proposed Project.</p> | <ul style="list-style-type: none"> • Quemetco is an existing operating facility which operates pursuant to existing air permits issued by South Coast AQMD. The existing permits include conditions which limit various operations via emission standards and other criteria. • Chapter 5 of the EIR analyzes the following alternatives to the proposed Project: Alternative 1 - No Project (i.e., not going forward with the proposed Project), Alternative 2 - Reduced Capacity Project, Alternative 3 - Offsite Facility, and Alternative 4 - Close the Facility. CEQA Guidelines Section 15126.6, Consideration and Discussion of Alternatives to the proposed Project, requires that an EIR describe a range of reasonable alternatives to the project or the project location which would feasibly attain most of the project objectives but would avoid or substantially lessen any of the significant effects of the project. The proposed Project would not result in any significant impacts. Nonetheless, an alternatives analysis was included to be responsive to community concerns. • As demonstrated by the analysis in Chapter 5, the No Project Alternative would have none of the proposed Project’s direct potential. Further, the indirect impacts of the No Project Alternative would continue to occur, including transportation of lead scrap out of state, higher emissions of air toxics in areas with less stringent controls and higher risks from the handling of hazardous wastes. |

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| 6 | Permit Violations | The EIR should analyze the status of existing permit violations and resolution, and historic environmental impacts. | <ul style="list-style-type: none"> • Detailed information regarding issuance of permit violations and settlements with South Coast AQMD are discussed in Section 2.7 and Appendix C of the EIR. These sections summarize the facility’s regulatory compliance status and permitting history. Regulatory and permitting requirements for Quemetco have become more rigorous (e.g., South Coast AQMD Rule 1420.1) as well as sufficiently expansive to collect samples to assess the extent of historic environmental effects from Quemetco’s activities (e.g., DTSC’s soil sampling requirements). • Quemetco is required to comply with the requirements of Rules 1420.1 and 1402. Rule 1420.1 will ensure that Quemetco continues to meet point and fugitive control requirements and conducts ambient monitoring for lead and arsenic. Rule 1420.1 has the strictest ambient lead requirements in the nation which are lower than the National Ambient Air Quality Standard and are averaged over a shorter time period. South Coast AQMD will continue to enforce Rule 1420.1 to ensure Quemetco continues to meet all of its requirements. In addition, Rule 1402 is an ongoing program that requires annual toxic emissions inventories for Quemetco under normal operating conditions to ensure there are no increases above health protective thresholds. This is an additional safeguard that will continue to be implemented. |
| 7 | Disproportionate Impacts on Disadvantaged Communities. | The community near the proposed Project is identified by CalEPA as a “Disadvantaged Community” pursuant to the criteria in SB535 or AB617 and the proposed Project raises environmental | <ul style="list-style-type: none"> • Under state law, “environmental justice” means the fair treatment of people of all races, cultures, and incomes with respect to the development, adoption, implementation, and enforcement of environmental laws, regulations, and policies. [Government Code § 65040.12(e).] Fairness in this context means that the benefits of a healthy environment should be available to everyone, and the burdens of pollution should not be focused on sensitive populations or on communities that are already experiencing its adverse effects. As part of the EIR, a HRA analyzed the potential health risks to the surrounding areas (see Section 4.2 and Appendix D). The HRA was prepared in accordance with South Coast AQMD’s methodology and guidance. The results indicated |

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| | | <p>justice concerns.</p> | <p>that the proposed Project would result in less than significant impacts. A detailed emissions evaluation is also presented in Section 4.2 and Appendix D of the EIR, which summarize the assessment methodology and results.</p> <ul style="list-style-type: none"> • SB 535 identifies environmental justice communities for an entirely separate purpose. Environmental justice communities are identified for the purpose of diverting at least 25 percent of the funds generated by AB 32 to be allocated for projects that benefit disadvantaged communities, with at least 10 percent for projects located within these communities. Quemetco participates in AB 32’s Cap-and-Trade program and thus supports SB 535 through its participation in Cap-and-Trade. • One of the South Coast AQMD's top environmental justice priorities is the implementation of AB 617 and 134. Although the Quemetco facility and its surrounding community is not designated as an AB 617 community eligible for incentive funding, this EIR evaluates all potential environmental impacts to the local and regional community. It is important to note however, for communities awarded with incentive funds, the money is allocated for projects or improvements that would provide an environmental benefit for the entire community. As such, financial compensation to individual residents is not a feature of the incentive funding structure for AB 617 communities. • CEQA requires a thorough analysis of a project’s potential physical environmental impacts, regardless of the demographics of the community. The EIR includes an extensive analysis of the proposed Project’s impacts on air quality and GHG emissions (including air toxics under normal operating conditions), energy, hazards and hazardous materials, hydrology and water quality, and transportation impacts. In addition, public health impacts associated with the proposed Project were analyzed in a HRA (see Section 4.2 and Appendix D of the EIR). |
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| 8 | Additional Community Concerns | <p>a. South Coast AQMD has not followed a legal process for notifying those affected or the potential for to be affected by hazardous discharges.</p> | <ul style="list-style-type: none"> • The CEQA process is a public process that invites public review and comment. Two public scoping meetings have been held, providing the public the opportunity to comment on the scope of the proposed Project’s EIR. All public comments received during the scoping period have been considered during preparation of the EIR and the responses to those comments are addressed in Appendix B, Responses to Comments. • In accordance with CEQA, South Coast AQMD prepared the NOP/IS and EIR. These documents and other relevant documents may be obtained by calling the South Coast AQMD Publication Request Line at (909) 396-2039; by contacting the South Coast AQMD Public Information Center by phone at (909) 396-2432 or by email at PICrequests@aqmd.gov, or by accessing the South Coast AQMD’s CEQA website at: http://www.aqmd.gov/home/research/documents-reports/lead-agency-permit-projects. • Information regarding Quemetco is available on the South Coast AQMD’s website at http://www.aqmd.gov/home/news-events/community-investigations/quemetco. • Members of the public can call 1-800-CUT-SMOG to register complaints, which are subsequently investigated. |
| | | <p>b. How many people and who have received notices for the NOP/IS notice of availability, CEQA Scoping Meeting #1 & CEQA Scoping Meeting #2</p> | <ul style="list-style-type: none"> • The announcement indicating the availability of the NOP/IS for a public review and comment period also included a notice of the September 13, 2018 CEQA scoping meeting. The announcement was published on South Coast AQMD’s website on August 30, 2018 and in the Los Angeles Times newspaper on August 31, 2018. The announcement was also transmitted electronically to 710 email addresses on August 31, 2018 and hard copies were mailed on August 30, 2018 to 5,745 addresses within the vicinity of the proposed Project. Depending on the notification method (e.g., hardcopy mailout, email, newspaper, and website posting), the public was given approximately 14 days advanced notice of the first CEQA scoping meeting. Aside from South Coast AQMD staff, facility representatives, DTSC staff, representatives from other local agencies, politicians, and members of the press, |

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| | | <p>there were 134 attendees who signed in at the CEQA scoping meeting held on September 13, 2018. Since attendees were not required to sign in and due to a free flow of people throughout the event, the exact number of people who attended cannot be determined but is likely higher than the number of people who signed in.</p> <ul style="list-style-type: none"> • The format of the CEQA scoping meeting held on September 13, 2018 at the Hacienda Heights Community Center was structured in an “open house” format with the intent of allowing attendees the flexibility to attend the meeting at varying times throughout the evening. The free-flow style empowered attendees to learn about the proposed Project at their own pace. Personnel from South Coast AQMD, DTSC and other agencies were present to answer questions about the facility in personalized interactions with attendees. The room was set up with an open floor plan so that attendees could stroll throughout the room and read various poster boards explaining the facility’s processes, the CEQA process, and the proposed Project. • Due to complaints that the style of the first CEQA scoping meeting did not meet attendees’ expectations of a more structured meeting format, an announcement was made that a second CEQA scoping meeting with the widely desired formal format would be scheduled. • The second CEQA scoping meeting was scheduled for October 11, 2018, and the original 32-day NOP/IS comment period from August 31, 2018 to October 2, 2018 was extended an additional 24 days to close on October 25, 2018. A notice of the second CEQA scoping meeting and the NOP/IS public review and comment period extension was published on South Coast AQMD’s website on September 27, 2018 and in the Los Angeles Times newspaper on September 28, 2018. The announcement was also transmitted electronically to 710 email addresses on September 28, 2018 and hard copies were mailed on October 2, 2018 and October 3, 2018³ |
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³ Paper copies of the notification were sent out via U.S. Postal Service with 8,007 pieces sent on October 2, 2018 and 2,248 pieces sent on October 3, 2018 per U.S. Postal Service Statement of Mailing receipts.

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| | | | <p>to 12,500 addresses within the vicinity of the proposed Project. Scoping meeting #2 included HRA notification group, which includes everyone in 10 in a million isopleth as required by Rule 1402.</p> <ul style="list-style-type: none"> The second CEQA scoping meeting held on October 11, 2018 at the Hacienda Heights Community Center included a formal presentation by a seated panel of South Coast AQMD personnel and other agency representatives (e.g., DTSC, Los Angeles County Board of Supervisors, Los Angeles County Fire Department, Los Angeles County Department of Public Health, Los Angeles County Regional Water Quality Control Board, and U.S House of Representatives). After the presentation, there was a question-and-answer period during which attendees' comments and questions could be heard by the entire audience. |
| | <p>c. The community wants to know about the facility's emissions.</p> | | <ul style="list-style-type: none"> Quemetco currently has four (4) fenceline air monitoring stations collecting ambient air concentrations for lead and arsenic. Quemetco also has continuous in-stack emissions monitoring systems (CEMS) for NOx, SOx, CO2, and arsenic; as part of the proposed Project Quemetco will add a CO CEMS. Emissions reports from CEMS and air monitoring stations are reviewed daily to verify compliance. Notifications and reports are sent to South Coast AQMD as required. Annual emission summaries for each permitted facility are summarized on FIND: https://xapprod.aqmd.gov/find. The Quemetco facility can be found by searching for Facility ID 8547. Note that FIND provides emission data from the Annual Emissions Reports and does not provide real-time CEMS data on a publicly available website. |
| | <p>d. What happens when the facility violates its permits and how is the community informed in the</p> | | <ul style="list-style-type: none"> Immediately upon becoming aware of any exceedance of its permit conditions, Quemetco activates the facility's South Coast AQMD-approved compliance plan and initiates a 50% process curtailment for 30 days as required by South Coast AQMD Rule 1420.1. South Coast AQMD Rule 1420.1 requires public notification in the event of an unplanned shut |

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| | | <p>event of an emergency?</p> | <p>down of air pollution control equipment in the form of an email that is sent within one-hour of the unplanned shutdown. To join this notification email list, click here: http://www.aqmd.gov/sign-up and scroll down to click on the Quemetco box under the “Community Investigations” banner.</p> <ul style="list-style-type: none"> • Quemetco’s fence-line ambient monitoring stations are in place to verify that the ambient levels of arsenic and lead concentrations are below both the aforementioned limits in South Coast AQMD Rule 1420.1 and the National Ambient Air Quality Standards (NAAQS) lead standards (0.15 µg/m³ averaged over a rolling 90-day period). With any exceedance, Quemetco would activate the facility’s South Coast AQMD-approved compliance plan, through notification of South Coast AQMD and initiate a process curtailment for 30 days from the date of occurrence as required by South Coast AQMD Rule 1420.1. |
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CHAPTER 2

PROPOSED PROJECT

Introduction
Project Objectives
Project Location
Background
Intended Use of this EIR
Project Description
Permits and Approvals
Facility Compliance History

2.0 PROPOSED PROJECT

2.1 INTRODUCTION

Quemetco currently operates an existing secondary lead smelting facility in the City of Industry, Los Angeles County, California. Secondary lead smelters process lead-bearing scrap material such as spent automobile batteries, to produce lead and lead alloys. Western Lead Products first established the use of the Quemetco facility site for recycling lead-acid batteries and other lead scrap materials in 1959 and Quemetco took over the site in 1970.

Quemetco recovers and reprocesses lead from secondary sources (primarily used batteries) referred to as “feed stock.” Feed stock includes lead-acid batteries such as used automotive batteries, steel case batteries, and oversized batteries, along with other lead-bearing scrap ranging from boat keels to materials not meeting battery manufacturer specifications. Quemetco purchases used batteries in a competitive open market. Currently there are more used batteries generated annually within California than there is in-state capacity to process and recycle them.

At this facility, used batteries are received, fragmented, and the lead containing materials are then stored, recovered, purified, and sold to customers who use lead or lead alloys in their processes. There are four primary processes involved with secondary lead smelting which purify lead until final alloys are produced, including: the rotary/kiln feed dryer, the reverberatory furnace, the electric arc furnace, and the refinery kettles.

Quemetco operates multiple air pollution control systems at the facility comprised of the following equipment: baghouses to remove particulates, scrubbers to remove sulfur dioxide (SO₂) and nitrogen oxides (NO_x), low temperature oxidation of nitrogen oxides (LOTOX[®]), a wet electrostatic precipitator (WESP) to reduce metallic particulate matter (PM) emissions including lead and some sulfur oxides (SO_x), and a regenerative thermal oxidizer (RTO) to reduce volatile organic compound (VOC) emissions from the rotary/kiln feed dryer.

The South Coast AQMD permit contains a condition which limits the amount of feed that can be fed to the reverberatory furnace to 600 tons per day (tpd), referred to as the throughput limit. After this permit was issued, Quemetco made several major improvements to its operations which included enclosing the battery wrecker building and installing the WESP, LOTOX[®], and RTO described above. Because these improvements have reduced the facility’s overall air pollutant emissions, Quemetco is requesting to increase the throughput limit to the rotary/kiln feed dryer and reverberatory furnace.

The Quemetco facility operates 24 hours per day, but not all of the equipment currently operates for 24 hours each day. In order to prevent exceeding the permit limit for the rotary/kiln feed dryer and reverberatory furnace during a 24-hour cycle, Quemetco operates this equipment according to a compliance period which is measured from noon until noon the subsequent day. When the daily throughput limit is reached, Quemetco stops sending feed, turns off the rotary/kiln feed dryer, and reduces the firing rate of the burner in the reverberatory furnace from operational mode firing at 16-20 million British Thermal Units (MMBTU) to idle mode at 5-6 MMBTU. This is known as

the Compliance Stop Period.¹ The throughput limit through the rotary/kiln feed dryer and reverberatory furnace is typically reached after 18 hours and up to 23 hours of operation, so the dryer and reverberatory furnace are off/idle for the remainder of the 24-hour cycle, from one (1) hour up to six (6) hours prior to noon each day. Although no additional feed may be processed during the Compliance Stop Period, the reverberatory furnace continues to burn fuel to maintain minimal idle temperature even when not processing feed. All other equipment, processes, and air pollution control equipment continue to operate at full capacity.

Through this proposed Project, Quemetco seeks authorization to increase the maximum daily throughput through the reverberatory furnace from 600 tons to 750 tons without any physical changes at the existing facility. With the proposed throughput increase, Quemetco would be able to eliminate the Compliance Stop Period, maximize the capacity of its existing equipment, eliminate inefficient fuel consumption during the Compliance Stop Period, and improve overall facility efficiency. By allowing Quemetco to increase the throughput limit, secondary impacts that would otherwise be associated with transporting a portion of the used batteries inventory out of state/overseas would be lessened.

In the past 10+ years, the facility's operations have not reached the daily refinery limits. Not all lead bearing materials convert to refined lead. The proposed throughput limit increase to 750 tpd would result in an increase from 460 tpd to 575 tpd in refined lead.

Additionally, the facility is currently permitted to use calcined coke as a smelting reagent in the smelting process, which recovers metals from lead bearing scrap, and is permitted to use petroleum coke as a purifying agent in the refinery process². However, there is a dwindling supply of calcined coke available in the local market. There are a limited number of calciners in California and aluminum smelters take priority (based on their ability to buy in volume and consume most if not all available calcined coke) in this market. Some years there's calcined coke for Quemetco to purchase; some years, there's no calcined coke available for Quemetco to purchase. Additionally, Quemetco has been purchasing calcined coke from Rodeo, California (northern California) and has been purchasing the petroleum coke from Arroyo Grande, California (southern California). Petroleum coke is more readily available and from a source which is closer to the facility. For these reasons, Quemetco proposes to use petroleum coke, in addition to or in lieu of, calcined coke as a reagent for the smelting.

For these reasons, Quemetco is proposing to modify its existing South Coast AQMD permits to: 1) increase the throughput limit to the rotary/kiln feed dryer and reverberatory furnace from 600 tons per day (tpd) to 750 tpd; 2) increase the temperature of the exhaust from the rotary/kiln feed dryer from 330 degrees Fahrenheit (F) to 450 degrees F; 3) increase the amount of coke material (e.g., calcined coke, petroleum coke, or a combination thereof) processed in the rotary/kiln feed

¹ The Compliance Stop Period varies based on whether there are mechanical breakdowns during the compliance period, varying moisture content of the feed in the rotary/kiln feed dryer and the reverberatory furnace, etc. The furnace operates best when there is continuous feed to allow the most efficient use of fuel and furnace heat. When there are gaps in the feed, fuel is inefficiently consumed, and some furnace heat is wasted.

² "Chunky coke" is also calcined coke differentiated for having larger "chunky" particle sizes. Chunky calcined coke is included in the calcined coke quantities used as a smelting reagent in the furnaces and is only differentiated for purchasing purposes (chunky calcined coke is a different price than fine calcined coke).

dryer and reverberatory furnace from 600,000 pounds per month (lbs/month) to 750,000 lbs/month; and 4) allow the use of petroleum coke, in lieu of or in addition to calcined coke, as a smelting reagent in the reverberatory furnace and electric arc furnace. Other permit modifications associated with the increased throughput have also been requested as described in detail in Section 2.6. Collectively, these proposed changes constitute the proposed Project.

2.2 PROJECT OBJECTIVES

Pursuant to CEQA Guidelines Section 15124(b), the EIR must include “a clearly written statement of objectives” to help the lead agency develop a reasonable range of alternatives to evaluate in the EIR and to aid the decision makers with preparing findings and a statement of overriding considerations, if necessary. The project objectives should include the underlying primary purpose of the project and may discuss the project benefits.³

Quemetco is proposing the Capacity Upgrade Project to allow the facility to recycle more batteries to accommodate the existing and future demand for local and regional lead-acid battery and secondary scrap recycling services, and to eliminate the existing daily Compliance Stop Period, which requires shutting down of the rotary/kiln feed dryer and idling of the reverberatory furnace. Thus, the objectives of the proposed Project are to:

1. Accommodate the existing and future need for local, regional, and state lead-acid battery and secondary scrap recycling services, to reduce diversion of lead-acid battery and lead scrap materials out of state.
2. Minimize the need to import calcined coke, if local supplies are not available as a smelting reagent, by allowing the substitution of locally available petroleum coke.
3. Maximize facility productivity and efficiency by more efficiently utilizing existing equipment and reducing inefficient fuel consumption, while assuring compliance with all applicable regulatory requirements.
4. Protect local jobs, including and especially union jobs, within the City of Industry through continued operation of the existing Quemetco facility.
5. Reduce the need for the construction and operation of new battery recycling facilities elsewhere in the region, state, or country by improving the efficiency of an existing facility.

2.3 PROJECT LOCATION

The proposed Project is located at the existing Quemetco facility at 720 South 7th Avenue (S. 7th Avenue) in the City of Industry, County of Los Angeles, California (latitude – longitude coordinates of N 34.026 and W 117.983). The proposed Project is entirely within the property boundaries of the existing Quemetco facility, which is situated on approximately 13 acres of land. The Quemetco facility is near the Pomona Freeway (also known as State Route 60 (SR-60)), roughly 15 miles east of downtown Los Angeles, at the northeast corner of S. 7th Avenue and Salt Lake Avenue. Figure 2-1 depicts the regional location. Figures 2-2, 2-3, and 2-4 depict the

³ In re Bay-Delta Programmatic Environmental Impact Report Coordinated Proceedings (2008) 43 Cal.4th 1143, 1163.

proposed Project site location within the City of Industry as well as provide an aerial view of the existing Quemetco facility.

The facility property is zoned as industrial and is located in an area predominately zoned as commercial and light industrial by the City of Industry. Manufacturing and warehouse operations surround Quemetco to the north, south, east, and west. The northern boundary of the property is the San Jose Creek, a concrete-lined channel that flows east to west. Salt Lake Avenue, the Union Pacific Railroad Company right of way and an industrial manufacturing facility are located to the south. The facility receives rail service via Union Pacific Railroad Company’s rail spur, which enters the property at the northeast corner.

The nearest residences are located approximately 600 feet to 700 feet south and southwest of the southern boundary of the facility; these homes are situated between Clark Avenue and SR-60. Existing warehousing and industrial uses and roadways separate these residences from the Quemetco facility. The nearest elementary school is Palm Elementary School, which is 0.6 mile to the south of the Quemetco facility.

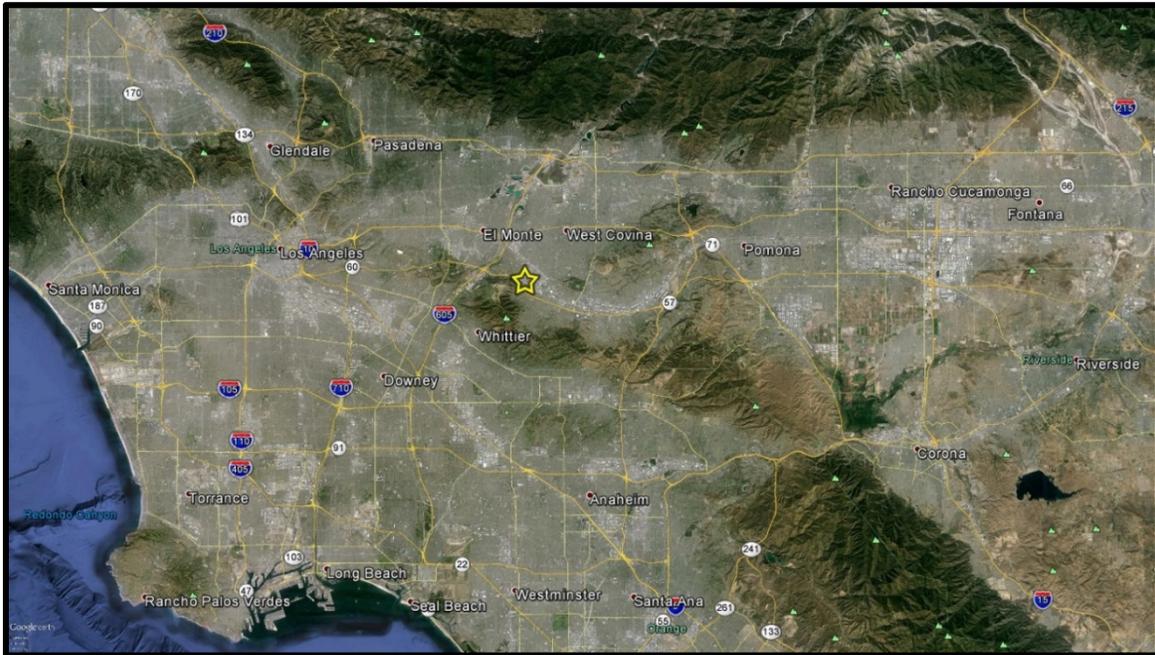
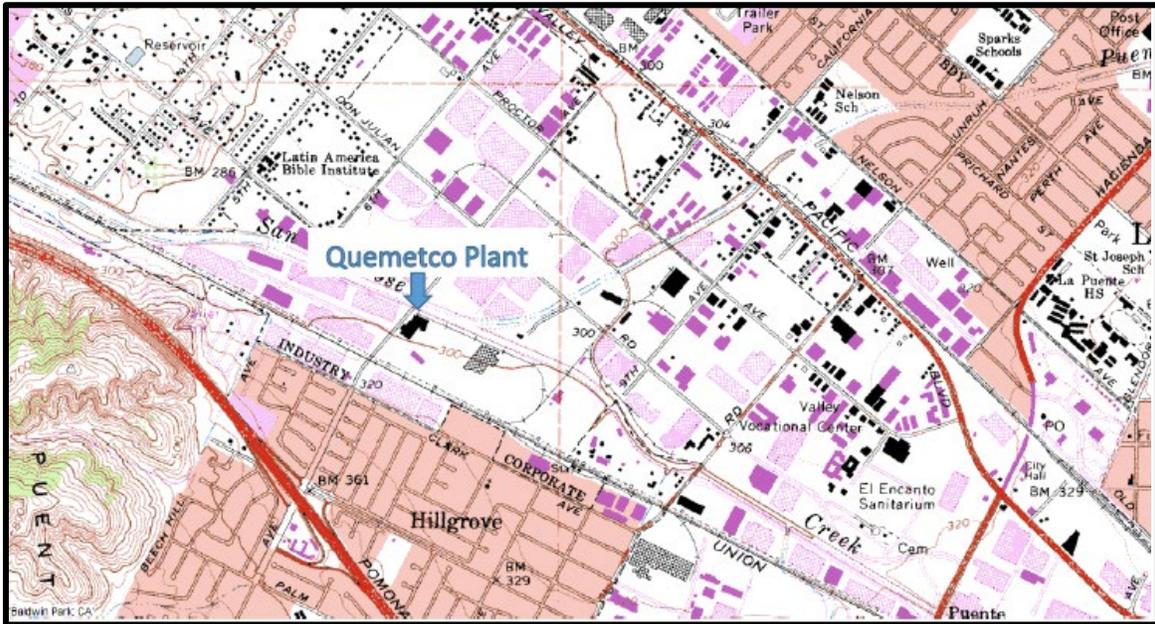


Figure 2-1 Regional Location



Note: Shaded pink/light purple areas are industrial/commercial and shaded salmon-colored areas are residential.

Figure 2-2 Project Location

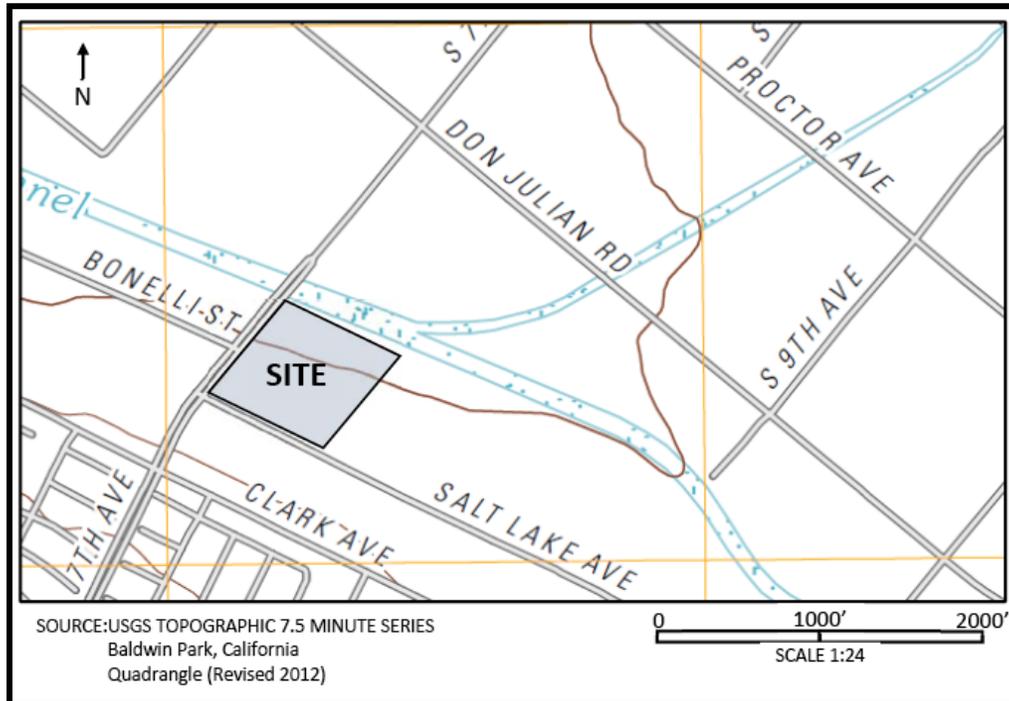


Figure 2-3 Focused Project Location

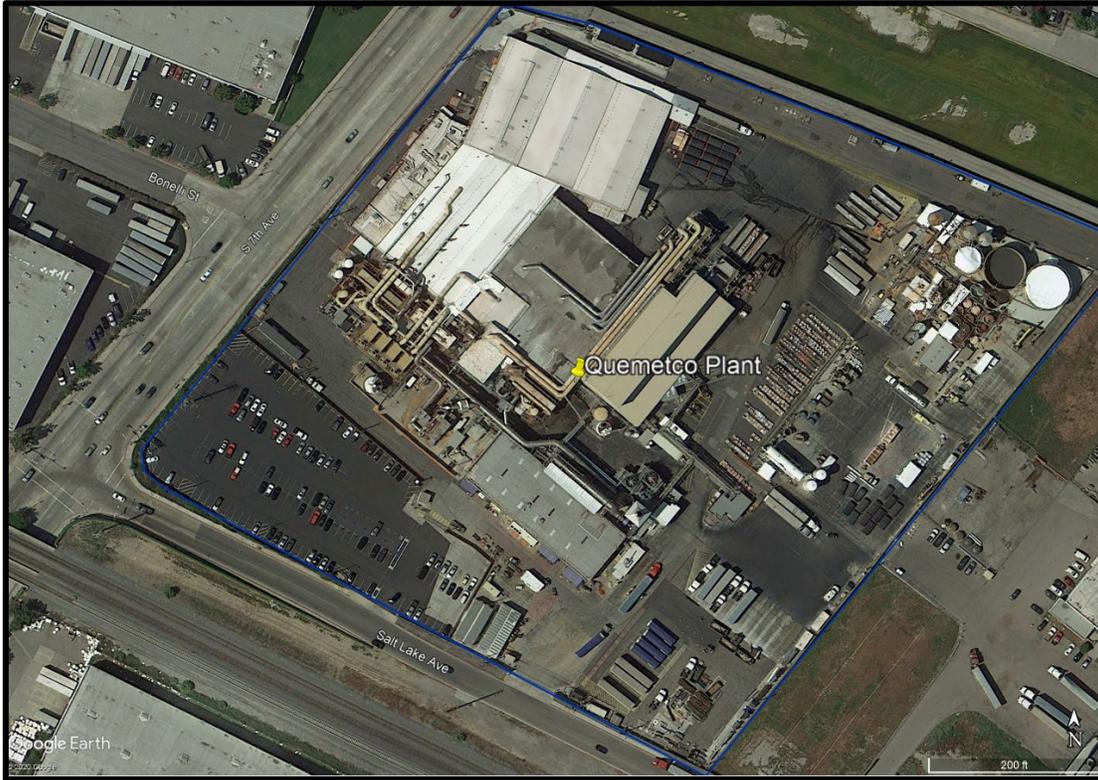


Figure 2-4 Project Site Aerial

2.4 BACKGROUND

Figure 2-5 illustrates the components of a typical lead-acid battery.

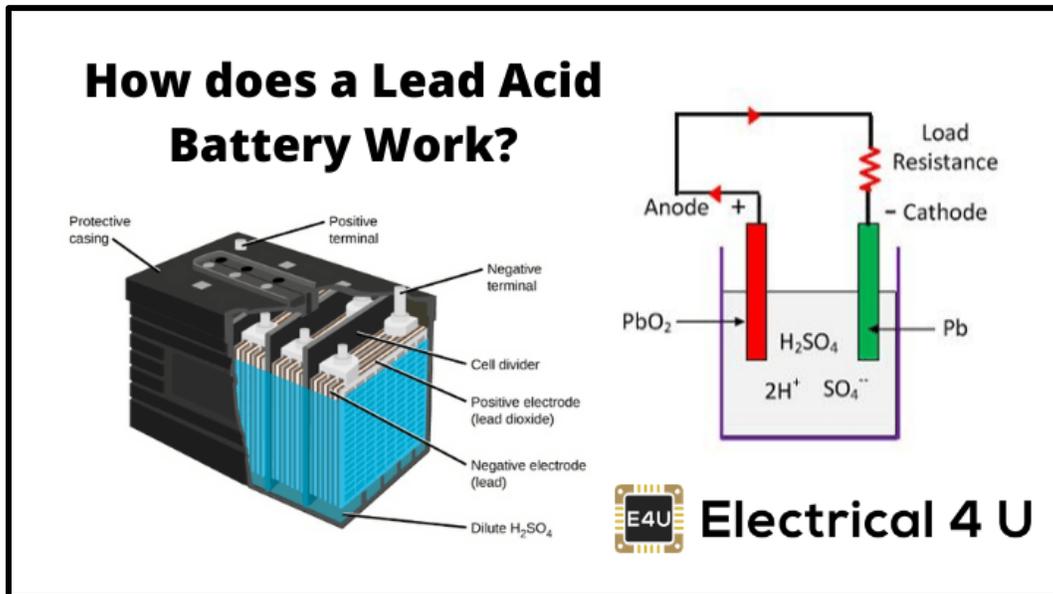


Figure 2-5 Lead-Acid Battery Components

The feed stock is fed through a hammermill, a rotary/kiln feed dryer, and then a series of furnaces and refinery kettles which combine heat and smelting reagents (commonly carbon, such as coke, a crude oil refinery by-product) to form lead ingots or blocks. Figure 2-6 depicts the overview of Quemetco’s lead recycling process and air flow. The following sections describe the detailed flow of feed stock through the Quemetco facility.

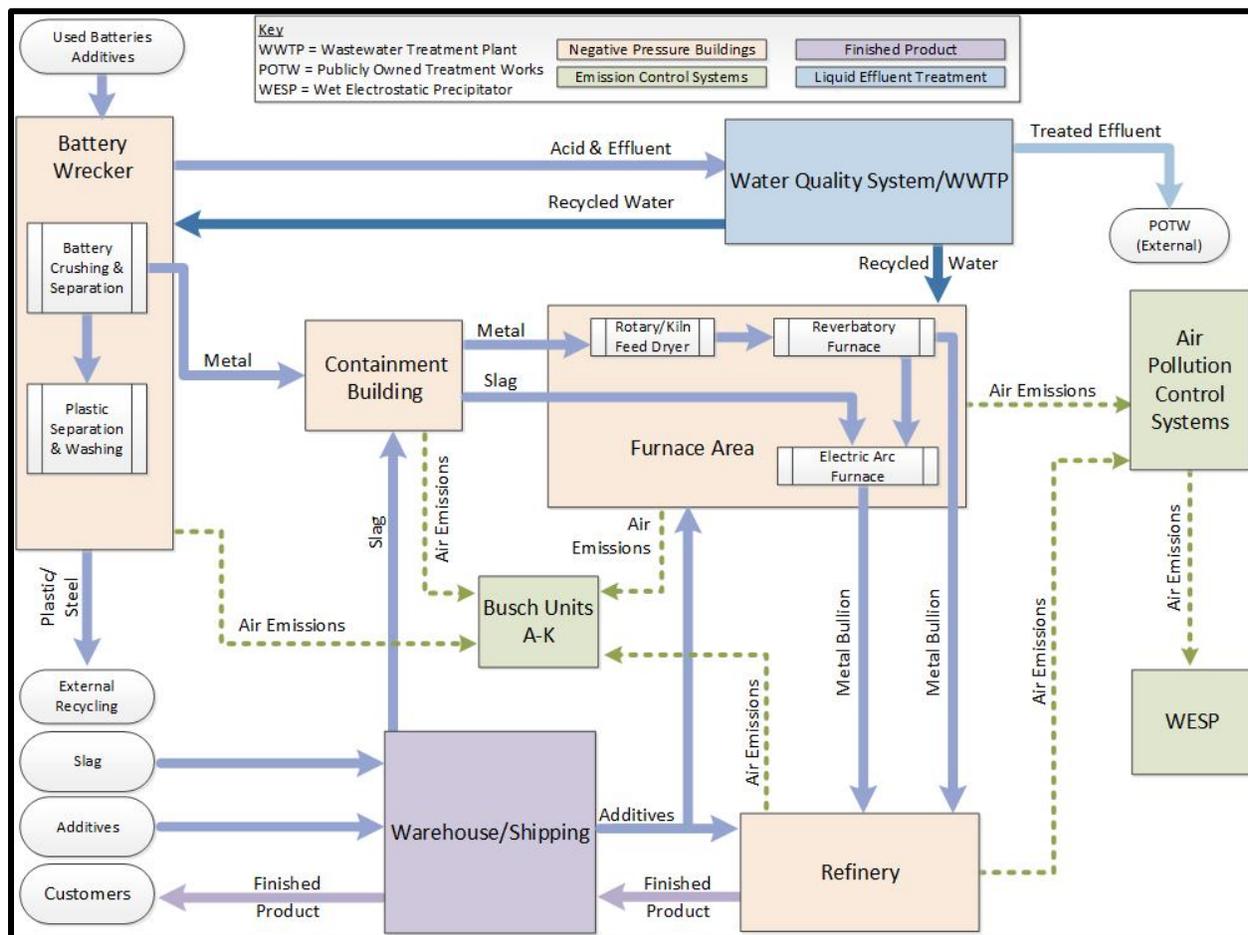


Figure 2-6 Overview of Quemetco’s Lead Recycling Process, Products, and Discharges

2.4.1 Delivery of Feed Stock

The feed stock, comprised of scrap or used batteries and other lead bearing materials, is delivered to the Quemetco facility primarily via heavy-duty trucks. Suppliers of feed stock include scrap yards, battery manufacturers, and used battery brokers located primarily throughout the western United States, generally west of the Rocky Mountains. The used lead-acid batteries primarily originate from vehicles but can also come from other equipment such as golf carts and forklifts.

Trucks access the Quemetco facility is by appointment through a controlled gate at an average rate of two (2) to three (3) trucks per hour and up to 53 trucks during a peak day (24-hour period),

carrying an average load of 20 to 25 tons per truck. Each truck moves directly through the controlled gate to a scale to measure the weight of the load and then from the scale to the truck loading dock so that the feed stock can be offloaded and moved into the “battery wrecker” building (see Figure 2-6) or to the temporary battery storage area for future processing.

The truck loading dock doors are fitted with dock seals and the ventilation system maintains the battery wrecker building under negative air pressure. Generally, this means that the air pressure inside the building is lower than the pressure outside the building. Thus, particles from inside the building will not flow outside. More specifically, the battery wrecker building is equipped with baghouses with high-efficiency particulate air (HEPA) filtration systems, referred to as Busch Units⁴ (J and K), that maintain the building under negative air pressure to prevent fugitive PM from being released into the ambient air. The negative air pressure ventilation systems pull air into the battery wrecker building where the air (and PM in the air) is routed to Busch Units J and K, thus preventing the release of fugitive PM into the ambient air. The rotary/kiln feed dryer, the reverberatory furnace, the electric arc furnace, and the refinery are also operated within buildings equipped with Busch Units which maintain those process buildings under negative air pressure via negative air pressure ventilation systems which route the air (and PM in the air) from the process buildings to additional Busch Units.

A forklift moves the used batteries from the truck loading dock into the battery wrecker building and drops them into a hopper, which conveys the feed stock to a hammermill where the batteries are crushed. Oversized batteries are also delivered by truck and are stored in the battery storage area until they are transferred by forklift to the battery wrecker building for dismantling (which includes removing or shearing off the steel casing) and processing. Some lead scrap may be transferred directly to the refinery for processing in the refinery kettles.

Additionally, one railcar delivery containing approximately 42 tons of slag (e.g., a stony waste matter separated from metals during smelting or refining) arrives at the facility every few years. The slag is offloaded via an onsite loader from the materials warehouse / shipping building (which includes rail) and is transported to the containment building which is equipped with a ventilation system which maintains negative pressure. The railcar-delivered slag is then fed to the electric arc furnace. The materials warehouse/shipping building (which includes rail) is used primarily for shipping recovered lead to the market. This building is not under negative pressure.

2.4.2 Battery Dismantling

The hammermill in the battery wrecking building is a rotating set of hammers which crush the batteries against steel grates to break apart the batteries into pieces comprised of various solid and liquid components (e.g., the solids are comprised of lead, plastics, and lead paste and the liquid is battery acid). Lead paste is primarily comprised of lead sulfate and battery acid is primarily comprised of sulfuric acid.

As the batteries break into pieces, the components drop out of the hammermill into a sink-float tank within the battery wrecker building filled with water and a polymer solution to undergo plastic

⁴ Busch units are defined in more detail under Section 2.4.7: Air Pollution Control Systems.

separation and washing. The solid battery components gravitationally separate in the sink-float system with the lead and lead paste sinking to the bottom of the tank while the plastics float to the top.

The floating (plastic) pieces are skimmed off the top and routed within the battery wrecker building to a plastic hammermill⁵ to be mechanically crushed for size reduction. The recovered plastic is later washed, dried via a centrifugal water separator, and conveyed into truck trailers. When full, either by volume or weight, whichever comes first, each trailer is hauled offsite via truck to a plastics recycling facility in Bakersfield, California.⁶

The solid material that sinks to the bottom of the tank is conveyed to the batch house using a screw conveyor system. The battery acid remains in the water/polymer solution, and all of the liquid is continuously drained from the tank, routed to a sump, and sent to the onsite wastewater treatment system. The battery acid/water/polymer solution is used for adjusting the pH (the chemical scale or standard used for specifying the acidity or alkalinity of water-based mixtures) in compliance with the facility's wastewater discharge requirement imposed by the Los Angeles County Sanitation District.

Approximately 15,000 gallons per day of recycled water is used in the sink-float tank system through rinsing sprays of the plastics conveyance system (also known as discharge augers). On a daily basis, 30 to 40 pounds per day of polymer is mixed with an additional 3,000 to 4,000 gallons of recycled water in the sink-float tank to create a polymer solution to facilitate the separation of solids from the liquid solution.

The plastic wash water solution in the plastics conveyance system after the sink float tank has a pH of 6-7; therefore, nothing is added to the plastics wash water to adjust its pH as it is already within the allowable range specified in Quemetco's wastewater permit (LACSD, 2016)⁷.

The steel cases that are manually sheared in the battery wrecker building are also recovered, washed in an open area inside the battery wrecker building, and placed in steel roll-off bins to air dry. The plastics and steel case wash water is collected in a sump and pumped to the onsite wastewater treatment system for treatment along with the rest of the process water prior to discharge. When the scrap in a steel bin reaches the top of the bin, the bin is hauled offsite via heavy-duty truck to a local steel recycling facility in southern California.

2.4.3 Lead Processing – Furnaces and Refinery

The lead components that are recovered from the feed stock during the battery wrecking process (e.g., lead plates, posts, and grids) are initially staged in the containment building which is maintained at negative pressure (see Figure 2-5 above for the components of a lead-acid battery) and then fed to the rotary/kiln feed dryer via a front-end loader. The rotary/kiln feed dryer serves a pre-dryer, equipped with, and fired by a 10 MMBTU natural gas burner that dries the moisture-

⁵ The plastic hammermill is identified in the permit as "hammermill, battery case material" per device permit D125.

⁶ Please note that maximum allowed truck weight in California is 80,000 pounds.

⁷ The federal and local pH minimums specified in Quemetco's wastewater permit are 5 and 6, respectively. Therefore, pH adjustment is not required.

laden feed stock. The process of injecting oxygen into the burner of the rotary/kiln feed dryer to enhance drying performance and to reduce nitrogen levels, also known as oxygen enrichment, is permitted but not a regular occurrence. The exhaust gases are ducted to a dedicated baghouse, with an inlet temperature of approximately 220°F to 270°F, that is connected to the facility's air emissions control system. Emissions in the rotary/kiln feed dryer exhaust are first controlled by this baghouse to collect PM including lead, then by the RTO to destroy VOCs⁸, and finally by the WESP to collect additional PM and SO_x.

After the lead material is dried in the rotary/kiln feed dryer, it is routed to and processed in the reverberatory furnace, which converts the solid lead-containing materials into molten lead and slag. The reverberatory furnace is fully enclosed and operates at a temperature that exceeds 2,000°F. The incorporation of oxygen enrichment in the reverberatory furnace is also permitted to enhance drying performance and to reduce nitrogen levels. Oxygen enrichment in the reverberatory furnace is routine.⁹

The molten lead exiting the reverberatory furnace is poured into molds and cooled to form large blocks called hogs. The hogs from the reverberatory furnace are then transferred via forklift to the refinery where they are melted in the refinery kettles, purified, and alloyed to meet customer specifications using various commodities (e.g., antimony, arsenic, and calcium) as needed.

Slag from the reverberatory furnace is transferred to the electric arc furnace where it is processed to recover any remaining lead. The recovered lead from the electric arc furnace is poured into molds and cooled. The cooled, recovered lead from the electric arc furnace is transported by forklift to the refinery where it is also melted in the refinery kettles.

Any remaining slag that is generated from the electric arc furnace does not contain recoverable amounts of lead. As such, this "second-pass" slag is conveyed to the containment building. Each load of slag is analyzed according to the United States Environmental Protection Agency's (U.S. EPA) Toxicity Characteristic Leaching Procedure (TCLP).¹⁰ The slag is sorted based on whether it meets the criteria of a hazardous waste or not as determined by the TCLP.

Slag from the electric arc furnace is periodically loaded into truck trailers to be hauled offsite by heavy-duty truck to an authorized landfill. Slag material ready for landfill is collected and loaded

⁸ The RTO destroys VOCs and their associated odors. This is relevant to the proposed Project's request to allow petroleum coke in lieu of or in addition to calcined coke (refer to Section 2.6 for more details about the proposed Project). Any differences in odors generated between calcined coke and petroleum coke was previously assessed in checklist question e) of the NOP/IS Section III: Would the project create objectionable odors affecting a substantial number of people? This analysis states that any additional odors that may be generated by increasing the throughput limit of feed and additives (which includes use of petroleum coke in the furnaces as a smelting reagent) would also be routed to the existing air pollution control systems and would result in less than significant odors impacts. The South Coast AQMD determined no further analysis is required.

⁹ Permit condition C303.1 allows the incorporation of oxygen into the reverberatory furnace burner. When oxygen is supplied, nitrogen-containing excess air is reduced which reduces NO_x emissions. Oxygen is manufactured onsite and is also supplied by Linde as (rarely) needed. Combustion air mixture is a combination of natural gas, ambient air, and pure oxygen. The specific concentration of each varies based on furnace temperature and NO_x formation.

¹⁰ U.S. EPA, SW-846 Test Method 1311: Toxicity Characteristic Leaching Procedure. <https://www.epa.gov/hw-sw846/sw-846-test-method-1311-toxicity-characteristic-leaching-procedure>

onto trucks in the containment building, an area which is under negative pressure, for offsite shipment. See Section 4.4 for further details regarding the offsite disposal of slag.

The exhaust emissions from the reverberatory furnace are controlled by an air pollution control system that consists of a reverberatory furnace baghouse to collect PM, a LOTOX[®] scrubber to remove NO_x, a wet scrubber to remove SO_x, and the aforementioned WESP to remove additional PM and SO_x. The exhaust emissions from the electric arc furnace are controlled by an air pollution control system that consists of a baghouse to collect PM, a wet scrubber to remove SO_x, and the aforementioned WESP to remove additional PM and SO_x. The exhaust emissions from the refinery are collected by an air pollution control system that consists of the refinery baghouse to collect PM and the WESP to remove additional PM and SO_x.

Quemetco currently operates seven (7) refinery kettles where hogs from the reverberatory furnace and electric arc furnace are further refined into final alloys that meet individual customer specifications before casting. For example, customers order either pure lead or lead mixed with alloys based on their individual industrial process requirements. Emissions from the refinery kettles include kettle process emissions, fugitive emissions, and refinery burner combustion exhaust gases. Each refinery kettle is equipped with a ventilation hood to capture the kettle process emissions from the refinery activities and vent them to an air pollution control system. Kettle process emissions are first controlled by a refinery baghouse to collect larger sized particles PM, and then are routed to the aforementioned WESP where additional PM and SO_x is collected.¹¹ All seven (7) refinery kettles are operated within a building equipped with Busch units. The Busch unit HEPA filters are designed to control PM emissions but are not capable of controlling VOCs. Busch units A and B serve the refinery.

The facility's permit condition C1.7 specifically limits the current throughput to the rotary/kiln feed dryer and reverberatory furnace to 600 tpd. Because the process is designed such that the feed first goes into the rotary/kiln feed dryer and then to the reverberatory furnace, permit condition C1.7 has the effect of also limiting the amount of feed stock entering the reverberatory furnace.

When the daily throughput is reached, Quemetco initiates the Compliance Stop Period by pausing the process of sending feed to the rotary/kiln feed dryer, turning off the rotary/kiln feed dryer, and reducing the firing rate of the burner in the reverberatory furnace from operational mode firing at 16-20 million MMBTU to idle mode at 5-6 MMBTU. During idle mode, the temperature within the reverberatory furnace gradually decreases. Although no additional feed may be processed during the Compliance Stop Period, the reverberatory furnace continues to burn fuel to maintain minimal idle temperature even when not processing feed. All other equipment, processes, and air pollution control equipment continue to operate at full capacity during the Compliance Stop Period. For example, the electric arc furnace may continue to process reverberatory furnace slag and the refinery kettles may continue to process lead metal to meet customer specifications. The facility's air emissions control systems also continue to operate.

¹¹ Although previously vented via the separate stack, the kettle burners have been venting to the WESP since it was installed. However, if the kettle burners were vented to atmosphere via this stack, the exhaust would be comprised of combustion emissions. Process emissions never go through this separate stack and can only be routed to the WESP via the refinery baghouse. Although not impossible, it is very unlikely this stack would be opened for venting kettle combustion emissions.

The 600 tpd throughput limit was established in accordance with the emission offset requirements in South Coast AQMD's Regulation XIII and the air toxics limits in South Coast AQMD's Regulation XIV. This limit, however, was imposed prior to the facility's installation of the WESP and the RTO. The WESP and the RTO have been operating since October 2008.

Although less feed per hour can be processed as demonstrated by the facility's current operational schedule for the rotary/kiln feed dryer and the reverberatory furnace, the Compliance Stop Period has the effect of creating inconsistent furnace temperatures and inefficient fuel usage. The reverberatory furnace operates best when there is continuous feed to allow the most efficient use of fuel and furnace heat. When there are gaps in the feed, fuel is inefficiently consumed, and some furnace heat is wasted.

For these reasons, Quemetco already operates its furnaces at its optimal hourly operational levels (within the daily 600 ton throughput limit) as much as possible to maximize the feed it can process in the most fuel- and heat-efficient manner.

2.4.4 Fuels and Furnace Additives

The rotary/kiln feed dryer and reverberatory furnace are fueled with natural gas, and oxygen is injected into the burners.¹² The refinery kettles are fueled with natural gas, and the electric arc furnace uses electricity for its operations. The natural gas is supplied by Southern California Gas (SCG) and the electricity is supplied by Southern California Edison (SCE).

All additives are intermittently delivered to Quemetco by truck from regional suppliers or distributors and stored in enclosed containers in the chemical product warehouse for use as needed. The consumption levels of additives fluctuate by customer specification. For the quantities of each of the additives utilized by Quemetco, see Section 2.6: Project Description, Table 2-1.

Petroleum Coke

Petroleum coke is a carbonaceous solid delivered from oil refinery processes. Petroleum coke can either be green coke or calcined coke. The initial product of the coking process, green coke, is used as fuel, in gasification and metallurgical processes, or as feed stock to produce calcined coke.

Green coke is generally referred to as petroleum coke. Petroleum coke is readily available from crude oil refineries in the South Coast Air Basin that are closer to the facility than the suppliers of calcined coke. Petroleum coke is currently used at the facility exclusively in the refinery kettles as a purifying agent. The proposed Project would expand the use of petroleum coke at the facility to include use as a reagent during the smelting process due to dwindling supplies of calcined coke.

Petroleum coke is roughly 90% elemental carbon, 3 to 6% elemental sulfur, with the remaining composition being hydrogen, oxygen and nitrogen. Trace amounts of metals, such as vanadium,

¹² Liquid Petroleum Gas (LPG) could also be used as fuel. LPG, however, has not been supplied for many years and the LPG storage tanks have been removed from the facility. There is no current LPG supplier.

have been measured in petroleum coke (NIST, 2021), but petroleum coke has been found to have a low-level of toxicity and no evidence of carcinogenicity (EPA, 2016). The Environmental Protection Agency (EPA) classifies petroleum coke as a highly stable product which is non-reactive at ambient conditions. EPA defines petroleum coke as having a “low health hazard potential” with no observed carcinogenic, reproductive, or developmental effects. Petroleum coke is chemically inert, does not react chemically in water, does not dissolve in water, is not bioavailable by organisms (organisms cannot absorb it) and does not bio accumulate (does not concentrate harmful substances) in organisms (EPA, 2011).

Calcined Coke

Calcined coke is produced when green coke is treated to higher temperatures (1200 to 1350°C) to drive off excess compounds and moisture. Calcined coke can be referred to as “chunky” or “fine” calcined coke and are the same as calcined coke. The additional processing to produce calcined coke removes most of the remaining volatile hydrocarbons (<0.5%) and increases the carbon content of the calcined coke (EPA, 2011). Calcined coke is approximately 97% elemental carbon, 1% elemental sulfur, with the remaining composition being hydrogen, oxygen and nitrogen. Trace amounts of metals, such as vanadium, have been measured in petroleum coke (NIST, 2021). Similar to petroleum coke, calcined coke is highly stable in the environment and is non-reactive, with no observed health hazards (Hickman, Williams & Co, 2012-2013). Calcined coke is chemically inert, does not react chemically in water, does not dissolve in water, is not bioavailable by organisms (organisms cannot absorb it) and does not bio accumulate (does not concentrate harmful substances) in organisms (EPA, 2011).

Additionally, Quemetco has been purchasing calcined coke from Rodeo, California (northern California) and has been purchasing the petroleum coke from Arroyo Grande, California (southern California). Petroleum coke is more readily available and from a source which is closer to the facility.

Calcined coke is an additive that is currently used as a purifying agent in the smelting process to enhance the removal of impurities from lead bearing scrap in the reverberatory furnace and electric arc furnace.

Soda Ash

Soda ash is the common name for sodium carbonate, and is soluble in water. Soda ash is stable under ambient conditions, and is not flammable or combustible (Fischer Scientific, 2008). Soda ash is utilized as needed for pH adjustment in the air pollution control systems (e.g., the reverberatory furnace and electric arc furnace scrubbers (see Section 2.4.7)). The soda ash is stored in an existing tank located in the electric arc furnace baghouse/scrubber area and in existing onsite silos located next to the battery wrecker enclosure and water quality system, so it can be transferred into a mix tank, mixed into a slurry with water, and pumped into the scrubbers.

Sulfuric Acid

Similar to soda ash, sulfuric acid is also used in Quemetco's onsite wastewater treatment system as a pH adjustment agent in the wastewater treatment process. Sulfuric acid is an acidic solution and is stable under normal conditions. Sulfuric acid is not flammable or combustible (LabChem, 2018). Most of the facility's sulfuric acid is obtained from the battery acid that is collected during the battery dismantling process (described in Section 2.4.2); small amounts of sulfuric acid are occasionally purchased if additional supply is needed.

Others

Limestone (e.g., pebble lime and dolomite lime) and cobbled steel are also used in the smelting process. Limestone is a sedimentary rock composed mainly of calcium carbonate (calcite) and the double carbonate of calcium and magnesium (dolomite). Limestone is stable, unreactive at normal conditions, and is not flammable or combustible (Lehigh Hanson, 2018). Cobbled steel is made from recycled steel and is used for its iron compounds in the electric arc furnace to bind with lead oxides and sulfur compounds in the slag formation process. Cobbled steel is also stable, unreactive at normal conditions, and is not flammable or combustible. Other additives such as arsenic, caustic soda beads, cobalt, graphite, metallic sodium, pyrite, silver, sodium nitrate, sulfur, and tin may also be added to the refinery kettles for treatment or alloying purposes at each customer's request. All these additives are stable and unreactive at normal conditions. Caustic soda beads and tin are nonflammable solids; arsenic, cobalt, graphite, metallic sodium, pyrite, silver, sodium nitrate, and sulfur may be flammable at elevated temperatures (>200 °F). Red phosphorus is also used as an additive in the refinery kettles and is a compound derived from elemental phosphorus. Red phosphorus is a flammable and combustible solid powder that is stable at normal conditions. The facility maintains a Risk Management Plan for red phosphorus, as required by the California Accidental Release Prevention (CalARP) regulation (see Section 3.4.2).

2.4.5 Water and Wastewater

Quemetco's wastewater treatment system is located at the northeast corner of the site. Potable water is provided by San Gabriel Valley Water Company (SGVWC) and is used for rinsing the plastics and steel recovered from the battery dismantling process; operating the WESP and SOx scrubbers; washing the outside areas of the facility; supplying water to the employee drinking fountains, kitchen, showers, and restrooms; and watering facility landscaping.

As explained in Section 2.4.4, Quemetco uses sulfuric acid and soda ash as pH adjustment agents in its wastewater treatment process. Solids are removed using a filter press. After treatment, Quemetco discharges the treated wastewater into the LACSD's regional wastewater system in accordance with Quemetco's LACSD Wastewater Discharge Permit. Sanitary wastewater generated from the employee kitchen, showers, and restrooms is discharged to the sewer without undergoing treatment through a separate discharge line from the onsite wastewater treatment system. There is one wastewater connection with LACSD.

Storm water collected on the processing side of the facility is sent to the onsite wastewater treatment. It is treated exactly like process water and discharged to the LACSD wastewater system

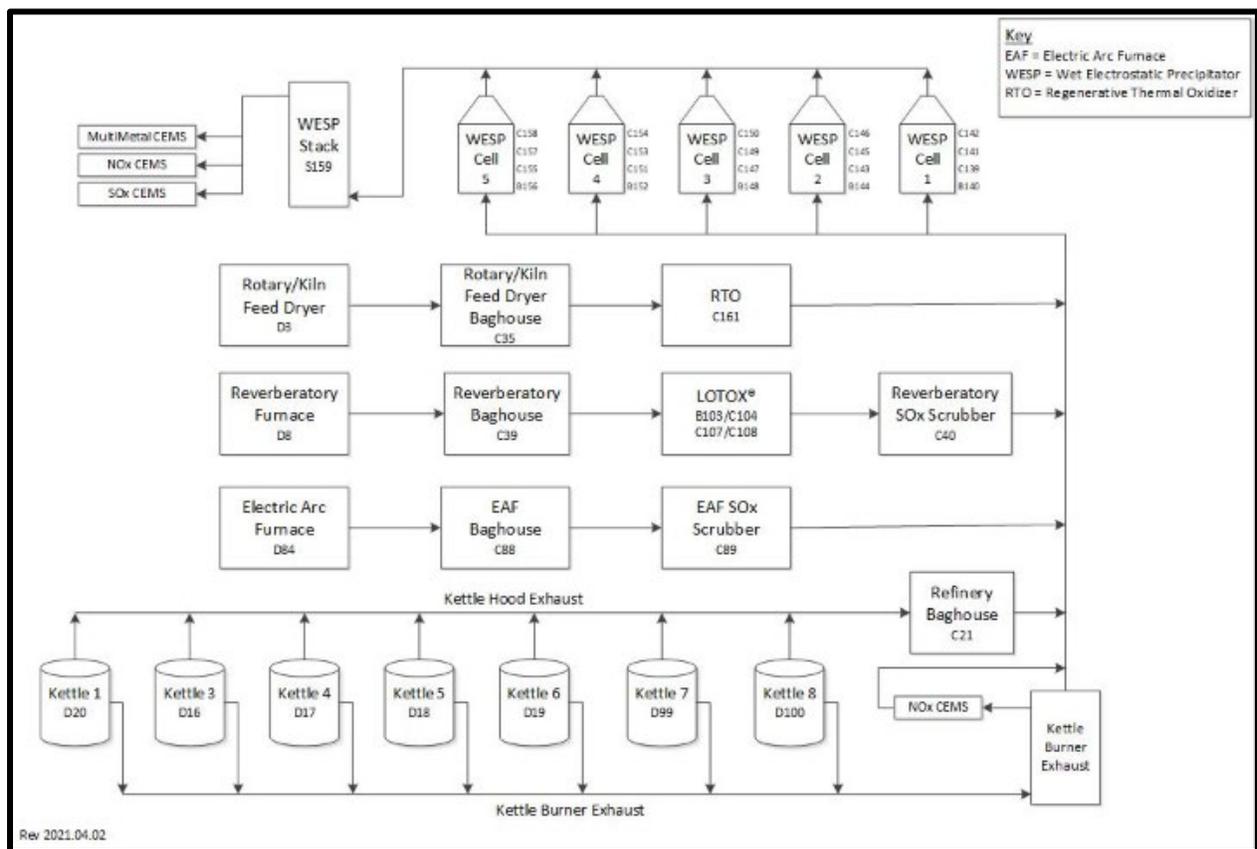
as treated process water. Storm water from the non-processing side of the facility (i.e., the security entrance and the office areas) is collected and treated in the facility’s existing storm water treatment system prior to discharge. Discharge from this system is ultimately to the municipal storm drain.

2.4.6 Other Existing Buildings and Work Areas

Other existing buildings and work areas at the Quemetco facility include: a security building; administrative offices; a laboratory; a warehouse/shipping building for storage of chemicals, additives and finished goods as well as receiving and shipping; and equipment maintenance areas.

2.4.7 Air Pollution Control Systems

Quemetco has multiple air pollution control systems which have some interconnected equipment that is utilized throughout the facility, as depicted in Figures 2-7 and 2-8, and as previously described in Section 2.4.3.



The facility’s air pollution control systems operate continuously and are inspected daily, as required by applicable South Coast AQMD permits and regulations. Routine checks look for

issues including pressure drop across baghouses, the pH of scrubber systems and the temperatures at control device inlets.

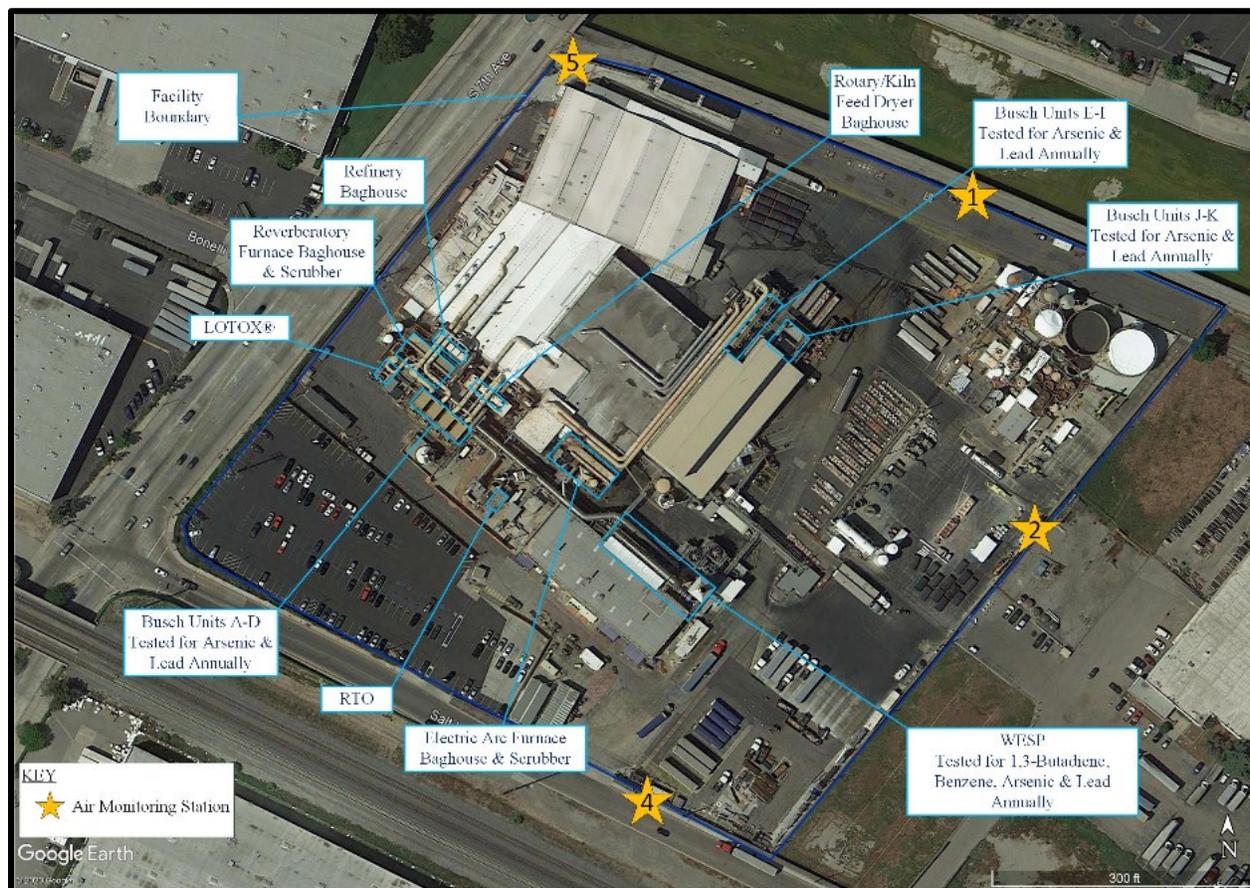
As depicted above in Figure 2-7, emissions in the rotary/kiln feed dryer exhaust are first routed to the rotary/kiln feed dryer baghouse to remove PM, including lead, and then to the RTO to destroy VOCs, and finally to the WESP to remove additional PM and SOx. The exhaust emissions from the reverberatory furnace are routed to a separate air pollution control system that consists of a reverberatory furnace baghouse to remove PM, a LOTOX[®] scrubber to remove NOx, and a reverberatory furnace scrubber to remove SOx, and then is connected to the aforementioned WESP to remove additional PM and SOx. The exhaust emissions from the electric arc furnace are routed to another air pollution control system that consists of an electric arc furnace baghouse to remove PM, an electric arc furnace scrubber to remove SOx, and then to the aforementioned WESP to remove additional PM and SOx. The exhaust emissions from the refinery are routed to its own air pollution control system that consists of the refinery baghouse to remove PM and then to the WESP to remove additional PM and SOx. Further, the rotary/kiln feed dryer, reverberatory furnace, electric arc furnace and refinery are operated within buildings with Busch units that maintain the buildings under negative air pressure to prevent fugitive PM emissions from being released into the ambient air.

The facility process buildings (including the battery wrecker building, furnace buildings and refinery building) are also equipped with Busch units; a ventilation system of baghouses with HEPA filters on the roof of the facility (see Figure 2-8). The Busch units create a negative pressure in the facility process buildings to prevent fugitive PM emissions from being released into the ambient air. The ventilation system fans pull air into the building processing areas where PM emissions are routed to the 11 Busch units. The Busch units operate in the following facility process areas:

- Busch units A and B - refinery
- Busch units C and D - rotary/kiln feed dryer and reverberatory furnace area
- Busch units E and F - electric arc furnace
- Busch units G, H, and I - containment building
- Busch units J and K - battery wrecker building

Figure 2-8 depicts the locations of the Busch units, the various baghouses and scrubbers, the RTO, the WESP, and the four onsite air monitoring stations¹³ as well as the type of source tests collected for some of these pollution control devices.

¹³ Figure 2-8 shows air monitoring stations 1, 2, 4 and 5. Air monitoring station 3 was replaced with air monitoring station 5.



The essential air pollution control systems must operate continuously, even during power outages. Power interruptions are generally the result of upstream supply issues on the utility grid. For this reason, Quemetco currently operates two diesel emergency internal combustion engines (ICE) and one natural gas ICE to supply backup power when there is a power outage to keep the following air pollution control systems and ventilation systems operating: Busch units F, I and J, the reverberatory scrubber blower, the reverberatory baghouse blower, the electric arc furnace scrubber blower, and the electric arc furnace baghouse blower, and the WESP. There are two additional natural gas ICEs which have received permits from South Coast AQMD but have not yet been constructed; these ICEs will operate Busch units A, B, C and D.

Also depicted in Figure 2-8, the facility’s onsite air monitors are positioned along the fence lines and continuously monitor ambient lead and arsenic concentrations, among other emissions, at the facility boundary. Quemetco is required to report all ambient monitoring results to South Coast AQMD under Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities.

2.5 INTENDED USES OF THIS EIR

The EIR is intended to be used as a decision-making tool that provides full disclosure of the proposed Project's potential environmental consequences. Additionally, CEQA Guidelines Section 15124(d)(1) requires a public agency to identify the following specific types of intended uses:

- A list of the agencies that are expected to use the EIR in their decision making;
- A list of permits and other approvals required to implement the project; and,
- A list of related environmental review and consultation requirements required by federal, state, or local laws, regulations, or policies.

To the extent that local public agencies, such as cities, county planning commissions, other potential responsible agencies, etc., are responsible for making land use and planning and permit decisions related to the proposed Project, they could possibly rely on this EIR during their respective decision-making processes. No such land use planning or permit decisions, however, are anticipated for the proposed Project. See Section 2.7 for a list of permit approvals needed.

2.6 PROJECT DESCRIPTION

To allow the facility to recycle more batteries and to eliminate the existing Compliance Stop Period, Quemetco is proposing to modify its existing South Coast AQMD permits to: 1) increase the throughput limit to the rotary/kiln feed dryer and reverberatory furnace from 600 tons per day (tpd) to 750 tpd; 2) increase the temperature of the exhaust from the rotary/kiln feed dryer from 330 degrees Fahrenheit (F) to 450 degrees F; 3) increase the amount of coke material (e.g., calcined coke, petroleum coke, or a combination thereof) processed in the rotary/kiln feed dryer and reverberatory furnace from 600,000 pounds per month (lbs/month) to 750,000 lbs/month; and 4) allow the use of petroleum coke, in lieu of or in addition to calcined coke, as a smelting reagent in the reverberatory furnace and electric arc furnace.

Currently, the facility's rotary/kiln feed dryer and reverberatory furnace typically operate approximately 18-23 hours per day; however, with the proposed increase in the rotary/kiln feed dryer and reverberatory furnace permit limit, the rotary/kiln feed dryer and reverberatory furnace may operate up to 24 hours per day and as a consequence, with the hourly throughput expected to stay the same, the refined lead product output would increase from approximately 460 tpd to 575 tpd. No physical changes to the facility are needed to implement the proposed Project. The type of feed stock received for processing is not expected to change as a result of the proposed Project.

The proposed Project also includes the following minor modifications to existing permit conditions for minor facility improvements that would have no effect on facility emissions and no anticipated environmental impacts:

- Add a new permit condition that would require Quemetco to maintain a differential pressure monitor on the WESP as an additional compliance assurance monitoring parameter;
- Update the WESP permit conditions to include a requirement to measure pressure drop across the WESP;
- Update permit conditions C6.1 and C6.4 to allow an increase temperature of the exhaust from the rotary/kiln feed dryer (Device D3) and its baghouse (Device D35) from 330 °F up to 450 °F;
- Add a carbon monoxide (CO) continuous emissions monitoring system (CEMS) to the WESP stack to measure compliance with CO emission limits from the WESP stack as requested by South Coast AQMD; and
- Remove permit conditions that reference obsolete South Coast AQMD compliance requirements.

Quemetco, as part of periodic maintenance, anticipates replacing the rotary/kiln feed dryer baghouse (Device C182) in late 2021; permit condition C6.1 was updated to limit the temperature of exhaust gas entering the rotary/kiln feed dryer baghouse to 450 °F. Permit condition C6.4 currently limits the temperature of exhaust gas exiting the rotary/kiln feed dryer (Device D3) to 330 °F. Quemetco has requested that permit condition C6.4 be updated from 330 °F to 450 °F to increase the bag life and reduce opportunities for incidental lead releases during bag replacement. This proposed exhaust temperature of 450 °F is less than the rotary/kiln feed dryer baghouse bag temperature rating of 500 °F and will have no effect on the facility's emissions and no environmental impacts.

Given these minor permit modifications will have no effect on facility emissions and no environmental impacts, they will not be evaluated further in Chapter 4 – Environmental Impact Analysis.

Table 2-1 presents a summary of year 2014 (baseline) and proposed Project operations. The EIR evaluates whether the proposed Project could cause a significant effect on the environment as compared to existing environmental conditions (known as baseline conditions) in accordance with CEQA Guidelines Section 15002(g) and 15125.

The year 2014 was selected as the baseline year (existing setting) for the proposed Project for several reasons. The applications for the proposed Project were submitted to South Coast AQMD in 2013. Also, since the facility was operating at less than normal conditions in year 2014, the CEQA analysis will result in the most conservative approach by presenting the largest incremental emission impacts, (e.g., the reasonable worst-case effects) that may occur if the proposed Project is implemented.

Quemetco operates its facility 24-hours per day such that there are always employees present, emissions control systems operating, and materials being received, processed through the battery wrecker, and finished in the refinery. The furnaces operate until the operating permit limits are reached, which is referred to as the Compliance Stop Period. Specifically, the rotary/kiln feed dryer and the reverberatory furnace operate until 600 tpd of feed stock is processed, which typically takes 18 to 23 hours. A maximum daily throughput limit of 750 tpd has been proposed to allow

the rotary/kiln feed dryer and the reverberatory furnace to operate at an optimal level by maintaining consistent furnace temperatures and efficient fuel use. Further, an increased daily throughput limit allows the furnaces to operate more hours (rather than process more feed per hour). The existing air pollution control systems would remain unchanged and fully operational before and after the proposed Project.

As previously described, the daily Compliance Day runs from noon one day until noon the subsequent day, and the rotary/kiln feed dryer typically shuts off and the reverberatory furnace idles during the morning hours just before noon each day. The proposed Project would allow the rotary/kiln feed dryer and reverberatory furnace to operate during these currently idle hours before noon. The proposed Project would be expected to increase the daily throughput limit (e.g., total feed) through the rotary/kiln feed dryer, the reverberatory furnace, and downstream processes. The proposed Project would increase the amount of natural gas and electricity used. Further, the proposed Project would increase the total refined lead product output from the refinery over baseline conditions. The potential air quality impacts of the peak hourly and daily emissions from all of the proposed Project's increased activities are evaluated in this EIR.

While petroleum coke is currently permitted for use as a purifying agent in the refinery process the proposed Project is requesting a permit modification to also allow petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric arc furnace. In 2016, the South Coast AQMD issued a temporary research permit in accordance with South Coast AQMD Rule 441 - Research Operations that allowed the use of petroleum coke, in lieu of calcined coke, as a smelting reagent in the reverberatory furnace and electric arc furnace. The purpose of the temporary research permit was to evaluate any emissions changes resulting from the change in smelting reagent prior to allowing a permanent change. The temporary research permit required Quemetco to conduct source tests requested by South Coast AQMD to determine whether emissions of pollutants from the air pollution control system would be different if petroleum coke is used instead of calcined coke as a smelting reagent. Quemetco completed the source tests of its air pollution control systems and provided to the South Coast AQMD the resulting emission levels when petroleum coke was used as a smelting reagent in the reverberatory furnace and electric arc (refer to Section 4.2 and Appendix D).

As part of the request to use petroleum coke in lieu of, or in addition to, calcined coke, Quemetco has agreed to install a CEMS to continuously monitor CO emissions from the WESP stack (included in minor permit modifications list above). Specifically, the CO CEMS will be used to continuously monitor compliance with the CO limits in permit condition A63.6 which limits CO emissions to 230 pounds per day. Quemetco is not seeking an increase in the CO limit. Once this CO CEMS is installed and certified, there will be five (5) constituents continuously monitored at the WESP stack: CO, CO₂, NO_x, SO_x, and arsenic. Additionally, four (4) fenceline monitors continuously monitor lead and arsenic in ambient air. The CO CEMS will enhance the current periodic source test results by providing continuous CO emissions data. The CO CEMS is included in the list of permit modifications above and requires an application for certification that is evaluated by South Coast AQMD's monitoring and source testing group in the same way the Regional Clean Air Incentive Market (RECLAIM) CEMS are certified.

Other than substituting petroleum coke for calcined coke in the reverberatory furnace and electric arc furnace, no physical changes were made to the facility or to any process equipment or air pollution control equipment/system as part of conducting this research project. Quemetco is proposing a permit modification to permanently allow petroleum coke to be used for this purpose. This EIR evaluates the potential effects of allowing petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric arc furnace (refer to Section 4.2 and Appendix D).

The proposed Project would generate an increase in the transport of materials -- including feed, additives, finished product, recycling, and waste -- in and out of the facility. The proposed Project could potentially generate three additional railcar trips a month and while the actual railcar trip activity is intermittent and not distinguishable on a daily basis, this additional railcar trip activity as a result of the proposed Project is included to be reasonably conservative. The proposed Project would increase water demand and wastewater generated. The proposed Project would not change the type of additives or any of the other materials used; it would increase the amount of feed (raw material scrap), additives (smelting reagent, limestone, cobbled steel, other additives including acids), and soda ash. The proposed Project would increase total consumption of natural gas and electricity as presented in Table 2-1 and analyzed in Section 4.3: Energy.

Table 2-1 includes estimates for the potential daily truck traffic increase needed to transport the additional feedstock to be processed. The proposed Project could increase daily traffic by up to 15 trucks and six (6) employee round trips per day (trips/day). The 15 daily truck trips are inclusive of: additional feedstock delivery trips; additional additives delivery trips; additional waste disposal trips (metals and plastics to recycling facilities and slag to landfill); and additional finished products trips.

Table 2-1 Summary of Quemetco Operations: Baseline & Proposed Project¹⁴

| | 2014 Baseline Conditions (pre-Project) | Proposed Project (post-Project) | Post-Project Increment |
|--|---|--|-------------------------------|
| Throughput Process Limits in Permits (tpd) | 600 | 750 | 150 |
| CEQA Evaluation Scenario of Throughput Process Limits (tpd) ¹⁴ | 510 | 750 | 240 |
| Additives (tpd): | | | |
| 1) Smelting Reagents/Total Coke Material Processed in Rotary/Kiln Feed Dryer and Reverberatory Furnace | 7.3 | 11.1 | 3.8 |
| a. Calcined Coke (chunky & fine) | 7.3 | 0 | -7.3 |
| b. Petroleum Coke | -- | 11.1 | 11.1 |
| 2) Limestone | 2.4 | 3.8 | 1.4 |
| 3) Cobbled Steel | 9.4 | 13.2 | 3.8 |

¹⁴ The baseline uses the year 2014 average daily throughput of 510 tpd (assuming 365 days per year of operation) rather than the permitted amount of 600 tpd. This is the lowest daily throughput since the permit application was submitted and therefore creates the largest Project increment for assessing the proposed Project's potential impacts.

| | 2014 Baseline Conditions (pre-Project) | Proposed Project (post-Project) | Post-Project Increment |
|--|--|---------------------------------|------------------------|
| 4) Other additives* | 7.4 | 8.9 | 1.5 |
| Soda Ash (tpd) | 58.2 | 87.3 | 29.1 |
| Electricity Consumption (annual kilowatt-hour, kWh) | 38,912,004 | 52,009,717 | 13,097,713 |
| Natural Gas Consumption (annual hundred cubic feet, CCF) | 2,750,998 | 3,610,761 | 859,773 |
| Railcars Activity Per Month: | | | |
| Inbound | 2 | 3 | 1 |
| Outbound | 8 | 10 | 2 |
| TOTAL | 10 | 13 | 3 |
| Railcar Peak Day Trips (one-way) | 2 | 2 | 0 |
| Potable Water Consumed (gallons per day, GPD) | 272,022 | 369,435 | 97,413 |
| Wastewater Discharged (gallons per week) | 1,351,133 | 1,651,974 | 300,841 |
| Solid Wastes (tons per year, tpy): | | | |
| Metals (recycled) | 1,613 | 1,892 | 252 |
| Plastics (recycled) | 6,340 | 9,440 | 3,100 |
| Slag (landfilled) | 11,232 | 15,346 | 4,114 |
| Truck Activity Per Month: | | | |
| Inbound | 1,084 | 1,409 | 325 |
| Outbound | 531 | 621 | 90 |
| TOTAL | 1,615 | 2,030 | 415 |
| Peak Daily Trucks (Inbound + Outbound) | 53 | 67 | 15 |
| Number of Employees | 244 | 250 | 6 |
| Peak Daily Employee Trips (Inbound + Outbound) | 244 | 250 | 6 |

Notes:

* The amount and type of other additives that may be used are determined by the customer and can consist of arsenic, caustic soda beads, cobalt, metallic sodium, pyrite, red phosphorus, silver, sodium nitrate, sulfur, and tin.

2.7 PERMITS AND APPROVALS

The proposed Project would require discretionary approvals from the South Coast AQMD (as lead agency), as well as subsequent action by the DTSC (as responsible agency). Table 2-2 summarizes the anticipated permits and approvals that may be required to implement the proposed Project. In addition, Quemetco submits reports to the U.S. EPA two times per year to certify compliance with all Title V requirements (implemented by the South Coast AQMD). The proposed Project will result in a South Coast AQMD Title V permit revision, which is subject to U.S. EPA review.

Table 2-2 Project Permits and Approvals

| Agency Permit or Approval | Requirement | Applicability to Project |
|---|--|--|
| State | | |
| California Environmental Protection Agency, DTSC | Hazardous Waste Facility Operation and Post-Closure Permit | The Hazardous Waste Facility Operation and Post-Closure Permit was initially issued by DTSC on September 15, 2005 and is currently in a renewal process. This permit allows Quemetco to operate the equipment and processes at issue in the Capacity Upgrade Project as Miscellaneous hazardous waste management units (HWMU) along with the other HWMUs at the facility. The current permit establishes maximum capacities for each piece of equipment and a maximum daily throughput for the reverberatory furnace, electric arc furnace, and rotary/kiln feed dryer. Any modifications to this permit as a result of the Capacity Upgrade Project would be a separate but related activity, and DTSC is a CEQA responsible agency with regards to the proposed Project with discretionary approval. |
| Regional | | |
| South Coast AQMD | Quemetco Air Permits | The proposed Project requires the modification of existing air permits. |

2.7.1 Lead Agency

As described previously, the South Coast AQMD is the lead agency for this proposed Project. [CEQA Guidelines Section 15051(b)]. In compliance with CEQA, the South Coast AQMD, as the lead agency for this proposed Project, prepared and released for a 56-day public review and comment period a NOP/IS to identify potential significant environmental impacts associated with the Quemetco Capacity Upgrade Project (see Appendix A). Comment letters were received on the NOP/IS. Comment letters and responses to individual comments can be found in Appendix B. Further, the District has caused this Draft EIR to be prepared and circulated for no less than 45 days in compliance with CEQA.

2.7.2 Responsible Agencies

CEQA Guidelines Section 15381 defines a “responsible agency” as “a public agency which proposes to carry out or approve a project, for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of CEQA, the term 'responsible agency' includes all public agencies other than the lead agency that have discretionary approval power over the project.”

DTSC initially issued a Hazardous Waste Facility Operation and Post-Closure Permit for the Quemetco facility in 2005 which allows the existing equipment and processes, referred to as Miscellaneous Hazardous Waste Management Units (HWMUs) to operate. The current DTSC permit establishes maximum capacities for each piece of equipment and a maximum daily throughput for the reverberatory furnace, electric arc furnace, and rotary/kiln feed dryer. If the proposed Project is approved, modifications would similarly be required in the facility's DTSC permit. This would be a separate but related activity, subject to discretionary review and approval by DTSC.

As a result, DTSC is identified in this EIR as a responsible agency. The South Coast AQMD has consulted with the DTSC, and DTSC's staff have been given an opportunity to review and comment on the NOP/IS and EIR.

2.7.3 Commenting Agencies

The following agencies are identified as commenting agencies because they have jurisdiction over the Quemetco facility [CEQA Guidelines Section 15366], but the proposed Project would not require any discretionary review and approvals from these: California Department of Transportation (Caltrans), City of Industry, Los Angeles County Sanitation District (LACSD), Los Angeles County Fire Department (LACFD), Los Angeles County Health Department, Los Angeles County Public Works, and the Regional Water Quality Control Board (RWQCB).

The following is a brief summary of other agencies' rules, regulations, and permits under which Quemetco operates. Because the proposed Project does not contain any components that would require a discretionary action by these agencies to determine whether to carry out or approve the proposed Project, these agencies are referred to as commenting agencies.

2.7.3.1 Caltrans

Caltrans is the state agency responsible for highway, bridge, and rail transportation planning, construction, and maintenance. Caltrans requires an encroachment permit for any project that will affect a state-owned facility. Additionally, Caltrans requires special permits for oversized loads traveling on roadways. Currently, Quemetco has no permits from Caltrans. The proposed Project does not contain any project elements that would affect a state-owned facility or Caltrans operations, and would not require the need for oversized loads. The proposed Project also would not involve any construction of highways, bridges, or rail lines, and there would be no substantial increases in traffic volumes due to increased workers or truck deliveries at the facility (as evaluated in Section 4.6: Transportation). Thus, the proposed Project would not require an encroachment permit from Caltrans. Although no known aspects of the proposed Project are anticipated to affect Caltrans operations or trigger any discretionary permits or special permits, Caltrans submitted a comment letter during the NOP/IS public review and comment period (see Appendix B, comment letter NOP-5) requesting a further evaluation of transportation impacts. The comment letter and its response are provided in Appendix B of this EIR (see comment letter NOP-5 and its response). The requested transportation analysis is included in Chapter 4 of this EIR.

2.7.3.2 City of Industry

The City of Industry governs zoning and land development within the City of Industry, which is where Quemetco and the proposed Project are located. The Quemetco facility is an allowed use within the City of Industry and does not require a Conditional Use Permit. The City of Industry is comprised of primarily industrial (92%) and commercial (8%) activities. As of the 2010 census, there were only 219 residents within the City of Industry. Because the proposed Project does not require any soil or ground disturbances and would not result in a change of use, no changes in zoning or land use would be needed. Therefore, the proposed Project would not require any action by the City of Industry such as a land use change or a building permit.

2.7.3.3 LACSD

Quemetco operates pursuant to an Industrial Wastewater Discharge Permit issued on March 29, 2016, with wastewater discharge limits from LACSD and the United States Environmental Protection Agency (U.S. EPA). U.S. EPA discharge limits are based on production data from July 1, 2014 to June 30, 2015. Quemetco submits production data quarterly to the LACSD in accordance with permit conditions. The portion of the proposed Project seeking to increase the number of batteries processed for recycling and to eliminate the existing daily idle time would increase wastewater discharge levels but would not trigger a discretionary permit modification from the LACSD because the proposed Project would operate within permit limits.

Per Condition No. 35 of the wastewater discharge permit, a new permit application must be submitted when there is a significant change in wastewater quantity (more than 25%) or quality from that given in the approved permit information. The changes in wastewater quantity and quality in the proposed Project would not exceed the permitted wastewater discharge rates and concentration values (as evaluated in Section 4.5: Hydrology and Water Quality).

2.7.3.4 LACFD

LACFD regulates the storage and handling of hazardous materials and hazardous waste. Per LACFD requirements, Quemetco has submitted an approved Hazardous Materials Business Plan (HMBP) that includes an inventory of hazardous materials and hazardous wastes, emergency response plan (ERP) and procedures, employee-training program, and map showing the locations of the hazardous materials and wastes. The HMBP is required to be updated annually or when any major changes in hazardous materials or hazardous waste occur or are expected to occur at the Quemetco facility (e.g., when new hazardous materials are added to facility processes). While the proposed Project is not expected to change the list of materials in Quemetco's HMBP inventory, the quantities of these materials at the facility may need to be updated via the LACFD's online reporting tool as necessary. The filing of a HMBP does not require any discretionary action from the LACFD as changes in quantities of hazardous materials used at the facility only need to be reported and do not require any approval by LACFD.

2.7.3.5 Los Angeles County Health Department

The Los Angeles County Health Department oversees public health and safety in Los Angeles County. Quemetco does not require any permits from the Los Angeles County Health Department. They were included in this agency list because they submitted comments on the NOP/IS and are participating in the CEQA process.

2.7.3.6 Los Angeles County Department of Public Works

The Los Angeles County Department of Public Works manages the San Jose Creek channel, immediately adjacent to Quemetco, as part of its county wide flood control responsibilities. Quemetco does not require any permits from the Los Angeles County Department of Public Works. They are included in this list given their jurisdiction over the San Jose channel along which Quemetco is located.

2.7.3.7 Regional Water Quality Control Board (RWQCB)

Quemetco operates pursuant to a National Pollutant Discharge Elimination System (NPDES) Storm Water General Permit through the RWQCB. The General Permit regulates industrial activities exposed to rainfall where possible contaminants may enter the storm water drainage system. Quemetco's storm water from within the central plant containment boundaries is collected and treated at the onsite wastewater treatment plant then discharged to the LACSD sanitary sewer under the facility's Industrial Wastewater Discharge Permit. Storm water collected outside the central plant containment boundaries is collected and treated prior to discharge using a new StormwaterRx storm water filtration system, which is a best management practice described in the facility's storm water pollution prevention plan (SWPPP) (Associates Environmental, 2020). As required by the General Permit, the facility's SWPPP identifies industrial activities that have the potential to impact storm water runoff and outlines the measures taken by the facility to achieve pollutant reduction in storm water runoff, including best management practices, facility inspections, sampling, monitoring and implementation plans, reporting, and other facility requirements.

The proposed Project does not include construction activities that would involve or affect the facility's existing stormwater drainage system; therefore, the proposed Project would not require a NPDES stormwater permit for construction activities.

2.7.4 Trustee Agencies

Trustee agencies as defined by CEQA Guidelines Section 15386 are public agencies having jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. No trustee agencies have been identified with respect to the proposed Project. However, the NOP/IS, the Notice of Completion (NOC) of the Draft EIR, and the Draft EIR were sent to the Office of Planning and Research (OPR) pursuant to Public

Resources Code Section 21080.4 for distribution in the event that any trustee agencies (or any additional responsible agencies) are identified for the proposed Project.

2.8 FACILITY COMPLIANCE HISTORY

This section presents a summary of the applicable South Coast AQMD regulatory requirements (including the Risk Reduction Plan for air toxics), a summary of the onsite facility monitoring data for arsenic, the facility's outstanding permit applications, and summary of the facility's permit violations and resolutions. Regulatory requirements applicable to Quemetco are summarized in Section 3.2.3 of this Document

2.8.1 Ambient Monitoring Data

Quemetco maintains four (4) ambient monitoring stations and each of those stations collect 24-hour samples each day, including weekends and holidays. Each sample from each ambient monitoring station is analyzed for concentrations of arsenic and lead. The results of the daily samples are required to be submitted to South Coast AQMD monthly. Both arsenic and lead concentrations have been monitored daily at each of the four (4) ambient monitoring stations since the beginning of 2014. Figure 2-9 presents ambient monitoring data collected from January 1, 2014 through February 29, 2020

In 2001, CARB prepared an alternate risk assessment methodology, *Risk Management Guidelines for New, Modified, and Existing Sources of Lead* (Lead RM Guidelines). This guidance is typically followed for lead-emitting facilities conducting an AB 2588 HRA. South Coast AQMD's emission limits for lead, however, are more stringent than the Lead RM Guidelines.

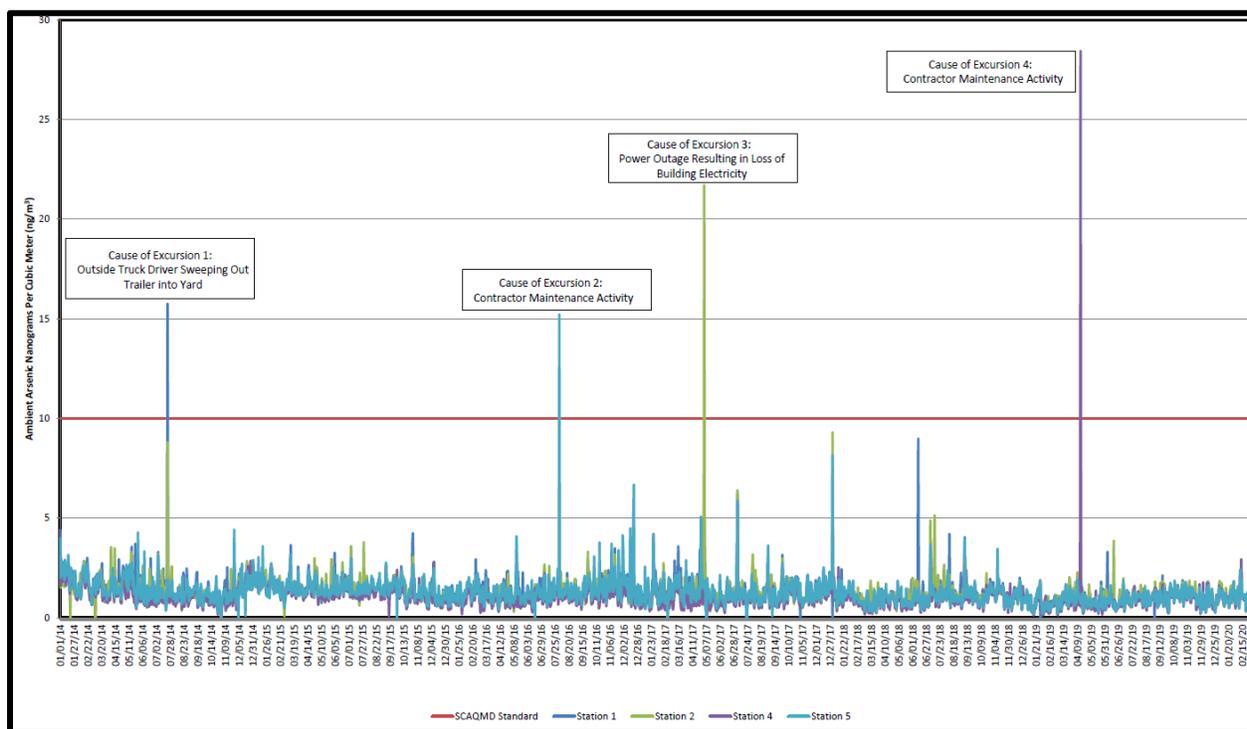
South Coast AQMD Rule 1420.1, which applies to Quemetco's operations, contains an ambient lead concentration limit of $0.100 \mu\text{g}/\text{m}^3$ averaged over any 30 consecutive days which is designed to ensure compliance with the lead NAAQS established in 2008 (e.g., $0.15 \mu\text{g}/\text{m}^3$ lead averaged over a rolling 3-month average). The Rule 1420.1 ambient lead concentration limit is more stringent than both the current state and the pre-2008 lead NAAQS available at the time that the Lead RM Guidelines were issued. South Coast AQMD staff determined (with the concurrence of staff from OEHHA and CARB) that since Quemetco's offsite concentrations were less than the Rule 1420.1 ambient lead concentration limit of $0.100 \mu\text{g}/\text{m}^3$ during the HRA period, the risks would be less than the thresholds established in the Lead RM Guidelines.

South Coast AQMD Rule 1420.1 also contains a daily, rather than a 30-day average, ambient arsenic concentration limit of $10 \text{ ng}/\text{m}^3$. Figure 2-9 shows the daily arsenic ambient monitoring results and the 30-day average lead ambient monitoring results from the Quemetco facility for the period beginning January 1, 2014 and ending February 29, 2020. Daily ambient monitoring for arsenic and lead continues as required by Rule 1420.1.

During the 2,250 days between January 1, 2014 and February 29, 2020, Quemetco's daily arsenic measurements were less than the Rule 1420.1 daily ambient arsenic concentration limit for 2,246 days, or more than 99.8% of the time. For the days when the Rule 1420.1 ambient arsenic limits

were exceeded, Quemetco conducted an investigation and submitted the results to South Coast AQMD in accordance with South Coast AQMD Rule 1420.1 requirements.

The results of the investigation attributed the exceedances to: 1) an outside truck operator sweeping out a non-Quemetco trailer on one occasion; 2) an external power outage leading to an interruption of back-up power to the WESP due to operator error on one occasion (See Section 3.2.3 and Appendix C); and 3) contractor maintenance activities on two separate occasions. These four (4) events are depicted in Figure 2-9. During that same period, the 30-day ambient lead standard was exceeded on two occasions which coincided with the arsenic exceedance events in May 2017 and April 2019.



2.8.2 Outstanding Permit Applications

Quemetco has no outstanding permit applications with the South Coast AQMD other than this Capacity Upgrade Project. None of the proposed Project’s potential changes require physical modifications to the equipment affected (i.e., no construction is required). Rather, all of the submitted applications are requesting to change the current permit conditions. The proposed permit modifications would affect equipment and permit conditions as summarized in Table 2-3.

Table 2-3 Summary of Equipment and Conditions Affected by Proposed Project

| South Coast AQMD Application Number | Application Submittal Date | Affected Equipment | Type of Application | Description of Requested Permit Change |
|-------------------------------------|----------------------------|--|---------------------|--|
| 550912 | 05/08/2013 | Reverberatory Furnace and Rotary/Kiln Feed Dryer | Change of Condition | Process throughput feed increase from 600 tpd to 750 tpd of all materials; allow use of petroleum coke; and increase exhaust temperature from 330°F to 450°F |
| 550914 | 05/08/2013 | Rotary/Kiln Feed Dryer Baghouse | Change of Condition | Process throughput feed increase from 600 tpd to 750 tpd of all materials |
| 550916 | 05/08/2013 | Reverberatory Furnace Process Air Pollution Control System | Change of Condition | Process throughput feed increase from 600 tpd to 750 tpd of all materials |
| 550918 | 05/08/2013 | Electric Arc Furnace | Change of Condition | Process throughput feed increase from 600 tpd to 750 tpd of all materials and allow use of petroleum coke |
| 550919 | 05/08/2013 | Electric Arc Furnace Air Pollution Control System | Change of Condition | Process throughput feed increase from 600 tpd to 750 tpd of all materials |
| 550921 | 05/08/2013 | RTO | Change of Condition | Process throughput feed increase from 600 tpd to 750 tpd of all materials |
| 550922 | 05/08/2013 | WESP | Change of Condition | Process throughput feed increase from 600 tpd to 750 tpd of all materials |

Quemetco also has a pending permit renewal application with DTSC which includes continuing existing operations and performing minor facility modifications, as well as preparing a closure plan. Specifically, Quemetco was issued a Hazardous Waste Facility Operation and Post-Closure Permit by the DTSC, effective September 15, 2005. The permit was set to expire on September 15, 2015 but was administratively continued upon submittal of its permit renewal application. As a result, Quemetco continues to operate pursuant to its existing permit while DTSC conducts its review of the renewal application. The permit renewal process is underway. Quemetco has applied to continue existing operations, perform facility modifications, and update its existing closure plan. The DTSC permit renewal process is independent of this proposed Project and would occur regardless of whether the South Coast AQMD approves the Quemetco Capacity Upgrade Project.

DTSC is not currently evaluating the proposed Project as part of this permit renewal application. Rather the renewed permit, if granted, would need to be modified to incorporate the proposed Project.

2.8.3 Summary of Rule and Permit Violations and Resolutions

Appendix C provides a summary table of Quemetco’s permit violations over the past decade (from 2010 to present), a description of each violation, corresponding corrective action and the current status.

CHAPTER 3

ENVIRONMENTAL SETTING

Introduction

Air Quality and Greenhouse Gas (GHG) Emissions

Energy

Hazards and Hazardous Materials

Hydrology and Water Quality

Transportation

3.0 ENVIRONMENTAL SETTING

3.1 INTRODUCTION

CEQA Guidelines Section 15125 requires that an EIR include a description of the physical environment within the vicinity of a proposed project as it exists at the time the NOP is published, or if no NOP is published, at the time the environmental analysis commences, from both a local and regional perspective. These are known as existing conditions or the environmental baseline. Where conditions fluctuate over time, existing conditions may be defined by historic conditions. (CEQA Guidelines Section 15125 (a)(1).) This chapter describes existing conditions used in this EIR to determine the proposed Project's potential environmental impacts.

This EIR is focused only on the environmental topic areas identified in the NOP/IS as having the potential to be significant impacts (e.g., air quality and GHGs emissions, energy, hazards and hazardous materials, and hydrology and water quality) as well as further transportation analysis requested by Caltrans, a commenting agency, in its comment letter (refer to Appendix B, comment NOP-5). The reader is referred to Chapter 6 – Other CEQA Considerations and the NOP/IS in Appendix A of this EIR for the discussion of the environmental topic areas not further analyzed in this EIR, and the rationale for inclusion or exclusion of each environmental topic area. The regional and local setting for each environmental topic evaluated in this EIR are described in this Chapter

3.2 AIR QUALITY AND GHG EMISSIONS

This section addresses the effects of meteorological conditions, temperature and rainfall, and wind flow patterns on the existing air quality conditions in the South Coast Air Basin (Basin). Existing air quality is examined for criteria pollutants, TACs, and GHGs at the regional, local, and site levels. This section also addresses the federal, state, and local regulatory setting. The proposed Project's potential air quality impacts are evaluated in Chapter 4 - Environmental Impact Analysis, including potential impacts to sensitive receptors,

3.2.1 Environmental Setting

Meteorological Conditions

The South Coast AQMD's jurisdiction consists of a four-county region which includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, the Riverside County portion of the Salton Sea Air Basin, and the non-Palo Verde, Riverside County portion of the Mojave Desert Air Basin. The South Coast AQMD region is bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Quemetco facility is located within the Los Angeles County portion of the Basin.

The climate in the Basin is generally characterized by sparse winter rainfall and hot summers tempered by cool ocean breezes. A temperature inversion, a warm layer of air that traps the cool marine air layer underneath it and prevents vertical mixing, is the prime factor that allows contaminants to accumulate in the Basin. The mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, and Santa Ana winds. The climate of the area is not unique, but the high concentration of mobile and stationary sources in the western portion of the Basin, in addition to the mountains, which surround the perimeter of the Basin, contribute to air quality challenges in the region.

Temperature and Rainfall

Temperature affects the air quality of the region in several ways. Local winds are the result of temperature differences between the relatively stable ocean air and the uneven heating and cooling that takes place in the Basin due to a wide variation in topography. Temperature also has a major effect on vertical mixing height and affects chemical and photochemical reaction times. The annual average temperature across the Basin is 75°F. The coastal areas show little variation in temperature on a year-round basis due to the moderating effect of the marine influence. On average, August is the warmest month while January is the coolest month. Most of the annual rainfall in the Basin falls between November and April. Annual average rainfall varies from nine (9) inches in Riverside to 14 inches in downtown Los Angeles.

The nearest National Oceanic and Atmospheric Administration (NOAA) weather station to the proposed Project location with recent temperature and precipitation data is located in downtown Los Angeles, approximately 18 miles away from the proposed Project location (NOAA, 2020a).

The annual average temperature in the downtown Los Angeles area during baseline year 2014 was 68.1°F. The annual average temperature recorded during subsequent years has fluctuated minimally, with annual average temperatures of 68.3°F (2015), 67.1 °F (2016), 68.2 °F (2017), 67.2 °F (2018), and 66.1 °F (2019) (NOAA, 2020b). Annual rainfall measured in the downtown Los Angeles area during baseline year 2014 was 6.04 inches. The annual rainfall recorded during subsequent years fluctuated more than that of the temperature metrics, with annual rainfalls of 11.24 (2015), 6.88 (2016), 19.07 (2017), 4.72 (2018), and 18.85 (2019) inches. Downtown Los Angeles has received 14.82 (2020) inches to date, with the water year ending September 30 each year (NOAA, 2020b).

Wind Flow Patterns

Wind flow patterns play an important role in the transport of air pollutants in the Basin. The winds flow from offshore and blow eastward during the daytime hours. In summer, the sea breeze starts in mid-morning, peaks at 10-15 miles per hour, and subsides after sundown. There is a calm period until about midnight. At that time, the land breeze begins from the northwest, typically becoming calm again about sunrise. In winter, the same general wind flow patterns exist, except that summer wind speeds average slightly higher than winter wind speeds. This pattern of low wind speeds is a major factor that allows the pollutants to accumulate in the Basin. The normal wind patterns in the Basin are interrupted by the unstable air accompanying the passing storms during the winter, and infrequent strong northeasterly Santa Ana wind flows from the mountains and deserts north of the Basin.

Quemetco has four (4) onsite monitoring stations that constantly measure wind speed and direction. The data acquired from these stations are used to generate annual wind roses. A wind rose is a graphic tool that gives a succinct view of the distribution of wind speed and direction at a given location. The circular format of a wind rose shows the direction that the wind blows from, and the distance that the red line extends away from the center of the circle shows how often the wind blows from that direction. The percentages shown in red correspond to the red line, indicating the average percent of time that wind blows from that direction. The 2014 (baseline year) and 2019 (most current data) wind roses generated from the data collected at the Quemetco monitoring stations are depicted in Figures 3.2-1 and 3.2-2. Monthly average and maximum wind speeds for these years can be seen in Table 3.2-1.

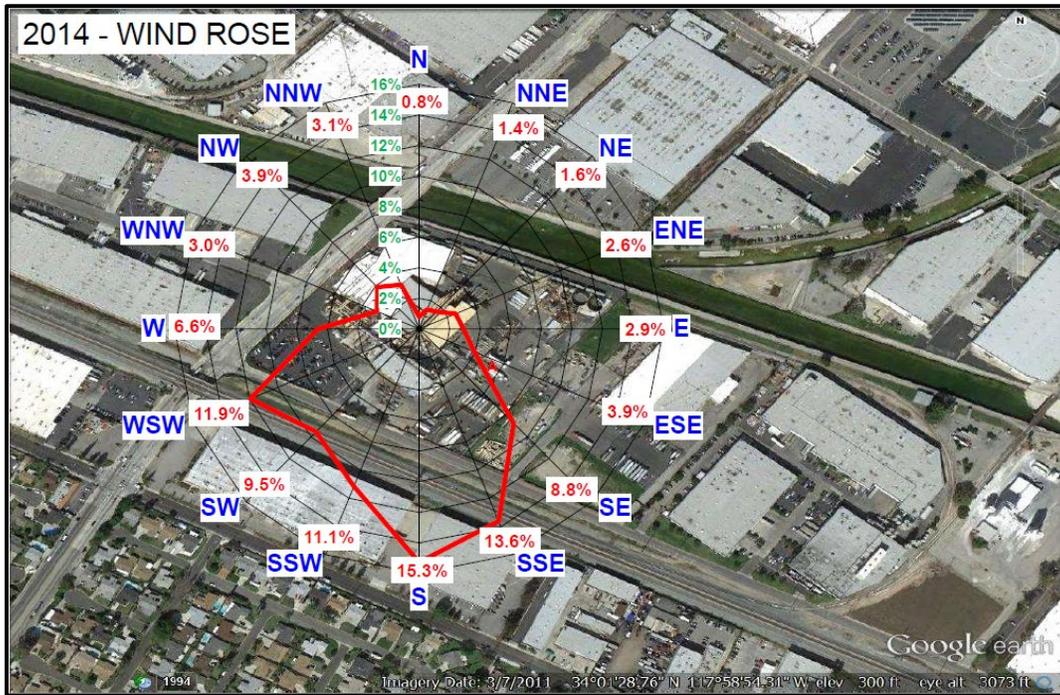


Figure 3.2-1 Quemetco 2014 Wind Rose

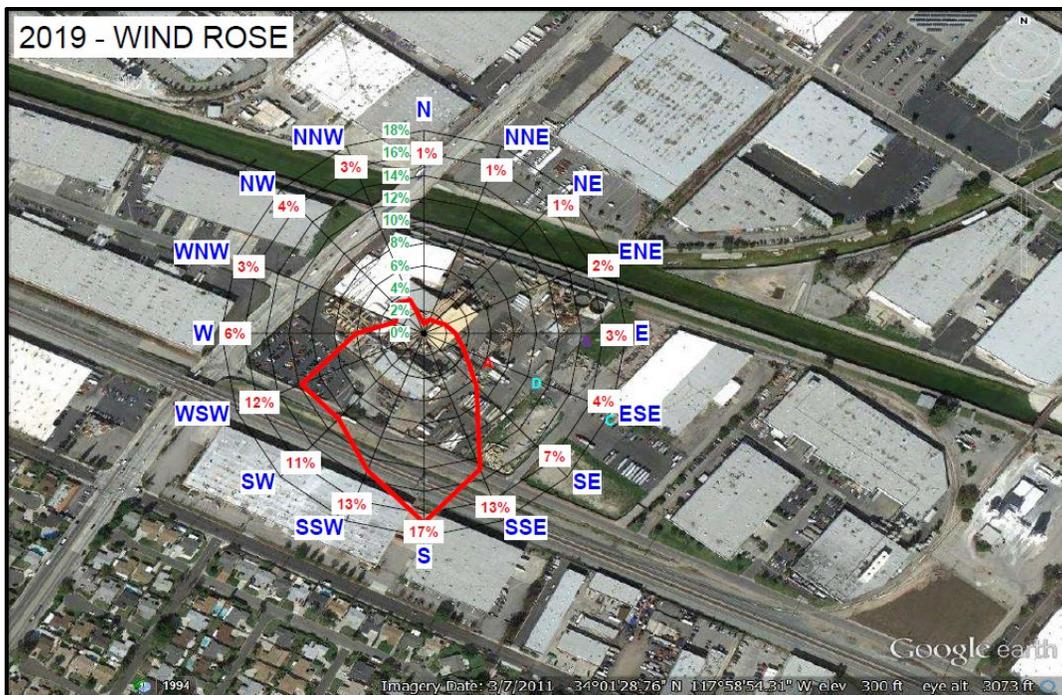


Figure 3.2-2 Quemetco 2019 Wind Rose

Table 3.2-1 Quemetco 2014 and 2019 Wind Speeds

| Month | 2014 Wind Speeds (mph) | | 2019 Wind Speeds (mph) | |
|-----------|------------------------|---------|------------------------|---------|
| | Average | Maximum | Average | Maximum |
| January | 3.2 | 9.1 | 3.9 | 16.5 |
| February | 3.9 | 16.6 | 4.5 | 17.5 |
| March | 4.4 | 16.3 | 4.5 | 13.2 |
| April | 4.8 | 14.5 | 4.9 | 17.6 |
| May | 4.9 | 16.1 | 4.8 | 15.1 |
| June | 4.9 | 12.1 | 4.8 | 11.4 |
| July | 3.6 | 14.0 | 4.8 | 11.5 |
| August | 3.4 | 12.2 | 4.3 | 11.7 |
| September | 3.7 | 13.0 | 4.1 | 11.5 |
| October | 3.8 | 11.8 | 3.7 | 15.5 |
| November | 3.6 | 11.4 | 3.2 | 10.9 |
| December | 3.5 | 15.6 | 3.5 | 14.4 |
| Annual | 4.0 | 16.6 | 4.3 | 17.6 |

As displayed in the figures and Table 3.2-1, the wind patterns at the facility are relatively consistent over time, with winds predominantly blowing from the south and west-southwest, and annual wind speeds averaging around four (4) mph.

Criteria Pollutants

The sources of air contaminants in the South Coast AQMD’s jurisdiction vary by pollutant, but generally include on-road mobile sources (e.g., automobiles, trucks, and buses), off-road mobile sources (e.g., airplanes, ships, trains, construction equipment, etc.), residential/commercial sources, and industrial/manufacturing sources. It is the responsibility of South Coast AQMD to ensure that state and federal ambient air quality standards are achieved and maintained in its geographical jurisdiction. Health-based air quality standards have been established by California and the federal government for the following criteria air pollutants: ozone, CO, NOx, particulate matter 10 microns or less in diameter (PM10), fine particulate matter (PM2.5), SO2, and lead. These standards were established to protect sensitive receptors with a margin of safety from adverse health impacts due to exposure to air pollution.

NAAQS were first authorized by the federal Clean Air Act (CAA) of 1970 and have been set by the U.S. EPA. California Ambient Air Quality Standards (CAAQS) were authorized by the state legislature in 1967 and have been set by the California Air Resources Board (CARB). The California standards are more stringent than the federal standards and in the case of PM10 and SO2, far more stringent. California has also established standards for sulfates, visibility reducing particles, hydrogen sulfide (H2S), and vinyl chloride. However, H2S and vinyl chloride are currently not monitored in the South Coast AQMD because they are not a regional air quality problem but are generally associated with localized emission sources. Air quality of a region is considered to be in attainment of the standards if the measured concentrations of air pollutants are continuously equal to or less than the air quality standards averaged over the previous three-year period. The CAAQS and NAAQS for each of these criteria pollutants and their effects on health are summarized in Table 3.2-2.

Table 3.2-2 Federal and State Ambient Air Quality Standards

| Pollutant | Averaging Time | State Standard ^a | Federal Primary Standard ^b | Most Relevant Effects* |
|--|------------------------|---------------------------------------|---------------------------------------|---|
| Ozone | 1-hour | 0.09 ppm (180 µg/m ³) | 0.12 ppm | (a) Short-term exposures: 1) Pulmonary function decrements and localized lung edema in humans and animals; and 2) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (b) Long-term exposures: Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (c) Vegetation damage; and (d) Property damage. |
| | 8-hour | 0.070 ppm (137 µg/m ³) | 0.070 ppm (137 µg/m ³) | |
| PM₁₀ | 24-hour | 50 µg/m ³ | 150 µg/m ³ | (a) Excess deaths from short-term exposures and exacerbation of symptoms in sensitive patients with respiratory disease; and (b) Excess seasonal declines in pulmonary function, especially in children. |
| | Annual Arithmetic Mean | 20 µg/m ³ | No Federal Standard | |
| PM_{2.5} | 24-hour | No State Standard | 35 µg/m ³ | (a) Increased hospital admissions and emergency room visits for heart and lung disease; (b) Increased respiratory symptoms and disease; and (c) Decreased lung functions and premature death. |
| | Annual Arithmetic Mean | 12 µg/m ³ | 12 µg/m ³ | |
| CO | 1-hour | 20 ppm (23 mg/m ³) | 35 ppm (40 mg/m ³) | (a) Aggravation of angina pectoris and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; and (d) Possible increased risk to fetuses. |
| | 8-hour | 9 ppm (10 mg/m ³) | 9 ppm (10 mg/m ³) | |
| Nitrogen Dioxide (NO₂) | 1-hour | 0.18 ppm (339 µg/m ³) | 0.100 ppm (188 µg/m ³) | (a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; and (c) Contribution to atmospheric discoloration. |
| | Annual Arithmetic Mean | 0.030 ppm (57 µg/m ³) | 0.053 ppm (100 µg/m ³) | |
| SO₂ | 1-hour | 0.25 ppm (655 µg/m ³) | 75 ppb (196 µg/m ³) | Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. |
| | 24-hour | 0.04 ppm (105 µg/m ³) | No Federal Standard | |
| Sulfates | 24-hour | 25 µg/m ³ | No Federal Standard | (a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; and (f) Property damage |
| H₂S | 1-hour | 0.03 ppm (42 µg/m ³) | No Federal Standard | Odor annoyance. |

| Pollutant | Averaging Time | State Standard ^a | Federal Primary Standard ^b | Most Relevant Effects* |
|--|-------------------------|---|--|---|
| Lead (Pb) | 30-Day Average | 1.5 µg/m ³ | No Federal Standard | (a) Increased body burden (concentration of lead stored in the body); and (b) Impairment of blood formation and nerve conduction. |
| | Calendar Quarter | No State Standard | 1.5 µg/m ³ | |
| | Rolling 3-Month Average | No State Standard | 0.15 µg/m ³ | |
| Visibility Reducing Particles | 8-hour | Extinction coefficient of 0.23 per kilometer - visibility of ten miles or more due to particles when relative humidity is less than 70 %. | No Federal Standard | The statewide standard is intended to limit the frequency and severity of visibility impairment due to regional haze. This is a visibility based standard not a health based standard. Nephelometry and AISI Tape Sampler; instrumental measurement on days when relative humidity is less than 70 %. |
| Vinyl Chloride | 24-hour | 0.01 ppm (26 µg/m ³) | No Federal Standard | Highly toxic and a known carcinogen that causes a rare cancer of the liver. |
| ppb – parts per billion parts of air, by volume ppm – parts per million parts of air, by volume | | | µg/m ³ – micrograms per cubic meter mg/m ³ – milligrams per cubic meter | |

Source: South Coast AQMD, 2019a

* See also the South Coast AQMD 2016 Air Quality Management Plan (South Coast AQMD, 2016)

^a The California ambient air quality standards for ozone, CO, SO₂ (1-hour and 24-hour), NO₂, PM₁₀, and PM_{2.5} are values not to be exceeded. All other California standards shown are values not to be equaled or exceeded.

^b The national ambient air quality standards, other than ozone and those based on annual averages are not to be exceeded more than once a year. The ozone standard is attained when the expected number of days per calendar year with maximum hourly average concentrations greater than the standard is equal to or less than one.

The Basin’s NAAQS and CAAQS current attainment statuses are listed in Table 3.2-3. The year listed indicates when that specific standard became effective.

Table 3.2-3 Basin NAAQS and CAAQS Attainment Status

| Air Quality Standard | Attainment Status (2020 NAAQS, 2018 CAAQS) |
|--------------------------|--|
| NAAQS ^a | |
| 8-Hour ozone (2015) | Extreme - Nonattainment |
| 8-Hour ozone (2008) | Extreme - Nonattainment |
| 8-Hour ozone (1997) | Extreme - Nonattainment |
| 1-Hour ozone (1979) | Extreme - Nonattainment |
| PM _{2.5} (2012) | Moderate - Nonattainment |
| PM _{2.5} (2006) | Serious - Nonattainment |
| PM _{2.5} (1997) | Moderate - Nonattainment |
| PM ₁₀ (1987) | Serious - Maintenance |
| SO ₂ (2010) | Attainment |
| SO ₂ (1971) | Attainment |
| Lead (2008) | Nonattainment |
| Lead (1978) | Attainment |
| CO (1971) | –Serious - Maintenance |
| NO ₂ (1971) | Maintenance |

| Air Quality Standard | Attainment Status (2020 NAAQS, 2018 CAAQS) |
|----------------------|---|
| CAAQS ^b | |
| ozone | Nonattainment |
| PM2.5 | Nonattainment |
| PM10 | Nonattainment |
| CO | Attainment |
| NO2 | Partial Nonattainment (CA 60 Near-road Portion of San Bernardino, Riverside and Los Angeles Counties) |
| SO2 | Attainment |
| Sulfates | Attainment |
| H2S | Unclassified |
| Lead | Attainment |

- a. EPA, 2020
- b. CARB, 2019a

Based on the latest available data, the Basin is in nonattainment with all applicable ozone and PM2.5 standards and is in attainment with all ambient air quality standards for SO2 and sulfates. For PM10, the Basin is designated as in nonattainment for CAAQS and as in “maintenance” for NAAQS, meaning it was previously in nonattainment but now attains the federal standard and has an EPA approved plan to maintain the standard. For lead, the Basin is designated as nonattainment for the 2008 CAAQS and attainment for the 1978 NAAQS and applicable CAAQS. For CO, the Basin is designated as in attainment for CAAQS and as in maintenance for NAAQS. For NO2, the Basin is designated as in partial nonattainment for CAAQS and as in maintenance for NAAQS. The Basin is unclassified for applicable H2S standards, meaning that available data does not support a designation of attainment or nonattainment.

Regional Air Quality

Air quality in the Basin is monitored by the South Coast AQMD, which operates a network of 39 permanent air monitoring stations and four (4) single-pollutant source impact lead air monitoring sites throughout the South Coast AQMD jurisdiction (South Coast AQMD, 2020). CARB operates additional monitoring stations. A summary of 2014 (baseline year) and 2019 air quality data (the latest data available) from South Coast AQMD’s monitoring stations is presented Table 3.2-4. For additional air quality monitoring station information and data, refer to South Coast AQMD’s Annual Air Quality Data Tables (South Coast AQMD, 2014 and South Coast AQMD, 2019a).

Table 3.2-4 South Coast AQMD Air Quality Data^a

| Parameter | 2014 ^b | 2019 ^c |
|--|--|--|
| PM10 | | |
| Total South Coast AQMD Monitoring Stations | 24 | 22 |
| Federal 24-hour Standard Exceedances (Stations) | 0 | 0 |
| State 24-hour Standard Exceedances (Stations) | 19 | 19 |
| Maximum 24-Hour Concentration ($\mu\text{g}/\text{m}^3$) | 152 $\mu\text{g}/\text{m}^3$ (Station #4157) | 154 $\mu\text{g}/\text{m}^3$ (Station #4032) |
| Maximum Annual Average Concentration ($\mu\text{g}/\text{m}^3$) | 54.9 $\mu\text{g}/\text{m}^3$ (Station #4165) | 43.1 $\mu\text{g}/\text{m}^3$ (Station #4144, 4165) |
| PM2.5 | | |
| Total South Coast AQMD Monitoring Stations | 20 | 19 |
| Federal 24-Hour Standard Exceedances (Stations) | 12 | 8 |
| Maximum 24-Hour Concentration ($\mu\text{g}/\text{m}^3$) | 78.9 $\mu\text{g}/\text{m}^3$ (Station #5197) | 46.7 $\mu\text{g}/\text{m}^3$ (Station #44) |
| Maximum Annual Average Concentration ($\mu\text{g}/\text{m}^3$) | 14.48 $\mu\text{g}/\text{m}^3$ (Station #4165) | 12.70 $\mu\text{g}/\text{m}^3$ (Station #5035) |
| CO | | |
| Total South Coast AQMD Monitoring Stations | 25 | 24 |
| Maximum 1-Hour Concentration (ppm) | 6 ppm (Station #112) | 3.8 ppm (Station #112) |
| Maximum 8-Hour Concentration (ppm) | 3.8 ppm (Station #112) | 3.2 ppm (Station #112) |
| Ozone | | |
| Total South Coast AQMD Monitoring Stations | 30 | 28 |
| Old Federal 1-Hour Standard Exceedances (Stations) | 8 | 7 |
| Current Federal 8-Hour Standard Exceedances (Stations) | 30 | 26 |
| State 1-hour Standard Exceedances (Stations) | 27 | 23 |
| State 8-hour Standard Exceedances (Stations) | 30 | 26 |
| Maximum 1-Hour Concentration (ppm) | 0.141 ppm (Station #4144) | 0.137 ppm (Station #5204) |
| Maximum 8-Hour Concentration (ppm) | 0.110 ppm (Station #090) | 0.117 ppm (Station #5204) |
| NO2 | | |
| Total South Coast AQMD Monitoring Stations | 25 | 26 |
| Maximum 1-Hour Concentration (ppb) | 135.9 ppb (Station #033) | 97.7 ppb (Station #32) |
| Maximum Annual Average Concentration (ppb) | 22.2 ppb (Station #087) | 29.0 ppb (Station #5036) |
| SO2 | | |
| Total South Coast AQMD Monitoring Stations | 7 | 5 |
| Maximum 1-Hour Concentration (ppb) | 15.3 ppb (Station #820) | 10.1 ppb (Station #87) |
| Lead | | |
| Total South Coast AQMD Monitoring Stations | 9 | 7 |
| Maximum Monthly Average Concentration ($\mu\text{g}/\text{m}^3$) | 0.017 $\mu\text{g}/\text{m}^3$ (Station #085) | 0.013 $\mu\text{g}/\text{m}^3$ (Station #5203) |
| Maximum 3-Month Rolling Average Concentration ($\mu\text{g}/\text{m}^3$) | 0.01 $\mu\text{g}/\text{m}^3$ (Multiple Stations) | 0.011 $\mu\text{g}/\text{m}^3$ (Station #5203) |
| Sulfates | | |
| Total South Coast AQMD Monitoring Stations | 20 | 7 |
| Maximum 24-Hour Concentration ($\mu\text{g}/\text{m}^3$) | 14.3 $\mu\text{g}/\text{m}^3$ (Station #060) | 14.6 $\mu\text{g}/\text{m}^3$ (Station #4144) |

- a. Source: South Coast AQMD Annual Air Quality Data Tables (South Coast AQMD, 2014 and South Coast AQMD, 2019a)
- b. 2014 represents the baseline year
- c. 2019 data is the latest available data at the time this existing conditions data was updated in late 2020 and early 2021.

Local Air Quality

Air quality conditions in California have improved substantially since CARB was established in 1967, resulting in a reduction in criteria air pollutant ambient air quality concentrations and the number of days that the standards are exceeded. Nonetheless, exceedances of federal and state standards for ozone, and the state standard for PM10, continue to occur.

The Quemetco facility is located within the South Coast AQMD's South San Gabriel Valley monitoring area. Recent background air quality data for criteria pollutants for the South San Gabriel Valley monitoring station (Monitoring Station #85), located approximately five (5) miles from the facility at 4144 San Gabriel River Parkway, Pico Rivera, CA 90660, are presented in Table 3.2-5. This monitoring station is representative of baseline criteria pollutant concentrations based on the proximity of the monitoring station to the proposed Project location, land-use of the area, and availability of the data.¹

The South San Gabriel Valley area has generally experienced consistent air quality, with certain years of both decreasing and increasing concentrations of most pollutants (see Table 3.2-5). Air quality in the South San Gabriel Valley monitoring area complies with the state and federal ambient air quality standards for CO, NOx, SOx, and sulfate. Ozone concentrations in the area do not comply with the federal and state one-hour and state eight-hour ozone standards. PM2.5 concentrations in the South San Gabriel Valley area exceeded the federal 24-hour PM2.5 standards on 1.7% of the days sampled in recent years. The air quality in this monitoring area also exceeded PM2.5 state annual average standards in 2014 but was otherwise in compliance. Because there is no *daily* state and federal lead standard, the South San Gabriel Valley monitoring station does not report the number of *daily* exceedances for lead. This monitoring station does report the monthly and 3-month rolling average lead concentrations and Table 3.2-5 summarizes the maximum observed concentrations for the federal lead standard is a 3-month rolling average of 0.15 µg/m³ and the state standard is a monthly average of 1.5 µg/m³. The lead concentrations reports in Table 3.2-5 are all less than the federal and state lead standards.

Table 3.2-5 Ambient Air Quality Monitoring Station #85 (2014-2019)

| Constituent | Maximum Observed Concentrations / Days Exceeding Standards | | | | | |
|------------------------------------|--|-------|-------|-------|-------|-------|
| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| Ozone: | | | | | | |
| 1-Hour (ppm) | 0.121 | 0.107 | 0.111 | 0.118 | 0.115 | 0.108 |
| Federal Standard (# days exceeded) | (0) | (0) | (1) | (0) | (0) | (0) |
| State Standard (# days exceeded) | (7) | (6) | (6) | (7) | (3) | (5) |
| 8-Hour (ppm) | 0.092 | 0.081 | 0.081 | 0.086 | 0.082 | 0.091 |
| Federal Standard (# days exceeded) | (7) | (11) | (6) | (9) | (5) | (7) |
| State Standard (# days exceeded) | (7) | (11) | (9) | (9) | (5) | (7) |

¹ Monitoring Station No. 085, is located approximately five (5) miles from the Quemetco facility. This monitoring station is zoned as limited industrial by the City of Pico Rivera, which is generally consistent with the zoning of the facility property and surrounding area (see Section 2.3).

| Constituent | Maximum Observed Concentrations / Days Exceeding Standards | | | | | |
|---|--|---------|-------|--------|---------|--------|
| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
| CO: | | | | | | |
| 1-Hour (ppm) | 4 | 2.8 | 2.8 | 2.5 | 2 | 1.9 |
| 8-Hour (ppm) | 2.5 | 1.7 | 1.7 | 2.2 | 1.8 | 1.5 |
| Federal Standard (# days exceeded) | (--) | (--) | (--) | (--) | (--) | (--) |
| State Standard (# days exceeded) | (--) | (--) | (--) | (--) | (--) | (--) |
| Nitrogen Dioxide: | | | | | | |
| 1-Hour (ppm) | 0.0867 | 0.07 | 0.06 | 0.075 | 0.0768* | 0.0618 |
| State Standard (# days exceeded) | (--) | (--) | 0 | (--) | (--) | (--) |
| 24-Hour (ppm) | -- | -- | -- | -- | -- | -- |
| Annual (ppm) | 0.0195 | 0.0205 | 0.02 | 0.0196 | 0.0183* | 0.0176 |
| PM10: | | | | | | |
| 24-Hour (µg/m ³) | -- | -- | -- | -- | -- | -- |
| Federal Standard (# days exceeded) | (--) | (--) | (--) | (--) | (--) | (--) |
| State Standard (# days exceeded) | (--) | (--) | (--) | (--) | (--) | (--) |
| Annual (µg/m ³) | -- | -- | -- | -- | -- | -- |
| Geometric Mean | -- | -- | -- | -- | -- | -- |
| Arithmetic Mean | -- | -- | -- | -- | -- | -- |
| PM2.5: | | | | | | |
| 24-Hour (µg/m ³) | 35.1 | 52.7+ | 46.59 | 49.5 | 35.4 | 29.60 |
| Federal Standard (% exceeded) | 0% | (1.7%*) | 1.70% | 0.80% | 0% | 0% |
| Annual Arithmetic Mean (µg/m ³) | 12.08 | 11.4+ | 11.75 | 12.23 | 12.31 | 10.34 |
| Sulfur Dioxide: | | | | | | |
| 1-Hour (ppm) | -- | -- | -- | -- | -- | -- |
| 24-Hour (ppm) | -- | -- | -- | -- | -- | -- |
| Annual Arithmetic Mean (ppm) | -- | -- | -- | -- | -- | -- |
| Lead: | | | | | | |
| 30-Day (µg/m ³) | 0.017 | 0.014 | 0.011 | 0.01 | 0.009 | 0.009 |
| Quarter (µg/m ³) | 0.01 | 0.01 | 0.01 | 0.01 | 0.009 | 0.007 |
| Sulfate: | | | | | | |
| 24-Hour (µg/m ³) | -- | -- | -- | -- | -- | -- |
| State Standard (# days exceeded) | (--) | (--) | (--) | (--) | (--) | (--) |

Source: South Coast AQMD Air Quality Data Annual Summaries 2014-2019.

Notes: (18) = Number of days or percent of samples exceeding the state standard, (--) = Not monitored, * = Less than 12 full months of data, so data may not be representative; + = data not yet available.

Quemetco Criteria Pollutant Emissions

Operation of the secondary lead smelter results in criteria pollutant emissions. South Coast AQMD’s Annual Emissions Reporting (AER) program tracks emissions of air contaminants from permitted facilities on an annual basis. Facilities subject to this program are required to report emissions (both criteria pollutants and TACs) for each calendar year. Quemetco’s reported emissions of criteria air pollutants for the previous six years are taken from the annual emission inventory reports prepared for the South Coast AQMD’s AER program and are presented in Table 3.2-6. The annual emission inventory reports are based on source test results and CEMS data. The emissions summarized in Table 3.2-6 represent actual operations. The maximum potential to emit per Quemetco’s permit limits would allow more emissions.

Table 3.2-6 Quemetco’s Annual Reported Criteria Pollutant Emissions¹

| Reporting Year | CO ² (tons) | VOC (tons) | NO _x (tons) | SO _x (tons) | PM ³ (tons) | Lead ⁴ (pounds) |
|----------------|---------------------------|---------------|---------------------------|---------------------------|---------------------------|-------------------------------|
| 2014 | 17.944 | 2.504 | 18.998 | 3.750 | 4.567 | 4.728 |
| 2015 | 18.190 | 1.986 | 23.643 | 6.121 | 4.426 | 4.551 |
| 2016 | 38.841 | 2.203 | 20.658 | 5.250 | 3.858 | 27.992 |
| 2017 | 36.105 | 2.098 | 19.439 | 4.337 | 3.690 | 3.456 |
| 2018 | 39.418 | 2.437 | 22.255 | 3.287 | 4.994 | 3.474 |

¹ Emissions data from South Coast AQMD Facility Information Data (FIND) Database. Accessed November 16, 2018.

² The value reported for lead in 2016 is an outlier due to test results for one test run of one Busch unit. The value reported in the AER reflects the data provided in the laboratory results. The explanation for this outlier is unknown.

³ PM = PM10 = PM2.5

⁴ Quemetco is implementing CEMS for CO monitoring as a minor permit modification (Section 2.6: Project Description).

Although the AER presented in Table 3.2-6 show year 2015 to have generated lower emissions for VOC, PM, and lead, year 2014 represents the lowest year of operations as measured by feed stock, since the submittal of the application.

Toxic Air Contaminants

Health and Safety Code (HSC) Section 39655 defines a TAC as an air pollutant which may cause or contribute to an increase in mortality, an increase in serious illness, or which may pose a present or potential hazard to human health. EPA defines hazardous air pollutants (HAPs) as those pollutants that are known or suspected to cause cancer or other serious health effects, such as reproductive effects or birth defects, or adverse environmental effects. Under California's TAC programs (AB 1807, HSC Section 39650 et seq. and AB 2588, HSC Section 39650 et seq), CARB, with the participation of the local air pollution control districts, evaluates and develops any needed control measures for air toxics to limit exposure to TACs to the maximum extent feasible.

OEHHA has determined that long-term exposure to diesel particulate matter (DPM) poses the highest cancer risk of any HAP it has evaluated. Short-term exposure to diesel exhaust can also have immediate health effects. Diesel exhaust can irritate the eyes, nose, throat, and lungs, and it can cause coughs, headaches, lightheadedness, and nausea. In studies with human volunteers, DPM made people with allergies more susceptible to the materials to which they are allergic, such as dust and pollen. Short-term exposure to diesel exhaust also causes inflammation in the lungs, which may aggravate chronic respiratory symptoms and increase the frequency or intensity of asthma attacks.

Quemetco is located closest to the North Long Beach and North Los Angeles monitoring stations.² Table 3.2-7 presents a summary of the most current available TAC data from the North Long Beach station (ARB# 70072), located at 3648 N. Long Beach Blvd., Long Beach, CA 90807 (approximately 17 miles southwest of the facility), and the Los Angeles – North Main Street station (ARB# 70087), located at 1630 North Main St., Los Angeles, CA 90012

² Monitoring for TACs is limited compared to monitoring for criteria pollutants because toxic pollutant impacts are typically more localized than criteria pollutant impacts. CARB conducts air monitoring for a number of TACs every 12 days at approximately 20 sites throughout California.

(approximately 14.3 miles west-northwest of the facility). These monitoring stations are the closest to the facility that report all the applicable TACs and show the best available representative pollutant concentrations.

Table 3.2-7 Ambient Air Quality TACs –Most Recent Maximum Concentration¹

| Pollutant | Peak 24-hour Concentration | | | |
|---|----------------------------|-------------|-------------------------|-------------|
| | ARB# 70072 | Year | ARB# 70087 | Year |
| VOCs | ppbv | | ppbv | |
| Acetaldehyde | 1.8 | 2013 | 2.6 | 2017 |
| Acetone | 8.3 | 2013 | 19 | 2018 |
| Acetonitrile | 0.8 | 2013 | 1.0 | 2018 |
| Acrolein | 1.1 | 2013 | 0.5 | 2018 |
| Benzene | 0.82 | 2013 | 0.46 | 2019 |
| 1,3-Butadiene | 0.29 | 2013 | 0.10 | 2019 |
| Carbon Disulfide | 0.05 | 2006 | 2.9 | 2006 |
| Carbon Tetrachloride | 0.09 | 2013 | 0.07 | 2019 |
| Chlorobenzene | 0.05 | 1994 | 0.1 | 1994 |
| Chloroform | 0.05 | 2013 | 0.05 | 2019 |
| meta-Dichlorobenzene | 0.1 | 1994 | 0.1 | 1994 |
| ortho-Dichlorobenzene | 0.15 | 2007 | 0.15 | 2007 |
| para-Dichlorobenzene | 0.15 | 2007 | 0.15 | 2007 |
| Dichlorodifluoromethane | -- | -- | -- | -- |
| cis-1,3-Dichloropropene | 0.05 | 2013 | 0.05 | 2019 |
| trans-1,3-Dichloropropene | 0.05 | 2013 | 0.05 | 2019 |
| Ethyl Benzene | 0.3 | 2013 | 0.1 | 2019 |
| Ethylene Dibromide | 0.005 | 1994 | 0.005 | 1994 |
| Ethylene Dichloride | 0.1 | 1992 | 0.1 | 1992 |
| Formaldehyde | 3.8 | 2013 | 7.3 | 2017 |
| Methyl Bromide | 0.05 | 2013 | 0.015 | 2019 |
| Methyl Chloroform | 0.005 | 2013 | 0.005 | 2019 |
| Methyl Ethyl Ketone | 0.3 | 2013 | 2.3 | 2017 |
| Methyl tertiary-Butyl Ether | 0.15 | 2004 | 0.15 | 2004 |
| Methylene Chloride | 2.6 | 2013 | 0.42 | 2019 |
| Perchloroethylene | 0.06 | 2013 | 0.03 | 2019 |
| Styrene | 0.1 | 2013 | 0.05 | 2019 |
| Toluene | 1.7 | 2013 | 1.1 | 2019 |
| Trichloroethylene | 0.08 | 2013 | 0.01 | 2019 |
| Trichlorofluoromethane | -- | -- | -- | -- |
| Trichlorotrifluoroethane | -- | -- | 0.01 | 2019 |
| meta-Xylene | 2.2 | 1994 | 6.7 | 1994 |
| meta/para-Xylene | 1.1 | 2013 | 0.6 | 2019 |
| ortho-Xylene | 0.4 | 2013 | 0.2 | 2019 |
| para-Xylene | 0.9 | 1994 | 2.4 | 1994 |
| Polycyclic Aromatic Hydrocarbons | ng/m³ | Year | ng/m³ | Year |
| Benzo(a)pyrene-10 | 0.61 | 2004 | 0.40 | 2004 |
| Benzo(b)fluoranthene-10 | 0.51 | 2004 | 0.41 | 2004 |
| Benzo(g,h,i)perylene-10 | 1.7 | 2004 | 1.1 | 2004 |
| Benzo(k)fluoranthene-10 | 0.19 | 2004 | 0.15 | 2004 |

| | | | | |
|---------------------------|-------------------------|-------------|-------------------------|-------------|
| Dibenz(a,h)anthracene-10 | 0.18 | 2004 | 0.025 | 2004 |
| Indeno(1,2,3-cd)pyrene-10 | 0.64 | 2004 | 0.46 | 2004 |
| Metals | ng/m³ | Year | ng/m³ | Year |
| Aluminum | 1700 | 2003 | 2400 | 2003 |
| Antimony | 12 | 2013 | 18 | 2018 |
| Arsenic | 0.75 | 2013 | 0.87 | 2018 |
| Barium | 56 | 2003 | 95 | 2003 |
| Beryllium | 0.3 | 2013 | 0.152 | 2018 |
| Bromine | 9 | 2003 | 9 | 2003 |
| Cadmium | 0.75 | 2013 | 3.2 | 2018 |
| Calcium | 2300 | 2003 | 2800 | 2003 |
| Chlorine | 3900 | 1990 | 4200 | 1990 |
| Chromium | 9 | 2013 | 11 | 2018 |
| Cobalt | 0.75 | 2013 | 1.9 | 2018 |
| Copper | 46 | 2013 | 101 | 2018 |
| Hexavalent Chromium | 0.07 | 2013 | 0.2 | 2017 |
| Iron | 1400 | 2013 | 2330 | 2018 |
| Lead | 9.1 | 2013 | 26.4 | 2018 |
| Manganese | 30 | 2013 | 40.4 | 2018 |
| Mercury | 1.5 | 2003 | 4 | 2003 |
| Molybdenum | 5.4 | 2013 | 6.8 | 2018 |
| Nickel | 5 | 2013 | 7 | 2018 |
| Phosphorus | 35 | 2003 | 32 | 2003 |
| Potassium | 890 | 2003 | 1000 | 2003 |
| Platinum | 0.15 | 2013 | 0.105 | 2014 |
| Rubidium | 4 | 2003 | 5 | 2003 |
| Selenium | 0.75 | 2013 | 1.65 | 2018 |
| Silicon | 5600 | 2003 | 7500 | 2003 |
| Strontium | 14 | 2013 | 30 | 2018 |
| Sulfur | 2,300 | 2013 | 1600 | 2013 |
| Tin | 5.4 | 2013 | 16.5 | 2018 |
| Titanium | 87 | 2013 | 113 | 2018 |
| Uranium | 1.5 | 2003 | 1.5 | 2003 |
| Vanadium | 12 | 2013 | 3.8 | 2018 |
| Yttrium | 2 | 2003 | 3 | 2003 |
| Zinc | 90 | 2013 | 188 | 2018 |
| Zirconium | 4.3 | 2013 | 11.2 | 2018 |

¹ There are no air quality standards for TACs.

Source: CARB, 2013.³ Annual Toxics Summaries by Monitoring Site, North Long Beach.

Notes: ppbv = parts per billion by volume. ng/m³ = nanograms per cubic meter. -- = no data available in the last 6 years.

The selection of these monitoring stations was based on the proximity of the monitoring station to the proposed Project location, land-use of the area, and representativeness and availability of the data.

³ <https://www.arb.ca.gov/adam/toxics/toxics.html>

Quemetco TACs

Operation of the facility's lead smelter results in the emission of TACs. The reported emissions of TACs from Quemetco for the last several years, based on the annual emission inventory reports prepared for the South Coast AQMD, are shown in Table 3.2-8. The emissions summarized in Table 3.2-8 represent actual operations. The maximum potential to emit per Quemetco's permit limits would allow for more emissions. The lead smelting process at Quemetco is a highly variable continuous batch process. The variation in reported values from year to year for each pollutant may be attributed to variation in amount of feed, normal variation of lead-acid battery feed sources, and even ambient conditions. The emissions reported are determined based on stack test results or throughput and default emission factors, depending on the pollutant.

Table 3.2-8 Quemetco’s Annual Reported TAC Emissions^a

| CAS Number | Name of TAC | Reporting Year (pounds) | | | | | | Basis of Emissions Reported ^b |
|------------|--|-------------------------|--------|--------|--------|---------|---------|--|
| | | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| 95636 | 1,2,4 Trimebenze | -- | 6.75 | -- | -- | -- | 9.47 | NA, NA, EF |
| 78875 | 1,2-Dichloropropane {Propylene dichloride} | -- | 0.00 | -- | -- | -- | 29.342 | ST, NA, NA |
| 106990 | 1,3-Butadiene | 12.52 | 12.70 | 11.85 | 5.86 | 6.385 | 3.565 | ST, ST, EF |
| 91576 | 2-Methyl naphthalene [PAH, POM] | 6.41 | 6.51 | 10.00 | 9.29 | 10.17 | 10.034 | ST, NA, NA |
| 83329 | Acenaphthene | 0.21 | 0.22 | 0.11 | 0.10 | 0.113 | 0.111 | ST, NA, NA |
| 208968 | Acenaphthylene | 0.48 | 0.49 | 0.14 | 0.13 | 0.146 | 0.144 | ST, NA, NA |
| 75070 | Acetaldehyde | -- | 403.03 | -- | -- | -- | 606.737 | ST, NA, EF |
| 107028 | Acrolein | -- | 0.09 | -- | -- | -- | 0.195 | NA, NA, EF |
| 7664417 | Ammonia | 64.50 | 59.34 | 922.43 | 820.45 | 864.264 | 903.08 | EF, NA, EF |
| 120127 | Anthracene | 0.18 | 0.18 | -- | -- | -- | 0.005 | ST, NA, NA |
| 7440382 | Arsenic | 6.09 | 5.68 | 4.90 | 4.90 | 5.216 | 0.772 | ST, ST, EF |
| 191242 | B[ghi] perylene | 0.02 | 0.02 | -- | -- | -- | -- | |
| 56553 | Benz[a]anthracene | 0.05 | 0.05 | -- | -- | -- | -- | |
| 71432 | Benzene | 355.87 | 364.98 | 328.88 | 174.86 | 179.478 | 120.503 | ST, ST, EF |
| 205992 | Benzo[b]fluoranthene | 0.01 | 0.01 | -- | -- | -- | -- | |
| 192972 | Benzo[e]pyrene [PAH, POM] | 0.01 | 0.01 | -- | -- | -- | -- | |
| 7440417 | Beryllium | 0.36 | 0.37 | -- | -- | -- | 0.055 | ST, ST, NA |
| 7440439 | Cadmium | 0.77 | 0.87 | 0.33 | 1.18 | 1.194 | 0.328 | ST, ST, EF |
| 56235 | Carbon tetrachloride | 16.22 | 16.48 | 0.00 | 0.00 | 0.000 | 0.000 | ST, NA, EF |
| 75456 | Chlorodifluoromethane {Freon 22} | -- | 3.50 | -- | -- | -- | -- | NA, NA, EF |
| 67663 | Chloroform | -- | 0.00 | -- | -- | -- | 0.000 | NA, NA, EF |
| 18540299 | Chromium (VI) | 0.06 | 0.06 | 0.04 | 0.03 | 0.037 | 0.087 | ST, ST, EF |
| 218019 | Chrysene | 1.51 | 1.54 | 0.09 | 0.08 | 0.089 | 0.088 | ST, NA, NA |
| 7440508 | Copper | -- | 0.68 | -- | -- | -- | 19.853 | ST, ST, EF |
| 100414 | Ethyl benzene | -- | 55.33 | -- | -- | -- | 70.332 | ST, NA, EF |
| 106934 | Ethylene dibromide | 0.00 | 0.00 | 70.06 | 65.11 | 71.272 | 70.319 | ST, NA, EF |
| 107062 | Ethylene dichloride | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.000 | NA, NA, EF |
| 111762 | Ethylene glycol monobutyl ether | -- | 2.69 | -- | -- | -- | 9.959 | NA, NA, EF |
| 206440 | Fluoranthene | 4.10 | 4.16 | 0.52 | 0.49 | 0.533 | 0.525 | ST, NA, NA |

CHAPTER 3: ENVIRONMENTAL SETTING

| CAS Number | Name of TAC | Reporting Year (pounds) | | | | | | Basis of Emissions Reported ^b |
|------------|---|-------------------------|----------|--------|--------|---------|---------|--|
| | | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | |
| 86737 | Fluorene | 0.64 | 0.65 | 0.51 | 0.47 | 0.519 | 0.512 | ST, NA, NA |
| 50000 | Formaldehyde | 1,005.42 | 1,022.05 | 635.36 | 590.58 | 646.975 | 638.128 | ST, NA, EF |
| 110543 | Hexane | -- | 0.21 | -- | -- | -- | 19.489 | NA, NA, EF |
| 7783064 | Hydrogen sulfide | -- | 499.38 | -- | -- | -- | 642.501 | ST, ST, NA |
| 193395 | Indeno[1,2,3-cd]pyrene | 0.00 | 0.00 | -- | -- | --- | -- | ST, NA, NA |
| 7439921 | Lead (inorganic) | 4.73 | 4.55 | 27.99 | 3.46 | 3.474 | 6.427 | ST, ST, EF |
| 7439965 | Manganese | -- | 2.93 | -- | -- | -- | 6.904 | ST, ST, EF |
| 7439976 | Mercury | -- | 6.05 | -- | -- | -- | 12.299 | ST, ST, NA |
| 67561 | Methanol | -- | 0.04 | -- | -- | -- | 5.711 | NA, NA, EF |
| 78933 | Methyl ethyl ketone | -- | 22.53 | -- | -- | -- | 2.308 | NA, NA, EF |
| 75092 | Methylene chloride | 32.96 | 33.49 | 0.01 | 0.01 | 0.006 | 0.02 | ST, NA, EF |
| 108383 | m-Xylene | -- | 0.01 | -- | -- | -- | 0.219 | NA, NA, EF |
| 91203 | Naphthalene | 28.12 | 28.57 | 99.63 | 92.59 | 101.36 | 99.997 | ST, NA, EF |
| 7440020 | Nickel | 3.23 | 3.71 | 3.46 | 2.38 | 2.459 | 11.287 | ST, ST, EF |
| 1151 | PAHs, total, with components not reported | 0.00 | 0.00 | 0.02 | 0.02 | 0.036 | 0.015 | NA, NA, EF |
| 85018 | Phenanthrene | 13.24 | 13.45 | 34.94 | 32.47 | 35.541 | 35.065 | ST, NA, NA |
| 1336363 | Polychlorinated biphenyls | -- | 0.72 | -- | -- | -- | 0.208 | ST, NA, NA |
| 108656 | Propylene glycol monomethyl ether acetate | -- | 0.38 | -- | -- | -- | 0.135 | NA, NA, EF |
| 129000 | Pyrene | 2.12 | 2.16 | 0.24 | 0.23 | 0.247 | 0.244 | ST, NA, NA |
| 7782492 | Selenium | -- | 5.79 | -- | -- | -- | 3.49 | ST, ST, NA |
| 1310732 | Sodium hydroxide | -- | 173.38 | -- | -- | -- | 317.884 | NA, NA, EF |
| 100425 | Styrene | -- | 41.05 | -- | -- | -- | 106.322 | ST, NA, EF |
| 108883 | Toluene | -- | 32.08 | -- | -- | -- | 95.479 | ST, NA, EF |
| 79016 | Trichloroethylene | 66.99 | 61.65 | 15.62 | 22.36 | 61.25 | -- | ST, NA, EF |
| 75014 | Vinyl chloride | 0.00 | 0.00 | 23.42 | 21.76 | 23.82 | 23.501 | ST, NA, NA |
| 1330207 | Xylenes | -- | 182.05 | -- | --- | -- | 170.334 | ST, NA, EF |

- a. Emissions data from South Coast AQMD Facility Information Detail (FIND) Database. Accessed October 26, 2020. A "--" indicates that emissions were not required to be reported for that pollutant in that year.
- b. NA = not applicable, EF = emission factor, ST = source test. The first value listed corresponds to emissions from the WESP. The second value listed corresponds to emissions from the Busch units. The third value listed corresponds to emissions from neither the WESP nor the Busch units.

GHGs

GHGs are a set of compounds whose presence in the atmosphere is associated with the differential absorption of incoming solar radiation and outgoing radiation from the surface of the earth. Greenhouse gases, such as carbon dioxide, methane, nitrous oxide, and certain synthetic chemicals, trap some of the Earth's outgoing energy, thus retaining heat in the atmosphere. This heat trapping causes changes in the radiative balance of the Earth—the balance between energy received from the sun and emitted from Earth—that alter climate and weather patterns at global and regional scales. (U.S. EPA, 2020c). More specifically, GHGs strongly absorb the long-wave radiation emitted by the earth, and hence are capable of warming the atmosphere. Regulated GHGs in California are carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), sulfur hexafluoride (SF₆), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and nitrogen trifluoride (NF₃). Other GHGs, such as water vapor, are not regulated.

In order to attempt to quantify the impact of specific GHGs, each gas is assigned a global warming potential (GWP). Individual GHG compounds have varying GWPs and atmospheric lifetimes. The GWP of a GHG is a measure of how much a given mass of a GHG is estimated to contribute to global warming, relative to CO₂, which is assigned a GWP of 1.0.

The GWP is used to determine the carbon dioxide equivalent (CO₂e) mass of each GHG. The calculation of the CO₂e is the accepted methodology for comparing GHG emissions since it normalizes various GHG emissions to a consistent reference gas, CO₂. For example, CH₄'s GWP of 25 indicates that the global warming effect of CH₄ is 25 times greater than that of CO₂ on a unit mass basis. CO₂e is the mass emissions of an individual GHG multiplied by its GWP.

The physical properties and sources of GHGs are described in Table 3.2-9.

Table 3.2-9 GWPs, Properties, and Sources of GHGs

| Constituent | GWP | Description and Physical Properties | Sources |
|-----------------|-----|--|--|
| CO ₂ | 1 | CO ₂ is an odorless, colorless, naturally occurring GHG. | CO ₂ is emitted from natural and anthropogenic (human) sources. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. |
| CH ₄ | 25 | CH ₄ is an organic, colorless, naturally occurring, flammable gas. Its atmospheric concentration is less than CO ₂ and its lifetime in the atmosphere is brief (10-12 years) compared to other GHGs. | CH ₄ has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of CH ₄ . Other anthropogenic sources include fossil-fuel and biomass combustion, as well as landfilling and wastewater treatment. |

| Constituent | GWP | Description and Physical Properties | Sources |
|------------------|----------------|--|--|
| N ₂ O | 298 | N ₂ O, commonly referred to as “laughing gas,” is a colorless, nonflammable GHG. It is a powerful oxidizer and breaks down readily in the atmosphere. | Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, e.g., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars. |
| HFCs | 92 - 14,900 | HFCs are synthetic man-made chemicals that form one of the GHGs with the highest GWP | HFCs are man-made for applications such as automobile air conditioners and refrigerants. |
| PFCs | 6,288 - 17,700 | PFCs are colorless, non-flammable, dense gasses that have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. | The two main sources of PFCs are primary aluminum production and semiconductor manufacture. |
| SF ₆ | 22,800 | SF ₆ is an inorganic, odorless, colorless, nontoxic, nonflammable gas. | SF ₆ is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection. |
| NF ₃ | 17,200 | NF ₃ is an inorganic, colorless, odorless, nonflammable gas. | NF ₃ is used primarily in the plasma etching of silicon wafers |

Source: CARB, 2016c.

There is growing concern about GHG emissions and their adverse impacts on the world’s climate and environment. These concerns relate to the change in the average weather of the earth that may be measured by changes in wind patterns, storms, precipitation, and temperature.

Throughout history, climate has been changing due to forces unrelated to human activity, including solar energy input variation, volcanic activity, and changing concentrations of key atmospheric constituents such as CH₄ and CO₂. These climate changes resulted in ice ages and warm interglacial periods, accompanied by large differences in snow and ice cover and associated changes in ecological systems.

Large-scale combustion of fossil fuels (i.e., coal, oil, and natural gas) by humans beginning in the 19th century resulted in significant increases in emissions of CO₂. The resulting increase in atmospheric levels of CO₂ has been recorded in long-term records at monitoring stations such as Mauna Loa, Hawaii, where measured background ambient CO₂ levels have increased from 285 ppm in 1877 (Stanhill, 1984) to the current level of 410 ppm (NOAA, 2018). Simultaneously, average surface temperatures have been increasing at many locations around the world. Multiple lines of evidence confirm that human activities are the primary cause of the global warming of the past 50 years. Natural factors, such as variations in the sun's output, volcanic activity, the Earth's orbit, the carbon cycle, and others, also affect Earth's radiative balance. However, beginning in the late 1700s, the net global effect of human activities has been a continual increase in greenhouse gas concentrations (IPCC, 2013; U.S. Global Change Research Program, 2014).

GHG Emissions Inventory

Emissions inventories identify and quantify the primary human-generated sources and sinks of GHGs. This section summarizes information on global, national, and state GHG emissions inventories.

- **Global Emissions.** Worldwide emissions of GHGs in 2004 totaled 27 billion metric tons (MT) of CO₂e per year (UNFCCC, 2007). Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change (UNFCCC).
- **United States Emissions.** In 2008, the United States emitted approximately seven (7) billion MT of CO₂e, or approximately 25 tpy, per person. Of the six (6) major sectors—electric power industry, transportation, industry, agriculture, commercial, and residential—the electric power industry and transportation sectors combined account for approximately 62% of the GHG emissions; the majority of the electric power industry and all of the transportation emissions are generated from direct fossil fuel combustion. Between 1990 and 2006, total United States GHG emissions rose approximately 14.7% (UNFCCC, 2007).
- **State of California Emissions.** According to CARB emission inventory estimates, California emitted approximately 474 million metric tons (MMT) of CO₂e emissions in 2008 (CARB, 2017b). This large number is due primarily to the sheer size of California compared to other states. By contrast, California has the fourth-lowest per-capita CO₂e emission rate from fossil fuel combustion in the country due to the success of its energy efficiency, renewable energy programs, and environmental commitments that have lowered the state's GHG emissions rate of growth by more than half (California Energy Commission (CEC), 2007). GHG emissions from the transportation and electricity sectors are approximately 36% and 22% of California's emission inventory, respectively. The industrial sector contributes approximately 18%. The remaining sources of GHG emissions are high GWP gases at 7%, residential and commercial activities at 9%, agriculture at 6%, and recycling and waste at 2%.

CARB is responsible for developing the California GHG Emission Inventory. This inventory estimates the volume of GHGs emitted to and removed from the atmosphere by human activities

within California and supports the AB 32 Climate Change Program. CARB's current GHG emission inventory covers the years 1990–2015, and is based on fuel use, equipment activity, industrial processes, and other relevant data (e.g., housing, landfill activity, and agricultural land area). Quemetco's emissions inventory is included in the development of the California GHG Emission Inventory.

CARB staff has projected statewide unregulated GHG emissions for 2020, which represent the emissions that would be expected to occur in the absence of any GHG reduction actions, at 596 MMT of CO₂e. GHG emissions from the transportation and electricity sectors as a whole are expected to increase but remain at approximately 36% and 22% of total CO₂e emissions, respectively (CARB, 2017b).

Quemetco's GHG Emissions Inventory

Natural gas fuel use data at the Quemetco facility is collected from monthly Southern California Gas Company invoices. The monthly totals are recorded on an annual GHG worksheet which is uploaded into CARB's electronic GHG Reporting Tool (Cal e-GGRT). Quemetco uses a CEMS on the WESP exhaust stack to quantify and report CO₂ emissions. A continuous gas sample is extracted from the stack and analyzed in a temperature controlled CEMS shelter. The CEMS is controlled by a programmable logic controller. The CEMS utilizes an electronic data acquisition system to monitor record and report emission data. All measurements are done on a continuous real-time basis. The CEMS monitors stack NO_x emission concentrations, O₂ concentrations, and stack gas volumetric flow rate. Emissions data are read and recorded at one-minute intervals.

Per CARB's mandatory GHG reporting requirement, direct GHG emissions of CO₂, CH₄, and N₂O are required to be reported annually. Indirect emissions, such as mobile sources and the emissions associated with electricity usage are not quantified in this report (See Chapter 4: Environmental Impact Analysis for the indirect GHG emissions analysis). In 2014, TRC Solutions Inc. verified Quemetco's direct GHG emissions at 79,928.5 MT CO₂e from its lead production activities and natural gas combustion (TRC Solutions, 2014). In 2017, ATC Group Services LLC verified Quemetco's GHG emissions at 38,362.38 MT CO₂e (ATC Group Services, 2018). Both TRC and ATC conducted detailed data checks that focused on the largest and most uncertain estimates of emissions, product data, and fuel and electricity transactions. These GHG verifications are performed for and submitted to CARB as part of the mandatory GHG reporting requirement

Effects of Global Climate Change

The Intergovernmental Panel on Climate Change (IPCC) has produced several trajectories of GHGs emission reductions believed to be needed to stabilize global temperatures and climate change impacts. In its Fifth Assessment Report, the IPCC predicted that the global mean temperature change from 1990 to 2100, could range from 1.1 degree Celsius (°C) to 6.4°C (8°F to 10.4°F). Global average temperatures and sea levels are expected to rise under all scenarios (IPCC, 2014). The IPCC concluded that global climate change was largely the result of human activity, mainly the burning of fossil fuels.

The effects of global climate change may arise from temperature increases, climate-sensitive diseases, extreme weather events, and degradation of air quality. There may be direct temperature effects through increases in global average temperatures, leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems. Heat-related problems include heat rash, heat stroke, drought, etc. In addition, climate-sensitive diseases may increase, such as those spread by mosquitoes and other disease-carrying insects. Such diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture. Global warming may also contribute to air quality problems due to the increased amount and frequency of smog and particulate air pollution.

According to the 2006 California Climate Action Team (CAT) Report, several climate change effects can be expected in California over the next century (CalEPA, 2006). These are based on trends established by the IPCC and are summarized below.

- A diminishing Sierra Nevada snowpack, declining by 70% to 90%, and thereby threatening the state's water supply.
- A rise in sea levels, resulting in the displacement of coastal businesses and residences. During the past century, sea levels along California's coast have risen about seven (7) inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Sea level rises of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. (Note: This condition would not affect the proposed Project area as it is approximately 25 miles from coastal areas.)
- An increase in temperature and extreme weather events. Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.
- Increased risk of large wildfires if rain increases as temperatures rise. Specifically, wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30% toward the end of the 21st century because more winter rain will stimulate the growth of more plant fuel available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90% more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- Increasing temperatures from 8°F to 10.4 °F leading to a 25% to 35% increase in the number of days that ozone pollution levels are exceeded in most urban areas.
- Increased vulnerability of forests due to forest fires, pest infestation, and increased temperatures.
- Reductions in the quality and quantity of certain agricultural products. The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- Exacerbation of air quality problems. If temperatures rise to the medium warming range, there could be 75% to 85% more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This

increase in air quality problems could result in an increase in asthma and other health-related problems.

- A decrease in the health and productivity of California's forests. Climate change can cause an increase in wildfires, an enhanced insect population, and the establishment of non-native species.
- Increased electricity demand, particularly in the hot summer months.
- Increased ground-level ozone formation due to higher reaction rates of ozone precursors.

3.2.2 Regulatory Setting

Ambient air quality standards in California are the responsibility of, and have been established by, both the U.S. EPA and CARB. These standards have been set at concentrations that provide margins of safety for the protection of public health and welfare. Federal and state air quality standards are presented in Table 3.2-2. The South Coast AQMD has established levels of episodic criteria and has indicated measures that must be initiated to immediately reduce contaminant emissions when these levels are reached or exceeded. The federal, state, and local air quality regulations are described in further detail in the following sections.

Federal

Clean Air Act

The U.S. EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside of state waters (Outer Continental Shelf). U.S. EPA is responsible for implementing the CAA, which is the comprehensive federal law that regulates air emissions from stationary and mobile sources.

The CAA is designed to attain compliance with the NAAQS adopted by the U.S. EPA. (42 United States Code (U.S.C.) § 7409.) U.S. EPA has adopted NAAQS for ozone, CO, NO₂, SO₂, PM₁₀, PM_{2.5}. (40 CFR Part 50.) For planning purposes, U.S. EPA has divided the country into separate "air quality control regions." (42 U.S.C. § 7407; 40 CFR Part 81.) U.S. EPA must determine whether each air quality region is "attainment" or "nonattainment" of the NAAQS for each criteria pollutant. (42 U.S.C. § 7407(d)(4); 42 U.S.C. § 7501(2).) Once a region is designated nonattainment, the CAA requires states to prepare a "state implementation plan" (SIP). (42 U.S.C. § 7410.) Each SIP must provide for: (1) "implementation of all reasonably available control measures as expeditiously as practicable," and (2) the attainment of the NAAQS. U.S. EPA must review and approve each proposed SIP. (42 U.S.C. § 7410(a)(1).)

The South Coast Air Basin is an air quality control region under the CAA. The South Coast AQMD is responsible for preparing the Basin's "Air Quality Management Plan" (AQMP). (Health and Safety Code § 40408.) The AQMP serves as the SIP under the CAA. (Health and Safety Code § 40460.) The AQMP sets forth a variety of general "control measures" designed to attain and maintain the NAAQS within the Basin. (Health and Safety Code § 40913.)

The CAA is organized into seven main sections:

- Title I – Air Pollution Prevention and Control
 - Part A – Air Quality and Emission Limitations
 - Part B – Ozone Protection
 - Part C – Prevention of Significant Deterioration (PSD) of Air Quality
 - Part D – Plan Requirements for Nonattainment Areas
- Title II – Emission Standards for Moving Sources
 - Part A – Motor Vehicle Emission and Fuel Standards
 - Part B – Aircraft Emission Standards
 - Part C – Clean Fuel Vehicles
- Title III – General Provisions
- Title IV – Noise Pollution
- Title IV-A – Acid Deposition Control
- Title V – Permits
- Title VI – Stratospheric Ozone Protection

Title I Part C of the CAA is Prevention of Significant Deterioration (PSD), which applies to new major sources or major modifications at existing sources for pollutants where the area that the source is located in is in attainment or unclassifiable with the NAAQS. It requires installation of the “Best Available Control Technology” (BACT), an air quality analysis, an additional impacts analysis, and public involvement. PSD review will not be required for the proposed Project, because it does not constitute a new major source or major modification to an existing source (physical change to existing equipment). Title III of the CAA regulates TACs and is applicable to the proposed Project as analyzed in Chapter 4. Title V of the CAA establishes a federal permit program. The Title V program is implemented by the South Coast AQMD for areas within its jurisdiction via South Coast AQMD Regulation XXX – Title V Permits. Title V permits incorporate all federally enforceable requirements as well as state and local requirements. Quemetco currently operates pursuant to its Title V permit, which imposes all applicable CAA requirements on the facility

NSPS and NESHAP

Additional U.S. EPA regulations are codified in the U.S. Code of Federal Regulations (CFR), Title 40: Protection of the Environment, which implements U.S. EPA’s mission of protecting human health and the environment. Subchapter C of Title 40 includes all air programs for which the U.S. EPA is responsible. Quemetco is subject to two significant programs within Title 40, Subchapter C, including Part 60, Subpart L – Standards of Performance for New Stationary Sources (e.g., NSPS) for Secondary Lead Smelters, and Part 63, Subpart X – National Emission Standards for hazardous Air Pollutants (NESHAP) from Secondary Lead Smelting.

Under NSPS for Secondary Lead Smelters, emissions of particulate matter are limited to:

- No more than 50 milligrams per dry standard cubic meter (mg/dscm) and less than 20% opacity from blast and reverberatory furnaces, and
- Less than 10% opacity from pot furnaces having charging capacities equal to or greater than 250 kilograms.

Under NESHAP from Secondary Lead Smelting, all of the following sources at a secondary lead smelter have emission standards: blast, reverberatory furnace, rotary/kiln feed dryer, and electric arc furnace; refinery kettles; agglomerating furnaces; dryers; process fugitive emissions sources; buildings containing lead-bearing materials; and fugitive dust sources. However, the South Coast AQMD's standards are more stringent than the NESHAP (see Section 3.2.2.3).

Greenhouse Gas Reporting Program

U.S. EPA's Greenhouse Gas Reporting Program (GHGRP), codified at 40 CFR Part 98, requires GHG data reporting from large GHG emission sources, fuel and industrial gas suppliers, and carbon dioxide injection sites in the United States. In general, the GHGRP applies to facilities that emit 25,000 MT CO₂e or more per year in the United States and requires such facilities to submit GHG emission reports on an annual basis. U.S. EPA electronically verifies data submitted and publishes the data. Quemetco is subject to the GHGRP and has a history of compliance with the program.

State

CAAQS

The California Clean Air Act sets forth a state regulatory program that is parallel to the federal CAA program. The California CAA is designed to attain compliance with the California Ambient Air Quality Standards within specified "air quality basins." (Health and Safety Code § 39606.) CARB has adopted CAAQS for all pollutants for which the federal government has NAAQS, and has also established standards for sulfates, visibility, H₂S, and vinyl chloride. California standards are generally more stringent than the NAAQS. Federal and state air quality standards are presented in Table 3.2-2.

For the most part, CARB's air quality basins have the same boundaries as U.S. EPA's air quality control regions. Like EPA under the Federal CAA, CARB must determine whether each air quality basin is attainment or nonattainment of the CAAQS for each criteria pollutant. (Health and Safety Code § 39608.) An "attainment plan" must be prepared for each nonattainment region. (Health and Safety Code § 40911.) Like federal SIPs, attainment plans must demonstrate how nonattainment basins will achieve and maintain the CAAQS. (Health and Safety Code § 40913.) Within each region/basin, the same document generally serves as both the SIP and the attainment plan. (Health and Safety Code § 41650(a).) These plans are variously referred to as "air quality management plans," "air quality maintenance plans," "attainment plans," or "non-attainment plans." CARB must review and approve each attainment plan. (Health and Safety Code § 40911.)

The South Coast Air Basin is an air quality basin under the California CAA. The South Coast AQMD's AQMP serves as the attainment plan under the California Act for the Basin. (Health and Safety Code § 40460.) The AQMP sets forth a variety of general "control measures" designed to attain and maintain the CAAQS within the Basin. (Health and Safety Code § 40913.) Thus, the AQMP serves the same purpose under the California CAA and the parallel CAA – it provides a blueprint for attaining compliance with both the NAAQS and the CAAQS.

CARB, which became part of the CalEPA in 1991, is responsible for ensuring implementation of the California CAA and federal CAA, and for regulating emissions.

AB 1807 and AB 2728

California also has established a state air toxics program, California Toxic Air Contaminants Program (Tanner Bill) (AB 1807), which was modified by the Revised Tanner Bill (AB 2728). This program sets forth provisions to implement the national program for control of HAPs. Quemetco is subject to the requirements of the California state air toxics program.

AB 2588

The Air Toxic "Hot Spots" Information and Assessment Act (AB 2588), as amended by Senate Bill (SB) 1731, requires operators of certain stationary sources to inventory air toxic emissions from their operations and, if directed to do so by the local air district, prepare an HRA to determine the potential health impacts of such emissions. If the health impacts are determined to be "significant" (greater than 10 per one million exposures or non-cancer hazard index greater than 1.0), each facility operator must, upon approval of the HRA, provide public notification to affected individuals. Quemetco is subject to the requirements of AB 2588.

Proposition 65

Proposition 65, officially named the "Safe Drinking Water and Toxic Enforcement Act of 1986," became law in California in 1986. The Proposition was intended to protect California citizens and the State's drinking water sources from chemicals known to cause cancer, birth defects, or other reproductive harm, and to inform citizens about exposure to such chemicals. Under the statute, the state must maintain and update a list of such chemicals. Additionally, a person doing business cannot expose an individual to such a chemical without first giving a clear and reasonable warning. The warning can be provided in various ways, such as by labeling a consumer product, posting signs at the workplace, or distributing or publishing notices. Quemetco is subject to the requirements of Proposition 65.

AB 32: MRR and Cap-and-Trade

The California Global Warming Solutions Act of 2006 (AB 32), requires a sharp reduction of GHG emissions in California in preparation to transition the State to a sustainable, low-carbon future. Pursuant to AB 32, CARB has adopted various programs and regulations with the goal of achieving maximum GHG emission reductions considering technological feasibility and cost-effectiveness.

One program that CARB developed and adopted under AB 32 is the Mandatory Reporting of Greenhouse Gas Emissions (MRR). The MRR (codified at Title 17, CCR, sections 95100-95157) incorporates certain requirements promulgated by U.S. EPA's GHGRP and is applicable to electricity generators, industrial facilities, fuel suppliers, and electricity importers. In general, the MRR applies to facilities that emit 10,000 MT CO₂e or more per year in California and requires such facilities to submit GHG emission reports on an annual basis. The MRR also requires the

independent verification of GHG emissions data reports by a CARB-accredited verification body. CARB then publishes the publicly available data. Quemetco is subject to the MRR and has a history of compliance with the program.

Another program that CARB developed and adopted under AB 32 is the California Cap-and-Trade Program, which applies to electricity generators, distributors of transportation, natural gas, and other fuels, and large industrial facilities emitting 25,000 MT CO₂e or more annually in California. Facilities subject to Cap-and-Trade are considered “covered entities,” and are required to register with the Cap-and-Trade Program, report and verify GHG emissions pursuant to the MRR, submit valid compliance instruments to fulfill the compliance obligation, and retain applicable records. Cap-and-Trade establishes a limit, or cap, on GHG emissions from covered entities. The cap commenced in 2013 and declines over time, achieving GHG emission reductions over time in alignment with AB 32. The cap is used to allocate emission credits, which are distributed to covered facilities. A facility’s credits give them permission to release a certain quantity of emissions. Facilities with more credits than they need can sell them as offsets, enabling other facilities to buy the right to emit more. Quemetco became subject to Cap-and-Trade in 2013 when a previous exemption that excluded the facility was eliminated. The facility’s stationary source GHG emissions are considered “covered emissions” under the Cap-and-Trade Program.⁴ Quemetco is subject to the requirements of Cap-and-Trade and has a history of compliance with the program.

Local

The South Coast AQMD has regulatory authority over stationary sources and air pollution control equipment, and limited authority over mobile sources for areas within its jurisdiction. The South Coast AQMD is responsible for air quality planning in the Basin and the development of the Air Quality Management Plan (AQMP). The AQMP establishes the strategies that will be used to achieve compliance with California Ambient Air Quality Standards in all areas within the South Coast AQMD’s jurisdiction.

The South Coast AQMD rules and regulations which are applicable to the Quemetco facility, include but are not limited to the following:

- Rule 203 - Permit to Operate
- Rule 212 - Standards for Approving Permits
- Rule 218 - Continuous Emissions Monitoring
- Rule 301 - Permitting and Associated fees
- Rule 401 - Visible Emissions
- Rule 402 - Nuisance
- Rule 404 - Particulate Emissions
- Regulation IX - NSPS for Secondary Lead Smelters (40 CFR Part 60 Subpart L)

⁴ Mobile and area GHG emissions are not included in the Cap-and-Trade program; however these emissions sources are included in this CEQA EIR and will be described in more detail under the analysis of the proposed Project in Chapter 4.

- Regulation X - NESHAP from Secondary Lead Smelting (40 CFR Part 63 Subpart X)
- Regulation XIII – NSR, including key rule (Rule 1303 - Requirements)
- Rule 1401 - New Source Review of Toxic Air Contaminants
- Rule 1402 - Control of Toxic Air Contaminants from Existing Sources
- Rule 1407 - Control of Emissions of Arsenic, Cadmium and Nickel from Non-Ferrous Metal Melting Operations
- Rule 1420 - Emissions Standard for Lead
- Rule 1420.1 - Emissions Standard for Lead from Large Lead-Acid Battery Recycling Facilities
- Regulation XX - RECLAIM including key rules (Rule 2005 - NSR for RECLAIM Pollutants)
- Regulation XXX - Title V Permits

Rule 1401

Rule 1401 applies to facilities, including Quemetco, with new, relocated, or modified equipment that emit TACs. This rule establishes allowable health risks for permit units that require new permits. Rule 1401 applies to Quemetco’s permit units based on the maximum potential to emit. Quemetco’s emissions control technology, such as the WESP and RTO, is subject to Rule 1401.

Rule 1402

Rule 1402 applies to facilities, including Quemetco, which are subject to the Air Toxics “Hot Spots” Information and Assessment Act (AB 2588), and facilities with emissions that exceed significant or action risk levels. This rule reduces the health risk associated with emissions of TACs from existing sources by specifying limits for the MICR, cancer burden, and non-cancer acute and chronic HI, and requiring facilities to implement risk reduction plans to achieve these risk limits, as required by the Hot Spots Act and this rule. Rule 1402 requires preparation of a HRA to demonstrate compliance with specified limits. Quemetco prepared an HRA based on the 2015 OEHHA updated Risk Assessment Guidelines (2015 OEHHA Guidelines) and exceeded the health risk thresholds for public notification and risk reduction; therefore, an RRP was submitted to South Coast AQMD and approved on June 22, 2017.⁵ The RRP contains an annual arsenic emission limit of 6.5 pounds and requires continuous monitoring of arsenic emissions from the WESP. Quemetco submits an HRA on a quadrennial basis.

Rule 1407

Rule 1407 applies to facilities conducting non-chromium metal melting operations such as smelters, foundries, die-casters, coating processes, and other miscellaneous processes. Rule 1407 establishes control efficiency requirements, mass emission limits, and emission control device monitoring requirements to control point source emissions, housekeeping and building enclosure provisions to limit fugitive emissions, and source testing and recordkeeping requirements.

⁵ Quemetco Rule 1402 Risk Reduction Plan, Submitted May 2016, and stamped November 2016. http://www.aqmd.gov/docs/default-source/planning/risk-assessment/quemetco/quemetco_rrp.pdf

Quemetco's existing air pollution control systems have been tested and demonstrated to be in compliance with Rule 1407. However, Rule 1407 was amended in October 2019 such that equipment and operations subject to the requirements of Rule 1420.1 are exempt from the requirements of this rule. Given that Quemetco is subject to Rule 1420.1, Rule 1407 no longer applies to the facility.

Rule 1420

Rule 1420 applies to facilities that process or use lead-containing materials. The Rule includes requirements for compliance with ambient air lead concentration limits, point source control requirements, housekeeping and maintenance requirements, and source testing. Rule 1420 was amended in December 2017 such that equipment and operations subject to the requirements of Rule 1420.1 are exempt from the requirements of this rule. Given that Quemetco is subject to Rule 1420.1, Rule 1420 no longer applies to the facility.

Rule 1420.1

On November 5, 2010, the South Coast AQMD adopted Rule 1420.1, which includes emission standards for lead and other TACs from large lead-acid battery recycling facilities. Rule 1420.1 was most recently amended on September 4, 2015 to incorporate a lower facility-wide lead emission rate and administrative provisions for facilities that have closed. Rule 1420.1 was crafted to: 1) protect public health by reducing exposure to and emissions of lead from large lead-acid battery recycling facilities; 2) help ensure attainment and maintenance of the NAAQS for lead; and 3) protect public health by limiting arsenic, benzene, and 1,3-butadiene exposure and emissions from these facilities. Because each of these compounds can be produced as a part of the secondary lead smelting process, Rule 1420.1 applies to the Quemetco facility.

Rule 1420.1 establishes a 30-day rolling average ambient air concentration for lead at a large lead-acid battery recycling facility as follows: 1) prior to January 1, 2016, 0.150 micrograms per cubic meter; 2) January 1 through December 31, 2016, 0.110 micrograms per cubic meter; and on or after January 1, 2017, the ambient air concentration of lead is 0.100 micrograms per cubic meter.

On-going source testing is required to be conducted to demonstrate compliance with the air quality permit and Rule 1420.1. Specifically, Rule 1420.1 requires source tests to be performed on all stacks at a minimum of once each year beginning in 2016. All source tests conducted for compliance purposes are governed by a South Coast AQMD-approved source testing methodology (see Table 3.2-8 for Quemetco's annual reported TAC emissions which are based on source test results and CEMS data). South Coast AQMD Rule 1420.1 is more stringent than Federal Regulation X - NESHAP. Rule 1420.1 also requires Quemetco to prepare annual compliance demonstrations.

Existing Permits

The U.S. EPA oversees permitting under Title V of the CAA (see Section 3.2.5.1.1 for details). Title V only applies to "major sources." U.S. EPA defines a "major source" as a facility that emits, or has the potential to emit, any criteria pollutant or HAP at levels equal to or greater than the

Major Source Thresholds (MST). The MST for criteria pollutants may vary depending on the attainment status (e.g., marginal, serious, extreme) of the geographic area in which the facility is located and the criteria pollutant or HAP of interest. Most Title V operating permits are issued by state or local agencies. Quemetco operates under a Title V operating permit issued by the South Coast AQMD on May 8, 2018. The permit expires on May 7, 2023. The proposed Project will require modifications to the Title V permit. As such, an application for a Title V permit revision has been submitted to South Coast AQMD and the details of the permit modification are detailed in Table 2-3.

The Quemetco facility is also subject to South Coast AQMD RECLAIM Program, which is an emissions cap-and-trade program that was implemented in 1994 to help the region achieve clean air in an economical and efficient manner. Facilities under the RECLAIM program must meet annual emission-reduction targets for NO_x and SO_x. These facilities are issued a RECLAIM permit, similar to a Title V permit, which contains permit conditions, source-testing requirements, reporting requirements, etc. Quemetco's operating permit issued by the South Coast AQMD contains RECLAIM requirements.

3.2.3 Quemetco's Regulatory Compliance Activities

Since 2008, Quemetco has completed several environmental improvement projects to comply with the recently revised National Ambient Air Quality Standards (NAAQS) for lead as well as with South Coast AQMD Rules 1402 and 1420.1. These emission reduction projects included the installation and operation of the WESP and RTO, and the enclosure of the battery wrecking operations.

Quemetco is required to comply with South Coast AQMD Rule 1402 - Control of Toxic Air Contaminants From Existing Sources, which applies to facilities subject to the Air Toxics "Hot Spots" Information and Assessment Act (Assembly Bill 2588, AB 2588) and facilities with emissions that exceed significant or action risk levels. Rule 1402 specifies limits to reduce health risks if emissions of toxic air contaminants (TACs) from existing sources exceed thresholds for the maximum individual cancer risk (MICR), cancer burden, or non-cancer acute and chronic hazard index (HI) based on a Health Risk Assessment (HRA) prepared for the facility. In some cases, facilities are required to prepare and implement Risk Reduction Plans (RRPs) to achieve these risk limits, as required by AB 2588 and Rule 1402. Quemetco prepares and submits additional HRAs to South Coast AQMD in accordance with air permit condition E448.2; these additional HRAs are prepared and submitted under a separate schedule.

Quemetco has prepared HRAs for South Coast AQMD approval, in accordance with AB 2588 and Rule 1402. An AB 2588 HRA was initially submitted by Quemetco to South Coast AQMD for review in May 2014 and was subsequently revised several times before being approved by South Coast AQMD on May 17, 2016. The approved HRA applied the 2015 Office of Environmental Health Hazard Assessment (OEHHA) updated Risk Assessment Guidelines (2015 OEHHA Guidelines).⁶

⁶ The approved HRA is available here: <http://www.aqmd.gov/docs/default-source/compliance/quemetco/2012-14-emissions-hra.pdf>

The 2015 OEHHA Guidelines can result in residential cancer risks three to five times higher than those calculated using the previous guidance, even at the same emission level, due to updates regarding cancer impacts for children and default assumptions about exposure parameters such as breathing rates and exposure duration. The AB 2588 HRA modeling for Quemetco's existing operations, based on the 2015 OEHHA Guidelines, exceeded South Coast AQMD's Rule 1402 health risk thresholds for public notification and risk reduction; therefore, a RRP was required. Quemetco submitted the RRP to South Coast AQMD on November 14, 2016, and South Coast AQMD issued a Conditional Approval of the RRP on June 22, 2017. The main requirements of the RRP are an annual arsenic limit of 6.5 pounds, and continuous monitoring of arsenic emissions from the WESP and both are applicable to the proposed Project.

On November 5, 2010 (as updated on January 10, 2014, March 7, 2014, March 6, 2015 and September 4, 2015), the South Coast AQMD adopted Rule 1420.1 - Emission Standards For Lead and Other Toxic Air Contaminants From Large Lead-Acid Battery Recycling Facilities, which includes emission standards for lead and other TACs from large lead-acid battery recycling facilities. Rule 1420.1 was most recently amended on September 4, 2015 to incorporate a lower facility-wide lead emission rate and administrative provisions for facilities that have closed. Rule 1420.1 was crafted to: 1) protect public health by reducing exposure to and emissions of lead from large lead-acid battery recycling facilities; 2) help ensure attainment and maintenance of the NAAQS for lead; and 3) protect public health by limiting arsenic, benzene, and 1,3-butadiene exposure and emissions from these facilities. Because each of these compounds can be produced as a part of the secondary lead smelting process, Quemetco is required to comply with Rule 1420.1. The following list includes a summary of the key requirements contained in Rule 1420.1, which are applicable to the Quemetco facility:

1. Established a new ambient arsenic monitoring requirement with curtailment requirements if an ambient arsenic concentration averaged over a 24-hour period exceeds 10.0 nanograms per cubic meter (ng/m^3) or greater at any monitoring location.
2. Established and maintains a current facility-wide stack emission rate for lead at 0.003 pounds per hour (lbs/hr) (26.3 pounds per year (lbs/yr)).
3. Established a facility-wide stack emission rate for arsenic of 0.00114 lbs/hr (10 lbs/yr) beginning January 1, 2015.
4. Established a WESP stack emission rate for benzene of 0.0514 lbs/hr (450 lbs/yr) beginning January 1, 2015.
5. Established a WESP stack emission rate for 1,3-butadiene of 0.00342 lbs/hr (30 lbs/yr) beginning January 1, 2015.
6. Established a new ambient lead monitoring requirement with curtailment requirements if an ambient lead concentration averaged over 30 consecutive days exceeds 0.110 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) or greater at any monitoring station beginning January 1, 2016.
7. Established a new ambient lead monitoring requirement with curtailment requirements if an ambient lead concentration averaged over 30 consecutive days exceeds 0.100 $\mu\text{g}/\text{m}^3$ or greater at any monitoring station beginning January 1, 2017.

One requirement of Rule 1420.1 is that Quemetco must maintain 30-day, rolling-average fence line ambient lead concentrations at or less than $0.110 \mu\text{g}/\text{m}^3$ through December 31, 2016, and at or less than $0.100 \mu\text{g}/\text{m}^3$ on and after January 1, 2017. The ambient monitoring stations at Quemetco's fence line are in place to verify that the ambient levels of lead concentrations are less than both the aforementioned limits in South Coast AQMD Rule 1420.1 and the NAAQS lead standards ($0.15 \mu\text{g}/\text{m}^3$ averaged over a rolling 90-day period).

During May 2017, an external power interruption resulted in ambient monitoring readings of arsenic and lead in excess of the Rule 1420.1 limits at one of the facility's four (4) ambient monitoring stations. At approximately 7:06 pm on May 3, 2017, Southern California Edison notified the facility of a Demand Response Program event. This notification prompted voluntary power curtailment activity at the facility, which involved reducing power consumption and shutting down production operations. Additionally, the facility implemented enhanced employee training and operational protocols for such events in response to this event.

During this process, issues with electrical equipment affected operation of the WESP and compromised both the reverberatory furnace and the building housing the reverberatory furnace. As a result, recorded arsenic and lead concentrations exceeded Rule 1420.1 ambient limits. Immediately upon becoming aware of the exceedance, Quemetco submitted the facility's South Coast AQMD-approved compliance plan and initiated a 50% process curtailment as required by South Coast AQMD Rule 1420.1, beginning on May 5, 2017. The curtailment period continued for a period of 30 days from the date of occurrence (i.e., May 3, 2017). With the concurrence of South Coast AQMD, Quemetco resumed full production on June 3, 2017. For more information on facility violations, see Appendix C, Summary of Rule and Permit Violations and Resolutions.

On-going source testing is required to be conducted to demonstrate compliance with the air quality permit and Rule 1420.1. Specifically, Rule 1420.1 requires source tests to be performed on all stacks at a minimum of once each year beginning in 2016. All source tests conducted for compliance purposes are governed by a South Coast AQMD-approved source testing methodology. Source test results for years 2014 through 2016 were used in the analysis of impacts in this EIR.

The proposed Project must also comply with all applicable South Coast AQMD rules and regulations, including but not limited to the following:

- Rule 203 - Permit to Operate
- Rule 212 - Standards for Approving Permits
- Rule 218 - Continuous Emissions Monitoring
- Rule 301 - Permitting and Associated fees
- Rule 401 - Visible Emissions
- Rule 402 - Nuisance
- Rule 404 - Particulate Emissions
- Regulation IX - New Source Performance Standards (NSPS) for Secondary Lead Smelters (40 CFR 60 Subpart L)

- Regulation X - National Emissions Standards for Hazardous Air Pollutants (NESHAP) from Secondary Lead Smelting (40 CFR 63 Subpart X)
- Regulation XIII – New Source Review (NSR), including key rule (Rule 1303 - Requirements)
- Rule 1401 - New Source Review of Toxic Air Contaminants
- Rule 1402 - Control of Toxic Air Contaminants from Existing Sources
- Rule 1407 - Control of Emissions of Arsenic, Cadmium and Nickel from Non-Ferrous Metal Melting Operations
- Rule 1420 - Emissions Standard for Lead
- Rule 1420.1 - Emissions Standard for Lead from Large Lead-Acid Battery Recycling Facilities
- Regulation XX - RECLAIM including key rules (Rule 2005 - NSR for RECLAIM Pollutants)
- Regulation XXX - Title V Permits

Quemetco will continue to be subject to the South Coast AQMD rules and regulations listed above if the proposed Project is implemented. The following discussion focuses on South Coast AQMD rules regulating toxics and secondary lead smelters. Quemetco currently complies with Rule 1402, which applies to facility risk based on reported emissions as well as the applicable Risk Reduction Plan. Rule 1401 applies to permit units based on maximum potential to emit that were evaluated in the EIR and during the issuance of the air quality permits. Quemetco's emissions control technology, such as the WESP and RTO, are required to be tested so as to demonstrate that they are toxics best available control technology (T-BACT). Quemetco's existing air pollution control systems have been tested and have demonstrated to be compliant with Rule 1407 and 1420⁷. No change to T-BACT compliance is expected as a result of the proposed Project.

The proposed Project would not involve modifications to any existing facility equipment. Existing Quemetco operations have previously demonstrated compliance with Regulation IX, and the Quemetco facility will be required to demonstrate compliance with Regulation IX after the proposed Project is implemented.

Rule 1420.1 is more stringent than Regulation X (NESHAP) because it has more restrictive emissions thresholds. Through on-going annual compliance demonstration of Rule 1420.1 (see Section 3.2.2), Quemetco is also demonstrating compliance with Regulation X.

⁷ Rule 1407 and Rule 1420 were amended in October 2019 and December 2017, respectively, such that equipment and operations subject to the requirements of Rule 1420.1 are exempt from the requirements of these aforementioned rules. Given that Quemetco is subject to Rule 1420.1, Rule 1407 and Rule 1420 no longer apply to the facility.

3.3 ENERGY

This section addresses the existing energy use on a state and regional level, and at the Quemetco facility. The federal, state, and local regulatory setting, and California electricity energy trends are also discussed. Project-specific and cumulative adverse energy impacts associated with implementing the proposed Project are evaluated in Chapter 4 - Environmental Impact Analysis

3.3.1 Environmental Setting

Energy Use

State Electricity Use

In 2014, 67% of California electricity came from in-state sources, while 33% was imported into the state. In 2014, the electricity generated in-state totaled 198,973 gigawatt-hours (GWh) while imported electricity totaled 97,870 GWh, with 37,261 GWh (13%) coming from the Pacific Northwest and 60,609 GWh (20%) coming from the Southwest (CEC, 2015).

Similarly, in 2018, 68% of California electricity came from in-state sources, while 32% was imported into the state. In 2018, the electricity generated in-state totaled 194,842 GWh while imported electricity totaled 90,647 GWh, with 39,517 GWh (44%) coming from the Pacific Northwest and 51,130 GWh (56%) coming from the Southwest (CEC, 2019).

Power plants in California provided approximately 67% of the total in-state electricity demand in 2014, with 22.5% from renewable sources such as biomass, geothermal, small hydro, solar, and wind. The Pacific Northwest provided another 13% of the total electricity demand, with 31% from renewable sources. The Southwest provided 21% of the total electricity demand, with six percent from renewable sources. In total, approximately 20% of the total in-state electricity demand for 2014 came from renewable sources (CEC, 2015).

Power plants in California provided approximately 68% of the total in-state electricity demand in 2018, with 32% from renewable sources such as biomass, geothermal, small hydro, solar, and wind. The Pacific Northwest provided another 14% of the total electricity demand, with 36% from renewable sources. The Southwest provided 18% of the total electricity demand, with 24% from renewable sources. In total, approximately 31% of the total in-state electricity demand for 2018 came from renewable sources (CEC, 2019).

Regional Electricity Use

Local electricity distribution service is provided to customers within Southern California by both investor-owned utilities (IOUs) and publicly owned utilities (POUs). The two IOUs operating in the region are SCE and San Diego Gas and Electric (SDG&E). SCE is the largest electricity utility in Southern California with a service area that covers all, or nearly all, of Orange, San Bernardino, and Ventura Counties, and most of Los Angeles and Riverside Counties. SCE coverage also

includes areas outside the Southern California region including Inyo, Tulare, and Mono Counties, as well as portions of Kern, Fresno, and Tuolumne Counties. SDG&E provides local distribution service to the southern portion of Orange County. Also, in the region, the Southern California Public Power Authority (SCPPA) members consist of the municipal utilities of Anaheim, Azusa, Banning, Burbank, Cerritos, Colton, Glendale, Los Angeles, Pasadena, Riverside, Vernon, and the Imperial Irrigation District. Together, these municipal utilities deliver electricity to over two million customers in the Southern California region that spans an area of 7,000 square miles and has a total population that exceeds five million people. The Los Angeles Department of Water and Power (LADWP) is the largest of the publicly owned electric utilities in Southern California (SCAG, 2016).

Table 3.3-1 shows the amount of electricity delivered in 2014 and 2019 to residential and non-residential entities in the counties in the Basin.

Table 3.3-1 2014 and 2019 Electricity Use in County (GWh)^a

| Sector | Los Angeles | Orange | Riverside | San Bernardino | Total |
|-----------------|-------------|--------|-----------|----------------|---------|
| Year 2014 | | | | | |
| Residential | 20,743 | 7,033 | 6,763 | 4,750 | 39,288 |
| Non-Residential | 49,211 | 13,714 | 8,771 | 9,983 | 81,679 |
| Total | 69,953 | 20,747 | 15,534 | 14,733 | 120,967 |
| Year 2019 | | | | | |
| Residential | 19,563 | 6,661 | 7,337 | 5,054 | 38,615 |
| Non-Residential | 46,556 | 12,798 | 8,183 | 9,933 | 77,470 |
| Total | 66,119 | 19,460 | 15,520 | 14,987 | 116,085 |

Source: CEC, 2014b and 2019

a. All values are rounded up to the nearest whole number

Quemetco’s Electricity Use

Quemetco’s electricity use from 2014 to 2019 is summarized in Table 3.3-2.

Table 3.3-2 Quemetco Electricity Use, 2014-2019

| Year | Electricity Use (kWh) |
|----------|-----------------------|
| 2014 | 38,758,024 |
| 2015 | 40,816,120 |
| 2016 | 34,117,872 |
| 2017 | 42,583,560 |
| 2018 | 44,699,776 |
| 2019 | 43,214,376 |
| Average: | 40,698,288 |

Electricity is required for operation of the battery wrecker, electric arc furnace, refinery operations, WESP, RTO, HEPA ventilation systems, oxygen generation, baghouses, LoTOx scrubbers, and

basic system operations. SCE provides electricity to the facility. As described in Chapter 2 – Proposed Project, these systems continue to operate even when the rotary/kiln feed dryer is shut down and the reverberatory furnace is in idle mode during the Compliance Stop Period. The facility also has two diesel ICE's equipped with diesel particulate filters which are connected to the WESP. There is currently one natural gas ICE which is controlled by 3-way catalyst but is not required to be connected to the WESP. There are two additional natural gas ICE's which have received permits from South Coast AQMD but have not yet been constructed. Each ICE is used to provide power to air pollution control systems during power interruptions.

Quemetco has committed to implementing an energy management plan through its establishment of the Energy Management System (EnMS) required for International Organization for Standardization (ISO) 50001 certification. The U.S. Department of Energy (U.S. DOE) recognizes the ISO 50001 “energy management standard as a proven framework for industrial facilities, commercial facilities, or entire organizations to manage energy—including all aspects of energy procurement and use. An energy management system establishes the structure and discipline to implement technical and management strategies that significantly cut energy costs and GHG emissions—and sustain those savings over time.”⁸ It also notes that “conformance to the standard provides proof that a facility has implemented sustainable energy management systems, completed a baseline of its energy use, and committed to continual improvement in energy performance.”⁹

Quemetco first established its EnMS in 2015 and updated the EnMS in 2018. ISO 50001 is a voluntary international standard developed by the ISO to provide organizations an internationally recognized framework to manage and improve their energy performance. The certification must be reissued every three years after the completion of a third-party audit process.

The ISO standard addresses the following areas:

- Energy use and consumption;
- Measurement, documentation, and reporting of energy use and consumption;
- Design and procurement practices for energy-using equipment, systems, and processes; and
- Development of an energy management plan and other factors affecting energy performance that can be monitored and influenced by the organization.

Quemetco has implemented or scheduled the implementation of numerous projects since receiving certification that demonstrates a commitment to energy conservation, continuous improvement in energy performance, and protection of the environment (RSR, 2019). These projects include:

- WESP Electrical Controls Upgrades (2015): Upgraded system with new transformers increasing electrical efficiency and reducing emissions.
- Refinery Lighting Upgrade (2017): Replaced fluorescent lighting fixtures with high efficiency LED lighting fixtures, reducing electrical consumption and improving safety in the area.

⁸ <https://www.energy.gov/ISO50001>

⁹ <https://www.energy.gov/eere/amo/iso-50001-frequently-asked-questions>

- Variable Frequency Drives (VFDs): Installed approximately (11) eleven and Quemetco continues to look for opportunities to install VFDs on equipment across the plant, allowing for reduced electrical consumption, better efficiency, and improved process performance.
- Compressed Air System Upgrade (2020): Replaced five oil-flooded single-stage screw air compressors with a three-stage oil free centrifugal turbo compressor. Energy savings by running the stage turbo units versus single-stage screws will be 29.5% without taking into consideration plans to replace the refrigeration dryers with Heat of Compression dryers, which reduce energy consumption by an additional 4.5%. The total energy reduction attributable to this project could exceed 35%. Maintenance savings per year for the 3-Stage Oil-Free Centrifugal Turbo Compressor is estimated to be 60% less than the current spending, and the screw compressors waste disposal stream will be reduced by 80%.

ISO 50001 certification provides a framework through which each organization can set and pursue its own goals for improving energy performance. An EnMS includes a series of processes enabling people of various responsibilities across an organization to use data and information to maintain and improve energy performance, while improving operational efficiencies, decreasing energy intensity, and reducing environmental impacts. Quemetco's top management personnel control and approve the EnMS and all Quemetco employees are trained on the energy policy. Quemetco holds annual internal audits to evaluate if the EnMS is effectively implemented and improving energy performance.

3.3.2 Regulatory Setting

Federal and state agencies regulate energy use and consumption through various regulations and programs. On the federal level, the United States Department of Transportation (U.S. DOT), U.S. DOE, and U.S. EPA are three agencies with substantial influence over energy policies and programs. Generally, federal agencies influence transportation energy consumption through establishment and enforcement of fuel economy standards for automobiles and light trucks, funding of energy related research and development projects, and funding for transportation infrastructure projects.

On the state level, the California Public Utilities Commission (CPUC) and CEC are two agencies with authority over different aspects of energy. The CPUC regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. The CEC collects and analyzes energy-related data; forecasts future energy needs; promotes energy efficiency and conservation by setting appliance and building energy efficiency standards; supports energy research; develops renewable energy resources, promotes alternative and renewable transportation fuels and technologies; certifies thermal power plants 50 megawatts (MW) and larger; and plans for and directs state response to energy emergencies. Some of the more relevant federal and state transportation-energy-related laws and plans are discussed in the following subsections.

Federal

Energy Policy and Conservation Act

The Energy Policy and Conservation Act (EPCA) of 1975 was enacted to serve the nation's energy demands and promote conservation methods when feasibly obtainable. Since being enacted on December 22, 1975, EPCA has been amended to:

- Grant specific authority to the President to fulfill obligations of the United States under the international energy program;
- Provide for the creation of a Strategic Petroleum Reserve capable of reducing the impact of severe energy supply interruptions;
- Conserve energy supplies through energy conservation programs, and the regulation of certain energy uses;
- Provide for improved energy efficiency of motor vehicles, major appliances, and certain other consumer products;
- Provide a means for verification of energy data to assure the reliability of energy data; and
- Conserve water by improving the water efficiency of certain plumbing products and appliances

National Energy Act of 1978

The National Energy Act of 1978 includes the following statutes: Public Utilities Regulatory Policies Act of 1978 (PURPA; Public Law 95-617), Energy Tax Act, National Energy Conservation Policy Act (NECPA), Power Plant and Industrial Fuel Use Act, and the National Gas Policy Act. The Power Plant and Industrial Fuel Use Act restricted the fuel used in power plants; however, these restrictions were lifted in 1987. The Energy Tax Act was superseded by the Energy Policy Acts of 1992 (EPACT92) and 2005. The National Gas Policy Act gave the Federal Energy Regulatory Commission authority over natural gas production and established pricing guidelines. NECPA set minimum energy performance standards, which replaced those in EPCA and the federal standards preempted those set by the state. NECPA was amended by the EPCA Amendments of 1985. Due to its relevance to electricity considerations, PURPA is discussed in more depth in the following section.

PURPA

PURPA was established in response to the unstable energy climate of the late 1970s. PURPA sought to promote conservation of electric energy. Additionally, PURPA created a new class of non-utility generators, small power producers from which, along with qualified co-generators, utilities are required to buy power.

PURPA was in part intended to augment electric utility generation with more efficiently produced electricity and to provide equitable rates to electric consumers. Utility companies are required to buy all electricity from a qualifying facility (QF). PURPA expanded the participation of non-utility generators in the electricity market and demonstrated that electricity from non-utility generators could successfully be integrated with a utility's own supply. PURPA requires utilities

to buy whatever power is produced by QFs (usually cogeneration or renewable energy). The Fuel Use Act of 1978 (FUA) (repealed in 1987) also helped QFs become established. Under the FUA, utilities were not allowed to use natural gas to fuel new generating technologies, but QFs, which were by definition not utilities, were able to take advantage of abundant natural gas and abundant new technologies (such as combined-cycle).

EPACT92

EPACT92 is comprised of 27 titles. It was passed by Congress and set goals, created mandates, and amended utility laws to increase clean energy use and improve overall energy efficiency in the United States. EPACT92 was amended as part of the Energy Conservation and Reauthorization Act of 1998.

Energy Policy Act of 2005

The Energy Policy Act of 2005 addresses energy efficiency; renewable energy requirements; oil, natural gas, and coal; alternative-fuel use; tribal energy, nuclear security; vehicles and vehicle fuels; hydropower and geothermal energy; and climate change technology. The Act provides revised annual energy reduction goals (2% per year beginning in 2006), revised renewable energy purchase goals, federal procurement of Energy Star or Federal Energy Management Program designated products, federal green building standards, and fuel cell vehicle and hydrogen energy system research and demonstration and development of standards.

Energy Independence and Security Act of 2007 (EISA)

EISA was signed into law on December 19, 2007. The objectives for EISA are to move the United States toward greater energy independence and security, increase the production of clean renewable fuels, protect consumers, increase product, building and vehicle efficiency, promote GHG research, improve the energy efficiency of the federal government, and improve vehicle fuel economy.

The renewable fuel standard in EISA established appliance energy efficiency standards for boilers, dehumidifiers, dishwashers, clothes washers, external power supplies, commercial walk-in coolers and freezers; federal buildings; lighting energy efficiency standards for general service incandescent lighting in 2012; and standards for industrial electric motor efficiency.

State

California Building Energy Efficiency Standards: Title 24

California established statewide building energy efficiency standards following legislative action. The legislation required the standards to be cost-effective based on building life cycle and to include both prescriptive and performance-based approaches. The 2005 Building Energy Efficiency Standards were first adopted in November 2003 and took effect October 1, 2005. Subsequently, the standards have undergone updates in four years: 2008, 2013, 2016, and 2019. The 2013 Building Energy Efficiency Standards went into effect on July 1, 2014. The 2016

standards went into effect on January 1, 2017. The 2019 standards went into effect on January 1, 2020. The 2022 standards will go into effect on January 1, 2023 and will continue to improve upon the current 2019 Standards for new construction of, and additions and alterations to, residential and nonresidential buildings.

The current 2019 standards focus on several key areas to improve the energy efficiency of newly constructed buildings and additions and alterations to existing buildings and include requirements that enable both demand reductions during critical peak periods, and future solar electric and thermal system installations.

California Environmental Quality Act

Appendix F of the CEQA Guidelines describes the types of information and analyses related to energy conservation that are to be included in EIRs prepared pursuant to CEQA. Energy conservation is described in Appendix F of the CEQA Guidelines in terms of decreased per capita energy consumption, decreased reliance on natural gas and oil, and increased reliance on renewable energy sources. To assure that energy implications are considered in project decisions, EIRs must include a discussion of the potentially significant energy impacts of proposed projects, with particular emphasis on avoiding or reducing inefficient, wasteful, and unnecessary consumption of energy.

Local

San Gabriel Valley Energy Efficiency Partnership

The San Gabriel Valley Energy Wise Partnership (SGVEWP) (“Partnership”) is a partnership between SCE, SCG, the San Gabriel Valley Council of Governments (SGVCOG), and the 30 cities in the San Gabriel Valley in SCE territory. The Partnership between SCE and the SGVCOG began in 2009, and SCG joined the Partnership in 2013. This program is funded by the CPUC Local Government Partnerships Program. The SGVEWP assists cities in the San Gabriel Valley in reducing their energy consumption and GHG emissions to create a more sustainable future for the entire region. Specifically, the Partnership provides resources and supports the implementation of energy efficiency projects at municipal facilities and helps to engage the community. Quemetco is located within SGVEWP’s service area.

Existing Permits

Quemetco has no existing permits pertaining to energy or electricity use.

3.4 HAZARDS AND HAZARDOUS MATERIALS

This section addresses the existing hazardous material use, generation, and disposal by the Quemetco facility; existing hazards permitting and soils testing; and the federal, state, and local regulatory setting. Project-specific and cumulative adverse hazards and hazardous materials impacts associated with implementing the proposed Project are evaluated in Chapter 4 - Environmental Impact Analysis.

3.4.1 Environmental Setting

Quemetco is located on previously rural land but is currently in an industrial and residential mixed-use area. This facility is a lead-acid battery recycling facility which has operated at this location since 1959. The facility includes hazardous waste management units and two post-closure units. The post-closure units are the facilities closed surface impoundment and former waste pile, and these units are subject to post-closure monitoring. The facility recovers lead from automotive batteries and other lead-bearing materials received from offsite; and from slag generated onsite. Quemetco's existing operations include the use, transport, and generation of hazardous materials and hazardous waste.

Hazardous Materials

A hazardous material is defined as any material that, because of quantity, concentration, or physical or chemical characteristics, poses a significant present or potential hazard to human health and safety or to the environment if released into the workplace or the environment [HSC Section 25501(o)]. The term "hazardous materials" refers to both hazardous substances and hazardous wastes. Under federal and state laws, any material, including wastes, may be considered hazardous if it is specifically listed by statute as such or if it is toxic, ignitable, corrosive, or reactive.

Regional Hazardous Materials

CalEPA DTSC maintains EnviroStor, a data management system for tracking cleanup, permitting, enforcement and investigation efforts at hazardous waste facilities and sites with known contamination or sites where there may be reasons to investigate further. EnviroStor lists 102 permitted hazardous waste facilities under the CalEPA DTSC in California, and 690 corrective action sites.

Quemetco Hazardous Materials

Quemetco's operation requires the use of multiple raw materials in the smelting processes and for treating wastewater. Raw hazardous materials currently used for the smelting processes include: smelting reagents (calcined coke), limestone, cobbled steel, and other additives (soda ash, caustics

and acids)¹⁰. Petroleum coke is used in the refinery as a purifying agent. Raw materials are received at the facility via trucks and railcars and transferred to the warehouse, silos, or trucks for storage. Sulfuric acid is primarily collected from the feed stock processing as a byproduct and transferred to the wastewater treatment system through a sump.

As described in Chapter 2 – Proposed Project, Section 2.6: Project Description and summarized in Table 2-1, Summary of Quemetco Operations, the proposed Project requires additional quantities of raw materials to be used in the smelting and refinery processes, including hazardous materials.

Quemetco has a permit from the LACFD Certified Unified Program Agency (CUPA) HMBP program, which allows the storage of hazardous materials and hazardous waste onsite. The HMBP requires a list of business activities, business owner/operator identification, a hazardous material inventory, a site map, an Emergency Response and Contingency Plan (ERCP), and an Employee Training Plan.

There is a single 10,000-gallon capacity underground storage tank (UST) containing diesel fuel used for fueling and re-fueling operations at the facility. The UST is permitted by South Coast AQMD (Permit No. M96094), and Quemetco maintains a UST Monitoring and Emergency Plan (“UST Plan”), per CUPA requirements. The UST Plan outlines the monitoring safety measures that the facility takes for the management of the diesel hazardous material in the UST and references the applicable sections of the ERCP in the event of an actual or suspected emergency, or the triggering of an alarm. The UST Plan is reviewed by South Coast AQMD annually.

The facility also maintains a Fire Prevention Plan in compliance with CCR Title 8, Section 3221, and the OSHA standard on fire prevention, 29 CFR Part 1910.39. The purpose of the Fire Prevention Plan is to eliminate the causes of fire, prevent loss of life and property by fire, and to provide employees with information and guidelines that will assist them in recognizing, reporting, and controlling fire hazards. The Fire Prevention Plan contains a list of potentially hazardous materials that are present at the facility. Per National Fire Protection Association (NFPA) Standard 704M: Identification of the Fire Hazards of Materials, hazardous materials are classified as health hazards, flammability hazards, reactivity hazards, and/or special hazards.

Table 3.4-1 presents the hazardous materials present at the Quemetco facility, as listed in the current Fire Prevention Plan.

¹⁰ Limestone, cobbled steel, and soda ash are additives in the process and are included here for completeness. They are not included Table 3.4-1, which represents the hazardous materials in the Fire Prevention Plan because they are not flammable.

Table 3.4-1 Hazardous Material Classifications

| Material | Description | Health ^a | Flammability ^b | Reactivity ^c | Special ^d |
|--------------------------------------|--|---------------------|---------------------------|-------------------------|----------------------|
| Acetylene | Flammable gas; pungent | 1 | 4 | 3 | |
| Caustic Potash (Potassium Hydroxide) | White solid, usually in form of flakes or pellets; corrosive | 3 | 0 | 1 | |
| Caustic Soda (Sodium Hydroxide) | White solid, usually in form of flakes or pellets or 50% solution; corrosive | 3 | 0 | 1 | |
| Coke, Calcined | Gray or black solid chunks or powder | 0 | 1 | 0 | |
| Coke, Petroleum | Gray or black solid chunks or powder | 0 | 1 | 0 | |
| Diesel Fuel | Flammable liquid | 0 | 2 | 0 | |
| Hydrochloric Acid | Oily liquid | 3 | 0 | 1 | |
| Hydrogen Peroxide | Slightly opaque liquid, 35-52% solution | 2 | 0 | 1 | OXY |
| Iron Pyrite (Iron Disulfide) | Gray to silver colored granular material slight sulfur odor | 3 | 1 | 0 | |
| Metallic Calcium or Calcium Aluminum | Silvery metallic chunks | 1 | 1 | 2 | W |
| Metallic Sodium | Silvery metallic chunks | 3 | 3 | 2 | W |
| Nitrogen (Liquid) | Colorless, odorless liquid, non-flammable | 3 | 0 | 0 | |
| Oxygen (Compressed) | Nonflammable, but promotes combustion | 0 | 0 | 0 | OXY |
| Oxygen (Liquid) | Nonflammable, but promotes combustion | 3 | 0 | 0 | OXY |
| Phosphorus, Red | Dark red powder | 0 | 1 | 1 | |
| Propane | Heavier than air gas; artificially odorized | 1 | 4 | 0 | |
| Quicklime (Calcium Oxide) | White to gray solid | 1 | 0 | 1 | |
| Sodium Nitrate (Niter) | White crystals; oxidizer | 1 | 0 | 0 | OXY |
| Sulfur | Yellow solid or powder | 2 | 1 | 0 | |
| Sulfuric Acid | Oily liquid | 3 | 0 | 2 | |
| Trisodium Phosphate | White crystals | 2 | 0 | 0 | |

Source: Quemetco, 2017

- a. 0 = Normal Material, 1 = Slightly Hazardous, 2 = Hazardous, 3 = Extreme Danger, 4 = Deadly
- b. Flammability scale indicates material flash point: 0 = Will Not Burn, 1 = Above 200°F, 2 = Above 100°F Not Exceeding 200°F, 3 = Below 100°F, 4 = Below 73°F
- c. 0 = Stable, 1 = Unstable if Heated, 2 = Violent Chemical Change, 3 = Shock and Heat; May Detonate, 4 = May Detonate
- d. OXY = Oxidizer, W = Use No Water

Both calcined coke and petroleum coke have the same flammability rating of level 1, which means they will burn at a temperature above 200°F. The proposed Project would not change the location of where the coke material is stored or used onsite. Currently, the facility feeds calcined coke through the rotary/kiln feed dryer to be used as a smelting reagent in the reverberatory furnace and electric arc furnace. Under the proposed Project, the facility could include petroleum coke in lieu of or in combination with calcined coke through the rotary/kiln feed dryer as a smelting reagent in the reverberatory furnace and electric arc furnace. There would be no change in throughput of coke whether calcined coke or petroleum coke is used as a smelting reagent.

3.4.1.1.3 Cortese List

Government Code Section 65962.5 requires the DTSC to compile a list called the Hazardous Waste and Substances Sites (Cortese) List, which includes:

- All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the HSC;
- All land designated as hazardous waste property or border zone property pursuant to former Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the HSC;
- All information received by the DTSC pursuant to Section 25242 of the HSC on hazardous waste disposals on public land; and
- All sites listed pursuant to Section 25356 of the HSC.

The lead agency is required to consult this list to determine whether the proposed Project and any alternatives to be analyzed in the EIR (see Chapter 5 - Project Alternatives) are located on a site which is included on the Government Code Section 65962.5 list. At the time of publication of the NOP/IS for the proposed Project (refer to Appendix A), it was assumed that Quemetco was included on DTSC's Cortese List. However, at the time of publication of this EIR, Quemetco is not included on the Cortese list.

RCRA Facility Investigation

The Resource Conservation and Recovery Act (RCRA) is the public law that creates the framework for the proper management of hazardous and non-hazardous solid waste. During the August 2005 RCRA Facility Investigation (RFI), soil samples were collected from 77 locations from five (5) areas of the facility. Releases of lead to soil were identified but because these areas are paved and there is no direct exposure of the noted contaminated soils, corrective action for these areas will be implemented following closure of the Quemetco facility (Environmental Strategies Consulting, 2006).

On November 16, 2018, DTSC issued an enforcement order for corrective action concerning sampling for lead concentrations within a geographic area known as the Quemetco Impacted Area. Following Quemetco's filing of a notice of defense seeking an administrative hearing to challenge this order, Quemetco agreed to voluntarily perform soil removal and replacement work within the Quemetco Impacted Area. DTSC approved Quemetco's workplan to perform such work in July 2019, and after Quemetco obtained the permits and access agreements necessary to start this work. Phase 1 of the soil removal and cleanup was completed in June 2020. Phase 2 of the work, which addresses portions of the neighboring levee road and a neighboring industrial property, began in

CHAPTER 3: ENVIRONMENTAL SETTING

February 2020. All Quemetco Impacted Area remediation has been completed at the time of release of this EIR.

On December 17, 2018, DTSC issued an Enforcement Order for Corrective Action to Quemetco requiring further perimeter sampling of lead around the facility. On December 18, 2018, Quemetco filed a formal notice of defense and objections to the order. On July 18, 2019, DTSC voluntarily dismissed the order.

On February 11, 2020, Quemetco and DTSC entered into a Corrective Action Consent Agreement pertaining to sampling for lead and analysis of releases or potential releases from the facility. The Agreement requires, among other tasks, the development of a Current Conditions Report accepted on August 31, 2012 and located here:

https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=80001454 (DTSC, 2021).

The report includes existing information pertinent to Quemetco operations including processes, waste management, geology, hydrogeology, contamination, migration pathways, potential receptor populations and interim corrective measures.

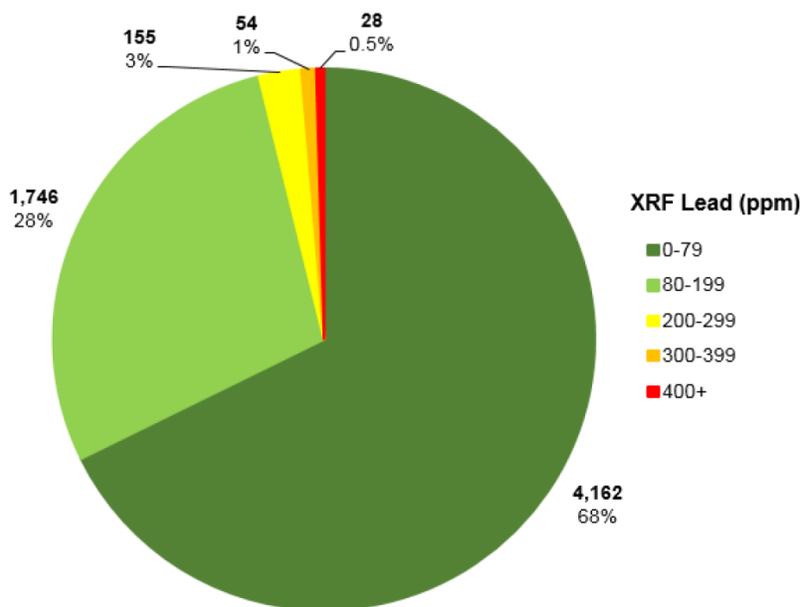
As required by DTSC, Quemetco completed an RFI Report for the perimeter area of the facility in October 2018 summarizing soil testing completed from May 2016 through February 2017 (WSP, 2018). A Sampling Area Map is shown in Figure 3.4-1.



Source: DTSC, 2016.

Figure 3.4-1 DTSC Soil Sampling Area Map

The soil study included two soil investigation areas: the Quemetco Perimeter Investigation Area and the Background and Ambient Investigation Areas. The soil testing included 6,145 soil samples taken from residential properties, which were then sent to a lab for analysis of metals, including lead and arsenic. Figure 3.4-2 shows the lead concentration results from the soil sampling completed on residential properties between June 30, 2016 and September 14, 2016.



Source: WSP, 2018

Figure 3.4-2 Results from Soil Samples at Residential Properties

As shown in the Figure 3.4-2, 99.5% of the residential soil samples contained lead less than 400 ppm, which is the California Department of Public Health definition of “lead contaminated soil” for soil in a play area [17 CCR Section 35036]. The remaining 0.05% of residential soil samples contained lead greater than 400 ppm. Twenty-one of 132 residential properties had one or more soil samples with a lead reading greater than 400 ppm.

A review of residential properties with at least one sample greater than 400 ppm was conducted to determine whether local sources of lead were identifiable and whether individual samples were representative of the property. The lead levels greater than 400 ppm in five (5) of the residential properties were the result of the confirmed presence of lead-containing paint with one location exhibiting lead-containing roofing tar that contained 3,330 ppm lead. Of the remaining 16 properties, five (5) demonstrated the presence of paint chips or peeling paint, but the lead content of the paint was not tested, and the remaining 11 properties did not reflect a distribution pattern related to distance from the facility (i.e., they were not clustered closest to the Quemetco Plant).

The pattern of these results do not support a finding that Quemetco is the source of the lead levels greater than 400 ppm and the samples exceeding 400 ppm of lead collected from these 11 properties are each a single isolated sample and likely not caused by Quemetco’s operations (WSP,

2018). Rather, the report concludes that in most of the area investigated, the soil lead levels were consistent with lead levels in other areas of similar age, and therefore potentially affected by lead in paint, and in similar proximity to freeways, and therefore affected by lead in gasoline. The October 2018 report, which DTSC accepted as final in February 2020, is available on DTSC's website¹¹.

Based on an analysis of the study results, Quemetco's RFI Report concluded that, with the exception of a limited area immediately adjacent to the Facility (the "Quemetco Impacted Area"), comparison of the perimeter investigation area results to the background and ambient study results for lead and other constituents demonstrate no impacts from Quemetco's operations. On February 6, 2020, DTSC accepted Quemetco's RFI Report as final, without accepting the RFI Report's conclusions.

To address the RFI's findings in the Quemetco Impacted Area, Quemetco submitted a Final Interim Measures Workplan for the Quemetco Impacted Area ("QIA IM Workplan") to DTSC, dated June 30, 2019. The QIA IM Workplan identified receptor populations; evaluated exposure pathways; and described interim remedial measures, project organization and management, the sampling and analysis plan and the work products and reporting. The QIA IM Workplan included excavation of approximately 2,740 cubic yards of lead-impacted soil, backfill with clean import fill or topsoil, and collection of post-excavation confirmation samples. DTSC approved the QIA IM Workplan on July 31, 2019.

The area established by DTSC as the Quemetco Impacted Area has been remediated prior to the release of this EIR; the QIA Phase II Completion Report and DTSC's August 20, 2021 approval letter are located on DTSC's website¹².

On January 14, 2021, DTSC provided Quemetco with a Transect Sampling Workplan, proposing to collect and analyze soil samples along transects within the ¼-mile to 1-mile area from the Quemetco facility, in order to evaluate the lateral extent of lead concentrations in soil beyond the original Quemetco Perimeter Investigation Area. As part of its ongoing analyses, DTSC prepared a transect sampling workplan and collected transect soil samples from areas surrounding the facility in March 2021. Documentation related to DTSC's implementation of the transect sampling workplan is available on DTSC's website¹³. The resulting transect sampling data and analysis report, the findings of which were consistent with the October 2018 report, was prepared in May 2021 and is still under review by DTSC.

The DTSC soils remediation activities, as described in more detail in Section 3.4 of the EIR, are addressing historic soil contamination and do not necessarily reflect today's operation and compliance with South Coast AQMD requirements including but not limited to Rule 1420.1 which was designed to curb toxic emissions and penalize exceedances with curtailment of facility operations.

¹¹ Located at the following link:

https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=80001454&doc_id=60367598

¹² Located at the following link: https://www.envirostor.dtsc.ca.gov/public/profile_report?global_id=80001454

¹³ Located at the following link:

https://www.envirostor.dtsc.ca.gov/public/final_documents2?global_id=80001454&doc_id=60486311

Hazardous Waste

Hazardous wastes are hazardous substances that no longer have a practical use, such as materials that have been spent, discarded, discharged, spilled, contaminated, or are being stored until they can be disposed of properly (22 CCR Section 66261.3). While hazardous substances are regulated by multiple agencies, cleanup requirements of hazardous wastes are determined on a case-by-case basis according to the agency with lead jurisdiction over the project.

Quemetco Hazardous Waste

Quemetco generates both Federal RCRA and California (Non-RCRA) hazardous waste through production-related activities, equipment repairs, and facility maintenance. Primary waste streams include plastics and metals from the battery casings and slag removed from the electric arc furnace. Plastic waste is considered hazardous until it is washed and dried in the recovery process where it is tested to ensure it is non-hazardous; when it is then tested to determine whether it is classified as a hazardous or non-hazardous material, the analysis always results in a non-hazardous finding. For this reason, Quemetco handles the plastic waste as a non-hazardous material and sends it to a recycling facility. Metal battery casings are not considered hazardous because they do not come in contact with hazardous materials but are included in this section for informational purposes. Metal battery casings are washed prior to shipping for recycling.

As outlined in Section 2.6: Project Description, the plastics from the battery casings amounted to a total of 6,340 tons in 2014. The metal casings reclaimed from batteries was a total of 1,613 tons in 2014. The waste stream of metals and plastics are rinsed; all recovered plastics are currently and will continue to be recycled. The recycling market for industrial metals and plastics is not anticipated to decline.

Batteries and other lead-bearing wastes received from offsite sources are recycled onsite to generate secondary lead and lead alloys. Lead-bearing wastes generated onsite, such as flue dust from air pollution control devices, reverberatory furnace slag, and filter press cake from the Wastewater Treatment Plant, are also recycled onsite. All non-lead-bearing wastes generated onsite are shipped offsite for recycling or disposal.

Quemetco's hazardous waste management units include the battery storage area, the battery wrecker, the containment building, the furnace area, and the wastewater treatment plant.

The hazardous constituents within the wastewater generated during the facility's processes are screened for solids, neutralized and discharged to the LACSD sewer system in accordance with Quemetco's Industrial Wastewater Discharge Permit (see Section 3.5.2.4); the corresponding Wastewater Treatment Plant filter cakes are disposed of to a qualified landfill.

The facility's recycling process generates air emissions. These air emissions are routed to an air pollution control system and most importantly the WESP (refer to Chapter 2 – Proposed Project, Section 2.4.7: Air Pollution Control Systems for additional description of these systems).

The hazardous waste slag captured in the electric arc furnace is hauled away for disposal to a qualified landfill (RCRA or non-RCRA depending on the levels of lead or other metals in the tested slag). The schedule for disposing slag occurs based on sufficient slag accumulation. Table 3.4-2 contains a summary of the number of annual slag disposal trips and the amount of slag disposed of between 2014 and 2019. As described in Appendix A, Section XVI: Solids and Hazardous Waste, Quemetco’s slag is tested for its level of impurities and hazards, in accordance with the DTSC permit, and separated into either slag bound for the U.S. Ecology’s RCRA certified landfill in Beatty, Nevada or La Paz County Landfill’s nonhazardous landfill operated by Republic Services in Parker, Arizona.

Table 3.4-2 Annual History of Slag Disposal

| Period | Number of Slag Disposal Trips | Slag Waste Hauled Offsite for Disposal (tpy) |
|---------------------|-------------------------------|--|
| 2012 | 578 | 12,639 |
| 2013 | 533 | 11,636 |
| 2014 | 514 | 11,232 |
| 2015 | 525 | 11,477 |
| 2016 | 546 | 11,923 |
| 2017 | 494 | 10,793 |
| 2018 | 621 | 13,569 |
| 2019 | 637 | 13,927 |
| 2012-2019 (Average) | 553 | 12,150 |

Table 3.4-3 contains a summary of the annual history of materials collected and where they are disposed of or recycled. As described previously, plastic waste are washed, tested and then determined to be non-hazardous prior to recycling.

Table 3.4-3 Annual History of Materials Collected

| Year | Plastics | | | Metal Casings | | |
|------|----------------|---------|----------------------------|----------------|---------|--------------|
| | Quantity (tpy) | Hazard? | Destination* | Quantity (tpy) | Hazard? | Destination* |
| 2012 | 8,324 | No | KW | N/A | No | SA |
| 2013 | 6,422 | No | KW | 1,299 | No | SA |
| 2014 | 6,340 | No | KW | 1,613 | No | SA |
| 2015 | 7,726 | No | KW | 1,153 | No | SA |
| 2016 | 7,727 | No | KW | 1,349 | No | SA |
| 2017 | 7,346 | No | KW | 1,042 | No | SA |
| 2018 | 7,462 | No | KW, Tulip | 1,834 | No | SA |
| 2019 | 7,363 | No | KW, Tulip, Global, Sanders | 1,599 | No | SA |

* Destination facility names, EPA ID, and locations are listed below:

| | | |
|---|------------------------|--------------------|
| KW = KW Plastics; | EPA ID = CAD982435026; | Bakersfield, CA |
| Tulip = Tulip Richardson Manufacturing; | EPA ID = NYD002113736; | Niagra Falls, NY |
| Global = Global Polymers; | EPA ID = N/A; | Louisville, KY |
| Sanders = Sanders Lead Co; | EPA ID = ALD046481032; | Troy, AL |
| SA = SA Recycling; | EPA ID = N/A; | Multiple Locations |

3.4.2 Regulatory Setting

There are many federal, state, and local regulations that hazardous waste generators and treatment, storage, and disposal facilities (TSDFs) must comply with to minimize potential impacts associated with hazards at these facilities. The following paragraphs summarize important and relevant regulations related to hazards and hazardous materials.

Federal

OSHA

Under OSHA regulations [29 CFR Part 1910], facilities which use, store, manufacture, handle, process, or move highly hazardous materials must prepare a fire prevention plan. Quemetco maintains a Fire Prevention Plan (Quemetco, 2017).

RCRA

RCRA creates framework for managing hazardous waste and gives the U.S. EPA regulatory control of hazardous materials management from the time of generation, until final disposal. The RCRA regulations are promulgated in 40 CFR Parts 239 to 282] and 40 CFR Parts 260 to 265 apply to hazardous waste generators and TSDFs. In particular, 40 CFR Part 262 regulates generators of hazardous waste and 40 CFR Part 265 regulates TSDFs that were already operating

when the rule was established, (called “interim status” facilities) and both of these cites include general requirements for facilities such as monitoring and recordkeeping.

RMP

Section 112(r) of the CAA Amendments of 1990 [42 U.S.C. 7401 et. Seq.] requires facilities that handle listed regulated substances to develop risk management programs (RMPs) to prevent accidental releases of these substances. U.S. EPA regulations for RMPs are set forth in 40 CFR Part 68. The rule requires owners and operators of facilities with hazardous materials onsite to take precautionary measures to prevent their release and minimize the impacts of potential releases. The rule lists substances that are regulated and the threshold amounts of each regulated substance.

State

DTSC

DTSC is part of the California Environmental Protection Agency (CalEPA). The CCR contains the State of California’s regulations. DTSC regulates hazardous waste through 22 CCR Division 4.5. This state level regulation is similar to the federal RCRA regulations. Chapter 12 of this regulation regulates generators of hazardous waste, Chapter 15 regulates the TSDFs that were already in place when the rule was developed, and Chapter 14 regulates TSDFs that have a hazardous waste facility permit.

CalARP

In conjunction with Section 112(r) of the CAA Amendments of 1990, the California HSC [Division 20 Chapter 6.95 Article 2] also requires facilities to develop RMPs. The Governor’s Office of Emergency Services (OES) issued the CalARP regulation [CCR Title 19, Division 2, Chapter 4.5]. The CalARP Program enforces the requirements of the federal rule and certain requirements from the California HSC. RMPs consist of three main elements: a hazard assessment that includes offsite consequences analyses and a five-year accident history, a prevention program, and an emergency response program.

Process Safety Management (PSM) of Highly Hazardous Chemicals

In addition, 29 CFR Part 1910.119, PSM of Highly Hazardous Chemicals, and CCR Title 8, General Industry Safety Order Section 5189, specify required prevention program elements to protect workers at facilities that handle toxic, flammable, reactive, or explosive materials. Prevention program elements are aimed at preventing or minimizing the consequences of catastrophic releases of the chemicals and include process hazard analyses, formal training programs for employees and contractors, investigation of equipment mechanical integrity, and an ERCP.

Hazardous Materials Release Response Plans and Inventory Program

HSC Sections 25500 - 25547.8, Hazardous Materials Release Response Plans and Inventory Program requires local agencies to regulate the storage and handling of hazardous materials and requires development of a HMBP to mitigate the release of hazardous materials. Businesses that handle any of the specified hazardous materials must submit to government agencies (i.e., fire departments), an inventory of the hazardous materials, an ERCP, and an employee training program. The HMPB must provide a description of the types of hazardous materials/waste onsite and the location of these materials. The information in the business plan can then be used in the event of an emergency to determine the appropriate response action, the need for public notification, and the need for evacuation.

The Enforcement and Emergency Response Division (EERD) has delegated several environmental programs, including the Hazardous Materials Release Response Plans and Inventory Program, to be administered by the CUPA agency, overseen by DTSC. CUPA consolidates all of the requirements of these various programs into one set of regulations to reduce the regulatory burden and improve the consistency of information between regulatory agencies. The unified program regulates hazardous waste through 27 CCR Division 1, Subdivision 4, Chapter 1.

The local CUPA for facilities in the City of Industry, including Quemetco, is LACFD. As the CUPA, LACFD administers various requirements that the Quemetco facility is subject to, including the Hazardous Materials Release Response Plans and Inventory Program and CalARP.

Standards for Owners and Operators of Hazardous Waste Transfer, Treatment, Storage, and Disposal Facilities

DTSC implements Standards for Owners and Operators of Hazardous Waste Transfer, Treatment, Storage, and Disposal Facilities under CCR, Title 22, Division 4.5, Chapter 14. These regulations include accident prevention requirements (Article 3), inspection and containment requirements for tanks and containers (Articles 9 and 10), and performances standards for miscellaneous units (Article 16). Article 3 outlines requirements regarding facility design and operation, equipment, testing and maintenance, access to communications or alarm systems, aisle space, and arrangements with local authorities. Article 9 outlines requirements regarding use and management of containers, compatibility of waste with containers, inspections, and containment. Article 10 outlines requirements regarding assessment of tank integrity, design and installation of new tank systems or components, containment and detection of releases, general operating requirements, inspection, response to leaks or spills, and closure and post-closure care. Article 16 outlines environmental performances standards; monitoring, analysis, inspection, response, reporting, and corrective actions; and post-closure care for miscellaneous units.

Table 3.4-4 summarizes applicability of the U.S. EPA RMP, CalARP, and California Occupational Safety and Health Administration (CalOSHA) Process Safety Management (PSM) programs. The applicability of each of these programs is based on the maximum quantity of each hazardous chemical stored onsite at any given time. Table 3.4-4 lists only chemicals found at the facility that have applicable thresholds within these programs. All other chemicals found at the facility do not

have applicable thresholds under these programs. Maximum quantities from calendar year 2020 are provided in Table 3.4-4 because the facility did not trigger applicable program thresholds in the baseline year 2014; further, the data available in the 2014 HMBP report does not include maximum quantities stored onsite at any one time. In March 2019, Quemetco prepared its first Risk Management Plan based on the maximum onsite inventory of red phosphorus exceeding the CalARP thresholds (Quemetco, 2019b).

Table 3.4-4 Hazardous Materials Regulatory Applicability Evaluation

| Hazardous Component | CAS# | 2020 Maximum Quantity Stored Onsite (lbs) | Exceeds Applicability Threshold? ^a | | |
|--------------------------------|---------|---|---|-------------|----------------------------------|
| | | | CalARP | CalOSHA PSM | U.S. EPA RMP Toxics/Flammability |
| Sulfuric Acid | 7664939 | 568,289 | Yes | N/A | N/A |
| Acetylene ^b | 74862 | 824 | N/A | N/A | No |
| Nitric Acid | 7697372 | 200 | No | No | N/A |
| Phosphorous | 7723140 | 11,000 | Yes | N/A | N/A |
| Hydrogen Peroxide | 7722841 | 99,013 | N/A | Yes | N/A |
| Hydrochloric Acid ^c | 7647010 | 5,159 | N/A | Yes | No |

Source: Quemetco Inc., 2020

a Each regulatory program has thresholds for specific chemicals which determine applicability to any facility

b U.S. EPA RMP threshold listed for acetylene is for flammability

c U.S. EPA RMP threshold listed for hydrochloric acid is for toxics

Existing Permits

Quemetco has a permit from the LACFD CUPA HMBP program which allows the storage of hazardous materials and hazardous waste without limiting the quantity of hazardous materials or hazardous waste that can be stored onsite. The HMBP requires Quemetco to report any hazardous material or hazardous waste quantities handled that are equal to or greater than 55 gallons of liquid, 500 pounds of solid, or 200 cubic feet of compressed gas. In addition, the HMBP requires a list of business activities, a site map, an ERCP, and an Employee Training Plan. Quemetco submits updated inventory information to the LACFD CUPA annually or when there is a change in the inventory of hazardous materials or hazardous waste which exceeds 55 gallons of liquids, 500 pounds of solids, or 200 cubic feet of compressed gases.

Quemetco was issued a Hazardous Waste Facility Operations and Post-Closure Permit by DTSC, effective September 15, 2005. The permit was issued for 10 years. The facility is in the process

of applying for a permit renewal, proposing to continue existing operations and perform minor facility modifications, and including a closure plan.

The Hazardous Waste Facility Operations and Post Closure Permit with DTSC allows the facility to treat and store hazardous waste. Quemetco is a Large Quantity Hazardous Waste Generator permitted through the U.S. EPA and DTSC, as described in Chapter 2 - Proposed Project, Section 2.7: Permits and Approvals. The facility has a Hazardous Waste Facility Operation and Post-Closure Permit in compliance with the RCRA, which is currently in a permit renewal process with the DTSC. The permit allows the facility to operate HWMU's, which includes the battery storage area, battery wrecker, containment building, furnace area, and wastewater treatment plant (WWTP). Current operational restrictions, acceptable materials, monitoring requirements, permit conditions, and limitations can be found in the current facility DTSC permit (DTSC, 2005). Quemetco's Hazardous Waste Facility Operations and Post Closure Permit incorporates corrective action requirements at the facility, including the 2020 Corrective Action Consent Agreement. Quemetco is working with DTSC to manage site monitoring and corrective action of the contaminants of concern (acetone, metals, and volatile organics) in the soils. Quemetco is also authorized through the LACFD to store hazardous materials and to manage hazardous waste generated onsite.

Quemetco has responded to previous corrective action through DTSC's Hazardous Waste Facility Operations and Post Closure Permit and previous U.S. EPA consent decree through the completed closure of its surface impoundment in December 1994 and implementation of post-closure care. Further, Quemetco enclosed the battery wrecker area in November 2010. In June of 2011, DTSC approved a Class 1* permit modification¹⁴ request to replace and relocate seven tanks (DTSC, 2011). In April 2015, DTSC approved a Class 2 permit modification request from Quemetco to add a dryer to remove moisture from the crushed battery casings and to replace two tanks (DTSC, 2015). This permit modification was separate from the permit renewal and was approved by DTSC to further dry plastics prior to shipment. In January 2019, DTSC approved a Class 1* permit modification request from Quemetco to allow the addition of trisodium phosphate¹⁵ to the water used to wash contaminated plastic that is separated from the metallic components of the spent lead-acid battery after the battery is shredded in the battery wrecker unit.

¹⁴ DTSC classifies its permit modifications. Class 1* is an administrative change and is the lowest tier.

¹⁵ Trisodium phosphate is not a hazardous substance. Lead attaches to the trisodium phosphate and is used to remove lead from the plastics in the wash water.

3.5 HYDROLOGY AND WATER QUALITY

This section addresses the existing water use, wastewater generation, storm water generation by the Quemetco facility, as well as the groundwater quality at the facility; and the federal, state, and local regulatory setting. Project-specific and cumulative adverse hydrology and water quality impacts associated with implementing the proposed Project are evaluated in Chapter 4 - Environmental Impact Analysis. Quemetco's existing operations use water and generate wastewater. The facility has an onsite WWTP and operates under a Wastewater Discharge Permit with LACSD.

3.5.1 Environmental Setting

Water Use

The SGVWC supplies water to the facility. Quemetco currently uses approximately 272,022 gallons per day (year 2014) of water in the battery wrecker, reverberatory furnace, scrubber, oxygen generation and facility wash-down (Table 2-1 in the Project Description). This water is subsequently treated in the onsite wastewater treatment plant and recycled or discharged. Monthly water usage from 2014-2019 is provided in Table 3.5-1.

Table 3.5-1 Water Usage by Month (Kgal)

| | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |
|------------------|-------|--------|--------|--------|--------|-------|
| January | 8,749 | 8,733 | 9,182 | 8,547 | 9,347 | 9,078 |
| February | 7,708 | 8,358 | 8,520 | 8,328 | 9,078 | 7,156 |
| March | 8,393 | 8,046 | 9,283 | 10,538 | 9,446 | 9,927 |
| April | 7,514 | 8,228 | 9,894 | 9,203 | 9,445 | 8,078 |
| May | 7,901 | 8,904 | 9,114 | 8,202 | 8,253 | 7,535 |
| June | 8,735 | 8,979 | 9,804 | 9,591 | 9,343 | 8,820 |
| July | 8,873 | 10,773 | 10,197 | 10,239 | 9,825 | 7,776 |
| August | 7,618 | 11,388 | 9,636 | 10,058 | 10,801 | 7,707 |
| September | 9,313 | 11,459 | 10,539 | 10,027 | 9,874 | 7,463 |
| October | 8,632 | 8,646 | 9,978 | 10,188 | 10,989 | 8,184 |
| November | 7,865 | 8,145 | 8,770 | 7,627 | 8,589 | 9,307 |
| December | 7,983 | 9,151 | 9,252 | 9,456 | 9,109 | 9,576 |

Note: Kgal = thousand gallons

The Urban Water Management Plan provides that the SGVWC has water supplies sufficient to meet anticipated future demand in normal, dry, and multiple-dry year scenarios through 2040. Moreover, the Urban Water Management Plan projects an increase in potable and raw water demand from industrial users from baseline (2015) conditions to 2040. The Urban Water Management Plan also notes the following:

- The total water demand serviced by the SGVWC in 2015 was 31,211 acre-feet.
- The projected demand for potable and raw water for 2020, 2025, 2030, and 2035 are 35,122, 42,574, 54,534, and 44,493 acre-feet, respectively.
- The Urban Water Management Plan concludes that reliable quantities of projected water supply sources are available to the SGVWC to meet demand through 2040. A single dry year or a multiple dry year period will not compromise the SGVWC's ability to provide a reliable supply of water to its customers. The groundwater supplies in the Main Basin and Central Basin are deemed reliable.
- The SGVWC has the ability to deliver imported water through a connection with the Metropolitan Water District of Southern California, as well as emergency interconnections with several surrounding water agencies to ensure the reliability of its water supply.

Wastewater

Quemetco treats wastewater generated at the facility at an onsite wastewater treatment unit, which adjusts pH levels and reduces suspended solids in collected wastewater prior to either reuse or discharge. The facility uses caustics (e.g., soda ash) and acid (e.g., sulfuric acid removed from dismantled batteries) to adjust the pH of wastewater entering the treatment unit. After adjusting the pH, a series of clarifiers and pressure filters settle out and remove suspended solids from the wastewater.

The capacity of wastewater treated and discharged is regulated by the facility's Industrial Wastewater Discharge Permit issued by the LACSD under Facility ID 2054312. Specifically, according to the Industrial Wastewater Discharge Permit (see section 7 of the Permit Data Sheet) issued in March 2016, the wastewater treatment system has a daily average flow limit of 213,000 gallons per day (LACSD, 2016).

Although wastewater was described in gallons per day in the NOP/IS, after close review of the wastewater discharge permit, the facility wastewater impact assessment (See Section 4.5) is being conducted in units of gallons per week. This is because the facility filters, treats, and reuses its wastewater onsite and does not discharge wastewater every day of the week. In other words, the wastewater generated and used per day does not necessarily equal the wastewater discharged per day. The facility generates and subsequently discharges on average 193,019 gallons per day of wastewater approximately three days per week. Therefore, the average volume of wastewater generated and subsequently discharged is 579,057 gallons per week. The facility reports average and maximum daily wastewater discharge to the LACSD on a quarterly basis (see Table 3.5-2).

Table 3.5-2 Quemetco Average and Maximum Wastewater Discharge

| Period | Average Daily Wastewater (gallons) | Maximum Daily Wastewater (gallons) |
|----------------------------|------------------------------------|------------------------------------|
| 1/1/14 - 3/31/14 | 198,984 | 320,700 |
| 4/1/14 - 6/30/14 | 180,812 | 293,500 |
| 7/1/14 - 9/30/14 | 178,765 | 278,800 |
| 10/1/14 - 12/31/14 | 206,372 | 342,600 |
| 2014 Average | 193,019 | 308,900 |
| 1/1/15 - 3/31/15 | 230,807 | 294,600 |
| 4/1/15 - 6/30/15 | 230,238 | 331,500 |
| 7/1/15 - 9/30/15 | 260,657 | 341,300 |
| 10/1/15 - 12/31/15 | 225,230 | 333,000 |
| 2015 Average | 236,733 | 325,100 |
| 1/1/16 - 3/31/16 | 234,103 | 338,600 |
| 4/1/16 - 6/30/16 | 231,972 | 338,000 |
| 7/1/16 - 9/30/16 | 226,681 | 324,400 |
| 10/1/16 - 12/31/16 | 239,158 | 350,100 |
| 2016 Average | 232,979 | 337,775 |
| 1/1/17 - 3/31/17 | 252,293 | 365,200 |
| 4/1/17 - 6/30/17 | 211,552 | 305,700 |
| 7/1/17 - 9/30/17 | 240,198 | 335,800 |
| 10/1/17 - 12/31/17 | 236,104 | 360,900 |
| 2017 Average | 235,037 | 341,900 |
| 1/1/18 - 3/31/18 | 232,324 | 316,700 |
| 4/1/18 - 6/30/18 | 202,860 | 306,700 |
| 7/1/18 - 9/30/18 | 218,013 | 306,000 |
| 10/1/18 - 12/31/18 | 226,792 | 321,300 |
| 2018 Average | 219,997 | 312,675 |
| 1/1/19 - 3/31/19 | 241,507 | 317,600 |
| 4/1/19 - 6/30/19 | 200,530 | 313,400 |
| 7/1/19 - 9/30/19 | 216,660 | 296,300 |
| 10/1/19 - 12/31/19 | 228,004 | 319,600 |
| 2019 Average | 221,675 | 311,725 |
| 2014 to 2019 Total Average | 230,620 | 328,644 |

Source: Quemetco Inc., 2014-2019 (Self-Monitoring Reports (SMRs))

During the daily Compliance Stop Period, most of the water-consuming activities at the facility continue. The air pollution control equipment that utilizes water (e.g., the scrubbers and the WESP) are operated throughout the daily Compliance Stop Period. The battery wrecker scrubber continues to operate during the daily Compliance Stop Period. All aspects of the water treatment continue to operate during the daily Compliance Stop Period. Housekeeping activities including wash-downs and wet scrubbing continue during the Compliance Stop Period. All facility support

areas including break areas, kitchen, locker rooms, administrative functions, and maintenance continue operating through the Compliance Stop Period.

Storm Water

Quemetco currently operates under a NPDES Industrial Storm Water permit under Waste Discharge Identification (WDID) 419I016010. The facility maintains and implements a SWPPP outlining compliance activities related to the Storm Water Permit (Associates Environmental 2020).

As listed in the SWPPP, the facility contains five drainage areas. Drainage Area A falls within the central plant containment boundaries. Storm water in this location is used within the process and finally treated at the onsite wastewater treatment plant then discharged to the LACSD sanitary sewer under the facility's Industrial Wastewater Discharge Permit. Drainage Area B consists of surface flow from the northwest, northeast, and southeast perimeter of the property. Storm water from this area is pumped into an advanced filtration system before being discharged. Drainage Area C consists of surface flow from the southwest employee parking lot, Maintenance Building, main office area, and the western perimeter of the property that runs along Seventh Avenue. Storm water from this area is also pumped into the advanced filtration system before being discharged. Drainage Area D consists of surface flow from the western portion of the Building 9 Property. Storm water from this area is directed by sheet flow to a storm drain and discharged. Drainage Area E consists of surface flow from the eastern portion of the Building 9 Property. Storm water from this area is directed by sheet flow to a storm drain and discharged.

All discharged storm water is discharged to Reach 1 of the San Jose Creek, which then discharges into Reach 3 of the San Gabriel River. A "reach" is section of a stream, river, or creek along which similar hydrologic conditions exist.

Groundwater

The Quemetco facility is located at the southern edge of the Main San Gabriel Groundwater Basin, near the border of the Puente Groundwater Subbasin. The Puente Subbasin is constrained on the north and south by bedrock and connects hydraulically to the Main San Gabriel Basin, feeding the Main San Gabriel Basin as a tributary. Groundwater generally flows westward in the Puente Subbasin then turns northwest at the mouth of the Main San Gabriel Basin (see Figure 3.5-1). For additional information regarding site hydrology, refer to the quarterly groundwater monitoring reports prepared by WSP USA, Inc. (WSP, 2015-2018).

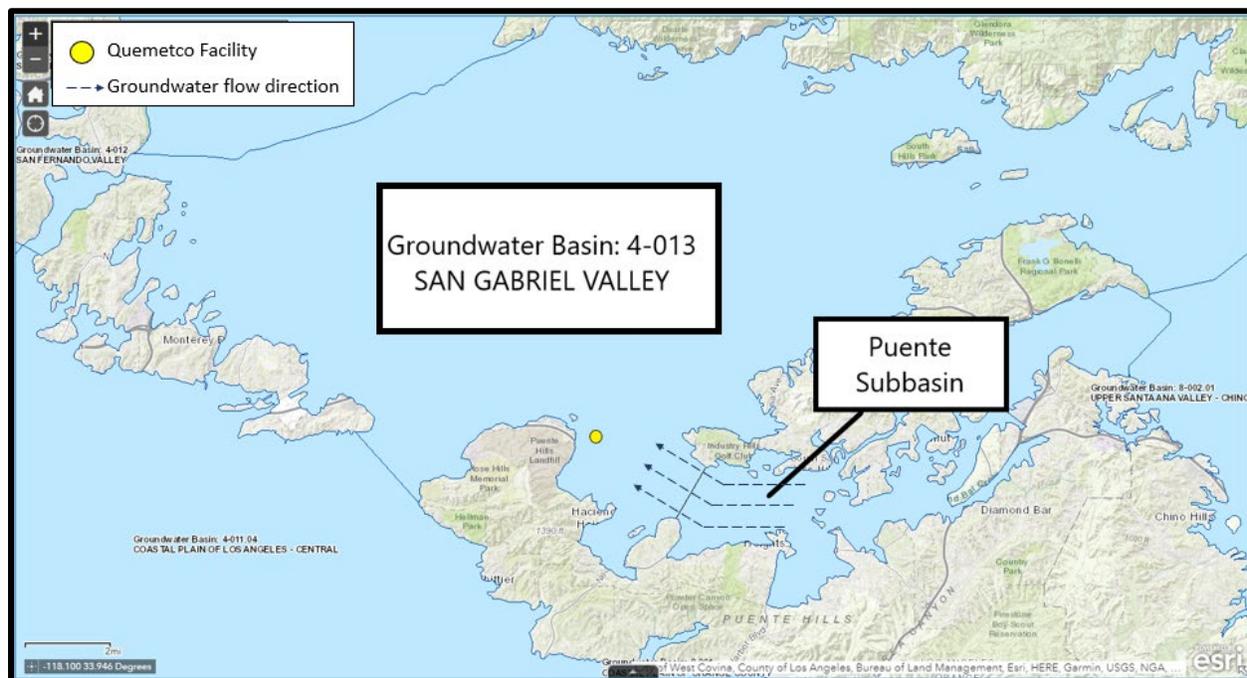


Figure 3.5-1 Groundwater Basin Map

In 1994, Quemetco implemented a groundwater monitoring program in accordance with DTSC requirements. The groundwater monitoring program includes quarterly sampling pursuant to DTSC RCRA Equivalent Hazardous Waste Facility Operations and Post Closure Permit (Part B Permit, 05-GLN-08), following 22 CCR 66264.99 guidelines.

The Hazardous Waste Facility Operations and Post Closure Permit requires that Quemetco monitor the two (2) RCRA regulated units on site: the closed surface impoundment (CSI) and the former raw materials storage area (FRMSA). Quemetco’s groundwater monitoring program applies specifically to these two non-active RCRA regulated units. The 2011 Sampling and Analysis Plan (SAP) is currently the guidance document for conducting the groundwater monitoring program at the Quemetco facility (WSP, 2011). The SAP includes monitoring parameters and frequency and field monitoring and sampling procedures, which include:

- instrument calibration
- well inspections and maintenance
- water level measurements
- well purging and groundwater indicator parameter measurements
- well sampling order and sampling collection sequence
- sample collection
- analytical procedures
- equipment decontamination
- quality control
- chain-of-custody
- reporting

The SAP also includes the Water Quality Protection Standard (WQPS) for each chemical of concern, shown in Table 3.5-3. WQPS are defined by Maximum Contaminant Levels (MCLs) or

action levels (ALs) for each pollutant. Each MCL and AL takes into account that specific chemical’s health risks and other factors such as detectability and treatability.

Table 3.5-3 Applicable Water Quality Protection Standards

| Parameter/Constituent | Primary MCLs ¹ (mg/L) | Secondary MCLs ¹ (mg/L) | Parameter/Constituent | Primary MCLs ¹ (mg/L) | Secondary MCLs ¹ (mg/L) |
|-----------------------|----------------------------------|------------------------------------|---------------------------|----------------------------------|------------------------------------|
| Antimony | 0.006 | * | Carbon tetrachloride | 0.5 | * |
| Arsenic | 0.01 | * | Chloroethane | * | * |
| Barium | 1.0 | * | Chlorobenzene | * | * |
| Beryllium | 0.004 | * | Chloroform | * | * |
| Cadmium | 0.005 | * | 2-Chloroethyl vinyl ether | * | * |
| Calcium | * | * | Chloromethane | * | * |
| Chloride | * | 250 | Dibromochloromethane | * | * |
| Chromium | 0.05 | * | 1,2-Dichlorobenzene | 600 | * |
| Copper | 1.3 | 1.0 | 1,3-Dichlorobenzene | * | * |
| Iron | * | 0.3 | 1,4-Dichlorobenzene | 5 | * |
| Lead | 0.015 | * | 1,4-Dichloro-2-butene | * | * |
| Magnesium | * | * | 1,1-Dichloroethane | 5 | * |
| Manganese | * | 0.05 | 1,2-Dichloroethane | 0.5 | * |
| Mercury | 0.002 | * | 1,1-Dichloroethene | 6 | * |
| Molybdenum | * | * | cis-1,2-Dichloroethene | 6 | * |
| Nickel | 0.1 | * | trans-1,2-Dichloroethene | 10 | * |
| Nitrate as N | 1.0 | * | 1,2-Dichloropropane | 5 | * |
| Potassium | * | * | cis-1,3-Dichloropropene | 0.5 | * |
| Phenolics | * | * | 1,3-Dichloropropane | * | * |
| Selenium | 0.05 | * | 2,2-Dichloropropane | * | * |
| Silver | * | 0.1 | trans-1,3-Dichloropropene | 0.5 | * |
| Sodium | * | * | 2-Hexanone | * | * |
| Sulfate | * | 250 | Methylene chloride | 5 | * |
| Sulfide | * | * | 1,1,2,2-Tetrachloroethane | 1 | * |
| Thallium | 0.002 | * | Tetrachloroethene | 5 | * |
| Tin | * | * | 1,1,1-Trichloroethane | 200 | * |
| Vanadium | * | * | 1,1,2-Trichloroethane | 5 | * |
| Zinc | * | 5.0 | Trichloroethene | 5 | * |
| Acetone | * | * | Toluene | 150 | * |
| Benzene | 1 | * | Vinyl chloride | 0.5 | * |
| Bromodichloromethane | * | * | m&p Xylenes | 1750 | * |
| Bromoform | * | * | 1,4-Dioxane | * | * |
| Bromomethane | * | * | | | |

1. Primary and secondary MCLs per 22 CCR Sections 64431, 64444, and 64449. Action Levels (ALs) for Lead and Copper per 22 CCR Section 64672.3.

* MCLs or ALs not established

Data from Quemetco's groundwater monitoring, which is publicly available on DTSC's EnviroStor, shows the presence of some chemicals of concern associated with Quemetco's operations. To the extent such compounds have been observed, they have been found close to the surface (approximately zero to several feet below ground surface), and not near the depth where impacts to the aquifer or sources of drinking water would occur (approximately 70 feet below ground surface and deeper depending on amounts of rainfall and monitoring location).

Quemetco is required under 22 CCR, Division 4.5, Article 6 to maintain a groundwater detection and evaluation monitoring program for the CSI and FRMSA. Based on quarterly monitoring data, Quemetco has not been required to implement a corrective action program or remediate any releases to groundwater from the CSI or FRMSA. Further, in early 2019, Quemetco installed numerous additional groundwater monitoring wells in accordance with these regulatory requirements.

3.5.2 Regulatory Setting

The following rules and regulations cover the use and discharge of water. All of these rules and regulations apply to the Quemetco facility.

Federal

Clean Water Act (CWA)

The CWA [33 U.S.C. Section 1251 et seq.] regulates the country's navigable water resources in an effort to minimize anthropogenic impacts on the environment. The CWA limits the types and amounts of pollutants released into the environment by setting water standards. The CWA makes it unlawful to discharge any pollutant into a navigable body of water without first obtaining the proper permit. Under the act, facilities are required to obtain an NPDES permit [40 CFR Part 122] if they discharge pollutants that may reach navigable waters. Facilities that obtain an NPDES permit are required to comply with applicable monitoring requirements and inspections to ensure compliance with the permit.

NPDES

A part of the NPDES is the national pretreatment program [40 CFR Part 403], which requires facilities to pretreat their wastewater prior to discharge to a publicly owned treatment works (POTWs). This program relieves the burden on POTWs and reduces the amount of pollutants that are ultimately released to the environment. The U.S. EPA grants a majority of states authority to implement the pretreatment requirements of the NPDES, including California.

Another NPDES program is the storm water program. This program regulates the water discharged from three major sources that contribute significant levels of pollutants to storm water runoff: municipal separate storm sewer systems, construction activities, and industrial activities. The U.S. EPA grants a majority of states authority to implement NPDES storm water permitting program, including California.

State

NPDES

The State of California is delegated authority to implement the NPDES permit program by the U.S. EPA. In the State, the California State Water Resources Control Board and the Regional Water Boards oversee the program. As part of the implementation of the NPDES, the State is also delegated authority over the pretreatment programs by the U.S. EPA and the authority to regulate storm water discharge. The State Water Boards thus oversee the implementation and oversight of POTW pretreatment programs and storm water programs in California under the NPDES.

The RWQCB entity for Quemetco is the Los Angeles Regional Water Board. This entity issues the NPDES permit to the LACSD.

LACSD is the local POTW that issues permits to discharge wastewater to the sewage system in the Los Angeles area and oversees the pretreatment of industrial pollutant discharges. Quemetco operates under an Industrial Wastewater Discharge Permit, with Facility ID 2054312, under the authority of the LACSD's Wastewater Ordinance [Section 401].

The LACSD Wastewater Ordinance requires any business that desires to discharge industrial wastewater to the LACSD's sewerage system to first obtain an Industrial Wastewater Discharge Permit. Industrial wastewater is defined as all wastewater from any manufacturing, processing, institutional, commercial, or agricultural operation, or any operation where the wastewater discharged includes significant quantities of waste of non-human origin (LACSD, 2020). The Industrial Wastewater Discharge Permit limits the discharge of and sets monitoring requirements for the treated wastewater from the facility.

Quemetco's permit (specifically the "Permit Data Sheet") identifies LACSD wastewater discharge concentration limits and categorical concentration limits derived from the U.S. EPA's mass discharge limits. Because Quemetco is subject to the secondary lead pretreatment standards for existing sources [40 CFR Part 421.135], the LACSD has specified concentration limits on Quemetco's permit pursuant to 40 CFR Part 403.6(c)(2)-(4) that are calculated using the specific U.S. EPA mass discharge limits, production rates, and wastewater flow. Quemetco is able to comply with the local and federal limits specified on the Industrial Wastewater Discharge Permit by operating a wastewater pretreatment system at the facility.

IGP

Certain industrial facilities are required under the CWA [40 CFR Part 122.26(b)(14)(i – xi)] to permit discharges from storm water under their NPDES. In the State of California, the RWQCB's storm water program regulates the discharge of pollutants from industrial sources by storm water runoff. This program regulates industrial storm water releases under a single permit known as the Industrial General Permit (IGP). Quemetco operates under a Storm Water IGP through the RWQCB. The IGP regulates industrial activities exposed to rainfall where possible contaminants

may enter the storm water drainage system. One of the requirements of the IGP is the development of a SWPPP. A SWPPP will outline the measures required by the facility to achieve pollutant reduction such as facility inspections, best management practices, monitoring and implementation plans, reporting, and other facility requirements. Quemetco has implemented a SWPPP to facilitate compliance with the IGP.

CalEPA - State Water Board and DTSC

CalEPA oversees the protection of public health and the environment in California. CalEPA is comprised of various agencies, each responsible for specific aspects of public health and the environment. DTSC is one agency within CalEPA and is responsible for managing California's hazardous waste and site cleanup programs. The State Water Board and the nine (9) RWQCBs are also part of CalEPA and are responsible for the coordination and control of water quality.

The State Water Board and RWQCBs implement the federal Clean Water Act in California through both regulatory and planning programs. The Water Boards adopt and implement water quality objectives, which are standards for the protection of groundwater. These objectives include both quantitative and qualitative standards. Each RWQCB has developed a Regional Board Water Quality Control Plan (Basin Plan) that outlines these standards, planning, and implementation, plans and policies, monitoring, and assessments, etc. Additionally, the Water Boards implement various programs to regulate discharge and cleanup of pollutants to the ground, to clean up spills and leaks that may occur, and to prevent the release of hazardous substances. The State Water Board and RWQCBs assist in overseeing groundwater investigations.

DTSC also oversees groundwater monitoring and investigations in California. DTSC's role includes overseeing installation and monitoring of wells and providing guidelines for the sampling and analysis of groundwater.

Existing Permits

Water Use

Water use permits authorize the consumptive use of groundwater or surface water. Quemetco has no existing permits pertaining to water use since they obtain water from a utility.

Wastewater

Quemetco currently has an active Industrial Wastewater Discharge Permit with the LACSD, a HMBP with the LACFD, and a Hazardous Waste Facility Operations and Post Closure Permit with DTSC.

Storm Water

Quemetco operates under the IGP issued by the RWQCB. The IGP regulates industrial activities exposed to rainfall where possible contaminants may enter the storm water drainage system. Quemetco has implemented a SWPPP to facilitate compliance with the IGP.

Surface Waters and Groundwater

Quemetco monitors surface water and groundwater as required by the RCRA Hazardous Waste Facility Operations and Post Closure Permit. Under this permit, Quemetco is required to establish a monitoring program for each surface water body that could be affected by a release from a regulated unit. Quemetco is also required to maintain a Surface Water Monitoring and Response Plan (SWMRP), which includes sample acquisition, preservation, transport, chain-of-custody, analysis methodologies, and reporting requirements. Additionally, Quemetco is required to monitor groundwater in accordance with a Groundwater Monitoring and Response Plan (GWMRP).

The facility is required to sample and analyze all background groundwater monitoring wells on a quarterly schedule. Sampling parameters and constituents and analytical methods must be in accordance with the RCRA Hazardous Waste Facility Operations and Post Closure Permit. If Quemetco determines that a background groundwater monitoring well is producing samples that contain constituents or concentrations not expected to be found in the background groundwater, the facility is required to notify DTSC. If the deviation from background is repeated, a permit modification application is required.

The facility is required to submit copies of all correspondence, findings, notifications, proposals, reports, or plans concerning groundwater and surface water, to DTSC. All records must be maintained in accordance with the RCRA Hazardous Waste Facility Operations and Post Closure Permit.

3.6 TRANSPORTATION

This section addresses the existing transportation at the Quemetco facility and the federal, state, and local regulatory setting. Project-specific and cumulative adverse transportation impacts associated with implementing the proposed Project are evaluated in Chapter 4 - Environmental Impact Analysis. The facility generates daily traffic from raw material and finished product truck trips and employee commutes.

3.6.1 Environmental Setting

Local Transportation

The City of Industry circulation network is likened to a grid system. Quemetco is located at the signalized intersection of S. 7th Avenue-Sunset Avenue and Salt Lake Avenue. S. 7th Avenue is a major north-south arterial that connects regional traffic to SR-60.

SR-60 runs in the east-west direction and provides eight to ten travel lanes. The western terminus of this facility lies in the City of Los Angeles, where it merges with the Santa Monica Freeway (I-10). To the east, the SR-60 Freeway connects the City of Industry to Riverside County and the desert areas, where it merges with the I-10 Freeway at its eastern terminus. SR-60 connects with S. 7th Avenue-Sunset Avenue at a grade-separated interchange.

S. 7th Avenue is a four-lane north-south arterial posted at 35 miles per hour.

Salt Lake Avenue is a two-lane east-west connector that provides driveway access to Quemetco.

Quemetco's Transportation Activities

During baseline year 2014, there were 124 railcar trips and 19,649 total truck trips (53.833 total truck trips/day times 365) associated with the facility. These trips included materials movements of raw material scrap, plastic, metal, slag, and additives (see Chapter 4, Table 4.6-2). Based on existing operations, truck trips accessing the facility arrive at a rate of approximately 2 to 3 per hour over a 24-hour period. Average one-way truck trip length in 2014 was 13.69 miles, based on CARB's 2017 emission factors model (EMFAC2017) data base for South Coast AQMD (CARB 2017c)¹⁶.

Quemetco also undergoes three shift changes throughout the day; however, only the a.m. shift change and a.m. peak hour of adjacent street traffic coincide. Neither of the remaining shift changes coincide with the p.m. peak hour of adjacent street traffic.

¹⁶ CARB created, maintains and updates an emissions factor model for use in California known as "EmFac" or "EMFAC." The latest U.S. EPA approved version of EMFAC is EMFAC2017. It allows CEQA lead agencies and consultants to pull emission factors for a range of fleet types, vehicle specifications and trip activities for a range of project scenarios including looking back and projecting forward in time based on fleet rules and actual emissions data. For the proposed Project, travel distance was derived for the year 2014 using EMFAC 2017.

For employee related passenger vehicle trips, there were 244 round trips/day and 89,060 round trips per year (trips/year) during baseline year 2014. Average one-way passenger trip length in 2014 was 7.65 miles, based on EMFAC2017 data base for South Coast AQMD (CARB, 2017).

3.6.2 Regulatory Setting

State

In June 1990, California voters approved Proposition 111 to fund transportation-related improvements statewide. A Congestion Management Program (CMP) is required to be adopted for urbanized counties in California to be eligible for revenues associated with Proposition 111.

In 2013, the California legislature enacted SB 743, which required, among other things, that the OPR adopt new guidelines for assessing transportation impacts and that when enacted, traffic congestion would no longer be considered in assessing a significant impact under CEQA. The purpose was to better align transportation impacts analysis under CEQA with the state's goals of reducing GHG emissions and traffic-related air pollution, promoting multimodal transportation networks and a diversity of land uses, encouraging higher density infill development, and providing clean, efficient access to a variety of destinations. These new regulations represent a significant shift in analyzing transportation impacts under CEQA.

The California Natural Resources Agency certified and adopted the CEQA Guidelines update package including the guidelines for implementing SB 743. The new CEQA Guidelines Section 15064.3 - Determining the Significance of Transportation Impacts, generally requires that VMT-based metrics be used to evaluate transportation impacts.

As of July 1, 2020, all CEQA lead agencies must analyze a project's transportation impacts using vehicle miles traveled (VMT). The OPR Technical Advisory provides guidance for evaluating this new transportation impact method (OPR, 2018).

Regional

In the County of Los Angeles, the Los Angeles County Metropolitan Transportation Authority (MTA) is the agency that prepares the CMP. The goal of the CMP is to promote a more coordinated approach to land use and transportation decisions by requiring traffic impact analyses for individual development projects of potential regional significance (add 50 or more trips during either the a.m. or p.m. peak hours to arterials within the CMP).

The CMP also requires traffic studies to analyze CMP freeway monitoring locations where a project adds 150 or more trips during the a.m. or p.m. peak hours. The Artesia Freeway (SR-91), the Harbor Freeway (I-110), the San Diego Freeway (I-405), and the Long Beach Freeway (I-710) are freeways that are designated for monitoring in the CMP. Compliance with the CMP provisions includes land use coordination through traffic impact analyses; implementation of Transportation Demand Management (TDM) strategies; maintenance of transit service standards; monitoring of

CMP highway system levels of service; and development of level of service deficiency plans where needed.

Regional transportation planning for Southern California, including Los Angeles County, is the responsibility of the Southern California Association of Governments (SCAG). Under Federal law, SCAG must prepare a Regional Transportation Plan (RTP). The RTP demonstrates how the region will meet federal mandates associated with air quality requirements and must be approved in order to receive Federal transportation funds.

The MTA is the state-designated planning agency for Los Angeles County and submits recommended projects to SCAG for inclusion in the RTP. The MTA identifies the transportation needs and challenges that Los Angeles County will face over a 25-year period through the development of Long-Range Transportation Plans. The adopted LRTP becomes the blueprint for implementing future transportation improvements in Los Angeles County. The LRTP seeks to maintain the existing transportation system, maximize system efficiency, increase system capacity, and manage demand.

Existing Permits

Quemetco has no existing permits pertaining to transportation.

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CHAPTER 4

ENVIRONMENTAL IMPACT ANALYSIS

Introduction

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4.0 ENVIRONMENTAL IMPACTS

4.1 INTRODUCTION

This EIR focuses only on the environmental topic areas which could potentially result in significant impacts as identified in the NOP/IS (see Appendix A) (e.g., air quality and greenhouse gases, energy, hazards and hazardous materials, and hydrology and water quality) as well as one additional topic area of transportation that was included in response to a request from Caltrans. The reader is referred to the NOP/IS in Appendix A of this EIR for a discussion of the environmental topic areas that were not further analyzed in this EIR. The environmental impacts assessed in this chapter are based on the proposed Project's potential impacts as compared to the environmental setting, or baseline conditions, presented previously in Chapter 3 – Environmental Setting.

The NOP/IS was based on the CEQA Guidelines, Appendix G – Environmental Checklist Form, but the environmental topic areas and questions were organized differently for streamlining and clarity and to eliminate repetition. For example, one key difference between the South Coast AQMD's version of the environmental checklist and the CEQA Guidelines Appendix G is that the air quality and greenhouse gas questions are merged into one (1) environmental topic area.

Subsequent to the release of the NOP/IS for public review and comment, the California Natural Resources Agency adopted revisions to the CEQA Guidelines and updated the Appendix G - Environmental Checklist. Accordingly, South Coast AQMD updated its version of the environmental checklist. Each environmental impact section in this chapter includes a summary table presenting the changes incorporated into South Coast AQMD's environmental checklist as a result of the updated Appendix G Environmental Checklist and identifies the additional information that will be addressed in this chapter.

In addition to the NOP/IS in Appendix A of this EIR, the reader is referred to Chapter 6 - Other CEQA Considerations of this EIR, which also summarizes the environmental checklist questions found not to be significant. Chapter 6 also summarizes the changes to South Coast AQMD's environmental checklist questions and explains that these topics would not be significant as previously determined in the NOP/IS.

4.2 AIR QUALITY AND GHG EMISSIONS

The proposed Project would not require new construction, new process equipment, or new control equipment; therefore, there will be no construction-related impacts. Instead, the proposed Project seeks to modify existing permit requirements. As a result, the proposed Project has the potential to increase operational criteria pollutants, TACs, and GHGs. This introduction summarizes the proposed Project’s potential air quality and GHG impacts. A detailed evaluation of these impacts follows (with additional technical details in Appendix D.1). Due to the proposed increase in feed stock processing and the corresponding increase in furnace and refinery activity, the proposed Project will increase the usage of natural gas and electricity, consumption of additives, consumption of water, and generation and treatment of wastewater. The proposed Project will also increase the amount of additives used, finished product generated, and solid waste generated, requiring either additional deliveries to the facility or additional hauling of materials away from the facility for delivery to customers, recycling, or disposal. Due to the increased material demand and finished product output, it is anticipated that the proposed Project would lead to an increase in the number of trucks trips and additional workers employed at the facility. The criteria pollutant, TAC, and GHG emissions associated with the proposed increased furnace and refinery activities (including increased use of natural gas and electricity, consumption of additives, consumption of water, and generation and treatment of wastewater.) and transportation activities (e.g., increased use of diesel fuel and gasoline) called for by the proposed Project are evaluated in the air quality and GHG analysis below.

Table 4.2-1 contains a comparison of the South Coast AQMD’s environmental checklist between the 2018 NOP/IS and the updated checklist in 2019. Table 4.2-1 also identifies which questions will be addressed in Chapter 4 of this EIR. None of the changes made to South Coast AQMD’s environmental checklist in 2019 require a new analysis in Section 4.2: Air Quality and GHG Emissions.

Table 4.2-1 Comparison of South Coast AQMD’s Environmental Checklist Questions in the 2018 NOP/IS to the Updated Questions in 2019 for the Topic of Air Quality and GHG Emissions

| South Coast AQMD Environmental Checklist Questions in the 2018 NOP/IS | Updated South Coast AQMD Environmental Checklist in 2019 | Changes? | Evaluated in this EIR? |
|---|---|----------|---|
| Would the project: | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | a) Conflict with or obstruct implementation of the applicable air quality plan? | None | No changes. NOP/IS determined that impacts would be less than significant and further evaluation of this issue in Chapter 4 of the EIR is not required. |

| | | | |
|--|---|--|---|
| b) Violate any air quality standard or contribute to an existing or projected air quality violation? | ---- | b) Violate any air quality standard or contribute to an existing or projected air quality violation? | Deleted. Further evaluated in this EIR because the IS/NOP concluded that impacts were potentially significant. |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard? | e) b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | Renumbered and streamlined without making any substantial changes to the intent. Further evaluated in this EIR because the IS/NOP concluded that impacts were potentially significant. |
| d) Expose sensitive receptors to substantial pollutant concentrations? | c) Expose sensitive receptors to substantial pollutant concentrations? | Renumbered but no change in question content. | Further evaluated in this EIR because the IS/NOP concluded that impacts were potentially significant. |
| e) Create objectionable odors affecting a substantial number of people? | d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | e) Create objectionable odors affecting a substantial number of people? <u>d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?</u> | Renumbered and re-phrased but without making any substantial changes to the intent. The NOP/IS determined that impacts would be less than significant and further evaluation of this issue in Chapter 4 of the EIR is not required. |
| f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)? | e) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)? | Renumbered but no change in question content. | Further evaluated in this EIR because the IS/NOP concluded that impacts were potentially significant. |

| | | | |
|--|--|---|---|
| g) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? | f) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment? | Renumbered but no change in question content. | Further evaluated in this EIR because the IS/NOP concluded that impacts were potentially significant. |
| h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs? | g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs? | Renumbered but no change in question content. | Further evaluated in this EIR because the IS/NOP concluded that impacts were potentially significant. |

4.2.1 Air Quality and GHG Impacts

Significance Criteria

Based on the assessment of the environmental checklist questions summarized in Table 4.2-1¹, this section of the EIR is focused on the following South Coast AQMD checklist questions and the applicable South Coast AQMD significance criteria:

- South Coast AQMD Checklist (Previous) Question b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
 - Applicable South Coast AQMD Significance Criteria: Presented in Table 4.2-2
- South Coast AQMD Checklist (Current) Question b) Result in a cumulatively considerable net increase in any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?
 - Applicable South Coast AQMD Significance Criteria: Presented in Table 4.2-2
- South Coast AQMD Checklist Question d) Expose sensitive receptors to substantial pollutant concentrations?
 - Applicable South Coast AQMD Significance Criteria: Presented in Table 4.2-2
- South Coast AQMD Checklist Question e) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?
 - Applicable South Coast AQMD Significance Criteria: Presented in Table 4.2-2
- South Coast AQMD Checklist Question f) Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
 - Applicable South Coast AQMD Significance Criteria: Presented in Table 4.2-2

¹ As stated in Table 4.2-1, the NOP/IS determined that potential conflicts with regional plans and odor impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.

- South Coast AQMD Checklist Question g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?
 - Applicable South Coast AQMD Significance Criteria: Presented in Table 4.2-2

South Coast AQMD has adopted its own air quality significance thresholds for criteria pollutants, TACs, and GHGs, which are presented in Table 4.2-2. These are quantitative thresholds against which the proposed Project’s air pollutant emissions can be measured (South Coast AQMD, 1993).

Table 4.2-2 South Coast AQMD Air Quality Significance Thresholds

| Mass Daily Thresholds ^a | | |
|--|---|---------------------------|
| Pollutant | Construction ^b | Operation ^c |
| NO _x | 100 pounds per day (lbs/day) | 55 lbs/day |
| VOC | 75 lbs/day | 55 lbs/day |
| PM ₁₀ | 150 lbs/day | 150 lbs/day |
| PM _{2.5} | 55 lbs/day | 55 lbs/day |
| SO _x | 150 lbs/day | 150 lbs/day |
| CO | 550 lbs/day | 550 lbs/day |
| Lead | 3 lbs/day | 3 lbs/day |
| Toxic Air Contaminants (TACs), Odor, and GHG Thresholds | | |
| TACs (including carcinogens and non-carcinogens) | Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment) | |
| Odor | Project creates an odor nuisance pursuant to South Coast AQMD Rule 402 | |
| GHG | 10,000 MT per year CO _{2e} for industrial facilities | |
| Ambient Air Quality Standards for Criteria Pollutants ^d | | |
| NO ₂ 1-hour average annual arithmetic mean | South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal) | |
| PM ₁₀ 24-hour average annual average | 10.4 µg/m ³ (construction) & 2.5 µg/m ³ (operation) 1.0 µg/m ³ | |
| PM _{2.5} 24-hour average | 10.4 µg/m ³ (construction) & 2.5 µg/m ³ (operation) | |
| SO ₂ 1-hour average 24-hour average | 0.25 ppm (state) & 0.075 ppm (federal – 99th percentile) 0.04 ppm (state) | |
| Sulfate 24-hour average | 25 µg/m ³ (state) | |
| CO 1-hour average 8-hour average | South Coast AQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal) | |
| Lead 30-day average Rolling 3-month average | 1.5 0.15 µg/m ³ (federal) | µg/m ³ (state) |

a Source: South Coast AQMD CEQA Handbook (South Coast AQMD, 1993), Revision: March 2019.

b Construction thresholds apply to South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

c For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

- d Ambient air quality thresholds for criteria pollutants based on South Coast AQMD Rule 1303, Table A-2 unless otherwise stated.
- e Ambient air quality threshold based on South Coast AQMD Rule 403.

| | | | | |
|------|-----------------------------|---|---|--------------------------------------|
| KEY: | lbs/day = pounds per day | ppm = parts per million | $\mu\text{g}/\text{m}^3$ = microgram per cubic meter | \geq = greater than or equal to |
| | lb/hr = pounds per hour | MT/yr CO ₂ eq = metric tons per year of CO ₂ equivalents | ng/m ³ = nanogram per cubic meter | $>$ = greater than |

The proposed Project’s emission estimates for operational stationary and mobile sources are compared to the mass daily emissions thresholds presented in Table 4.2-2 to determine if there would be a significant impact. (The proposed Project would only have operational emissions since no construction is proposed.) A comparison of the proposed Project’s emissions to the mass daily emissions thresholds is presented in Section 4.2.3, impact AQ-1: Criteria Air Pollutants Analysis: Mass Daily Emissions.

The proposed Project’s operational HRA results for stationary and mobile sources are compared to the TAC emissions thresholds presented in Table 4.2-2 to determine if there would be a significant impact for TAC emissions. The TAC analysis is presented in Section 4.2.3, impact AQ-3: Health Risk Assessment Analysis.

The proposed Project’s GHG operational emissions estimates for stationary and mobile sources are compared to the GHG emissions threshold presented in Table 4.2-2 to determine if there would be a significant impact for GHG emissions. The GHG analysis is presented in Section 4.2.3, impact AQ-4: GHG Emissions Analysis.

The ambient air quality standards presented in Table 4.2-2 are based on NAAQS, CAAQS, and South Coast AQMD Rules 1303 and 403 as well as Rule 1420.1 which applies specifically to large lead-acid battery recycling facilities (the applicable Rules are described in Chapter 3 – Environmental Setting, Section 3.2). Rule 1420.1 establishes a 30-day rolling average ambient air concentration for lead: at or below 0.110 $\mu\text{g}/\text{m}^3$ through December 31, 2016 and at or below 0.100 $\mu\text{g}/\text{m}^3$ on and after January 1, 2017. Rule 1420.1 also establishes the following standards for TACs from large lead-acid battery recycling facilities: 10 ng/m³ (24-hr average) or 0.00114 pounds per hour (lb/hr) for arsenic, 0.0514 lb/hr for benzene, and 0.00342 lb/hr for 1,3-butadiene.

It is South Coast AQMD’s responsibility to ensure that the NAAQS and CAAQS are achieved and maintained in its geographical jurisdiction, the South Coast Air Basin. A pollutant’s attainment status in a given sub-region within the Basin dictates the significance determination for potential increases in ambient air pollution. If the sub-region is in attainment for a specific criteria pollutant, a project’s net contributions plus the measured background concentration of that pollutant cannot exceed the applicable CAAQS (or NAAQS). In sub-regions that are in nonattainment for a specific criteria pollutant, a project’s emissions increase cannot exceed the applicable South Coast AQMD air quality significance threshold. The proposed Project’s potential ambient air quality impacts are presented in Section 4.2.3, impact AQ-2: Ambient Air Quality Impact Analysis.

South Coast AQMD’s Localized Significance Thresholds (LSTs) are directly linked to and derived from the NAAQS for NO₂, CO, PM₁₀, and PM_{2.5} as well as Rule 403 for fugitive dust. Since there is no construction for the proposed Project, the construction LSTs do not apply.

For operational LSTs, the South Coast AQMD states that, “*The operational PM_{2.5} and PM₁₀ LSTs are derived using an air quality dispersion model to back-calculate the emissions necessary to make an existing violation in the specific SRA [source receptor area] worse, using the allowable change in concentration thresholds in Table A-2 in Rule 1303. For PM_{2.5} and PM₁₀ the allowable change in concentration thresholds is 2.5 µg/m³. These levels represent measurable impacts taking into account modeling sensitivity.*” (South Coast AQMD, 2008).

The analysis of the proposed Project includes ambient air dispersion modeling, which is more precise than an LST analysis. For this reason, the operational LST is not applied except for evaluating the nonattainment pollutant (PM₁₀ and PM_{2.5}) impacts. The allowable change in concentration threshold for PM₁₀ and PM_{2.5} (2.5 µg/m³) from South Coast AQMDs LST has been applied in this EIR as part of the ambient air quality assessment for NAAQS and CAAQS compliance.

This evaluation was prepared in accordance with the standards, procedures, and methodologies established in South Coast AQMD’s Air Quality Analysis Handbook (South Coast AQMD, 1993), CEQA, and the CEQA Guidelines. The following section describes the methodologies used to determine the proposed Project’s potential air quality and GHG impacts in more detail.

4.2.2 Environmental Impact Assessment Methods

Criteria and GHG Air Pollutants Methods

The proposed Project’s potential air quality impacts were compared to the baseline emissions for calendar year 2014 for the following pollutants: CO, VOC, NO_x, PM₁₀, PM_{2.5}, SO_x, lead, CO₂, CH₄, N₂O, and CO₂e. The proposed Project and baseline emissions for both mobile and stationary sources were calculated applying methods summarized below and detailed in Appendix D.1.

Emission factors (EFs) for proposed Project criteria pollutants and lead for the lead smelting stationary source processes were derived from Year 2016 source testing conducted pursuant to a research permit issued in accordance with South Coast AQMD Rule 441.

Year 2019 EFs were applied for truck and passenger vehicle mobile sources for both baseline Year 2014 and the proposed Project. Mobile source emission factors in 2014 are higher than those provided for 2019; this accounts for changes in fleet rules that apply to newer fleets. Using the same Year 2019 emission rates for both baseline and proposed Project allows for an assessment in change in increased activity levels (See Appendix D.1 for a further discussion).

Stationary Source Emissions Methods

The criteria pollutant emissions for stationary sources from the lead smelting process were estimated based on the actual process feed rates for baseline Year 2014, which was 510 tpd, and,

for the proposed Project the maximum proposed permitted throughput of 750 tpd was used, as summarized in Table 2-1.

Because actual recorded emissions exist for the baseline year, but not for the proposed Project, EFs were selected in order to estimate the proposed Project's potential emissions. Most of the emissions calculations for criteria pollutants used EFs derived from source tests conducted on the lead smelting process exhaust stacks (WESP stacks and Busch units) in 2016 through 2017. Source tests were performed to satisfy permit condition testing requirements, NESHAP testing requirements and South Coast AQMD Rule 1420.1 testing requirements.

For NO_x and SO_x, EFs were based on data from the CEMS, which was installed on the WESP stack pursuant to South Coast AQMD Regulation XX - RECLAIM. The CO₂, CH₄, and N₂O emissions for stationary sources from the lead smelting process and scrubber system were calculated based on guidance provided in 40 CFR Part 98, Subpart R - Lead Production. The WESP CEMS monitors CO₂, but does not monitor CH₄ or N₂O, and thus different calculation methods were applied for each pollutant. This analysis applies the CO₂ EF from CEMS data in the verified 2017 GHG Mandatory Reporting Rule (MRR) report for the calculation of CO₂ emissions from the WESP stack (combustion, lead smelting process, and scrubber exhaust streams). EFs from 40 CFR Part 98, Subpart C, Table C-1, and Table C-2 were applied to calculate CH₄ and N₂O emissions from natural gas usage by stationary sources. CO₂e emissions applied CO₂, CH₄ and N₂O GWP factors in 40 CFR Part 98, Subpart A, Table C-A.

Facility emission sources associated with the lead smelting process include the battery wrecker building activities, the containment building, the electric arc furnace, the rotary/kiln feed drying furnace, the reverberatory furnace, and the refinery.

The proposed Project includes the use of petroleum coke in lieu of or in addition to calcined coke as a smelting reagent in the reverberatory and electric arc furnaces (refer to Section 2.6 - Project Description for additional information about calcined coke and petroleum coke). In order to assess the potential change in smelting reagent from calcined coke to petroleum coke, South Coast AQMD issued a Rule 441 research permit to test the use of petroleum coke as a smelting reagent in Quemetco's furnaces in 2016. The Rule 441 research permit required source testing and process sampling to assess the changes in emissions when petroleum coke was used as a smelting reagent in the furnaces. South Coast AQMD approved the CARB Method 410 test methods, sampling procedures, and source test protocols.

The source tests were performed from July 6, 2016 to July 8, 2016. During testing, the facility operated at a known process rate, process conditions were monitored, and the WESP stack emissions were measured. The process rate used during the testing was consistent with the rate that is expected to be used in the proposed Project.² Testing was performed for three (3) operating scenarios:

- 1) Calcined coke used in the reverberatory furnace and petroleum coke used in the electric arc furnace;

² Refer to Appendices D.1 and D.2 for more detailed information.

- 2) Petroleum coke used in the reverberatory furnace and calcined coke used in the electric arc furnace; and
- 3) Petroleum coke used in both furnaces.

The Rule 441 research permit testing focused on what, if any, differences were found in furnace emissions between source tests and whether the emission differences could be attributed to the smelting reagents. The Rule 441 research permit results showed that while there were variations in emissions under the three (3) operating scenarios, the emissions levels did not increase emissions as compared to emissions from existing operations and did not exceed the existing permit limits.

Smelting reagents are a very small portion of the total material fed into the facility's furnaces compared to feed stock (as limited by permit conditions C1.7 and C1.8, coke no more than 2.7% of feed per day). There are, however, normal variations in feed stock that cannot be controlled (e.g., differences in residual amounts of rubbers, metals, etc.). These variations in emissions observed during the Rule 441 research permit testing were in the same range of variability as any other source tests conducted at Quemetco. See Appendix D.2 for the Rule 441 research permit test report³.

Table 4.2-3 summarizes the methods and sources applied for estimating criteria pollutants, TACs, and GHG emission factors for stationary sources (refer to Appendix D.1 for additional explanation), and the Rule 441 research permit emission factors for baseline and proposed Project conditions.

³ Additionally, there may be a difference in odors generated between calcined coke and petroleum coke. Odors are generally associated with VOCs. This was previously assessed in checklist question e) of the NOP/IS Section III: *Would the project create objectionable odors affecting a substantial number of people?* This analysis states that any additional odors that may be generated by increasing feed stock and additives (which includes use of petroleum coke in the furnaces as a smelting reagent) will also be routed to the existing air pollution control systems (See Chapter 2 – Proposed Project, Section 2.4.7: Air Pollution Control Systems as well as Figure 2-7). The air pollution control system on the rotary/kiln feed dryer utilizes an RTO which destroys VOCs and their associated odors.

Table 4.2-3 Stationary Sources Emission Calculation Methodologies

| Pollutant Type | Source of Emissions ^a | Emission Calculation Methodology |
|----------------------------|--|---|
| Criteria Pollutants | | |
| Lead | <ul style="list-style-type: none"> • WESP Stack • Busch units (Fugitive Emissions) | <p>The WESP stack lead EF is based on the maximum emissions recorded during three (3) source tests conducted on the WESP stack from July 6, 2016 to July 15, 2016 per CARB Method 436 (metals) pursuant to the South Coast AQMD Rule 441 research permit issued in 2016.</p> <p>Busch unit lead EFs are based on source tests conducted from January 30, 2017 to February 8, 2017 per CARB Method 436 (metals).</p> |
| NOx | <ul style="list-style-type: none"> • WESP Stack | <p>The NOx EF is based on CEMS data during the three (3) source tests conducted on the WESP stack from July 6, 2016 to July 15, 2016 pursuant to the South Coast AQMD Rule 441 research permit issued in 2016. The maximum hourly emission rate from the three (3) CEMS runs was selected as the EF for NOx.</p> |
| SOx | <ul style="list-style-type: none"> • WESP Stack | <p>The SOx EF is based on CEMS data during the three (3) source tests conducted on the WESP stack from July 6, 2016 to July 15, 2016 pursuant to the South Coast AQMD Rule 441 research permit issued in 2016. The maximum hourly emission rate from the three (3) CEMS runs was selected as the EF for SOx.</p> |
| CO | <ul style="list-style-type: none"> • WESP Stack | <p>The CO EF is based on the maximum of three (3) source tests conducted on the WESP stack from July 6, 2016 to July 15, 2016 pursuant to the South Coast AQMD Rule 441 research permit issued in 2016 and in accordance with South Coast AQMD Method 25.1/25.3 – Total Gaseous Non-Methane Organics (TGNMO) and CO.</p> |
| VOC | <ul style="list-style-type: none"> • WESP Stack | <p>The VOC EF is based on the maximum of three (3) source tests conducted on the WESP stack from July 6, 2016 to July 15, 2016 pursuant to the South Coast AQMD Rule 441 research permit issued in 2016 and in accordance with South Coast AQMD Method 25.1/25.3 – Total Gaseous Non-Methane Organics (TGNMO) and CO.</p> |

| Pollutant Type | Source of Emissions ^a | Emission Calculation Methodology |
|----------------------|--|--|
| PM | <ul style="list-style-type: none"> • WESP Stack • Busch units (Fugitive Emissions) • Material Handling (Fugitive Emissions) | <p>The WESP stack PM EF is based on the maximum of three (3) source tests conducted from July 6, 2016 to July 15, 2016 pursuant to the South Coast AQMD Rule 441 research permit issued in 2016 and in accordance with U.S. EPA Method 201A/202 - PM10 and Condensable PM test method and various methods for air toxics.</p> <p>PM10 emissions for Busch unit fugitives are assumed to be the sum of all the metal emissions from the source test conducted from February 5, 2016 to February 15, 2016.</p> <p>The PM2.5 fraction of PM10 is 0.951 for electroreduction, furnace, fluxing, storage, and processing from Primary and Secondary Metals Category as set forth in South Coast AQMD's Methodology to Calculate PM 2.5 and PM 2.5 Significance Thresholds, Appendix A.</p> <p>Material handling EFs are based on South Coast AQMD's guidance document Processes/Equipment at Asphalt, Cement, Concrete, and Aggregate Product Plants for loading/unloading/conveyor transfer point of aggregate - concrete batching and others.</p> |
| GHG Emissions | | |
| CO2 | <ul style="list-style-type: none"> • WESP Stack • Indirect Electricity^b | <p>Certified 2017 EFs in metric tons per hour are from the GHG report based on CEMS data for CO2 emissions for the WESP stack.</p> <p>CO2 EFs for indirect electricity are from Table 1.2: Electrical Utility Emission Factors of Greenhouse Gases, CalEEMod version 2016.3.2 and a review of version 2020.4.0, Appendix D Default Data Tables. The version 2016.3.2 EFs are higher than those published in version 2020.4.0; the older EFs were applied to be reasonably conservative.</p> |
| CH4 | <ul style="list-style-type: none"> • WESP Stack • Indirect Electricity^b | <p>CH4 EFs for the WESP Stack (natural gas combustion) from U.S. EPA GHG MMR, 40 CFR Part 98, are used.</p> <p>CH4 EFs for indirect electricity are from Table 1.2: Electrical Utility Emission Factors of Greenhouse Gases, CalEEMod version 2016.3.2 and a review of version 2020.4.0, Appendix D Default Data Tables. The version 2016.3.2 EFs are higher than those published in version 2020.4.0; the older EFs were applied to be reasonably conservative.</p> |

| Pollutant Type | Source of Emissions ^a | Emission Calculation Methodology |
|----------------------|--|---|
| N2O | <ul style="list-style-type: none"> • WESP Stack • Indirect Electricity^b | <p>N2O EFs for the WESP Stack (natural gas combustion) are from U.S. EPA GHG Mandatory Reporting Rule, 40 CFR Part 98.</p> <p>N2O EFs for indirect electricity are from Table 1.2: Electrical Utility Emission Factors of Greenhouse Gases, CalEEMod version 2016.3.2, and a review of version 2020.4.0, Appendix D Default Data Tables. The version 2016.3.2 EFs are higher than those published in version 2020.4.0; the older EFs were applied to be reasonably conservative.</p> |
| TAC Emissions | | |
| TACs | <ul style="list-style-type: none"> • WESP Stack • Busch units (Fugitive Emissions) | <p>WESP and Busch units TAC EFs apply the 2019 Rule 1420.1 compliance test report, or the test report approved by South Coast AQMD for use in the 2016 RRP, whichever is more recent (refer to Appendix D.1 for EF source by TAC).</p> <p>For the purposes of the HRA, material handling emissions are accounted for as fugitive lead and arsenic emissions based on ambient monitoring data consistent with those developed specifically for the most recent South Coast AQMD-approved HRA for Quemetco.</p> |

^a The Quemetco facility has four (4) sources relating to the lead smelting activities which combust natural gas and/or produce process emissions (e.g., rotary/kiln feed drying furnace, reverberatory furnace, refinery, and RTO) which are all routed to the WESP and then vent from the WESP stack.

^b While emissions from indirect electricity are not a part of the stationary source permit, they contribute to the GHG portion of the emissions estimates, and thus, are included in this table.

Mobile Source Emissions Methods

The proposed Project includes trucks, locomotives, and passenger vehicles as mobile sources. The mobile source emission calculations for criteria pollutants and CO2 for both the baseline and proposed Project conditions applied EFs from EMFAC2017 model (version 1.0.2) (CARB, 2016b) for equipment inventory year 2019. EMFAC2017 fleet EFs represent an aggregation of model years. Year 2019 EFs constitute the most conservative project operations year at the time of initial EIR preparation in calendar year 2018; utilizing EFs from a later year would only result in lower emissions.

Criteria pollutant EFs for the calendar year 2014 fleet were not used for baseline criteria pollutant emissions. Year 2014 fleet EFs would be higher than year 2019 EFs reflecting an older and less efficient vehicle fleet. Thus, use of the year 2014 EFs for the baseline condition would result in higher baseline emissions and, ultimately, negative net emissions for the proposed Project. Instead, year 2019 fleet EFs were applied when estimating both year 2014 baseline emissions and proposed Project emissions (year 2019). This approach resulted in a greater, more conservative difference between baseline emissions and the proposed Project’s emissions.

As described further in Appendix D.1, the analysis used an average trip length derived from EMFAC2017’s VMT output by vehicle type. The mobile source emissions estimates applied EMFAC2017 EFs by vehicle type for truck and passenger vehicles. While EMFAC2017 has EFs for CO₂, it does not have EFs for CH₄ and N₂O. Thus, the CO₂e vehicular emissions estimates applied the CH₄ and N₂O EFs from 40 CFR Part 98 Subpart C (Table C-2). For locomotive emissions estimates, criteria pollutant and GHG emissions were calculated using U.S. EPA’s guidance on preparing mobile source port-related emission inventories (U.S. EPA, 2009). Table 4.2-4 summarizes the methods applied for estimating mobile source criteria pollutants, TACs, and GHG emissions.

Table 4.2-4 Mobile Sources Emissions Methodology

| Mobile Sources | Emissions Calculation Methodology | | |
|--------------------|--|--|--|
| | Criteria Pollutants ^a | GHG ^a | Air Toxics ^b |
| Trucks | Year 2019 EFs for heavy duty vehicles from CARB's EMFAC2017 model run. | Year 2019 EFs for heavy duty vehicles from CARB's EMFAC2017 model run. | Year 2019 EFs for heavy duty vehicles from CARB's EMFAC2017 model run. |
| Locomotive | U.S. EPA’s Methodologies in Preparing Mobile Source Port-Related Emission Inventories, 2009. | U.S. EPA’s Methodologies in Preparing Mobile Source Port-Related Emission Inventories, 2009. | U.S. EPA’s Methodologies in Preparing Mobile Source Port-Related Emission Inventories, 2009. |
| Passenger Vehicles | Year 2019 EFs for light duty vehicles from CARB's EMFAC2017 model run. | Year 2019 EFs for light duty vehicles from CARB's EMFAC2017 model run. | N/A ^c |

^a – The criteria pollutant GHG emission estimates included an adjustment for CARB’s SAFE Vehicle Rule – Part I (refer to Appendix D.1).

^b The EF for the applicable air toxic for the mobile sources, diesel particulate matter, is assumed to be equivalent to the PM_{2.5} EF.

^c Consistent with previously approved HRAs for the facility, the emissions calculations in the proposed Project’s HRA model passenger vehicle and fugitive (material handling) TACs, which are estimated using a different method than the method for the criteria pollutant ambient modeling. Fugitive lead and arsenic emissions are based on ambient monitoring data and are consistent with those developed specifically for the most recent South Coast AQMD-approved HRA and used in the RRP.

Air Dispersion Modeling Methods

An ambient air quality analysis (AAQA) was performed to determine if the proposed Project has the potential to impact ambient air quality by violating the ambient air quality standards or substantially contributing to an existing or a projected air quality standard violation. The basis for the analysis is dispersion modeling and the proposed Project’s short- and long-term criteria pollutant impacts. The emission rates modeled generally reflect the proposed daily incremental emissions increase, calculated according to the methodology described in Table 4.2-5, converted from pounds per day to grams per second assuming continuous operation at maximum operating conditions. This approach results in higher emissions estimates than could actually occur because the facility must occasionally close for maintenance and cannot continuously operate. Results of

the AAQA analysis are presented in Section 4.2.3, impact AQ-2 and additional technical documentation is provided in Appendix D.1.

The analysis uses the most recent version of the U.S. EPA recommended computer model (AERMOD Version 19191). The AAQA used all of the regulatory default AERMOD model keyword parameters, used the Ambient Ratio Method Version 2 (ARM2) conversion of NO_x to NO₂, and was modeled with the urban option. Applicable outputs were selected depending on the format and averaging period of the pollutant standard.

The air dispersion model contains a three-dimensional model of the facility, including mobile and stationary emission sources and buildings. A fence line receptor grid spaced at 20 meters outlines the property boundary. A receptor grid of 10,000 meters by 10,000 meters extends from the property boundary at a density varying from 50 meters to 250 meters. The model incorporates local terrain parameters from the United States Geological Survey and onsite meteorological data for years 2015 through 2019⁴ approved by South Coast AQMD, in accordance with its modeling protocols to use the most recent five years of meteorological data as part of the dispersion modeling.

For each attainment pollutant and applicable averaging period modeled, a “total” concentration was estimated by adding the measured background air concentration to the predicted emissions of the proposed Project. The analysis modeled the net increase in emissions over the applicable averaging period. The background criteria air pollutant concentrations for years 2015 through 2019 were calculated from measured concentrations at South Coast AQMD Monitoring Station No. 085, Source No. 11, in the South San Gabriel Valley. This monitoring station best represents the background concentration due to its proximity to the proposed Project location, land-use of the area, and availability of the data⁵. A background concentration was not applied for the nonattainment pollutant modeling (specifically PM₁₀ and PM_{2.5}) as the applicable thresholds only consider the ambient emissions increase as a result of the proposed Project. There is an allowable change in concentration threshold for PM₁₀ and PM_{2.5} from the South Coast AQMD LST methodology which is applied in this EIR as described in Section 4.2.1: Air Quality and GHG Impacts, Significance Criteria (South Coast AQMD, 2008).

As described in more detail in Appendix D.1, modeling dispersion of lead emissions applied the program LEADPOST to calculate the 3-month rolling average concentrations using the monthly concentrations from AERMOD. These concentrations were added to the aforementioned background data to determine the total lead concentration.

⁴ According to South Coast AQMD Modeling Guidance for AERMOD, modeling should use the most recently available and meteorologically-appropriate 5-year data set. Years 2015 through 2019 represent the most recently available and meteorologically-appropriate 5-year data set at the time of the AAQA, regardless of the baseline year.

⁵ Monitoring Station No. 085, Source No. 11 is located approximately five (5) miles from the Quemetco facility. This monitoring station is zoned as limited industrial by the City of Pico Rivera, which is generally consistent with the zoning of the facility property and surrounding area (see Section 2.3).

HRA Modeling Methods

A HRA produces estimates of health risks for people who are exposed to various amounts of toxic substances. A HRA combines results of studies on the health effects of various animal and human exposures to toxic air pollutants and the results of studies that estimate the level of human exposure at various distances from the pollutant sources.

A HRA was performed to determine if the proposed Project's potential net increase in TAC emissions would be significant at worker, resident, and sensitive receptor locations (e.g., schools and hospitals) surrounding the facility. The HRA is comprised of two (2) components: air dispersion modeling of the affected mobile and stationary sources followed by health risk evaluation based on the proposed Project's potential short (acute) and long-term (cancer and non-cancer) air quality impacts. Results of the HRA analysis are presented in Section 4.2.3: Environmental Impact Analysis, AQ-3: Health Risk Assessment Analysis and additional technical documentation is provided in Appendix D.1.

The air dispersion model for the HRA is set up in AERMOD in a generally consistent manner with the AAQA models previously discussed in Section 4.2.2, with a few minor differences discussed in further detail in Appendix D.1. For example, the air dispersion model is run within CARB's Hotspots Analysis and Reporting Program (HARP 2.0) which uses U.S. EPA AERMOD Version 18081. Additional differences involve the receptor grid spacing, terrain file type, and polygon area source basis, which all have negligible impacts on model results. Result plot files are selected for hourly (for acute risk evaluation) and annual (for cancer and chronic risk evaluation) periods.

Default parameters are primarily used for the HARP 2.0 risk analysis. Specifically, the following exposure durations are reflected for cancer and chronic risk: 30 years for residential and sensitive receptors, 25 years for workers, and 70 years for population-wide cancer burden. Default exposure pathways are considered for workers including inhalation, dermal, and soil. For residential and sensitive receptor, mother's milk and homegrown fruits and vegetables pathways are considered in addition to inhalation, dermal, and soil.

While the AAQA model runs solely reflect the net increase in criteria pollutant emissions, the HRA models both the baseline and proposed Project conditions, identifies risk values for the applicable receptors, and then calculates the incremental (net) risk per receptor. The HRA receptor grid includes fence-line receptors with 20-meter spacing, a receptor grid up to approximately 5,500 meters from the facility with 50-meter spacing, receptors at sensitive locations within 5,000 meters of the facility, and a receptor per census tract as identified by HARP 2.0. Risk results are considered for the following locations: Maximum Exposed Individual Residential (MEIR), Maximum Exposed Individual Worker (MEIW), Maximum Chronic Hazard Index, and Maximum Acute Hazard Index. Sensitive receptors are included in the residential receptor analysis and are specifically identified in Appendix D.1.

Cancer burden is also evaluated by multiplying the potential cancer risk at a census tract centroid by the number of people who live in the census tract and adding the estimated number of potential cancer cases across the zone of impact.

Long-Term CO “Hot Spots” Methods

Localized areas of vehicle congestion can create pockets of CO called “hot spots” (i.e., areas with higher CO concentrations) which have the potential to exceed the state one-hour CO standard of 20 ppm or the eight-hour CO standard of 9 ppm. Emitted CO does not readily disperse; therefore, adherence to ambient air quality standards is typically demonstrated through an analysis of localized CO concentrations. Hot spots tend to occur at intersections, where traffic congestion is highest, vehicles queue for longer periods, and reduced speeds occur. In general, for an intersection to exhibit a significant CO concentration, it would operate at Level of Service (LOS)⁶ E or worse without improvements (Caltrans, 1997).

The proposed Project is projected to generate 15 additional daily truck roundtrips and six (6) additional passenger vehicle roundtrips as compared to baseline conditions. Vehicle emission standards have become more stringent over the past 20 years, leading to the decreased potential for the generation of CO hot spots. CO concentrations in the proposed Project vicinity have steadily declined since the adoption of these standards, and hot spots exceeding the applicable air quality standards would not be generated even at very busy intersections. Localized air quality impacts (i.e., higher CO concentrations near intersections or roadway segments in the proposed Project vicinity) would be less than significant due to the generally low ambient CO concentrations⁷. For these reasons, a Project-specific analysis was not required for local CO hot spots.

⁶ Level of service (LOS) is a qualitative measure used to relate the quality of motor vehicle traffic service. LOS is used to analyze roadways and intersections by categorizing traffic flow and assigning quality levels of traffic based on performance measure like vehicle speed, density, congestion, etc. LOS no longer may be used to evaluate transportation impacts for CEQA purposes.

⁷ Table 3.2-3 shows that the Basin is designated as in attainment for CAAQS and as in maintenance for NAAQS for CO. Table 3.2-4 summarizes air quality data for 2014 and 2019 and shows that there have been no exceedances of CO NAAQS and CAAQS standards within South Coast AQMD’s jurisdiction.

4.2.3 Environmental Impact Analysis

AQ-1: Criteria Air Pollutants Analysis: Mass Daily Emissions

South Coast AQMD Checklist Question b): Would the proposed Project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for O3 precursors)?

Applicable South Coast AQMD Significance Criteria: presented in Table 4.2-2 plus all applicable South Coast AQMD rules and regulations (see list in Section 3.2.2.3) plus the LSTs

South Coast AQMD Checklist Question e) Would the proposed Project diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?

Applicable South Coast AQMD Significance Criteria: presented in Table 4.2-2 plus all applicable South Coast AQMD rules and regulations (see list in Section 3.2.2.3) plus the LSTs

To evaluate the proposed Project's potential criteria pollutant emissions, the net difference between baseline conditions and the proposed Project's condition is compared to the mass daily thresholds in Table 4.2-2 for the following pollutants: CO, VOC, NO_x, PM₁₀, PM_{2.5}, SO_x, and lead and the results are shown in Table 4.2-5. As previously described, the analysis used year 2019 emission factors when estimating both year 2014 baseline and proposed Project emissions for mobile sources; this approach resulted in a greater emissions difference between the proposed Project and baseline emissions and created a more conservative analysis. For stationary sources, Table 4.2-3 summarizes the emission factor sources and methods.

Table 4.2-6 Daily Emissions: Baseline & Proposed Project

| Basis | Emissions Source | Daily Emissions (lbs/day) | | | | | | |
|--|----------------------------|---------------------------|-----------------|---------------|-----------------|-------------|-------------|-------------|
| | | VOC | NO _x | CO | SO _x | PM10 | PM2.5 | Lead |
| 2014 Baseline (Pre-Project) | Lead Smelting ^a | 11.88 | 80.07 | 254.49 | 14.28 | 3.11 | 2.96 | 0.01 |
| | Trucks | 0.28 | 11.02 | 1.35 | 0.04 | 0.16 | 0.15 | 0.00 |
| | Locomotives | 0.20 | 5.33 | 1.06 | 0.00 | 0.08 | 0.08 | 0.00 |
| | Fugitive ^b | 0.00 | 0.00 | 0.00 | 0.00 | 0.29 | 0.29 | 0.00 |
| | Passenger Vehicles | 0.21 | 1.31 | 11.29 | 0.03 | 0.02 | 0.02 | 0.00 |
| | Total | 12.58 | 97.73 | 268.19 | 14.36 | 3.67 | 3.51 | 0.01 |
| 2019 Proposed Project | Lead Smelting ^a | 17.48 | 117.75 | 374.25 | 21.00 | 4.58 | 4.36 | 0.02 |
| | Trucks | 0.33 | 13.03 | 1.61 | 0.05 | 0.19 | 0.18 | 0.00 |
| | Locomotives | 0.24 | 6.52 | 1.33 | 0.00 | 0.10 | 0.10 | 0.00 |
| | Fugitive ^b | 0.00 | 0.00 | 0.00 | 0.00 | 0.42 | 0.42 | 0.00 |
| | Passenger Vehicles | 0.22 | 1.38 | 11.89 | 0.04 | 0.03 | 0.02 | 0.00 |
| | Total | 18.27 | 138.68 | 389.07 | 21.09 | 5.32 | 5.08 | 0.02 |
| Net Difference (Proposed Project - Baseline) | Lead Smelting ^a | 5.59 | 37.68 | 119.76 | 6.72 | 1.47 | 1.39 | 0.01 |
| | Trucks | 0.05 | 2.01 | 0.26 | 0.01 | 0.03 | 0.03 | 0.00 |
| | Locomotives | 0.04 | 1.20 | 0.27 | 0.00 | 0.02 | 0.02 | 0.00 |
| | Fugitive ^b | 0.00 | 0.00 | 0.00 | 0.00 | 0.12 | 0.12 | 0.00 |
| | Passenger Vehicles | 0.01 | 0.07 | 0.59 | 0.00 | 0.00 | 0.00 | 0.00 |
| Net Emission Increase | 5.70 | 40.96 | 120.87 | 6.73 | 1.65 | 1.58 | 0.01 | |
| South Coast AQMD Air Quality Significance Thresholds for Operation (Mass Daily) | 55 | 55 | 550 | 150 | 150 | 55 | 3 | |
| Significant? | NO | NO | NO | NO | NO | NO | NO | |

Note: ^a Facility emission sources associated with the lead smelting process include the battery wrecker building activities, the containment building, the electric arc furnace, the rotary/kiln feed drying furnace, the reverberatory furnace, and the refinery.

^b Fugitive emissions were estimated from movement of materials (e.g., smelting reagents, furnace and refinery additives, cobbled steel, soda ash and limestone).

Table 4.2-7 summarizes annual emissions for informational purposes; South Coast AQMD does not have annual emission thresholds for CO, VOC, NO_x, PM10, PM2.5, SO_x, and lead.

Table 4.2-7 Annual Emissions: Baseline & Proposed Project

| Basis | Source | Annual Emissions (tpy) | | | | | | |
|---|----------------------------|------------------------|-----------------|--------------|-----------------|-------------|-------------|--------------|
| | | VOC | NO _x | CO | SO _x | PM10 | PM2.5 | Lead |
| 2014 Baseline (Pre-Project) | Lead Smelting ^a | 2.17 | 14.61 | 46.44 | 2.61 | 0.57 | 0.54 | 0.003 |
| | Truck | 0.05 | 2.01 | 0.25 | 0.01 | 0.03 | 0.03 | 0.000 |
| | Locomotive | 0.04 | 0.97 | 0.19 | 0.00 | 0.01 | 0.01 | 0.000 |
| | Fugitive ^b | 0.00 | 0.00 | 0.00 | 0.00 | 0.05 | 0.05 | 0.000 |
| | Passenger Vehicle | 0.04 | 0.24 | 2.06 | 0.01 | 0.00 | 0.00 | 0.000 |
| | Total | 2.30 | 17.84 | 48.95 | 2.62 | 0.67 | 0.64 | 0.003 |
| Proposed Project | Lead Smelting ^a | 3.19 | 21.49 | 68.30 | 3.83 | 0.84 | 0.79 | 0.004 |
| | Truck | 0.06 | 2.38 | 0.29 | 0.01 | 0.03 | 0.03 | 0.000 |
| | Locomotive | 0.04 | 1.19 | 0.24 | 0.00 | 0.02 | 0.02 | 0.000 |
| | Fugitive ^b | 0.00 | 0.00 | 0.00 | 0.00 | 0.08 | 0.08 | 0.000 |
| | Passenger Vehicle | 0.04 | 0.25 | 2.17 | 0.01 | 0.00 | 0.00 | 0.000 |
| | Total | 3.33 | 25.31 | 71.01 | 3.85 | 0.97 | 0.93 | 0.004 |
| Net Difference (Proposed Project - Baseline) | Lead Smelting ^a | 1.02 | 6.88 | 21.86 | 1.23 | 0.27 | 0.25 | 0.001 |
| | Truck | 0.01 | 0.37 | 0.05 | 0.00 | 0.01 | 0.00 | 0.000 |
| | Locomotive | 0.01 | 0.22 | 0.05 | 0.00 | 0.00 | 0.00 | 0.000 |
| | Fugitive ^b | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 | 0.02 | 0.000 |
| | Passenger Vehicle | 0.00 | 0.01 | 0.11 | 0.00 | 0.00 | 0.00 | 0.000 |
| Net Emissions Increase | | 1.0 | 7.5 | 22.1 | 1.2 | 0.3 | 0.3 | 0.001 |

Note: ^a Facility emission sources associated with the lead smelting process include the battery wrecker building activities, the containment building, the electric arc furnace, the rotary/kiln feed drying furnace, the reverberatory furnace, and the refinery.

^b Fugitive emissions were estimated from movement of materials (e.g., smelting reagents, furnace and refinery additives, cobbled steel, soda ash and limestone).

As shown in Table 4.2-6, the proposed Project’s daily criteria pollutant emissions are less than South Coast AQMD’s Air Quality Significance Thresholds for mass daily emissions (refer to Table 4.2-2). Thus, based on the mass daily emissions estimates, the proposed Project is not expected to generate significant air quality impacts.

AQ-2: Ambient Air Quality Impacts Analysis

South Coast AQMD Checklist (Previous) Question b) Would the proposed Project violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Applicable South Coast AQMD Significance Criteria: presented in Table 4.2-2 plus all applicable South Coast AQMD rules and regulations (see list in Section 3.2.2.3) plus the LSTs

The results of the air dispersion modeling, presented in Table 4.2-8, demonstrate that the maximum impacts attributable to the proposed Project, when considered in addition to the existing

background concentrations, would be below the applicable ambient air quality standard for all criteria pollutants. The proposed Project site is located within South Coast AQMD’s San Gabriel Valley monitoring area, and thus the San Gabriel Valley monitoring station was the source of modeling background values. Refer to Appendix D.1, Technical Air Quality Methods and Emissions Assumptions, for additional details on modeling methodology, analysis assumptions and results.

Table 4.2-8 Predicted Ambient Air Quality Impacts

| Pollutant | Averaging Period | Background Concentration (µg/m ³) ^a | Project Contribution ^b (µg/m ³) | | Proposed Project + Background (µg/m ³) | NAAQS ^c (µg/m ³) | CAAQS ^c (µg/m ³) | South Coast AQMD LST Significant Change Threshold (µg/m ³) | Significant? |
|-------------------|------------------|--|--|---------|--|---|---|--|--------------|
| | | | H8H | HIH | | | | | |
| NO ₂ | 1-hour | 112 | H8H | 7.8 | 119.9 | 188 | — | — | No |
| | 1-hour | 112 | HIH | 10.8 | 122.8 | — | 339 | — | No |
| | Annual | 36.1 | HIH | 3.6 | 39.7 | 100 | 57 | — | No |
| SO ₂ | 1-hour | 8.6 | H1H | 5.4 | 14.0 | 196 | 655 | — | No |
| | 3-hour | 8.6 | H1H | 2.2 | 10.9 | 1,300 | — | — | No |
| | 24-hour | 8.6 | H1H | 0.6 | 9.3 | — | 105 | — | No |
| CO | 1-hour | 2,725.1 | H1H | 96.9 | 2,822.0 | 40,000 | 23,000 | — | No |
| | 8-hour | 2,015.2 | H1H | 18.0 | 2,033.2 | 10,000 | 10,000 | — | No |
| PM ₁₀ | 24-hour | — ^d | H1H | 1.5 | 1.5 | 150 | 50 | 2.5 | No |
| | Annual | — ^d | H1H | 0.8 | 0.8 | — | 20 | 1.0 | No |
| PM _{2.5} | 24-hour | — ^d | H8H | 1.2 | 1.2 | 35 | — | 2.5 | No |
| | Annual | — ^d | H1H | 0.8 | 0.8 | — | — | 1.0 ^e | No |
| Lead | 30-day | 0.011 | Max Ave 30-Day | 0.00026 | 0.011 | — | 1.5 | — | No |
| | 30-day rolling | — ^d | Max Ave 30-Day | 0.00029 | 0.00029 | — | — | 0.10 ^f | No |
| | 3-month | 0.009 | Max Ave 3-Month | 0.00026 | 0.009 | 0.15 | — | — | No |

- a) Background concentration is obtained from Station No. 085 (Source No. 11, South San Gabriel Valley).
- b) H8H = 8th Highest High (98th percentile); HIH = 1st Highest High (highest modeled result). Where a pollutant and averaging period has a NAAQS and CAAQS standard, the most stringent standard is selected.
- c) South Coast AQMD is in attainment for these pollutants (excluding PM₁₀ and PM_{2.5}) and averaging periods; therefore, the most stringent AAQS (CAAQS or NAAQS) is used for the significant determination.
- d) South Coast AQMD is not in attainment of these standards, therefore, South Coast AQMD LST Significant Change Threshold is used for determining significance and does not require background concentrations (South Coast AQMD 2008).
- e) Table 4.2-2 does not present an annual significant change threshold for PM_{2.5}; for the purposes of this assessment, the annual significant change threshold for PM₁₀ was applied for PM_{2.5} for comparative purposes.
- f) The 30-day rolling lead standard applied for the purposes of this assessment is based on the ambient air lead concentration limits specified in South Coast AQMD Rule 1420.1.

As presented in Table 4.2-7, air dispersion modeling estimates of the proposed Project’s ambient air quality impacts for the attainment pollutants NO₂, SO₂, CO, and lead were estimated to be less than the applicable NAAQS and CAAQS for the various averaging periods. Further, for PM₁₀, PM_{2.5}, and lead, pollutants for which the South Coast AQMD is not in attainment, additional

ambient air quality standards, referred to as the South AQMD Significant Change Thresholds, were also analyzed. The air dispersion modeling estimates of the proposed Project’s ambient air quality impacts for PM10, PM2.5, and lead were shown to be less than the South Coast AQMD Significant Change thresholds. Therefore, based on the localized ambient air quality modeling estimates for NO2, SO2, CO, PM10, PM2.5, and lead emissions, the proposed Project is not expected to generate significant air quality impacts.

AQ-3: Health Risk Assessment Analysis

South Coast AQMD Checklist Question d): Would the proposed Project expose sensitive receptors to substantial pollutant concentrations?

Applicable South Coast AQMD Significance Criteria: presented in Table 4.2-2 plus all applicable South Coast AQMD rules and regulations (see list in Section 3.2.2.3) plus the LSTs

The results of the HRA, presented in Table 4.2-9, demonstrate that the incremental (net) potential increase in health risk attributable to the proposed Project remains less than the applicable health risk significance thresholds. As described in greater detail in Appendix D.1: Technical Air Quality Methods and Emissions Assumptions, separate HRAs, which include both mobile and stationary sources, were conducted to estimate the emissions for the baseline and proposed Project conditions; baseline emissions were subtracted from the proposed Project emissions to estimate the incremental (net) increase in health risk. Appendix D.1 also discusses the locations of sensitive receptors.

Table 4.2-9 Health Risk Summary

| HRA Scenario | Maximum Residential Cancer Risk (risk per million) Receptor 51165 | Maximum Worker Cancer Risk (risk per million) Receptor 51191 | Maximum Residential Chronic Risk (Hazard Index) Receptor 51165 | Maximum Worker Chronic Risk (Hazard Index) Receptor 51187 | Maximum Acute Risk (Hazard Index) Receptor 53487 | Cancer Burden |
|-------------------------------|---|--|--|---|--|---------------|
| Proposed Project | 5.36 | 4.38 | 0.165 | 0.486 | 0.143 | 0.108 |
| Baseline (Year 2014) | 3.76 | 3.37 | 0.112 | 0.331 | 0.143 | 0.0465 |
| Net Health Risk Impact | 1.60 | 1.01 | 0.0530 | 0.155 | 0 | 0.0615 |

| HRA Scenario | Maximum Residential Cancer Risk (risk per million) Receptor 51165 | Maximum Worker Cancer Risk (risk per million) Receptor 51191 | Maximum Residential Chronic Risk (Hazard Index) Receptor 51165 | Maximum Worker Chronic Risk (Hazard Index) Receptor 51187 | Maximum Acute Risk (Hazard Index) Receptor 53487 | Cancer Burden |
|---|---|--|--|---|--|---------------|
| South Coast AQMD Air Quality Significance Threshold for TACs ^a | 10 | 10 | 1.0 | 1 | 1 | 0.5 |
| Significant? | NO | NO | NO | NO | NO | NO |

^a As shown in Table 4.2-2, the South Coast AQMD Air Quality Significance Thresholds for TACs are based on the project increment.

Table 4.2-8 shows that the potential net cancer risk impacts, inclusive of both stationary and mobile sources, from the proposed Project would be less than the South Coast AQMD threshold for MEIR and MEIW receptors. Sensitive receptors are included in the residential receptor analysis. Potential cancer risk net impacts, which are represented as Maximum Chronic Hazard Index and Maximum Acute Hazard Index, would also be less than their respective significance thresholds.

Table 4.2-10 Health Risk Speciation for Maximum Residential Cancer Risk (Receptor 51165)

| HRA Scenario | Maximum Residential Cancer Risk (risk per million) | Inhalation Risk (risk per million) | Soil Risk (risk per million) | Dermal Risk (risk per million) | Mothers Milk Risk (risk per million) | Crop Risk (risk per million) |
|---|--|------------------------------------|------------------------------|--------------------------------|--------------------------------------|------------------------------|
| Proposed Project | 5.36 | 2.55 | 1.56 | 0.0709 | 0.0896 | 1.09 |
| Baseline (Pre-Project) | 3.76 | 1.85 | 1.06 | 0.0482 | 0.0608 | 0.738 |
| Net Health Risk Impact | 1.60 | 0.7 | 0.5 | 0.0227 | 0.0288 | 0.352 |
| % Contribution | | 43.75% | 31.25% | 1.42% | 1.8% | 22% |
| South Coast AQMD Air Quality Significance Threshold for TACs ^a | 10 | -- | -- | -- | -- | -- |

| | | | | | | |
|---------------------|-----------|----|----|----|----|----|
| Significant? | NO | -- | -- | -- | -- | -- |
|---------------------|-----------|----|----|----|----|----|

^a As shown in Table 4.2-2, the South Coast AQMD Air Quality Significance Thresholds for TACs are based on the project increment.

Table 4.2-9 summarizes the maximum residential cancer risk and net health risk impact inclusive of both stationary and mobile sources for the receptor 51165, the location of highest estimated risk for the MEIR. Table 4.2-9 breaks down the potential sources of risk being evaluated (inhalation, soil (e.g., land and waterways), dermal, mother's milk, and crops (e.g., home gardens)) as well as the percentage contribution of each risk source to the maximum residential cancer risk. The MEIR risks, including soil deposition impacts, for the total proposed Project, the baseline, and the increment (proposed Project less baseline), would be less than the South Coast AQMD maximum residential cancer risk threshold (Table 4.2-8). For these reasons, potential soil deposition impacts from the proposed Project would also be less than the South Coast AQMD maximum residential cancer risk threshold and the proposed Project would not generate significant soil deposition impacts. For these reasons, the net health risk impact from the proposed Project would not cause significant air quality impacts.

AQ-4: GHG Emissions Analysis

South Coast AQMD Checklist Question f): Would the proposed Project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

Applicable South Coast AQMD Significance Criteria: presented in Table 4.2-2

South Coast AQMD Checklist Question g) Would the proposed Project conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs?

Applicable South Coast AQMD Significance Criteria: presented in Table 4.2-2

The Quemetco facility is subject to U.S. EPA’s Greenhouse Gas Reporting Program (GHGRP) and California’s MRR for GHG reporting. As a result, Quemetco has submitted its GHG emissions data to both U.S. EPA and CARB in the required reporting years and maintains a plan for accurately capturing and recording this data. As required by CARB, Quemetco has had its GHG emissions data reports verified each year by a CARB-accredited verification body. In 2014, Quemetco emitted a verified 79,928.5 MT CO₂e from its lead production activities, which includes the usage of calcined coke as a smelting reagent, natural gas, and other fuels, but does not include other GHG emissions from mobile sources (e.g., trucks, locomotives, or passenger vehicles) or indirect emissions associated with electricity use.

As explained in Section 3.2.2: Regulatory Setting, under the Cap-and-Trade program, CARB sets a cap, or limit, on GHG emissions from major sources. The GHG emissions under the cap are turned into credits, which are distributed to facilities that participate in CARB’s Cap-and-Trade program. A facility’s credits give them permission to release a certain quantity of GHG emissions. A facility with more credits than needed can sell them as offsets, enabling other facilities to buy the right to emit more GHGs. The GHG emissions from Quemetco’s lead production activities

are regulated by CARB’s Cap-and-Trade program, as discussed in Section 3.2.2: Regulatory Setting. Quemetco’s credit allocation varies each year and is based on a formula that includes the level of production. Historically, Quemetco has neither bought nor sold offsets. Because the GHG emissions associated with Quemetco’s lead production activities are regulated by CARB’s Cap-and-Trade program, this portion of GHG emissions are excluded from the total GHG emissions which are subject to South Coast AQMD’s significance threshold for GHGs of 10,000 MT/year of CO₂e.

The GHG emissions from mobile sources and indirect electricity are not regulated by CARB’s Cap-and-Trade program so Quemetco is required to quantify these emissions and compare the total to the South Coast AQMD air quality significance threshold for GHGs of 10,000 MT/year of CO₂e to determine whether a significant adverse GHG impact would occur.

To present a full picture of the GHGs during baseline conditions, Table 4.2-10 includes both the verified GHG emissions (Cap-and-Trade “Covered” emissions) as well as the GHG emissions from mobile sources and indirect electricity (non-Cap-and-Trade emissions).

As stated previously, to produce the most conservative comparison of baseline year 2014 GHG emissions and proposed Project’s GHG emissions, the proposed Project year 2019 emission factors were also used for calculating 2014 baseline emissions. This approach resulted in a greater emissions difference between baseline emissions and the proposed Project emissions, and therefore represents a more conservative approach to assess the GHG impacts that may result from the proposed Project.

Table 4.2-11 Annual GHG Emissions Pre- and Post-Project

| Basis | Source | Annual Emissions (MT/year) | | | |
|---------------------------------|----------------------|----------------------------|-----------------|------------------|-------------------|
| | | CO ₂ | CH ₄ | N ₂ O | CO ₂ e |
| 2014 Baseline | Lead Smelting | 41,982 | 0.28 | 0.03 | 41,996 |
| | Trucks | 741 | 0.00 | 0.12 | 776 |
| | Locomotives | 66 | 0.00 | 0.01 | 74 |
| | Indirect Electricity | 12,390 | 0.51 | 0.12 | 12,439 |
| | Passenger Vehicles | 570 | 0.02 | 0.00 | 572 |
| | Total | 55,750 | 0.82 | 0.27 | 55,859 |
| Proposed Project | Lead Smelting | 61,738 | 0.36 | 0.04 | 61,757 |
| | Trucks | 876 | 0.00 | 0.14 | 917 |
| | Locomotives | 82 | 0.00 | 0.01 | 93 |
| | Indirect Electricity | 16,561 | 0.68 | 0.15 | 16,621 |
| | Passenger Vehicles | 602 | 0.02 | 0.00 | 602 |
| | Total | 79,859 | 1.07 | 0.33 | 79,992 |
| Net Difference (Proposed) | Lead Smelting | 19,756 | 0.08 | 0.01 | 19,761 |
| | Trucks | 135 | 0.00 | 0.02 | 141 |
| | Locomotives | 16 | 0.00 | 0.00 | 19 |
| | Indirect Electricity | 4,171 | 0.17 | 0.03 | 4,183 |

| | | | | | |
|--|--------------------|--------|------|------|---------------|
| Project – Baseline) | Passenger Vehicles | 30 | 0.00 | 0.00 | 30 |
| Total Net Emission Increase | | 24,108 | 0.26 | 0.06 | 24,133 |
| Cap-and-Trade “Covered” Emissions ^a | | 19,756 | 0.08 | 0.01 | 19,761 |
| Non-Cap-and-Trade Emissions ^b | | 4,352 | 0.17 | 0.05 | 4,373 |
| South Coast AQMD Significance Threshold for Non-Cap-and-Trade GHGs | | -- | -- | -- | 10,000 |
| Is the Significance Threshold for GHGs Exceeded? | | | | | NO |

^a Cap-and-Trade “Covered” Emissions are GHG emissions from lead smelting activities.

^b Non-Cap-and-Trade Emissions are GHG emissions from mobile sources (e.g., trucks, locomotives, and passenger vehicles) and indirect electricity.

As shown in Table 4.2-10, the proposed Project will increase Quemetco’s Cap-and-Trade covered emissions by approximately 19,761 MT CO₂e/year. If this causes the facility to exceed the number of emissions credits it has under the Cap-and-Trade program, Quemetco will be required to purchase offsets to account for the increase.

As shown in Table 4.2-10, the proposed Project will increase Quemetco’s non-Cap-and-Trade emissions by approximately 4,373 MT CO₂e/year. Given that this increase is not subject to Cap-and-Trade requirements, the South Coast AQMD significance threshold of 10,000 MT/year is applicable. Because the net projected increase in non-Cap-and-Trade CO₂e emissions associated with the proposed Project is less than 10,000 MT/year, the impacts from non-Cap-and-Trade GHG emissions would be less than significant. Thus, the proposed Project would have a less than significant GHG impact; no mitigation measures would be required.

4.2.4 Significance Determinations

Based on the impact analysis in Section 4.2.3, the proposed Project would have a less than significant impact on criteria air pollutant, TAC and GHG emissions. Therefore, no mitigation measures would be required.

4.2.5 Cumulative Air Quality and GHG Impacts

A project impact that is individually limited may nonetheless contribute to a larger cumulative impact. A “cumulative impact” is defined as two or more impacts from related past, current, or probable future projects which, when considered together, are considerable.

An EIR must discuss a cumulative impact if a project impact makes a “cumulatively considerable” contribution to the larger cumulative impact. A project impact is “cumulatively considerable” if the impact is significant when viewed together with similar impacts from related projects. If a project’s incremental contribution to a cumulative impact is not cumulatively considerable, however, the EIR need only briefly describe the basis for its conclusions.

A lead agency may find that a project's contribution to a cumulative impact is not cumulatively considerable if the project will comply with the requirements of a plan, regulation, or mitigation program and the plan or program (1) is adopted by an agency with jurisdiction over the affected resources, and (2) sets forth specific requirements that will avoid or substantially lessen the cumulative impact within the relevant geographic area.

The relevant geographic area for analysis of cumulative criteria pollutant air quality impacts herein is the South Coast Air Basin. As explained above in Section 3.2.2, the Basin is a designated air quality control region under the Federal CAA and a designated air quality basin under the California CAA. Compliance with both Acts is measured based on criteria pollutant concentrations throughout the Basin.

In lieu of a list of specific projects, the analysis of cumulative air quality impacts herein uses the summary of projections and conditions set forth in the 2016 AQMP and the Final Program Environmental Impact Report for the 2016 AQMP prepared and certified by the South Coast AQMD.

The AQMP is an approved plan and mitigation program within the meaning of CEQA Guidelines Section 15064(h)(3). The AQMP was adopted by the South Coast AQMD through a public process, and the South Coast AQMD has jurisdiction over air quality throughout the Basin. The California Legislature has delegated to the South Coast AQMD the State's primary responsibility under the Act for achieving and maintaining the NAAQS within the Basin. (Health and Safety Code Sections 40001 and 40412.) The AQMP, approved by the U.S. EPA and CARB under the federal and state CAAs, respectively, sets forth control measures designed to attain the NAAQS and CAAQS. (Health and Safety Code Section 40913). The South Coast AQMD implements the AQMP control measures through regulations known as "rules" and a permitting scheme. (Health and Safety Code Sections 40440, 40506, and 42300).

AQ-1 Criteria Air Pollutants Analysis: Mass Daily Emissions

As shown in Table 4.2-5, the proposed Project will result in emissions increases of the criteria pollutants VOCs, NO_x, CO, SO_x, PM₁₀, PM_{2.5}, and lead. These emissions will contribute to an existing and projected significant cumulative regional air quality impact. As shown in Table 3.2-3, the South Coast Air Basin is currently designated as extreme nonattainment for four (4) ozone NAAQS, serious nonattainment for one (1) PM_{2.5} NAAQ, moderate nonattainment for two (2) other PM_{2.5} NAAQS, and nonattainment for the ozone, PM_{2.5}, PM₁₀, and NO₂ CAAQS. Because the NAAQS and CAAQS are health-based standards, a "nonattainment" designation reflects an existing significant impact.

In addition, regional levels of some pollutants are expected to increase in the future. South Coast AQMD assessed regional air quality in its 2016 AQMP and the March 2017 Final Program EIR for the 2016 AQMP (South Coast AQMD, 2016) which concluded that VOC and NO_x emissions are expected to decrease due to existing regulations, such as controls for on- and off-road equipment, new vehicle standards, and the RECLAIM program. However, SO_x and PM_{2.5} emissions are expected to increase after 2022. This is because increases in emissions due to

increases in population and activity are anticipated to outpace the emission reductions from introducing newer and cleaner equipment and vehicles.

The proposed Project's incremental contribution of criteria pollutants to regional air pollution, however, is not considered cumulatively considerable because each emissions increase is less than the applicable significance threshold. The significance thresholds, by their very nature, are designed to assess whether a project's incremental contribution to Basin-wide levels of air pollution is cumulatively considerable. (South Coast AQMD 1993 Section 6.2.) The significance thresholds are based in part on the CAA's "new source review" requirements that apply to the permitting of new sources in nonattainment areas. Under Section 172 of the CAA, each state implementation plan (SIP) for a nonattainment area must contain a permit program for new and modified "major sources" of air pollution. (42 U.S.C. Section 7502(c)(5).) Permit programs must require major new sources to, among other things, "offset" the emission of nonattainment pollutants with emission reductions of the same pollutant in an equal, or in some cases greater, amount. A new stationary source is considered "major" if the source has the potential to emit quantities of any nonattainment pollutant, measured in tons per year, greater than certain specified threshold levels. (40 CFR Section 51.165(a)(1)(iv), (v).) The major source thresholds vary by pollutant and region depending on the severity of each region's nonattainment status. Section 182(e) of the CAA defines the term "major source" for purposes of "extreme" ozone nonattainment SIPs. The significance thresholds are based, in part, on this definition. (South Coast AQMD 1993 Section 6.2.)

AQ-2 Ambient Air Quality Impacts Analysis

The air quality modeling demonstrated that the proposed Project's increased emission of attainment pollutants, when combined with background levels of attainment pollutants, would not cause an exceedance of any NAAQS or CAAQS. Thus, the proposed Project will not have a cumulative impact on attainment pollutants based on violation of an air quality standard. The proposed Project will, however, contribute additional non-attainment pollutants to a basin that is already designated nonattainment. Thus, for non-attainment pollutants, the proposed Project will contribute to an existing significant cumulative impact. The proposed Project's incremental contribution of non-attainment pollutants, however, is not considered cumulatively considerable because dispersion modeling demonstrated that each incremental contribution was less than the applicable significant change threshold. See Table 4.2-7. Like the mass daily significance thresholds applied to impact AQ-1, the significant change thresholds by their nature assess whether a project's contribution to a significant cumulative impact is cumulatively considerable.

AQ-3 Health Risk Assessment Analysis

As explained in Section 4.2.3, the proposed Project will result in less-than-significant increases in health risks. These increases contribute to a cumulative impact based on existing and projected levels of toxic air contaminants in the project area. The cumulative impact, described in detail in the 2016 AQMP, the 2016 AQMP Final Program EIR, and the 2021 MATES V study, is summarized in Appendix F. The nearest monitoring station shows a less-than-significant cumulative impact in the vicinity of the proposed Project. Nonetheless, because other portions of the Basin continue to experience unacceptable cumulative levels of risk, South Coast AQMD

makes the conservative assumption that the proposed Project contributes to a significant cumulative air toxics health risk.

The proposed Project's contribution to the significant cumulative health risk, however, is not cumulatively considerable because the proposed Project will comply with the requirements set forth in the AQMP. As explained in the 2016 AQMP, the South Coast AQMD has a "robust, multifaceted, and comprehensive air toxics regulatory program" consisting of rules, permitting requirements, the AB 2588 program for existing sources of air toxics, and some source-specific rules. As described in Section 3.2.2.3.1, Rules 1401 and 212 apply to new and modified sources of toxic air contaminants, and Rule 1402 applies toxic air contaminants from existing sources. Rule 1420 imposes a variety of requirements on facilities that process or use lead-containing materials. Rule 1420.1 entitled "Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities" applies exclusively to the Quemetco facility (because Quemetco is the only large lead-acid battery recycler in the Basin). Rule 1420.1 imposes a variety of requirements on Quemetco designed to limit public exposure to lead and other toxic air contaminants.

The South Coast AQMD's air toxics regulatory program has been very successful. Over the last 21 years, the cancer risks measured at 11 monitoring stations throughout the Basin have decreased dramatically. Lead concentrations measured at Closet World, the monitoring station closest to Quemetco, have not exceeded the applicable NAAQS since 1997 and while there is no NAAQS for arsenic, those levels have also not shown any recent exceedance. See Appendix F.

AQ-4 GHG Emissions Analysis

Based on the effects of global climate change discussed in Section 3.2.1, the cumulative effect of all GHG emissions is considered to be significant. The proposed Project's incremental contribution of GHG emissions, however, is not considered to be cumulatively considerable. Like the significance thresholds applied in the AQ-1 and AQ-2 analyses, the thresholds applied to increased GHG emissions by their nature assess whether a project's incremental contribution to a significant cumulative impact is cumulatively considerable. Since the threshold is not exceeded, the proposed Project will not have a significant cumulative impact on GHG emissions.

4.3 ENERGY

The proposed Project would not require new construction, new process equipment, or new control equipment; therefore, there will be no construction related energy impacts. However, operational activities associated with the proposed Project would increase consumption of various energy sources at the facility.

SCE provides electricity to the Quemetco facility. Under existing conditions operations, the following processes remain operational at full electrical demand during the daily Compliance Stop Period: the electric arc furnace, the Busch units (bag houses and HEPA ventilation systems), the battery wrecker, the waste water treatment operations, the air pollution control systems, and facility support functions (i.e., break areas, locker rooms, administrative functions, shipping and receiving, and maintenance operations). The proposed Project's potential electricity demand increase would be based on additional refinery processing, water consumption, and wastewater treatment, as well as increased generation of oxygen for consumption in the reverberatory furnace.

As described in Section 2.4.7: Air Pollution Control Systems, Quemetco currently operates two diesel emergency ICE and one natural gas emergency ICE which supply backup power to the facility emissions control system when there is a power outage. The diesel ICEs are equipped with diesel particulate filters, and their exhaust is routed to the WESP. The natural gas ICE emissions are controlled by a three-way catalyst, which oxidizes exhaust pollutants⁸ and as such are not routed to the WESP. All three ICEs supply backup power to Busch units F, I and J, the reverberatory scrubber blower, the reverberatory baghouse blower, the electric arc furnace scrubber blower, the electric arc furnace baghouse blower, and the WESP.⁹ South Coast AQMD has issued permits for two additional natural gas-fired ICEs which have not yet been installed. After the two new natural gas-fired ICEs are installed and tested, the facility, in concert with South Coast AQMD, will determine if each of the existing diesel-fired ICEs should be maintained in service or decommissioned¹⁰.

SCG provides natural gas to the Quemetco facility. The proposed Project would consume additional natural gas and oxygen due to increased use of the rotary/kiln feed dryer, reverberatory furnace, and RTO, as well as additional refinery processing. The proposed Project's potential natural gas consumption increase was found to have less than significant energy impacts in the NOP/IS based on the estimated natural gas increase being less than South Coast AQMD's threshold for energy resources (refer to Appendix A). Therefore, the proposed Project's potential natural gas consumption impacts are not evaluated further in this section of the EIR.

⁸ With a three-way catalyst, there are chemical reactions between all three major exhaust pollutants (CO, hydrocarbons (HC), and NOx) which result in the simultaneous removal of these pollutants through conversion into harmless components water (H₂O), carbon dioxide (CO₂), and nitrogen (N₂). The fundamental chemical reactions occurring in the three-way catalyst can be written as follows: CO + NO + HC = H₂O + CO₂ + N₂.

⁹ With doors closed as required during a power interruption, Busch units F, I and J provide sufficient negative pressure as required by South Coast AQMD Rule 1420.1 and the U.S. EPA NESHAPS for maintenance of negative pressure.

¹⁰ With the addition of the new ICEs, there would be additional natural gas consumption for monthly maintenance tests and those times when there is loss of power. Based on Appendix A, Section VI: Energy, the proposed Project's additional natural gas usage would not exceed South Coast AQMD's threshold for energy usage, including the operations of the natural gas ICEs.

Since the proposed Project would increase the amount of additives used, finished product generated, and solid waste generated, additional deliveries to the facility or additional hauling of materials away from the facility for either recycling or disposal would be required and additional diesel fuel would be consumed by the additional trucks, forklifts, cranes and railcars that would be needed to implement the proposed Project. Due to the increased material demand and output, the proposed Project is also expected to increase the number of workers employed at the facility which would in turn require additional gasoline to be consumed by passenger vehicles during the additional worker commutes that are expected to occur. The proposed Project’s potential increase in diesel and gasoline consumption was found to be less than significant in the NOP/IS based on estimated diesel and gasoline fuel use increase being less than South Coast AQMDs threshold for energy resources (refer to Appendix A). Therefore, the proposed Project’s potential diesel and gasoline consumption impacts are not evaluated further in this section of the EIR.

Quemetco generates oxygen onsite, which requires energy, for routine oxygen enrichment in the reverberatory furnace and occasional oxygen enrichment in the rotary/kiln feed dryer. The oxygen generation process involves injecting compressed air through an electricity-powered oxygen generator which captures and absorbs nitrogen molecules, leaving a stream of oxygen to flow out. The facility is also served by Linde as (rarely) needed. The proposed Project would require additional oxygen to process the additional feed stock.

Table 4.3-1 contains a comparison of the South Coast AQMD’s environmental checklist between the 2018 NOP/IS and the updated checklist in 2019. Table 4.3-1 also identifies which questions will be addressed in Chapter 4 of this EIR. Changes made to South Coast AQMD’s environmental checklist in 2019 include two new questions that require an analysis of new impacts in Section 4.3: Energy.

Table 4.3-1 of South Coast AQMD’s Environmental Checklist Questions in the 2018 NOP/IS to the Updated Questions in 2019 for the Topic of Energy

| South Coast AQMD Environmental Checklist Questions in the 2018 NOP/IS | Updated South Coast AQMD Environmental Checklist in 2019 | Changes? | Evaluated in this EIR? |
|---|---|---|--|
| Would the project: | | | |
| a) Conflict with adopted energy conservation plans? | a) Conflict with or obstruct adopted energy conservation plans, a state or local plan for renewable energy, or energy efficiency? | a) Conflict with <u>or obstruct</u> adopted energy conservation plans, <u>a state or local plan for renewable energy, or energy efficiency?</u> | Rephrased but without making any substantial changes to the intent. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required. |

| | | | |
|---|---|---|--|
| b) Result in the need for new or substantially altered power or natural gas utility systems? | b) Result in the need for new or substantially altered power or natural gas utility systems? | None. | No changes. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required. |
| c) Create any significant effects on local or regional energy supplies and on requirements for additional energy? | c) Create any significant effects on local or regional energy supplies and on requirements for additional energy? | None. | No changes. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required. |
| d) Create any significant effects on peak and base period demands for electricity and other forms of energy? | d) Create any significant effects on peak and base period demands for electricity and other forms of energy? | None. | Electricity is further evaluated in this EIR. NOP/IS determined that other forms of energy impacts would be less than significant, and further evaluation of the other forms of energy issues in Chapter 4 of the EIR is not required. |
| e) Comply with existing energy standards? | e) Comply with existing energy standards? | None. | No changes. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required. |
| ---- | f) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation? | <u>f) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?</u> | Evaluated in this EIR as a new environmental checklist question. |
| ---- | g) Require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects? | <u>g) Require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?</u> | Evaluated in this EIR as a new environmental checklist question. |

4.3.1 Energy Impacts

Significance Criteria

Based on the assessment of these environmental checklist questions summarized in Table 4.3-1¹¹, this section of the EIR is focused on the following South Coast AQMD checklist questions and the applicable South Coast AQMD significance criteria:

- South Coast AQMD Checklist Question d) Create any significant effects on peak and base period demands for electricity?
 - Applicable South Coast AQMD Significance Criteria: The project results in substantial depletion of existing energy resource supplies.
- South Coast AQMD Checklist Question f) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?
 - Applicable South Coast AQMD Significance Criteria: The project uses energy resources in a wasteful and/or inefficient manner.
- South Coast AQMD Checklist Question g) Require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunication facilities?
 - Applicable South Coast AQMD Significance Criteria: An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.

An increase in energy use (e.g., electricity or fuel) of one percent or greater is the criteria the South Coast AQMD applies when determining the significance of potential impacts (South Coast AQMD, 2016). Therefore, based on potential natural gas increase being less than South Coast AQMDs threshold for energy demand in the NOP/IS (See Appendix A, Section VI: Energy), no additional analysis of potential natural gas usage is required in this EIR.

Introduction

As previously discussed, the majority of Quemetco's equipment operates continuously during the Compliance Stop Period and therefore, the proposed Project's elimination of the Compliance Stop Period would not be anticipated to result in a substantial increase in electricity usage. However, the analysis in this EIR includes an increase in electricity usage to account for the proposed increased operations at the facility. Increased facility operations would include additional electricity usage, water usage, wastewater treatment, and increased generation of oxygen during the existing Compliance Stop Period. Because the Compliance Stop Period currently occurs in the morning periods before noon, Quemetco anticipates that, under the proposed Project, elimination

¹¹ Table 4.3-1 documents that the NOP/IS determined that potential conflicts with adopted plans, need for new utility systems, significant effects on energy supplies, and compliance with existing energy standards would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.

of the Compliance Stop Period would generate additional demand of electricity during morning periods before noon for these processes.

Through Quemetco’s Energy Management System (EnMS) as described in Section 3.3.1, the facility has established control procedures (monitor and manage activities to minimize inefficient usage) that apply to the facility’s energy usage. These procedures are consistent with the facility’s energy policy, objectives and targets, and action plans included in Quemetco’s EnMS.

With the implementation of the proposed Project, Quemetco would continue its standard practice of monitoring and managing activities to minimize any wasteful usage¹² so that electricity is consumed efficiently. Table 4.3-2 shows the anticipated increase in electricity demand due to the proposed Project, accounting for increased electricity usage by electricity-powered equipment due to the elimination of the Compliance Stop Period requirement.

Table 4.3-2: Existing and Proposed Project Annual Electricity Usage

| Scenario | Total Electricity Usage | Instantaneous Electricity Demand ^a |
|--|-------------------------|---|
| | (kWh per year) | (MW) |
| 2014 Baseline Conditions (pre-Project) | 38,912,004 | 4.44 |
| Proposed Project (post-Project) | 52,009,717 | 5.94 |
| Post-Project Increment (net change between 2014 Baseline and proposed Project) | 13,097,713 | 1.5 |
| Total Electricity Demand from Industrial Sector 2020 ^b | 38,825,000,000 | 4,432.08 |
| Percent Total Industrial Demand 2020 | 0.034% | 0.034% |
| Significant? ^c | NO | NO |

Source: CEC 2014a.

a Daily instantaneous electricity demand derived by dividing annual kWh usage by 365 to establish a daily usage, then 24 to establish hourly, then 1000 to convert kWh to MW.

b Using only industrial electricity demand projected for SCE is conservative because it assumes an electricity demand that is less than the total energy demand across all sectors.

c South Coast AQMD’s energy threshold for electricity used is one percent of supply.

¹² This includes monitoring monthly bills to reduce wasteful expenditures, as well as regularly conducting equipment inspections and maintenance to ensure all systems are operating efficiently.

4.3.2 Analysis of Energy Impacts

EN-1: Project Impacts on Electricity Loads for Peak and Base Periods

South Coast AQMD Checklist Question d) Would the proposed Project create any significant effects on peak and base period demands for electricity?

Applicable South Coast AQMD Significance Criteria: The project results in substantial depletion of existing energy resource supplies. The Project causes an increase in energy use (e.g., electricity or fuel) of one percent or greater.

This section evaluates whether the proposed Project's potential increased energy demand could be accommodated by SCE's current capacities. This analysis is based on: baseline year 2014 electricity consumption at Quemetco and in Los Angeles County; CEC demand forecasts for the SCE service area; and discussions with SCE directly.

The proposed Project's electricity consumption for the year 2014 (baseline) and 2019 proposed Project conditions are presented in Table 4.3-2. The changes associated with the proposed Project would not be implemented until after 2020. Thus, data for total electricity demand from the industrial sector from 2020 is used to determine the percent electricity demand represented by the proposed Project. The proposed Project's additional electricity consumption is projected to be 13,097,713 kWh per year and 1.5 MW of instantaneous electricity demand on a daily basis.

The proposed increase in throughput would result in an increase in electricity usage (albeit not proportional to the throughput increase given the facility is already operating 24 hours per day, even during the Compliance Stop Period). Quemetco anticipates that the increased electricity demand would occur during morning periods when the existing Compliance Stop Period would be eliminated. Because mornings are the time of day when peak load periods may occur for electricity service providers, the proposed Project would increase the peak period demands on electricity loads.

As shown in Table 3.3-1, in 2014, the non-residential electricity use in Los Angeles County was 49,211,000,000 kWh per year. Since the analysis in this EIR relies on year 2014 for the baseline, the proposed Project's electricity use is compared to the non-residential electricity use in Los Angeles County data from year 2014 in order to determine if the electricity impacts are potentially significant. An increase in electricity usage of 13,097,713 kWh per year represents a 0.0266% increase in Los Angeles County electricity usage from 2014.

The CEC projects the electricity consumption for SCE in 2020 is 136,079 million kWh for all sectors and 38,825 million kWh for the industrial sector. The proposed Project increase would be 0.0096% of all sectors and 0.034% of the industrial sector. To determine whether a project would cause a significant impact, the South Coast AQMD determines significance for increased energy by comparing the potential increases in electricity demand to one percent of supply. As shown in

Table 4.3-2, the increased use of electricity during operation would not exceed the significance threshold of one percent (1%) of supply. Since the proposed Project would not exceed the South Coast AQMD's energy threshold of one (1%) percent of supply for electricity usage, implementation of the proposed project would have less than significant energy impacts.

In the event of unexpected electricity interruption by SCE, Quemetco currently has two diesel emergency ICE and one natural gas ICE to supply backup power to Busch units F, I and J, the reverberatory scrubber blower, the reverberatory baghouse blower, the electric arc furnace scrubber blower, the electric arc furnace baghouse blower, and the WESP. When there is a power outage, the ICEs will automatically start-up (without having to wait for an operator to manually turn them on). The period between when the loss of power occurs and the backup power turns on is approximately 15-20 seconds.

During the transition to back up power, the emission controls equipment (fugitive and main source) continues to operate due to system momentum. Specifically, the fans that generate negative pressure in Busch units F, I and J do not instantaneously stop during the 15-20 second transition to backup power because momentum keeps them spinning and maintaining some negative pressure until full operation of the backup ICEs occurs. The proposed Project will not impact the functionality or use of the ICEs used to supply backup power in the event of an unexpected power outage.

For these reasons, the proposed Project would have a less than significant impact on electricity loads for peak and base periods. Since no significant impacts to electricity loads for peak and base periods were identified, no mitigation measures are required.

EN-2: Wasteful Energy Consumption

South Coast AQMD Checklist Question f) Would the proposed Project result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation?

Applicable South Coast AQMD Significance Criteria: The project uses energy resources in a wasteful and/or inefficient manner.

Quemetco currently processes up to 600 tpd of lead acid batteries and similar materials and converts them into refined lead, meeting customer specifications of California manufacturers for reuse in industrial and manufacturing processes. The proposed Project would permit the processing of an additional 150 tpd of used lead acid batteries and similar materials, without requiring physical construction of new facilities or expanded facilities, either on- or off-site. Increasing the capacity of the existing Quemetco facility would, in turn, reduce diversion of used lead acid batteries to other facilities located out of state or overseas, which, in the existing baseline condition, consumes energy associated with the transport and export of these materials.

For example, spent lead acid batteries not recycled within the South Coast AQMD region are exported out of Southern California. The most common domestic destinations are battery

recycling facilities in Texas or further east; however, a significant tonnage is also sent to Korea and Mexico. Based on market data, it is estimated that currently up to 40% of California's used batteries are transported out of the country via ships to various countries in Asia and via truck and rail to Mexico (Battery Council International, 2019). Such export, whether domestic or foreign, results in energy-related air pollutant and GHG emissions, as well as potential environmental impacts associated with the less stringent regulations for lead acid battery recycling outside of California.

Because the proposed Project does not require any physical changes to the existing Quemetco facility, no construction-related energy consumption would occur as a result of the proposed Project. Thus, no potentially significant environmental impacts due to wasteful, inefficient, or unnecessary consumption of energy resources during project construction are expected.

While operation of the proposed Project will increase energy consumption over the existing baseline, this energy use would not be wasteful or inefficient, because: (1) the existing facility's infrastructure will be used to increase the existing facility's efficiency and output, reducing the need to construct new facilities elsewhere; and (2) regional energy resources currently utilized to divert used lead acid batteries to destinations outside the region, state and country would be reduced (this analysis doesn't take credit for these unquantifiable reductions). For these reasons as well as the elimination of fuel wasted during the existing Compliance Stop Period, operational energy impacts would also not be wasteful and inefficient, and no potentially significant impact would occur. Since no significant adverse impacts were identified for this environmental checklist question, no mitigation measures are required.

EN-3: New or Expanded Utility Facilities

South Coast AQMD Checklist Question g) Would the proposed Project require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunication facilities.

Applicable South Coast AQMD Significance Criteria: An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.

The proposed Project includes an increase in operation levels, leading to increased consumption of natural gas, oxygen, electricity, diesel, and gasoline. The proposed Project does not contain any components that would change or increase the use of existing telecommunication facilities or services available to the Quemetco facility. Therefore, the proposed Project does not require relocation, construction, or expansion of telecommunication facilities.

As described in Section 2.5.VI. of the NOP/IS (refer to Appendix A), SCE has indicated that it can and will serve the expanded demand for electricity as part of the proposed Project without any

groundbreaking required (Zavala, Joe, 2015).¹³ Prior to the publication of the NOP/IS in August 2018, SCE verbally re-confirmed their ability to serve the proposed Project's expanded electricity demand and did not comment to the contrary. Therefore, the proposed Project does not require relocation, construction, or expansion of electric power facilities.

As described in Section VI. of the NOP/IS (refer to Appendix A), SCG has indicated that it can and will serve the expanded demand for natural gas if the proposed Project is implemented, and that the existing natural gas delivery system has sufficient capacity to handle the projected increase (Yee, Michael and Warwick, Joshua, 2015 and 2016).¹⁴ Prior to the publication of the NOP/IS in August 2018, SCG verbally re-confirmed its ability to serve the expanded natural gas demand and did not comment to the contrary. Therefore, the proposed Project does not require relocation, construction, or expansion of natural gas facilities.

Given that the anticipated increases in natural gas and electricity would not require relocation or construction of new or expanded utilities facilities, and that there is no anticipated impact on telecommunication facilities, the proposed Project would not require or result in the relocation or construction of new or expanded electric power, natural gas, or telecommunication facilities. Since no construction or relocation of utilities would be required, the proposed Project would not result in any significant adverse environmental impacts. Since no significant adverse impacts were identified for this environmental checklist question, no mitigation measures are required.

4.3.3 Significance Determination

Because the proposed Project's impacts would be less than significant, the proposed Project does not require any mitigation measures related to energy demand.

4.3.4 Cumulative Energy Impacts

The Quemetco facility is located within the City of Industry jurisdiction in the industrial land use area. The nature of the activities under the proposed Project would be the same as activities that are currently being conducted at Quemetco's facility, which do not conflict with the City of Industry's General Plan Land Use Map nor trigger any land use permits or modifications (refer to Appendix A: NOP/IS, Chapter 2, Section X: Land Use and Planning and Chapter 6 of this EIR).

South Coast AQMD assessed regional energy impacts in its 2016 AQMP and related programmatic EIR (South Coast AQMD, 2016). Further, the SCAG assessed regional energy impacts in its 2016 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) programmatic EIR (SCAG, 2016). Anticipated demand for transportation-related fuels is expected to decrease due to

¹³ Zavala, Joe. 2015. Service Planner. Southern California Edison. Telephone conversation with Trinity Consultants, Inc. on March 10, 2015 confirming that Southern California Edison can and will serve the expanded electricity demand as part of the Capacity Upgrade Project.

¹⁴ Yee, Michael and Joshua Warwick. 2015 and 2016. Senior Account Representative. Southern California Gas (SCG). Telephone conversations and email verification with Valerie Rosenkrantz of Trinity Consultants, Inc. on March 23, 2015 and May 23, 2016 confirming that SCG can and will serve the increased gas demand as part of the Quemetco Capacity Upgrade Project.

an increase in carpooling and transit use, and better fuel economy. However, the regional transportation system has the potential to increase petroleum and non-renewable fuel consumption. Overall, the increase in energy consumption due to population growth is expected to outpace the projected per capita decrease in energy consumption.

In summary, regional cumulative baseline energy impacts as assessed through the combination of projected transportation projects in the 2016 RTP/SCS and control measures involved in the 2016 AQMP would be considered cumulatively significant.

CEQA Guidelines Section 15064(h)(1) requires that a “lead agency consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable.” Where a lead agency is examining a project with an incremental effect that is not cumulatively considerable, the lead agency need not consider the effect significant, but must briefly describe the basis for concluding that the incremental effect is not cumulatively considerable.

The proposed Project’s contribution to the cumulative energy impact is not considered cumulatively considerable. The proposed Project will only increase electricity use at SCE by 0.0096% for all sectors and 0.034% for the industrial sector. This increase is a very small fraction of the 1% significance threshold. In addition, SCE has confirmed its ability to meet the proposed Project’s increased demand for electricity.

4.4 HAZARDS AND HAZARDOUS MATERIALS

Quemetco recycles hazardous materials including lead-bearing feed stock such as used lead-acid batteries. The facility's recycling process utilizes hazardous materials including sulfuric acid, chemical reagents, and other additives. Quemetco's operations also produce a refined lead product for its customers, which is hazardous because of the lead content in the final product. The facility's operations generate hazardous wastes which include lead-bearing waste (e.g., slag) and non-hazardous associated residuals (e.g., metals and plastics).

The management of these hazardous materials as feed stock or as hazardous wastes are governed by the CUPA program and the DTSC RCRA Hazardous Waste Facility Operations and Post-Closure Permit. These hazardous materials and hazardous wastes are common to lead smelting facilities worldwide and are a function of the materials processed, operation and maintenance of the facility, and waste handling procedures.

As described in Section 2.6: Project Description, the proposed Project would increase the daily furnace throughput limit from 600 to 750 tpd; this EIR evaluates an increase to the Year 2014 baseline daily throughput from 510 tons to 750 tons. The increase in throughput is expected to result in increased processing of lead and sulfuric acid, and a proportional increase in the use of additives such as limestone and cobbled steel (Table 2-1).

The increase in processing would also result in an increase in the volume of wastewater, air emissions, and solid wastes created during the facility's recycling process, all of which contain hazardous constituents. As described in Section 2.6: Project Description, the proposed Project would also increase the current permitted use of coke materials as a smelting reagent (whether calcined coke, petroleum coke or a combination thereof), resulting in additional smelting reagents being delivered to the facility, passed through the rotary/kiln feed dryer, and utilized in the reverberatory furnace and electric arc furnace. Petroleum coke and calcined coke are listed as hazardous under Quemetco's Fire Prevention Plan for flammability with a score of 1, for "slightly hazardous" (refer to Table 3.4-1, Hazardous Materials Classification).

The proposed Project would not involve the use of any hazardous materials that are not currently used at the facility. Further, the proposed Project would not involve the use of hazardous materials in locations where they are not currently used other than passing petroleum coke through the rotary/kiln feed dryer and using it as a smelting reagent in the reverberatory furnace and electric arc furnace, further discussed below. In addition, the proposed Project would not generate any new types of hazardous waste streams.

Table 4.4-1 contains a comparison of the South Coast AQMD's environmental checklist between the 2018 NOP/IS and the updated checklist in 2019. Table 4.4-1 also identifies which questions will be addressed in Chapter 4 of this EIR. One of the changes made to the South Coast AQMD's environmental checklist in 2019 includes one new question that requires a new analysis in Section 4.4: Hazards and Hazardous Materials.

Table 4.4-1 Comparison of South Coast AQMD’s Environmental Checklist Questions in the 2018 NOP/IS to the Updated Questions in 2019 for the Topic of Hazards and Hazardous Materials

| South Coast AQMD Environmental Checklist Questions in the 2018 NOP/IS | Updated South Coast AQMD Environmental Checklist in 2019 | Changes? | Evaluated in this EIR? |
|---|---|---|--|
| Would the project: | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials? | a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? | a) Create a significant hazard to the public or the environment through the routine transport, use, or and disposal of hazardous materials? | Rephrased but without making any substantial changes to the intent. Further evaluated in this EIR as determined in the NOP/IS. |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment? | b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? | Rephrased but without making any substantial changes to the intent. Further evaluated in this EIR as determined in the NOP/IS. |
| c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | None. | No changes. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required. |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment? | d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment? | None. | No changes. Further evaluated in this EIR. |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or a private airstrip, would the project result in a safety hazard for | e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people | e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport or a private airstrip , would the project result in a safety hazard for | Rephrased but without making any substantial changes to the intent. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter |

| | | | |
|--|---|--|--|
| people residing or working in the project area? | residing or working in the project area? | people residing or working in the project area? | 4 of the EIR is not required. |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | None. | No changes. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required. |
| g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | g) Significantly increased fire hazard in areas with flammable materials? | g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? g) Significantly increased fire hazard in areas with flammable materials? | Further evaluated in this EIR as a new checklist question. |

4.4.1 Hazards and Hazardous Materials Impacts

Significance Criteria

Based on the assessment of the environmental checklist questions summarized in Table 4.4-1¹⁵, this section of the EIR is focused on the following South Coast AQMD checklist questions and the applicable South Coast AQMD significance criteria:

- South Coast AQMD Checklist Question a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?
 - Applicable South Coast AQMD Significance Criteria: Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.
- South Coast AQMD Checklist Question b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?
 - Applicable South Coast AQMD Significance Criteria: Exposure to hazardous chemicals in concentrations equal to or greater than the ERPG 2 levels.

¹⁵ Table 4.4-1 documents that the NOP/IS determined that hazards associated with the proposed Project being located within one-quarter mile of an existing or proposed school, being located within an airport land use plan or within two miles of a public airport or public use airport or conflicting with an adopted emergency response plan or emergency evacuation plan would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.

- South Coast AQMD Checklist Question d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?
 - Applicable South Coast AQMD Significance Criteria: None.
- South Coast AQMD Checklist Question g) Significantly increased fire hazard in areas with flammable materials?
 - Applicable South Coast AQMD Significance Criteria: Non-conformance to National Fire Protection Association standards.

Project-specific and cumulative adverse hazards and hazardous materials impacts associated with increased throughput and increased generation of hazardous waste during operational activities associated with implementing the proposed Project are evaluated in this EIR.

4.4.2 Analysis of Hazards and Hazardous Materials Impacts

The proposed Project would not involve the use of any hazardous materials that are not currently used at the facility, involve the use of hazardous materials in locations where they are not currently used (other than passing petroleum coke through the rotary/kiln feed dryer and using it as a smelting reagent in the reverberatory furnace and electric arc furnace, further discussed below), or generate any new types of hazardous waste streams; it would only increase the quantity of the existing hazardous materials handled and hazardous wastes disposed as summarized in Table 4.4-2.

Table 4.4-2 Summary of Hazardous Materials and Hazardous Waste

| Scenario | 2014 Baseline Conditions (pre-Project) | Proposed Project (post-Project) | Post-Project Increment |
|--|--|---------------------------------|------------------------|
| Throughput Process Limits in Permits (tpd) | 600 | 750 | 150 |
| 2014 Baseline to Proposed Permitted Throughput Process Limits (tpd) | 510 | 750 | 240 |
| Hazardous Materials | | | |
| Additives (tpd): | | | |
| 1) Smelting Reagents/Total Coke Material Processed in Rotary/Kiln Feed Dryer & Reverberatory Furnace | 7.3 | 11.1 | 3.8 |
| a. Calcined Coke | 7.3 | 0 | -7.3 |
| b. Petroleum Coke | -- | 11.1 | 11.1 |
| 2) Limestone | 2.4 | 3.8 | 1.4 |
| 3) Cobbled Steel | 9.4 | 13.2 | 3.8 |
| 4) Other additives ^c | 7.4 | 8.9 | 1.5 |
| Soda Ash (tpd) | 58.2 | 87.3 | 29.1 |
| Hazardous Wastes | | | |

| Scenario | 2014 Baseline Conditions (pre-Project) | Proposed Project (post-Project) | Post-Project Increment |
|-------------------------------------|--|---------------------------------|------------------------|
| Waste Streams (tpy): | | | |
| Solid Wastes (landfilled) | 1,613 | 1,892 | 252 |
| a. Metals (recycled) ^d | 6,340 | 9,440 | 3,100 |
| b. Plastics (recycled) ^e | 11,232 | 15,346 | 4,114 |
| c. Slag (landfilled) | 12,639 | 17,292 | 4,653 |
| Liquid Wastes ^f | - | - | - |

a Feed stock tons per month (tpm) calculated by multiplying throughput limits in tons per day by 365 days/year, and dividing by 12 months.

b The amount and type of other additives that may be used are determined by the customer and can consist of arsenic, caustic soda beads, cobalt, metallic sodium, pyrite, red phosphorus, silver, sodium nitrate, sulfur, and tin.

c Metal waste is not considered hazardous but is included in this table for informational purposes. Metal battery casings are washed of all lead bearing materials prior to shipping for recycling.

d Plastic waste is included in this table for informational purposes. Plastic waste is washed and dried in the recovery process to ensure it is non-hazardous; it is then tested to determine whether it is classified as a hazardous or non-hazardous material and the analysis always results in a non-hazardous finding. For this reason, Quemetco handles the plastic waste as a non-hazardous material and sends it a recycling facility.

e Sulfuric acid is received in the WWTP as a neutralizer and is not a hazardous waste stream.

f Petroleum coke is currently used in the refining process per customer specifications and this quantity of existing petroleum coke usage is included within “other additives.”

g Project description includes allowing petroleum coke to be used as a smelting reagent in addition to or in lieu of calcined coke. This table presents the assumption of 0 calcined coke used post-project to estimate potential worst-case emissions for the proposed Project, through assuming that calcined coke (chunky and fine) would be completely replaced by petroleum coke; however, the continued use of calcined coke (chunky and fine) and the new use of petroleum coke are expected to be used after implementation of the proposed Project.

The South Coast AQMD checklist questions analyzed in this section address whether various aspects of hazardous materials and hazardous waste impacts from the proposed Project would create a significant hazard to the public or the environment. As discussed in Section 4.2.2: Environmental Impact Assessment Methods an HRA was performed for the proposed Project which produces estimates of health risks for people who are exposed to various amounts of toxic substances by combining results of studies on the health effects of various animal and human exposures to toxic air pollutants with results of studies that estimate the level of human exposure at various distances from the pollutant sources.

As discussed in Section 4.2.3: Environmental Impact Analysis, the results of the HRA demonstrate that the potential incremental (net) increase in health risk attributable to the proposed Project would be less than significant. The net potential cancer risk impacts from the proposed Project would be less than significant for MEIR and MEIW receptors. The potential non-cancer risk incremental (net) impacts are also less than significant.

The applicability of several hazardous material and hazardous waste programs, including CalARP, CalOSHA PSM, and U.S. EPA RMP, is determined by the maximum quantity of each hazardous chemical stored onsite at any given time (refer to Table 3.4-4). While the frequency of feed stock and additive material deliveries to the facility will increase under the proposed Project, so will the rate of processing; as such, the facility does not anticipate any change in the total maximum

quantity of these materials stored onsite relative to current quantities stored. Therefore, the applicability of these regulations is not anticipated to change due to the proposed Project.

HAZ-1: Transport, Use and Disposal of Hazardous Materials and Hazardous Waste

South Coast AQMD Checklist Question a) – Would the proposed Project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Applicable South Coast AQMD Significance Criteria: Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

A potential impact would occur if activities involving the handling of hazardous materials or hazardous wastes via the transport, use, or disposal could create a significant hazard to the public or the environment due to hazardous chemical exposure.

The potential for exposure would primarily be to Quemetco personnel or onsite contractors who directly handle, or work in the immediate area of any hazardous materials or hazardous wastes encountered during operation. Improper handling of hazardous materials or hazardous wastes can lead to adverse health effects for the handler, and potentially for other workers in the immediate vicinity. Because members of the public would not be allowed entry to the facility without being fitted with protective gear, given safety training, and then escorted by Quemetco personnel, the risk of exposure to hazardous materials or hazardous wastes for members of the public is considerably lower than for the operators.

The potential for the proposed Project to create a significant hazard to the public or the environment due to the routine transport, use, or disposal of hazardous materials is evaluated in this section. Specifically, this section evaluates checklist question HAZ-1 as it relates to the ERPG-2 levels, which is South Coast AQMD's significance criteria for this impact area. First, the various activity levels are described for transport, use, and disposal. Then, ERPG-2 levels are examined in the context of the proposed Project. ERPGs are air concentration guidelines for single exposures to agents. They are intended for use as tools to assess the adequacy of accident prevention and emergency response plans, including transportation emergency planning.

Transport

As discussed in Section 4.6: Transportation, the proposed Project would result in an increase in truck trips to transport feed stock and additives to the facility.

As described in Section 2.4: Project Background, feed stock is currently delivered primarily via trucks from scrap yards, battery manufacturers, and used battery brokers located throughout the western United States to the Quemetco facility. Trucks access the Quemetco facility through a controlled gate by appointment which is described in more detail in Section 2.4.1: Delivery of Feed Stock. After the truck drops off the feedstock, a forklift moves the feed stock into the battery

wrecker building. Additionally, one railcar delivery containing approximately 42 tons of lead-bearing scrap arrives at the facility every few years. The scrap is offloaded via an onsite loader from the rail receiving building and transported to the containment building. The main hazards associated with the transport of the feed stock include the risk of burn, fire or explosion, or electrical shock. Lead-acid batteries contain battery acid which is corrosive and can cause burns; battery terminals may contain residual electricity which could cause fire or explosion if not handled properly; and, battery exposure to moisture could lead to an electrical shock. As detailed below, the transport of hazardous materials and hazardous waste (including lead-acid batteries) is highly regulated, and there are several requirements and precautions in place to ensure the transport is done safely, including securing the batteries before transport, labeling/placarding requirements, and transport weight limits. The risks associated with the transport of lead-acid batteries exist in the baseline conditions, and any increase in feed stock delivered under the proposed Project will be processed in the same manner. Therefore, additional hazards (beyond those that exist at the baseline) associated with transport of the feed stock are not expected as a result of the proposed Project.

All additives are intermittently delivered to Quemetco by truck from regional suppliers or distributors and stored in enclosed containers in the chemical product warehouse for use as needed. The additives are stable and non-reactive under ambient conditions and are delivered to the facility in closed containers, so the main hazard associated with the transport of the feed stock additives is fugitive dust generation, which may irritate the eyes, skin, or respiratory tract and lead to congestion and/or shortness of breath. The risk associated with the transport of feed stock additives exist in the baseline conditions, and any increase in additives delivered under the proposed Project will be processed in the same manner. Therefore, additional hazards (beyond those that exist at the baseline) associated with transport of the feed stock additives are not expected as a result of the proposed Project. Other hazards associated with the use and disposal of these materials are addressed below.

The proposed Project would also result in an increase in truck trips leaving the facility transporting plastics and metals for recycling, slag for disposal, and finished product to customers. The number of railcar trips to export finished product would also increase as shown in Table 4.6-2. Because the proposed Project will not involve the transport of any new hazardous materials, additional hazards are not expected.

As described in Section 2.4: Project Background, plastic waste is stored in truck trailers, and when capacity is reached, the trailers are hauled offsite via truck to a plastics recycling facility in Bakersfield, California. Prior to hauling away for recycling, the plastic waste is washed and dried in the recovery process to remove the hazardous materials and then it is tested to determine whether it is classified as a hazardous or non-hazardous material. To date, the testing results have consistently concluded that the plastics are not hazardous. In the event that plastics testing results in a hazardous determination, the plastics would be rewashed and retested until the test results in a nonhazardous finding. For this reason, Quemetco handles the plastic waste as a non-hazardous material. Any increase in plastic waste generated by the proposed Project will be handled in the same manner and trucked to the same plastics recycling facility. While plastic waste is not a hazardous material, this analysis addresses plastic waste in this section for informational purposes.

Scrap metal is placed in steel roll-off bins, which are hauled offsite via truck to a local steel recycling facility in Southern California when they reach capacity. Any increase in metal waste generated under the proposed Project will be handled in the same manner and trucked to the same steel recycling facility. Metal waste, which includes metal battery casings that are washed of all lead bearing materials prior to recycling, is not subject to management as hazardous waste since it meets the regulatory definition¹⁶ of scrap metal and is recycled. This analysis is included for informational purposes.

Every batch of slag waste generated is tested and sent to either a RCRA or a non-RCRA landfill, based on the composition of each load. The existing slag disposal trucks have some capacity for additional slag volume; however, the analysis has conservatively included 178 additional slag disposal trips per year (see Sections 3.6 and 4.6: Transportation) to accommodate the proposed Project's increased production. Any increase in slag waste generated under the proposed Project will be handled in the same manner and trucked to the same RCRA or non-RCRA landfills, based on the composition of each load, as in the existing conditions

Hazardous materials and hazardous waste transportation in California are highly regulated by U.S. EPA, U.S. DOT, OSHA, DTSC, and the California Highway Patrol (CHP). Specifically, transport regulations administered by these agencies are detailed in 40 CFR Parts 260-273 (U.S. EPA), 49 CFR Parts 100-185 (U.S. DOT), 29 CFR part 1911 (OSHA), 22 CCR Sections 66263.10- 66263.50 (DTSC), and 13 CCR Sections 1160-1167 (CHP). Rules and regulations regarding hazardous material and hazardous waste transportation contain procedures (specific to the hazardous material or hazardous waste type or classification) to limit the potential exposure to workers, the public, and the environment. Under the proposed Project, the same regulations and requirements will continue to apply to the Quemetco facility and the transportation of hazardous materials to and from the facility. For the reasons described herein, the potential impact of the proposed Project on the transport of hazardous materials and hazardous wastes would be less than significant.

Use

The increase in permitted throughput limit from 600 tpd to 750 tpd under the proposed Project would result in an increase in hazardous materials used and hazardous wastes generated, as summarized in Table 4.4-2. While the frequency of feed stock and additive material deliveries to the facility will increase under the proposed Project, so will the rate of processing; therefore, the facility does not anticipate any change in the total maximum quantity of these materials stored onsite relative to current quantities stored. The proposed Project will neither involve the use of any hazardous materials that are not currently used at the facility nor involve the use of hazardous materials in locations where they are not currently used, other than passing petroleum coke through the rotary/kiln feed dryer and using it as a smelting reagent in the reverberatory furnace and electric arc furnace.

The hazards associated with the use of increased petroleum coke at the facility, in lieu of or in addition to calcined coke, are evaluated below. Petroleum coke is a water insoluble solid material derived from oil refinery processes and composed primarily of carbon. Petroleum coke is stable

¹⁶ The regulatory definition of scrap metal pursuant to 22 CCR 66260.10.

and non-reactive under ambient conditions. Material handling of petroleum coke can generate dusts, which may irritate the eyes and skin, and/or cause shortness of breath and cough. Petroleum coke generally has a higher moisture content than calcined coke, so hazards associated with fugitive dust generation as a result of material handling are lower than that of calcined coke.

Calcined coke is similarly a water insoluble solid material composed primarily of carbon. Calcined coke is derived from thermally processing petroleum coke in a rotary dryer to drive off excess compounds and moisture. Calcined coke is also stable and non-reactive under ambient conditions. Like that of petroleum coke, material handling of calcined coke can generate dusts. Calcined coke dusts may be a mild irritant to the eyes and skin and a mild toxin if inhaled. Repeated overexposure to calcined coke dusts may also irritate the respiratory tract and/or cause congestion, inflammation, coughing, and shortness of breath.

Quemetco has safety measures and practices in place for its employees to prevent worker exposure to toxic materials and minimize hazards associated with material handling. Both petroleum coke and calcined coke are delivered to the facility in closed containers, and the containers are not opened until they are in the process buildings under negative pressure and managed by Quemetco employees wearing protective uniforms (or Tyvek® suits) and respirators. Therefore, the current safety measures in place mitigate the potential hazards associated with material handling of petroleum coke and calcined coke.

In addition to the hazardous materials outlined in Table 4.4-2, the proposed Project's increased transportation would potentially increase diesel fuel use at the facility's existing underground storage tank (UST). A potential increase of diesel fuel use would mean more frequent fueling and re-fueling of the facility's UST.

Quemetco has procedures in place to ensure safe UST filling, including continuously monitoring of diesel transfer operations and ensuring the available volume in the UST is greater than the volume of diesel to be transferred. The UST is permitted by South Coast AQMD (Permit No. M96094), and the facility maintains a UST Plan, per CUPA requirements. This plan outlines the safety measures (e.g., safety training, best management practices, spill control and cleanup procedures, and emergency response procedures and contacts) that the facility must take to manage the diesel fuel in the UST and references the applicable sections of the ERCP in the event of an actual or suspected emergency or the triggering of an alarm.

Under the proposed Project, Quemetco will continue to operate the UST pursuant to the permit issued by South Coast AQMD, and in accordance with the standard best practices and monitoring and safety measures as outlined in the UST Plan. As such, the potential increased use of diesel fueling and re-fueling at the UST would not create a significant new hazard to the public or the environment.

Natural gas consumption in the rotary/kiln feed dryer and reverberatory furnace is also expected to increase under the proposed Project given the increase in use of these operations, as shown in Table 2-1 of Chapter 2 – Proposed Project. The facility receives natural gas via pipeline from SCG. Therefore, Quemetco does not store natural gas onsite (i.e., there are no natural gas storage tanks at Quemetco).

The hazards associated with the use of natural gas are also assessed for informational purposes. Natural gas consists primarily of methane and ethane and is transported to Quemetco via pipeline under pressure, which is owned and operated by SCG. Natural gas is extremely flammable and may explode if heated, so it should be stored in a well-ventilated place and kept away from heat, sparks, open flames, and ignition sources. As mentioned previously, the facility does not store natural gas onsite. Because the facility does not store natural gas onsite, the increased consumption of natural gas will not pose any additional risks such as tank failure, rupture, or accidental release. This increased consumption will not change the amount of natural gas onsite at any given time and natural gas will be supplied and used in a manner consistent with current conditions. Further, natural gas is piped directly to the equipment which operates with natural gas; any increase in natural gas consumption would not involve any new operator interface and therefore no new risks. Therefore, the proposed Project's potential increased natural gas consumption would not create a significant new hazard to the public or the environment.

South Coast AQMD references ERPG-2 levels as significance criteria for public exposure to hazardous chemicals due to their use. The Emergency Response Planning committee of the American Industrial Hygiene Association develops ERPG levels, which are used to provide short-term exposure level guidelines for airborne concentrations of highly toxic, volatile, high-priority chemicals (AIHA, 2016). ERPGs serve as thresholds to protect the public and are not intended as guidelines for workers who are routinely exposed to background chemical releases (NOAA, 2018). There are three tiers of ERPGs:¹⁷

- ERPG-1: Maximum airborne concentration below which nearly all individuals could be exposed for up to one hour without experiencing more than mild, transient adverse health effects or without perceiving a clearly defined objectionable odor.
- ERPG-2: Maximum airborne concentration below which nearly all individuals could be exposed for up to one hour without experiencing or developing irreversible or other serious health effects or symptoms which could impair an individual's ability to take protective action.
- ERPG-3: Maximum airborne concentration below which nearly all individuals could be exposed for up to one hour without experiencing or developing life-threatening health effects.

Table 4.4-3 presents the ERPG-2 concentration levels for airborne contaminants relevant to Quemetco's emissions.

¹⁷ <https://response.restoration.noaa.gov/oil-and-chemical-spills/chemical-spills/resources/emergency-response-planning-guidelines-erpgs.html>

Table 4.4-3 ERPG 2 Levels

| Contaminant of Concern | CAS Number | ERPG 2 Level |
|------------------------|------------|----------------------|
| 1,3-Butadiene | 106-99-0 | 500 ppm |
| Acetaldehyde | 75-07-0 | 200 ppm |
| Benzene | 71-43-2 | 150 ppm |
| Beryllium | 7440-41-7 | 25 µg/m ³ |
| Formaldehyde | 50-00-0 | 10 ppm |
| Hydrogen Sulfide | 7783-06-4 | 30 ppm |
| Mercury (Vapor) | 7439-97-6 | 0.25 ppm |
| Methyl Bromide | 74-83-9 | 50 ppm |
| Methyl Chloride | 74-87-3 | 1000 ppm |
| Styrene | 100-42-5 | 250 ppm |
| Toluene | 108-88-3 | 300 ppm |
| Vinyl Chloride | 75-01-4 | 5000 ppm |
| Vinylidene Chloride | 75-35-4 | 500 ppm |

Source: AIHA, 2016

As described in Section 4.2: Air Quality and GHG Emissions, an HRA was performed to determine if the net increase in TAC emissions from the proposed Project would result in significant health risks at worker, resident, and sensitive receptor locations surrounding the facility. The HRA modeled emission rates for contaminants of concern, including those listed in Table 4.4-3 (see Appendix D.1), for the peak 1-hour exposure, and the resulting concentrations were less than ERPG-2 levels. Based on the results of the HRA, the proposed Project's potential incremental (net) health risk impacts would be less than the South Coast AQMD's significance thresholds.

As mentioned above, the ERPGs are designed to establish the lowest levels at which health effects will begin to be experienced at their respective toxic endpoints (i.e., lungs) for up to a one-hour exposure. Emissions of the contaminants of concern would be vented through Quemetco's existing air pollution control systems, and compliance with South Coast AQMD Rule 1420.1 (which limits lead, arsenic, benzene, and 1,3-butadiene concentrations below ERPG-2 levels) is required under the proposed Project. As such, hazardous material use associated with the proposed Project would not result in ERPG-2 concentration level exceedances. Therefore, hazardous material use associated with the proposed Project would not create a significant hazard to the public or the environment relative to ERPG-2 values.

Hazardous material use in California is regulated by U.S. EPA, Occupational Safety and Health Administration (OSHA), CalOSHA, CalARP, and CUPA agencies while hazardous waste is regulated by DTSC. Rules and regulations regarding hazardous material use contain specific procedures to ensure that such materials are managed in such a manner as to limit the potential exposure to workers, the public, and the environment. Under the proposed Project, all such current regulations, plans, and procedures for the use of hazardous materials as well as the handling of hazardous waste will continue to apply to the Quemetco facility. For the reasons described herein,

the potential impact of the proposed Project based on the use of hazardous materials and the handling of hazardous waste would be less than significant.

Disposal

The proposed Project's increase in permitted throughput limit from 600 tpd to 750 tpd would result in an increase in hazardous waste generated, as summarized in Table 4.4-2. The quantity of hazardous waste generated would increase under the proposed Project, and given the space onsite to hold hazardous wastes is defined and there are no plans to expand this area, the rate of disposal will also increase; therefore, the facility does not anticipate any change in the total maximum quantity of hazardous wastes stored onsite relative to current quantities stored. The proposed Project will neither involve the generation of hazardous wastes that are not currently generated at the facility nor involve the disposal of hazardous wastes to locations where they are not currently disposed as discussed below¹⁸.

Each load of slag is analyzed according to the United States Environmental Protection Agency's (U.S. EPA) Toxicity Characteristic Leaching Procedure (TCLP).¹⁹ The slag is sorted based on whether it meets the criteria of a hazardous waste or not as determined by the TCLP. Increases in slag waste will be handled in the same manner and hauled via truck to the same RCRA or non-RCRA landfills, based on the composition of each load.

Hazardous waste disposal in California is highly regulated by U.S. EPA, DTSC, and CUPA agencies under RCRA and state hazardous waste laws. Rules and regulations regarding hazardous waste disposal contain specific procedures to ensure that such wastes are managed in such a manner as to limit the potential exposure to workers, the public, and the environment. Under the proposed Project, Quemetco will continue to comply with all such applicable regulations. For the reasons described herein, the potential impact of the proposed Project on the disposal of hazardous wastes would be less than significant.

While the proposed Project would increase the quantity of hazardous materials and hazardous wastes transported, hazardous materials used and stored, hazardous waste generated and stored, and hazardous wastes disposed or recycled, no new hazardous materials or hazardous waste regulations would be triggered. Quemetco will continue to comply with all applicable design codes and regulations, and conform to federal, state, and local rules, regulations, policies, and procedures concerning transport, use, and storage of hazardous materials; and the transport, generation, storage, and disposal of hazardous wastes. For these reasons, the potential impact of the proposed Project on the public or the environment from the transport, use, and storage of hazardous materials; and the transport, generation, storage, and disposal of hazardous wastes would be less than significant. No mitigation measures would be required.

¹⁸ Recycled materials are not classified as hazardous wastes.

¹⁹ U.S. EPA, SW-846 Test Method 1311: Toxicity Characteristic Leaching Procedure. <https://www.epa.gov/hw-sw846/sw-846-test-method-1311-toxicity-characteristic-leaching-procedure>

HAZ-2: Potential Release of Hazardous Materials and Hazardous Wastes

South Coast AQMD Checklist Question b) – Would the proposed Project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Applicable South Coast AQMD Significance Criteria: Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

Releases of hazardous materials and hazardous wastes at a facility can occur as a result of natural events, such as earthquakes, and non-natural events, such as mechanical failure or human error. A potential impact would occur if reasonably foreseeable upset and accident conditions involving the release of hazardous materials and hazardous wastes into the environment could result in public or environmental exposure. The potential of the proposed Project to create a significant hazard to the public or the environment due to reasonably foreseeable upset and accident conditions involving the release of hazardous materials and hazardous wastes into the environment is evaluated in this section.

As required by Section 112(r) of the CAA Amendments of 1990 [42 U.S.C. 7401 et. seq.], Quemetco maintains a RMP which contains a hazards assessment and outlines precautionary measures taken to prevent release of hazardous materials and hazardous wastes and minimize the impacts of such releases (refer to Section 3.4: Hazards and Hazardous Materials).

The facility currently maintains and operates in accordance with an ERCP as required by the CUPA program (refer to Section 3.4.2: Regulatory Setting). The ERCP specifies measures to be taken in emergency scenarios (e.g., spills, vehicle accidents, fires, explosions, earthquakes, and bomb threats), outlines employee training requirements, and identifies the responsible parties and the supporting organizations/agencies for any incidents. These measures, requirements, responsible parties, and supporting organizations/agencies would not change with implementation of the proposed Project. Under the proposed Project, Quemetco would continue to operate in accordance with the ERCP.

The facility also currently maintains a CalARP Program 1 RMP with LACFD for phosphorus storage (Quemetco, Inc., 2019b). The RMP is required to include an offsite consequence analysis, a history of any accidents occurring over the previous five-year period, if any, and information regarding coordinating response actions with local emergency planning and response agencies. The offsite consequence analysis within the RMP includes the worst-case release scenario, which would not impact any receptors outside the facility. No incidents involving phosphorus onsite have occurred in the last five (5) years. The proposed Project would not change the amount of phosphorus stored onsite at any given time, and thus would not impact the offsite consequence analysis or worst-case release scenario. Under the proposed Project, Quemetco would continue to operate in accordance with the RMP.

ERPG-2 levels are discussed in Section 4.4.2.1: Transport, Use and Disposal of Hazardous Materials and Hazardous Wastes. All programs, plans, and regulations regarding prevention and response to accidental release of chemicals, and the potential release of hazardous materials will continue to apply to the Quemetco facility if the proposed Project is implemented. The analysis indicates that no exceedances of the ERPG-2 concentration level are expected to occur as a result of the proposed Project. Therefore, the proposed Project not expected to create a significant hazard to the public or the environment relative to ERPG-2 values.

For these reasons, there is no reasonably foreseeable upset or accident condition due to the existing rules and regulations detailed above which help prevent such upset or accident conditions and Quemetco's compliance with CalARP Program 1 RMP with LACFD for phosphorus storage, neither of which would change under the proposed Project. Therefore, the proposed Project's potential release of hazardous materials and hazardous waste through reasonably foreseeable upset and accident conditions would be less than significant; no mitigation measures would be required.

HAZ-3: Hazardous Materials Site

South Coast AQMD Checklist Question d) – Would the proposed Project be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment?

Applicable South Coast AQMD Significance Criteria: None.

As discussed in the NOP/IS (refer to Appendix A) and in Section 3.4.1: Environmental Setting, Government Code Section 65962.5 requires DTSC to compile a list called the Hazardous Waste and Substances Sites (Cortese) List. Public Resources Code Section 21092.6 requires the lead agency to consult the Cortese list to determine whether the proposed Project and any alternatives are located on a site which is included on the list. A potential impact would occur if the proposed Project were located on a site which is included on the Cortese list and was not under proper agency management in response. The potential of the proposed Project to create a significant hazard to the public or the environment due to inclusion on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 is evaluated in this section.

At the time of publication of the NOP/IS for the proposed Project (refer to Appendix A), it was assumed that the Quemetco facility was included on DTSC's Cortese List. However, at the time of publication of this EIR, it has been verified that the Quemetco facility is not included on the Cortese list. Therefore, the proposed Project would not create a significant hazard to the public or the environment due to being located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. For this reason, the proposed Project's impact relating to this checklist question would be less than significant; no mitigation measures would be required.

HAZ-4: Potential Fire Hazards

South Coast AQMD Checklist Question g) – Would the proposed Project significantly increase fire hazards in areas with flammable materials?

Applicable South Coast AQMD Significance Criteria: Non-conformance to National Fire Protection Association (NFPA) standards.

Many hazardous materials used by the facility and hazardous wastes generated at the facility are flammable as detailed in Table 3.4-1 and could create a fire hazard if not managed properly. A potential impact would occur if the proposed Project resulted in non-conformance to NFPA standards.

NFPA publishes more than 300 codes and standards which are intended to minimize the possibility and effects of fire and risk. These codes and standards include but are not limited to: Fire Code (NFPA 1), Standard for Portable Fire Extinguishers (NFPA 10), Standard for the Installation of Sprinkler Systems (NFPA 13), Flammable and Combustible Liquids Code (NFPA 30), National Electrical Code® (NFPA 70®), National Fire Alarm and Signaling Code® (NFPA 72®), and Standards for Ovens and Furnaces (NFPA 86).

The proposed Project would not involve any new or modified structures, equipment, or processes, and would not involve any change in the quantity or type of flammable materials stored onsite. Quemetco already stores sufficient quantities onsite for normal operations and would receive 1-2 additional materials deliveries a week in response to accommodate the needs of the proposed Project's throughput increase. Therefore, Quemetco would continue to conform to all applicable NFPA standards under the proposed Project.

Specific emergency procedures for fires are outlined in Quemetco's ERCP, which is updated on an annual basis or more frequently as necessary. The ERCP also includes emergency equipment related to fire protection, including fire alarms, portable fire extinguishers, and a fire sprinkler system and includes both wet pipe and dry pipe equipment. Fire alarms are attached to the emergency fire sprinkler system throughout the facility. The fire alarms are attached to main risers and are activated by water flow in the system. The locations of the fire alarms are shown in the Plot Plan in the ERCP. In the hazardous waste process areas, air horns are available for personnel to use to alert others during an emergency. Portable fire extinguishers are placed throughout the facility, with signage indicating their location, to ensure that applicable maximum travel distances are not exceeded. Each fire extinguisher is inspected monthly at minimum by the Safety and/or Operations Department and undergoes an annual maintenance check. Employees receive training on the proper use of fire-related and prevention equipment. Emergency call lists are also posted within the facility. The proposed Project would not involve any new or modified structures, equipment, or processes, and would not require any change to these existing fire prevention and protection systems. Under the proposed Project, Quemetco would continue to operate in accordance with the ERCP.

NFPA requires classification of hazardous materials as health hazards, flammability hazards, reactivity hazards, and/or special hazards (refer to Section 3.4: Hazards and Hazardous Materials). The facility maintains a Fire Prevention Plan in compliance with CCR Title 8, Section 3221 and the OSHA standard on fire prevention, 29 CFR Part 1910.39. The purpose of the Fire Prevention Plan is to eliminate the causes of fire, prevent loss of life and property by fire, and to provide employees with information and guidelines that will assist them in recognizing, reporting, and controlling fire hazards. The Fire Prevention Plan contains a list of potentially hazardous materials that are present at the facility and their NFPA classifications (refer to Table 3.4-1). The proposed Project would not involve the use of any flammable materials that are not currently used at the facility. Under the proposed Project, Quemetco would continue to operate in accordance with the Fire Prevention Plan.

As discussed in Section 2.6: Project Description, petroleum coke is currently permitted for use at Quemetco as a purifying agent in the refinery process. Under the proposed Project, Quemetco would also be permitted to pass petroleum coke through the rotary/kiln feed dryer (increasing the permitted exhaust temperature from the rotary/kiln feed dryer and its baghouse from 300°F to 450°F) and use it as a smelting reagent in the reverberatory furnace and electric arc furnace. Calcined coke, currently used as a smelting reagent in the reverberatory furnace and electric arc furnace, is a derivative of petroleum coke and they share similar properties. Calcined coke and petroleum coke are both classified by NFPA as Level 1 for flammability, which are materials that are normally stable but become explosive at elevated temperatures and pressure and have a flashpoint of greater than 200°F.²⁰ Based on safety data sheets (SDSs), calcined coke does not have a flashpoint, and petroleum coke has a flashpoint greater than 500°F (Hickman, Williams and Company, 2012-2013). In the event of a fire involving either calcined or petroleum coke, water, carbon dioxide, foam, dirt, or sand should be used to extinguish flames.

The proposed Project would not include any physical facility modifications or new activities that could contribute to a change in onsite fire hazards. Additionally, the proposed Project will not introduce any new types of flammable materials onsite or increase the quantity of flammable materials stored onsite at any given time. The proposed Project would not change the location of where the coke material is stored or used onsite.

As described in Section 2.6: Project Description, South Coast AQMD issued a Rule 441 research permit in 2016 which allowed Quemetco to use petroleum coke as a smelting reagent in the reverberatory furnace and electric arc furnace. Quemetco tested the use of petroleum coke, in the areas where calcined coke is currently used, for approximately two (2) weeks in order to assess the impact, if any, on emissions caused by this change. Based on current operations using calcined coke and use of petroleum coke during the research permit testing, neither type of coke ignited in the rotary/kiln feed dryer. Additionally, the rotary/kiln feed dryer exhaust temperature (ranges from 330 to 450 °F) is less than the flashpoint of petroleum coke (e.g., greater than 500°F). For these reasons, no significant increase in fire hazard would result from the use of petroleum coke in the rotary/kiln feed dryer.

²⁰ Flashpoint is the lowest temperature at which enough flammable vapor will form to induce ignition when exposed to an ignition source. NFPA flammability scale indicated material flashpoint: 0 = Will Not Burn, 1 = Above 200°F, 2 = Above 100°F Not Exceeding 200°F, 3 = Below 100°F, 4 = Below 73°F

Under the proposed Project, petroleum coke would be added as a smelting reagent in the reverberatory furnace and the electric arc furnace, which both operate at temperatures greater than 2,000°F. Access to each furnace is controlled by a feed screw, which is a conveyor mechanism that uses a rotating helical blade to move materials into each furnace. This use of a feed screw in the furnace design contains the feed material and oxygen entering the reverberatory furnace into an enclosed industrial mechanical screw which controls the potential hazards of high-temperature smelting. Therefore, there would be no increase in fire hazards associated with use of petroleum coke in the reverberatory furnace or the electric arc furnace.

The facility is expected to continue operating in accordance with NFPA standards, the ERCP, and the Fire Prevention Plan under the proposed Project. There are no new regulations or requirements regarding flammable materials that would be triggered due to the proposed Project. The proposed Project does not include any physical facility modifications that could contribute to a change in onsite fire hazards. Additionally, there will be no new type of flammable material introduced onsite.

The proposed Project seeks approval to use petroleum coke in lieu of or in addition to calcined coke as a smelting reagent in the reverberatory and electric arc furnaces. Although the total amount of petroleum coke used at the facility would increase as a result of the proposed Project, the total amount of smelting reagents (calcined coke and petroleum coke) stored onsite is not expected to increase as a result of the proposed Project. With the proposed Project's throughput increase, there will also be an increase in the frequency of feed stock and additive material (including smelting reagents) deliveries to the facility. For this reason, the facility does not anticipate an increase in the total maximum quantity of smelting reagents stored onsite. As discussed above, the use of petroleum coke as a smelting reagent in lieu of or in place of calcined coke would not be expected to significantly increase fire hazards. For these reasons, the proposed Project's potential fire hazards impacts would not substantially change relative to baseline operations and therefore would be less than significant; no mitigation measures would be required.

4.4.3 Significance Determination

Based on the proposed Project impact analysis in Section 4.4.2, the proposed Project would have a less than significant impact on hazards and hazardous materials. No significant hazards impacts associated with operation of the proposed Project were identified. Because the proposed Project's hazards and hazardous materials impacts would be less than significant no mitigation measures would be required.

4.4.4 Cumulative Hazards and Hazardous Materials Impacts

The Quemetco facility is located within the City of Industry jurisdiction within the industrial land use area. The nature of the activities under the proposed Project would be the same as activities that are currently being conducted at Quemetco's facility, which do not conflict with the City of Industry's General Plan Land Use Map nor trigger any land use permits or modifications (refer to Appendix A, NOP/IS, Section X: Land Use and Planning).

South Coast AQMD assessed regional hazards and hazardous materials impacts in the March 2017 Program EIR for the 2016 AQMP (South Coast AQMD, 2016). Toxic emissions are expected to decrease overall in response to toxic control measures. However, fire hazard impacts associated with reformulated coatings, solvents, and consumer products and hazard impacts at sensitive receptors could be potentially significant in response to implementation.

SCAG assessed regional hazards and hazardous materials in its 2016 RTP/SCS Program EIR (SCAG, 2016). Transportation of hazardous materials associated with movement of goods, impairment or interference of emergency response procedures and emergency evacuation plans associated with roadway closures and congestion due to construction, wildland fires associated with possible development in areas with a high fire hazard risk, and hazardous material transport all have the potential to have significant impacts.

In summary, regional cumulative baseline hazardous and hazardous material impacts as assessed through the combination of projected transportation projects in the 2016 RTP/SCS and the control measures involved in the 2016 AQMP would be considered cumulatively significant.

CEQA Guidelines Section 15064(h)(1) requires that a “lead agency consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable.” Where a lead agency is examining a project with an incremental effect that is not cumulatively considerable, a lead agency need not consider the effect significant, but must briefly describe the basis for concluding the incremental effect is not cumulatively considerable.

The proposed Project’s contribution to cumulatively hazards impacts is not considered cumulatively considerable. South Coast AQMD considers projects that do not conform with hazards and hazardous materials regulations or that generate exposure greater than ERPG-2 level to exceed project-specific significance thresholds and therefore to be cumulatively considerable. The Quemetco operation already involves the transportation and handling of hazardous materials and hazardous waste, and as presented in Table 4.4-3, the exposure level remains within acceptable exposure levels such that the incremental increase will not substantially increase the risks of upset or other hazards. In addition, the transportation and handling of hazardous materials and waste is heavily regulated at the federal, state, and local level and the Quemetco facility has shown an ability to meet those regulatory requirements.

4.5 HYDROLOGY AND WATER QUALITY

The proposed Project includes an increase in operation levels, which would, in turn, lead to increased water use and wastewater generation as summarized in Chapter 2 – Proposed Project, Table 2-1, Summary of Quemetco Operations.

Water is used in various operations throughout Quemetco’s processes. As described in Chapter 2 - Proposed Project, water is consumed in the employee drinking fountains, kitchen, showers, restrooms, and landscaping. The proposed Project is not anticipated to impact this water consumption. However, other facility operations relating to battery processing also require water use, including the battery dismantling process, which involves a sink-float tank filled with water which gets drained and sent to the onsite wastewater treatment system, and battery rinsing sprays. Water is also used for operation of the WESP and scrubbers. The proposed Project would require increased water use for these processes as a result of the throughput increase associated with the proposed Project.

The NOP/IS concluded that sufficient water supplies are available to support the proposed Project, and therefore this issue is not discussed further in this EIR. However, as a result of increased water consumption, the proposed Project also has the potential to increase the amount of wastewater generated, which, as determined in the NOP/IS, could create substantial changes to water quality that would cause potentially significant adverse water quality impacts. These potential impacts are further addressed in this chapter.

Table 4.5-1 contains a comparison of the South Coast AQMD’s environmental checklist between the 2018 NOP/IS and the updated checklist in 2019. Table 4.5-1 also identifies which questions will be addressed in Chapter 4 of this EIR. One of the changes made to South Coast AQMD’s environmental checklist in 2019 includes a new question that requires a new analysis in Section 4.5: Hydrology and Water Quality.

Table 4.5-1 Comparison of South Coast AQMD’s Environmental Checklist Questions in the 2018 NOP/IS to the Updated Questions in 2019 for the Topic of Hydrology and Water Quality

| South Coast AQMD Environmental Checklist Questions in the 2018 NOP/IS | Updated South Coast AQMD Environmental Checklist in 2019 | Changes? | Evaluated in this EIR? |
|--|---|--|--|
| Would the project: | | | |
| a) Violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality? | a) Violate any water quality standards, waste discharge requirements, or otherwise substantially degrade surface or ground water quality? | a) Violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade <u>surface or ground</u> water quality? | Further evaluated in this EIR as determined in the NOP/IS. |

| | | | |
|--|---|---|---|
| <p>b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</p> | <p>b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</p> | <p>b) Substantially deplete decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin- there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</p> | <p>Reorganized and streamlined without making any substantial changes to the intent. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.</p> |
| <p>c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or offsite or flooding on- or offsite?</p> | <p>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would: - Result in substantial erosion or siltation on- or offsite? - Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? - Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? - Impede or redirect flood flows?</p> | <p>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:</p> <ul style="list-style-type: none"> • result in substantial erosion or siltation on- or offsite?_ • or substantially increase the rate or amount of surface runoff in a manner which that would result in flooding on- or offsite? • 4 create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? • impede or redirect flood flows? | <p>Reorganized and streamlined without making any substantial changes to the intent. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.</p> |

| | | | |
|---|---|--|--|
| <p>d) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?</p> | | <p>d) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?</p> | <p>Deleted.</p> |
| | <p>e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</p> | <p><u>e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?</u></p> | <p>The impacts associated with this new question will be assessed in Section 4.5.2. Further evaluated in this EIR.</p> |
| <p>e) Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows?</p> | | <p>e) Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows?</p> | <p>Deleted.</p> |
| <p>f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow?</p> | <p>d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?</p> | <p>f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow? <u>d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?</u></p> | <p>(former questions e) and f) now combined into new question d)). NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.</p> |
| <p>g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?</p> | <p>f) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage facilities, the construction or relocation of which could cause significant environmental effects?</p> | <p>g) f) Require or result in the <u>relocation or</u> construction of new or <u>expanded</u> water, wastewater treatment facilities, or new storm water drainage₁ facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?</p> | <p>Renumbered and streamlined without making any substantial changes to the intent. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.</p> |

| | | | |
|--|--|--|--|
| <p>h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?</p> | <p>g) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years?</p> | <p>g) h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? <u>and reasonably foreseeable future development during normal, dry and multiple dry years?</u></p> | <p>Renumbered and streamlined without making any substantial changes to the intent. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.</p> |
| <p>i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</p> | <p>h) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?</p> | <p>None.</p> | <p>No changes. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.</p> |

4.5.1 Hydrology and Water Quality Impacts

Significance Criteria

Based on the assessment of the environmental checklist questions summarized in Table 4.5-1²¹, this section of the EIR is focused on the following South Coast AQMD checklist questions and the applicable South Coast AQMD significance criteria:

- South Coast AQMD Checklist Question a) Violate any water quality standards, waste discharge requirements, or otherwise substantially degrade surface or ground water quality?
 - Applicable South Coast AQMD Significance Criteria:
 - The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
 - The project will cause the degradation of surface water substantially affecting current or future uses.
 - The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.
 - The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- South Coast AQMD Checklist Question e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

²¹ Table 4.5-1 documents that the NOP/IS (Appendix A) determined that potential conflicts with groundwater supplies, drainage patterns, storm water runoff, flood hazards, water or wastewater treatment capacity, and water supplies impacts would be less than significant, and further evaluation of these issues in Chapter 4 of the EIR is not required.

- Applicable South Coast AQMD Significance Criteria: None.

The proposed Project's potential Project-specific and cumulative hydrology and water quality impacts are evaluated in this EIR.

4.5.2 Analysis of Hydrology and Water Quality Impacts

This section presents the potential environmental impact analysis for water quality standards, waste discharge requirements, groundwater quality and applicable water quality control plans or sustainable groundwater management plans. The proposed Project would involve increased water use for battery crushing and during the separation process as a result of the feed stock increase. Based on the considerations in the NOP/IS, the proposed Project's potential to increase the amount of wastewater generated could potentially result in significant adverse water quality impacts. Additionally, because impacts to groundwater quality and implementation of a water quality control plan or sustainable groundwater management plan were not evaluated in the NOP/IS, these impacts are evaluated in this section of the EIR.

HYD-1: Wastewater Discharge and Surface and Groundwater Quality Impacts

South Coast AQMD Checklist Question a) – Would the proposed Project violate any water quality standards, waste discharge requirements, or otherwise substantially degrade surface or ground water quality?

Applicable South Coast AQMD Significance Criteria:

- *The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.*
- *The project will cause the degradation of surface water substantially affecting current or future uses.*
- *The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.*
- *The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.*

Wastewater Discharge Requirements

Quemetco is currently allowed to discharge an average of 213,000 gallons per day (GPD) \pm 25% per Condition No. 35 of the wastewater discharge permit issued by the Los Angeles County Sanitation District to the facility, which reads:

A new permit application must be submitted when there is a significant change in wastewater quantity (more than 25%) or quality from that given in the approved permit information.

To address wastewater quantity requirements, the facility is required to submit a permit application if a daily average of less than 159,750 GPD or greater than 266,250 GPD of wastewater is discharged.

To address wastewater quality requirements, the facility pre-treats and neutralizes process wastewater prior to discharge to the sewer. To ensure that Quemetco meets the permissible discharge limits outlined on its wastewater discharge permit, the facility is required to complete and submit a Self-Monitoring Report (SMR) to the LACSD on a quarterly basis. The SMR requires Quemetco to report the following information:

- third-party laboratory’s results for regulated pollutants from wastewater sampled quarterly;
- daily average and daily maximum wastewater flow; and
- daily average and daily long-term production rate.

Based on SMRs submitted to the LACSD between data years 2014-2019 (Quemetco, 2014-2019), Quemetco has a history of compliance with the local and federal water quality standards (i.e., permissible pollutant discharge limits) imposed in its wastewater discharge permit.

Although the proposed Project’s projected increase in wastewater to be generated was described in the NOP/IS in terms of gallons per day, the facility filters, treats, and reuses some of its wastewater onsite and as a result, the amount of wastewater generated is not equivalent to the amount of wastewater discharged on a daily basis. Moreover, because the facility can control how much wastewater is discharged each day, the quantity of wastewater discharged in a given day does not necessarily equal the wastewater generated during that day. While the facility may generate wastewater seven days per week, the existing wastewater system might discharge wastewater only three to four days per week because the facility has a practice of filtering, neutralizing and reusing its wastewater in the battery wrecker. For these reasons, the analysis in this EIR is based on a weekly discharge rate in terms of gallons per week which assumes that the facility discharges the average daily limit for seven days per week. Quemetco is currently allowed to discharge wastewater at an average of 1,118,250 to 1,863,750 gallons per week.

The proposed increase in the daily feed rate to 750 tpd would increase the amount of water needed for processing (e.g., water demand) and thus increase the quantity of wastewater to be discharged. Table 4.5-2 presents a comparison of the projected increase in wastewater to be discharged relative to the current permit limit and the 2014 baseline. The proposed Project is anticipated to increase wastewater to be discharged by approximately 300,841 gallons per week relative to 2014 baseline.

Table 4.5-2 Wastewater Quantity Discharged

| Parameter | Units | Permitted^a | 2014 Baseline | Proposed Project | Post-Project Increment |
|-------------------------------|--------------|------------------------------|----------------------|-------------------------|-------------------------------|
| Average Wastewater Discharged | Gal/week | 1,863,750 | 1,351,133 | 1,651,974 | 300,841 |

Source: Quemetco, Inc., 2014-2019

a Permitted value is obtained from Quemetco’s LACSD permit (Permit No. 015708, dated March 29, 2016) daily average flow limit of 213,000 GPD + 25%.

Under the proposed Project, an estimated weekly average of 1,651,974 gallons of wastewater would be discharged, which is less than the currently permitted maximum weekly average of 1,863,750 gallons. The proposed Project’s wastewater discharge volumes will increase by approximately 11%, which is less than 25% of permitted levels; therefore, no modification to the wastewater discharge permit will be required. Therefore, the proposed Project would not exceed the applicable wastewater discharge quantity requirements, and the proposed Project would have a less than significant impact no mitigation measures would be required.

Water Quality Standards

Quemetco is subject to federal, state, and local water quality standards. The local limits are numerical limits established by LACSD and apply to all industrial facilities under LACSD’s purview. LACSD is also approved to administer U.S. EPA’s NPDES national pretreatment program, which is designed to protect POTWs and reduce pollutants discharged by industries into municipal sewer systems and the environment. Quemetco is subject to the federal categorical pretreatment standards for existing sources in the Nonferrous Metals Manufacturing Point Source Category (40 CFR Part 421), Subpart M - Secondary Lead. These standards are production-based, meaning that discharge permit limits are calculated based on production rates, resulting in mass-based daily maximum and monthly average limits.

A wastewater loading assessment was conducted to compare the maximum allowable wastewater loading from the existing LACSD permit (baseline conditions), the total proposed Project wastewater loading and is summarized in Table 4.5-3. The loading was calculated based on the currently permitted maximum allowable wastewater flow (266,250 GPD) and the federal parameter concentration limits in the permit. The proposed Project analysis conservatively assumes the more stringent concentration limit between the daily average maximum and monthly average maximum. The results of the loading assessment demonstrate that the loading associated with the proposed Project would be less than the maximum allowable loading as defined in the LACSD wastewater permit, and therefore no additional wastewater permit modifications would be required as a result of the proposed Project.

Table 4.5-3 Wastewater Loading Summary - Federal Limits

| Parameter ^a | Maximum Permitted Loading ^b [milligrams per day (mg/day)] | Total Proposed Project Loading ^c [mg/day] | | Less than Maximum Permitted Loading? | Significant ? |
|-----------------------------|--|--|--|--------------------------------------|---------------|
| Arsenic, Total | 796,214.05 | 705,741.07 | | Yes | No |
| Lead, Total | 181,415.86 | 160,801.76 | | Yes | No |
| Zinc, Total | 584,562.21 | 518,139.01 | | Yes | No |
| Antimony, Total | 1,199,360.41 | 1,063,078.31 | | Yes | No |
| Ammonia (as N) ^c | 0.00 | 0.00 | | Yes | No |

Source: Quemetco, Inc., 2018

a Monitored pollutants under 40 CFR Part 421, Subpart M.

b Maximum loading based on LACSD wastewater permit limits and is essentially the “baseline conditions”.

c Proposed project loading based on estimated average wastewater discharge of 1,651,974 gallons per week and the currently permitted loading limits.

- d Loading increment represents the difference between the maximum permitting loading and the proposed Project loading.
- e The U.S. EPA promulgated an ammonia effluent limitation of zero for discharges subject to 40 CFR Part 421, Subpart M. Quemetco has demonstrated compliance with this limit. N = nitrogen.

With implementation of the proposed Project, the wastewater loading would not exceed the currently permitted maximum allowable loading from the LACSD wastewater permit (see Table 4.5-3). As long as there is not a significant change in water quality (greater than 25%) causing the wastewater effluent to exceed the maximum permitted loading, a revised permit would not be required. After implementation of the proposed Project, the water quality of wastewater effluent will remain within Quemetco’s permitted loading range; therefore, the proposed Project will have less than significant federal wastewater loading impacts.

In addition to the federal categorical loading limits, Quemetco is also subject to local numerical effluent limits, presented below in Table 4.5-4. These limits are not production-based and apply to all permitted industrial facilities that discharge to POTWs under LACSD’s purview. The proposed Project wastewater effluent is compared to the 2014 baseline conditions and permitted wastewater effluent limits to determine the impact of the proposed Project on wastewater quality standards.

The facility’s quarterly SMRs serve as the baseline for this analysis. 2014 baseline effluent concentrations are based on the average of the quarterly SMR results from calendar year 2014. In the event where both federal and local limits are established for a given parameter, the analysis assumes the more stringent of the limits. Such is the case for arsenic, lead, zinc, and antimony, because the calculated federal concentration limits based on production rates are lower than the local limits established by LACSD. A summary of the applicable limits and estimated effluent concentrations from the 2014 baseline and proposed Project are summarized in Table 4.5-4.

Table 4.5-4 Wastewater Effluent Constituents - Local Limits

| Parameter | Units | Permitted^a | 2014 Baseline^b | Proposed Project | Post-Project Increment |
|------------------|--------------|------------------------------|----------------------------------|-------------------------|-------------------------------|
| pH | Units | ≥ 6 | 7.67 | 7.67 | N/A |
| Suspended Solids | mg/L | N/A | 19.25 | 19.25 | N/A |
| Total Cyanide | mg/L | 10 | 0.037 | 0.037 | N/A |
| Soluble Sulfide | mg/L | 0.1 | < 0.1 | < 0.1 | N/A |
| Arsenic, Total | mg/L | 0.79 ^c | 0.03225 | 0.03943 | 0.0072 |
| Cadmium, Total | mg/L | 15 | 0.453 | 0.453 | N/A |
| Chromium, Total | mg/L | 10 | 0.01875 | 0.01875 | N/A |
| Copper, Total | mg/L | 15 | 0.06125 | 0.06125 | N/A |
| Lead, Total | mg/L | 0.18 ^c | 0.062 | 0.076 | 0.014 |
| Nickel, Total | mg/L | 12 | 0.79 | 0.79 | N/A |
| Zinc, Total | mg/L | 0.58 ^c | 0.1525 | 0.1865 | 0.034 |
| Antimony, Total | mg/L | 1.19 ^c | 0.455 | 0.556 | 0.101 |

Source: Quemetco, Inc., 2014-2019

a Permitted values are obtained from Quemetco’s LACSD permit (Permit No. 015708, dated March 29, 2016).

b The baseline values come from the Quemetco 2014 quarterly SMRs.

c These limits correspond to the calculated categorical concentration limits from Quemetco's LACSD permit, based on the facility's production rates and mass discharge limitations in 40 CFR Part 421, Subpart M.

d Increase in pollutant concentration of federal categorical parameters estimated as (proposed Project discharge/2014 Baseline discharge) x 2014 Baseline concentration. For example, arsenic concentration is estimated as $(1,651,974 \text{ gal/week} / 1,351,133 \text{ gal/week}) \times 0.03225 \text{ mg/L}$.

As demonstrated in Table 4.5-4, the proposed Project is not expected to increase pollutant concentrations in the facility's wastewater effluent, except those parameters directly related to production rates (arsenic, lead, zinc, and antimony). These pollutants are analyzed in Table 4.5-3, but pollutant concentration estimates are presented in Table 4.5-4 for completeness since they are also locally monitored parameters. However, for the remaining locally monitored parameters, the proposed Project is not expected effect wastewater discharge characteristics. These pollutant concentrations are not expected to change because the increased feedstock associated with the proposed Project will also increase water usage and in turn wastewater generated. As a result, wastewater pollutant concentrations on a mass per volume basis are not expected to increase. After implementation of the proposed Project, the water quality of the wastewater effluent will remain less than local numerical effluent limits; therefore, less than significant impacts would occur.

Quemetco has demonstrated a history of compliance with the federal and local wastewater discharge quality requirements listed in the facility's LACSD permit (Permit No. 015708, dated March 29, 2016) as supported by the analytical testing reported in the quarterly SMRs. However, LACSD has questioned whether the facility's effluent meets the local numerical limit of 0.1 mg/L for soluble sulfide in wastewater discharge. In response, LACSD has requested that the facility conduct an analysis of current and historical sulfide levels in the wastewater. Given LACSD's concern regarding sulfide levels and whether increasing the amount of wastewater generated would cause substantial changes to water quality, this section evaluates this issue further.

The increase in feed processed by the facility under the proposed Project would result in an increase in the quantity of sulfuric acid collected from the additional feed stock (e.g., lead-acid batteries) that will be processed. Sulfuric acid is collected from the lead-acid batteries and reserved for treating/neutralizing the wastewater stream as it enters the existing water treatment system. Sulfides can be formed in wastewater under anaerobic conditions where bacteria reduce sulfates (the anion of sulfuric acid) to sulfides or when wastewater sulfate reacts with effluents containing chemicals and metals. Increased sulfides in wastewater are corrosive to the sewer system and have a high chemical oxygen demand, and consequently result in a lower amount of dissolved oxygen, which can be harmful to aquatic life.

The analysis of 2014 wastewater discharge demonstrated that the sulfide concentration in the wastewater was less than the permit limit of 0.1 mg/L soluble sulfide (see Table 4.5-4). The SMR data for years 2014-2019 were also reviewed to confirm that the results of the wastewater effluent testing for soluble sulfide were also less than the wastewater permit limits. The concentration of soluble sulfide in the wastewater discharge effluent associated with the proposed Project would

not be expected to substantially change from the existing baseline conditions as a result of the proposed Project²² (see Table 4.5-4, Wastewater Effluent Constituents).

The additional recovered sulfuric acid associated with the increased feed processing would be used to neutralize the pH of the additional wastewater generated. Therefore, under the proposed Project, the facility would be expected to continue to maintain the pH permit requirements for the discharged wastewater using this recovered sulfuric acid. In the event that the quantity of recovered sulfuric acid is not sufficient, supplemental sulfuric acid is currently purchased from an outside vendor. This practice will continue as part of the proposed Project.

Soda ash is similarly used by the facility for pH adjustments in the wastewater treatment process. Specifically, soda ash is utilized to neutralize the pH in the air pollution control systems (e.g., the reverberatory furnace and electric arc furnace scrubbers). Wastewater generated from wet scrubbing is routed to the facility's wastewater treatment system and is ultimately discharged to the sanitary sewer. Quemetco purchases soda ash from a third-party vendor and stores the additive in a storage tank located in the electric arc furnace/scrubber area and in the existing onsite silos next to the battery wrecker enclosure and water quality system. The additional soda ash purchased and under the proposed Project would be used to neutralize the pH of additional wastewater generated from wet scrubbing. Therefore, under the proposed Project, the facility would be expected to continue to maintain the pH permit requirements for the discharged wastewater using soda ash.

Based on the analysis, the proposed Project would not be expected to cause an exceedance of the permitted wastewater discharge rates and concentration limits because the composition of the effluent wastewater would remain essentially the same as the pre-Project values. For these reasons, the proposed Project would have a less than significant impact on wastewater discharge requirements; no mitigation measures would be required.

Surface Water Quality

As described in the NOP/IS and in Section 2.4.5: Water and Wastewater, stormwater collected on the operations (battery-processing) side of the facility is sent to the onsite wastewater treatment system where it is treated with the facility's process water and discharged to the LACSD wastewater system. As previously mentioned, LACSD enforces the categorical pretreatment standards established by the U.S. EPA. These categorical pretreatment standards are part of the NPDES permit requirements established under the CWA, and LACSD incorporates the NPDES permit requirements into industrial wastewater permits. The proposed Project is not expected to cause an exceedance of permitted wastewater discharge volumes or concentration limits. Through compliance with the facility's LACSD wastewater permit, Quemetco is demonstrating compliance with NPDES wastewater permit requirements. Therefore, the proposed Project is not expected to result in a violation of NPDES permit requirements related to wastewater discharge.

²² Only parameters directly related to production rates (arsenic, lead, zinc, and antimony) are expected to increase as a result of the proposed Project. As mentioned above, the proposed Project is not expected effect wastewater discharge characteristics for the other locally monitored parameters (including soluble sulfide) because the increased feedstock associated with the proposed Project will also increase water usage and in turn wastewater generated. As a result, soluble sulfide concentration on a mass per volume basis (e.g., mg/L) is not expected to increase.

Stormwater from the non-processing side of the facility (i.e., the security entrance and the office areas) is collected and treated in the stormwater treatment system and then discharged to the municipal storm drain. Because the proposed Project does not increase the amount of impervious surface at the facility or otherwise require modifications to the facility's existing stormwater drainage system, no modifications to the NPDES stormwater permit are necessary. Therefore, the proposed Project is not expected to result in a violation of NPDES permit requirements related to stormwater discharge. Additionally, the facility's stormwater and wastewater do not impact existing or would not impact future surface water quality because no onsite stormwater or wastewater interferes with or is discharged directly to any bodies of surface water. Therefore, the proposed Project is not expected to cause the degradation of surface water substantially affecting current or future uses. As a result, the proposed Project would have a less than significant impact on surface water quality; no mitigation measures would be required.

Groundwater Quality

As discussed in the NOP/IS, water is provided by the San Gabriel Valley Water Company, the main source of which is the Main San Gabriel Groundwater Basin. Because the amount of water needed for the proposed Project is less than the significance thresholds for potable water and total water, respectively, the increased need for water would have less than significant impacts on water demand. Further, because the San Gabriel Valley Water Company can supply the additional water needed to implement the proposed Project, the proposed Project would have less than significant impacts on water supply including groundwater. Given that groundwater supply impacts were concluded to be less than significant in the NOP/IS, this section focuses solely groundwater quality impacts.

As discussed in Section 3.5: Hydrology and Water Quality, Quemetco has an existing groundwater monitoring program for the closed surface impound (CSI) and the former raw materials storage area (FRMSA), both of which are closed units. The program is used for detection and evaluation monitoring and is regulated under the RCRA Hazardous Waste Facility Operations and Post-Closure Permit. The groundwater monitoring program requires quarterly monitoring of groundwater quality for these units. Data collected during groundwater monitoring is publicly available and indicates the presence of naturally occurring compounds and compounds associated with Quemetco operations.

To the extent that such compounds have been observed, they have been found close to the surface (approximately zero to several feet below ground surface), and not near the depth where impacts to the aquifer or sources of drinking water would occur (approximately 70 feet below ground surface and deeper depending on amounts of rainfall and monitoring location).

In 2019, Quemetco installed numerous additional groundwater monitoring wells to comply with regulatory requirements. Based on quarterly monitoring data, Quemetco has not been required to implement a corrective action program or remediate any releases to groundwater from the CSI or FRMSA. Given that the proposed Project does not involve the CSI or FRMSA, it would not alter or impact the current groundwater monitoring program and would not have an impact on groundwater quality.

Therefore, the proposed Project would neither cause degradation or depletion of ground water resources substantially affecting current or future uses nor result in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs. The proposed Project would have a less than significant impact on groundwater quality; no mitigation measures would be required.

HYD-2: Applicable Water Quality Control Plans or Sustainable Groundwater Management Plans

South Coast AQMD Checklist Question e) – Would the proposed Project conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

Applicable South Coast AQMD Significance Criteria: None.

Water Quality Control Plans

The LARWQCB Water Quality Control Plan (Basin Plan) contains the Region’s water quality regulations and applicable programs to implement those regulations. The Basin Plan is designed to preserve and enhance water quality and protect the beneficial uses of all waters, including surface and ground waters, in the Los Angeles Region. The NOP/IS (refer to Appendix A), and the analysis of impact on water quality standards, waste discharge requirements, and groundwater quality in Section 4.5.2: Analysis of Hydrology and Water Quality Impacts determined that the proposed Project would have less than significant impacts on water supply and quality. Because the analysis indicates that the proposed Project would have a less than significant impact on water supply and water quality, no conflict with or obstruction of the Basin Plan is anticipated from implementation of the proposed Project. For these reasons, the proposed Project would not conflict with or obstruct implementation of a water quality control plan; therefore, the impact would be less than significant and no mitigation measures are required.

Sustainable Groundwater Management Plans

Quemetco is located within the Main San Gabriel Groundwater Basin, which is managed by the Main San Gabriel Basin Watermaster (“Watermaster”) and is comprised of a board appointed by the Los Angeles County Superior Court to: 1) manage and control the withdrawal and replenishment of water supplies in the Basin; 2) determine the amount of groundwater that can safely be extracted each year; 3) assist in enforcing water quality regulations; and 4) prepare annual reports.

The Sustainable Groundwater Management Act (SGMA), enacted in 2014, aims to bring groundwater basins into balanced levels of pumping and recharge. As required by SGMA, the Watermaster periodically prepares a Five-Year Water Quality and Supply Plan (Watermaster, 2020), with the most recent prepared for years 2020-21 through 2024-25, which outlines the most recent water supply and water quality conditions, various monitoring programs, cleanup projects, and other planning and actions. Because the analysis of the proposed Project has indicated a less than significant impact on groundwater supply and groundwater quality, there would be no conflict

with or obstruction of the Five-Year Water Quality and Supply Plan from implementation of the proposed Project.

The Recycled Water Policy, adopted by the State Water Resources Control Board in February 2009, requires all groundwater basins to develop a Salt and Nutrient Management Plan (SNMP). The Watermaster developed the SNMP for the Main San Gabriel Basin, identifying the existing water quality of the Main San Gabriel Basin and comparing the water quality to standards established by the Regional Board. Because the analysis indicates that the proposed Project is expected to have a less than significant impact on groundwater supply and groundwater quality, no conflict with or obstruction of SNMP is anticipated from implementation of the proposed Project.

While the proposed Project will increase the quantity of wastewater discharged, it will have a less than significant impact on water supply and water quality. The same hydrology and water quality rules, regulations, standards, and plans will continue to apply to the Quemetco facility if the proposed Project is implemented. For these reasons, the proposed Project would not conflict with or obstruct implementation of a sustainable groundwater management plan; therefore, the impact would be less than significant with no mitigation measures required.

4.5.3 Significance Determination

Based on the proposed Project impact analysis in Section 4.5.2, the proposed Project would have a less than significant impact on hydrology and water quality. No significant wastewater quantity, wastewater quality, surface water quality, or groundwater quality impacts associated with operation of the proposed Project were identified. Additionally, no significant impact on applicable water quality control plans or sustainable groundwater management plan associated with the proposed Project were identified. Because impacts to hydrology and water quality would be less than significant, the proposed Project does not require any mitigation measures.

4.5.4 Cumulative Hydrology and Water Quality Impacts

The Quemetco facility is located within the City of Industry jurisdiction within the industrial land use area within an existing secondary lead smelter. The nature of the activities under the proposed Project would be the same as activities that are currently being conducted at Quemetco's facility, which do not conflict with the City of Industry's General Plan Land Use Map nor trigger any land use permits or modifications (refer to Appendix A, NOP/IS, Section X: Land Use and Planning).

South Coast AQMD analyzed regional hydrology and water quality impacts in its March 2017 Final Program EIR for the 2016 AQMP (South Coast AQMD, 2016) which concluded that the increase in wastewater that could be associated with 2016 AQMP control measures would not be expected to exceed the capacity of existing wastewater treatment facilities. Adverse water quality impacts associated with the use of alternative fuels would not be expected to exceed such impacts from the use of conventional fuels, and the impacts would be less than significant. The increased use of electric and hybrid vehicles and the associated increase in battery use and disposal would be also expected to have less than significant adverse water quality impacts.

However, the water demand associated with certain air pollution control technologies and the use of waterborne coatings anticipated from implementing the 2016 AQMP could exceed the significance threshold of 262,820 gallons per day of potable water demand and five million gallons per day of total water demand. Therefore, the overall water demand associated with the 2016 AQMP was determined to have significant hydrology and water quality impacts.

SCAG assessed regional hydrology and water quality in its 2016 RTP/SCS Program EIR (SCAG, 2016) which identified a potential to increase impervious surface areas. This would result in an increase of urban runoff and the transport of increased quantities of contaminants to receiving waters that may currently be impaired, resulting in a significant cumulative impact. In addition, the analysis concluded that the 2016 RTP/SCS would contribute incrementally to significant cumulative impacts associated with depleting groundwater supplies, altering drainage patterns, exceeding existing or planned stormwater drainage system capacity, degrading water quality, placing structures that would impede or redirect flood flows within a 100-year flood hazard area, and potentially inundating these areas by seiche, tsunami, or mudflow.

In summary, regional cumulative hydrology and water quality impacts caused by the combination of projected transportation projects in the 2016 RTP/SCS and the control measures involved in the 2016 AQMP are considered cumulatively significant.

CEQA Guidelines Section 15064(h)(1) requires that a “lead agency consider whether the cumulative impact is significant and whether the effects of the project are cumulatively considerable.” Where a lead agency is examining a project with an incremental effect that is not cumulatively considerable, a lead agency need not consider the effect significant, but must briefly describe the basis for concluding the incremental effect is not cumulatively considerable.

The proposed Project’s contribution to the cumulative impact, however, is not considered cumulatively considerable. The increase in wastewater discharge to LACSD is within the limits of the facility’s existing discharge permit. In addition, the facility collects stormwater runoff and will add no new impervious surfaces.

4.6 TRANSPORTATION

The overall purpose of the proposed Project is to increase the amount of batteries processed for recycling. To accomplish this purpose, the proposed Project would increase the feed rate of the rotary/kiln feed dryer and reverberatory furnace. The proposed Project would also generate 15 additional truck round trips and six (6) additional employee trips on a daily basis (refer to Table 2-1). The proposed Project does not include any construction activities, as described in Section 2.6.

The analysis in the NOP/IS concluded that the proposed Project would not result in significant adverse transportation impacts. However, as indicated in Section 4.1: Introduction, after the release of the NOP/IS for public review and comment, the Natural Resources Agency adopted revisions to the CEQA Guidelines, which included updates to the Appendix G – Environmental Checklist Form. As a result, South Coast AQMD updated its environmental checklist.

Table 4.6-1 contains a comparison of the South Coast AQMD’s environmental checklist between the 2018 NOP/IS and the updated checklist in 2019. Table 4.6-1 also identifies which questions will be addressed in this section of the EIR. One of the changes that was made to the South Coast AQMD’s environmental checklist in 2019 includes the addition of a new question that requires new analysis in Section 4.6: Transportation regarding vehicle miles traveled or VMT.

Table 4.6-1 Comparison of South Coast AQMD’s Environmental Checklist Questions in the 2018 NOP/IS to the Updated Questions in 2019 for the Topic of Transportation

| South Coast AQMD Environmental Checklist Questions in the 2018 NOP/IS | Updated South Coast AQMD Environmental Checklist in 2019 | Changes? | Evaluated in this EIR? |
|--|---|--|--|
| <p>Would the project:</p> <p>a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?</p> | <p>a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?</p> | <p>a) Conflict with an applicable program plan, ordinance or policy establishing measures of effectiveness for the performance of addressing the circulation system, <u>including transit, roadway, bicycle and pedestrian facilities?</u> taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways,</p> | <p>Reworded without making any substantial changes to the intent. NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.</p> |

| | | | |
|--|---|--|---|
| | | <p>pedestrian and bicycle paths, and mass transit?</p> <p>Reorganized and streamlined without making any substantial changes in intent.</p> | |
| <p>b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</p> | <p>b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b)?</p> | <p>b) <u>Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)?</u> Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?</p> | <p>Further evaluated in this EIR based on new impact area from checklist updates.</p> |
| <p>c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</p> | | <p>e) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?</p> <p>Deleted.</p> | <p>NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.</p> |
| <p>d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?</p> | <p>c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</p> | <p>d) c) Substantially increase hazards due to a <u>geometric</u> design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?</p> <p>Renumbered and streamlined without making any substantial changes in intent.</p> | <p>Further evaluated in this EIR based on NOP/IS comment letter NOP-5 from Caltrans.</p> |
| <p>e) Result in inadequate emergency access?</p> | <p>d) Result in inadequate emergency access?</p> | <p>e) d) Result in inadequate emergency access?</p> <p>Renumbered without making any substantial changes in intent.</p> | <p>NOP/IS determined that impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.</p> |
| <p>f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian</p> | | <p>f). Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or</p> | <p>NOP/IS determined that impacts would be less than significant, and</p> |

| | | | |
|---|--|---|---|
| facilities, or otherwise decrease the performance or safety of such facilities? | | pedestrian facilities, or otherwise decrease the performance or safety of such facilities? Deleted. | further evaluation of this issue in Chapter 4 of the EIR is not required. |
|---|--|---|---|

In its comment letter on the NOP/IS (comment NOP-5), Caltrans agreed that the proposed Project would not be expected to result in significant impacts to existing state transportation facilities. Caltrans, however, requested a verification that the truck turning radius at ramp locations could safely accommodate heavy truck turning movements in the proposed Project area. In response to Caltrans’ request, this section presents a technical assessment and verification of the truck turning movements of the on- and off-ramps of SR-60 interchange with S. 7th Avenue, prepared by Ruetters & Schuler Civil Engineers (R&S).

4.6.1 Transportation Impacts

Significance Criteria

Based on the assessment of the environmental checklist questions summarized in Table 4.6-1²³, this section of the EIR is focused on the following South Coast AQMD checklist questions and the applicable South Coast AQMD significance criteria:

- South Coast AQMD Checklist Question b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b)?
 - Applicable South Coast AQMD Significance Criteria: none
- South Coast AQMD Checklist Question d) Result in a substantial increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?
 - Applicable South Coast AQMD Significance Criteria: Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased

Project Operations Features

The proposed Project could increase daily round-trip traffic by up to 15 trucks and six (6) employee vehicles per day (Table 2-1 in Chapter 2: Project Description). Table 4.6-2 describes the number of truck trips by the type of materials being moved through the facility on an annual basis under both baseline and proposed Project conditions. This table indicates that the proposed Project would result in an additional 3,422 raw material scrap trips, 283 plastic, metal, and slag trips, and 551 additives trips per year.

²³ Table 4.6-1 documents that the NOP/IS (Appendix A) determined that potential conflicts with program plan, ordinance or policy, air traffic patterns, emergency access, and transit, bike or pedestrian impacts would be less than significant, and further evaluation of this issue in Chapter 4 of the EIR is not required.

Table 4.6-2 Annual Traffic Generation from Materials Movement: Baseline & Proposed Project

| Materials Movement | Year 2014 Baseline Conditions (pre-Project) | Proposed Project (post-Project) | Proposed Project Increment |
|---------------------------------------|---|---------------------------------|----------------------------|
| Plastics (trucks per year) | 410 | 497 | 87 |
| Metals (trucks per year) | 118 | 136 | 18 |
| Slag (trucks per year) | 506 | 684 | 178 |
| Additives (trucks per year): | | | |
| - Coke (smelting reagents) | 172 | 212 | 40 |
| - Limestone | 35 | 116 | 43 |
| - Cobbled Steel | 157 | 401 | 114 |
| - Soda Ash | 803 | 1,154 | 351 |
| - Other Additives | 156 | 159 | 3 |
| Raw Materials Scrap (trucks per year) | 11,843 | 15,265 | 3,422 |
| Finished Product (trucks per year) | 5,335 | 6,135 | 800 |
| Finished Product (railcars per year) | 124 | 155 | 31 |
| Total Trucks per Year (round trip) | 19,710 | 24,820 | 5,110 |
| Total Trucks per Day (round trip) | 54 | 68 | 14 ⁽¹⁾ |

Source: Quemetco, Inc., 2015

Note: (1) Although the proposed Project increment for additional trucks is approximately 14 trucks per day, the value of 15 trucks per day (and 5,475 trucks per year) was used to be reasonably conservative

Trip Generation

Total daily and annual proposed Project trip generation is presented in Table 4.6-2. The annual baseline and proposed Project trip generation includes trip type by material (no more than 54 truck trips per day over a 24-hour period of operation). Based on existing operations, truck trips accessing the Quemetco facility arrive at a rate of approximately two to three per hour over a 24-hour period.

With the proposed Project operations, an additional 15 round trip truck deliveries will access the facility at a rate of one arrival and one departure during each of the peak hours.²⁴ Additionally, each round trip is considered two vehicle trips and are therefore shown arriving and departing during each peak hour (R&S, 2018).

Quemetco also undergoes three shift changes throughout the day; however, only the morning shift change and a.m. peak hour of adjacent street traffic coincide. Neither of the remaining shift changes coincide with the p.m. peak hour of adjacent street traffic. Quemetco will add six new employees to accommodate the additional work needs of the expanded operations; the analysis assumes two employees will be added to each shift. Based on this, two new employees will arrive and two will depart during the shift change coinciding with the a.m. peak hour of adjacent street traffic.

²⁴ Although the incremental daily increase in truck activity presented in Table 4-6.2 is 14, for the purposes of a conservative impact assessment, this environmental analysis assumed an increase in 15 trucks per day.

Estimated average daily traffic (ADT) and a.m./p.m. peak hour of adjacent street traffic volumes due to the proposed increase in the number of employees and heavy-duty trucks are shown in Table 4.6-3.

Table 4.6-3 Project Trip Generation

| Traffic Type | Proposed Project Increase | ADT | a.m. Peak Hour | | p.m. Peak Hour | |
|-------------------|---------------------------|-----|----------------|----------------|----------------|----------------|
| | | | Inbound Trips | Outbound Trips | Inbound Trips | Outbound Trips |
| Employee | 6 (per day) | 12 | 2 | 2 | 0 | 0 |
| Heavy-Duty Trucks | 15 (per day) | 30 | 2 | 2 | 2 | 2 |
| Total Trips | | 42 | 4 | 4 | 2 | 2 |

Source: R&S, 2018

The data in Tables 4.6-2 and 4.6-3 is presented to support the following transportation impact analysis.

4.6.2 Transportation Impact Analysis

TRANS-1: Potential VMT Impacts

South Coast AQMD Checklist Question b) Would the proposed Project conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b)?

Applicable South Coast AQMD Significance Criteria: none

As discussed in Section 3.6, the California legislature enacted SB 743 in 2013, which required, among other things, that the OPR adopt the new CEQA Guidelines Section 15064.3 - Determining the Significance of Transportation Impacts for assessing transportation impacts. OPR has replaced roadway capacity and vehicle delay measures, often described as LOS, with VMT, which estimates the total distance people drive by vehicle.

The South Coast AQMD has not yet adopted a VMT significance threshold for evaluating transportation impacts in CEQA under SB 743. Therefore, this EIR utilizes the thresholds developed by OPR in December 2018 entitled, “*Technical Advisory on Evaluating Transportation Impacts in CEQA*” (Technical Advisory) for automobile VMT (i.e., light-duty vehicles).

Thresholds for VMT Impacts

The Technical Advisory suggests that lead agencies may screen out VMT impacts under CEQA based on project size, VMT generation characteristics, transit availability, and provision of

affordable housing. The following project types are 'screened out' as having less-than-significant transportation impacts in the Technical Advisory²⁵:

Small Projects Generating Less than 110 Daily Trips: OPR suggests a small project that would generate 110 trips per day or less generally may be assumed to cause a less-than-significant transportation impact and thus not warrant further VMT analysis.

Redevelopment Projects with a Net Decrease in VMT: Where a project replaces existing VMT-generating land uses, if the replacement leads to a net overall decrease in VMT, the project would lead to a less-than-significant transportation impact. If the project leads to a net overall increase in VMT, then the thresholds developed by the jurisdiction should apply.

Projects in Low VMT Areas: Residential and office (or other land use) projects that are located in areas with low VMT, and that incorporate similar features (i.e., density, mix of uses, transit accessibility), will tend to exhibit similarly low VMT and thus do not warrant further VMT analysis.

Projects in Transit Priority Areas (TPAs): A TPA is an area within a half a mile of a major transit stop or a bus transit corridor with service intervals of no longer than 15 minutes during peak commute hours. A 'major transit stop' means "a site containing an existing rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods." as defined by Public Resources Code Section 21064.3. OPR suggests that a project in TPA should generally be presumed to have less than significant impacts, but the presumption might not be appropriate if the project:

- Has a Floor Area Ratio (FAR) of less than 0.75
- Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking)
- Is inconsistent with the applicable Sustainable Communities Strategy (SCS) (as determined by the lead agency, with input from the Metropolitan Planning Organization)
- Replaces affordable residential units with a smaller number of moderate- or high-income residential units

Local-Serving Retail Projects under 50,000 Square Feet: Because new retail development typically redistributes shopping trips rather than creates new trips, estimating the total change in VMT (i.e., the difference in total VMT in the area affected with and without the project) is the best way to analyze a retail project's transportation impacts. By adding retail opportunities into the urban fabric and thereby improving retail destination proximity, local-serving retail development tends to shorten trips and reduce VMT. Thus, lead agencies generally may presume such development creates a less-than-significant transportation impact. Regional serving retail development, on the other hand, which can lead to substitution of longer trips for shorter ones, may tend to have a significant impact. Where such development decreases VMT,

²⁵ Governor's Office of Planning and Research. 2018, December. Technical Advisory on Evaluating Transportation Impacts in CEQA. https://opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf

lead agencies should consider the impact to be less-than-significant. The Technical Advisory suggests that retail uses of less than 50,000 square feet might be considered local-serving.

Affordable Housing Projects: OPR guidance indicates that adding affordable housing to infill locations generally improves jobs-housing match, in turn shortening commutes and reducing VMT. Further, "... low-wage workers in particular would be more likely to choose a residential location close to their workplace, if one is available." In areas where existing jobs-housing match is closer to optimal, low-income housing nevertheless generates less VMT than market rate housing, therefore, a project consisting of a high percentage of affordable housing may be a basis for the lead agency to find a less-than-significant impact on VMT. Evidence supports a presumption of a less-than-significant impact for a 100 percent affordable residential development (or the residential component of a mixed-use development) in infill locations.

OPR also identified the following recommended VMT thresholds for projects that are not screened out under the criteria above:

Residential Projects: A proposed residential project exceeding a level of 15 percent below existing VMT per capita may indicate a significant transportation impact. OPR states these thresholds can be applied to either household (i.e., tour-based) VMT or home-based (i.e., trip based) VMT assessments.²⁶

Office (Employment) Projects: OPR recommends that office (employment) projects that would generate vehicle travel exceeding 15 percent below existing VMT per employee for the region may indicate a significant transportation impact. OPR uses the term 'office;' however, the likely intent of the advisory is as 'employment.'

Retail Projects: Because new retail development typically redistributes shopping trips rather than creating new trips, OPR recommends a threshold based on the total change in VMT (i.e., the difference in total VMT in the area affected with and without the project) as the best way to analyze a retail projects transportation impacts. A net increase in total VMT may indicate a significant transportation impact.

The thresholds identified by OPR were derived from the CARB *2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals* (CARB Report) on the VMT reductions needed over current conditions (2015-2018) to meet the State's 2030 and 2050 climate goals.²⁷ The CARB Report includes non-binding technical information on what level of statewide VMT reduction would promote achievement of statewide GHG emission reduction targets. CARB asserts that the currently adopted SCSs throughout the state "would achieve in aggregate, a nearly 18 percent reduction in statewide per capita on-road light-duty transportation-related GHG emissions relative to 2005 by 2035, if those SCSs were successfully implemented."

²⁶ OPR states that lead agencies can evaluate each component of a mixed-use project independently and apply the significance threshold for each project type included. In the analysis of each use, a project should take credit for internal capture. Alternatively, a lead agency may consider only a projects dominant use.

²⁷ California Air Resources Board (CARB). January 19. 2017 Scoping Plan-Identified VMT Reductions and Relationship to State Climate Goals. <https://ww2.arb.ca.gov/resources/documents/carb-2017-scoping-plan-identified-vmt-reductions-andrelationship-state-climate>

However, in order to meet the state climate goals, the full reduction needed is a 25 percent reduction in statewide per capita on-road light-duty transportation-related GHG emissions. CARB has “determined that those targets would be infeasible for metropolitan planning organizations (MPOs) to achieve with currently available resources.” CARB concluded (using assumptions of a cleaner fuels and technologies scenario) that a 14.3 percent reduction in total daily VMT per capita below existing conditions and a 16.8 percent reduction in light-duty VMT per capita below existing conditions were needed to meet these goals. The CARB Report is based on modeling that incorporates cleaner technologies and fuels assumptions consistent with the 2017 Scoping Plan Update and the 2016 Mobile Source Strategy.

Thresholds for Impacts to Goods Movement

Neither the Technical Advisory nor CEQA Guidelines Section 15064.3(a) directly address how to analyze transportation impacts associated with changes in traffic associated with goods movement, which is largely carried out by heavy-duty trucks. CEQA Guidelines Section 15064.3(a) specifies that the VMT to be analyzed is defined as the amount and distance of *automobile travel* (emphasis added) attributable to a project. The term 'automobile' refers to on-road *passenger vehicles, specifically cars and light trucks* (emphasis added).²⁸ SB 743 does not require the inclusion of heavy-duty truck trips, utility vehicles, or other types of vehicles in the VMT analysis.²⁹ In the case of trucks (other than light trucks), based on CARB's 2017 Scoping Plan, the State's strategy for the goods movement sector is not via VMT reduction, but through advances in technology [zero-emissions (ZE) and near-zero emissions (NZE) control strategies].³⁰

Automobile VMT Impact Assessment

CEQA Guidelines Section 15064.3(a) states that the primary consideration in evaluating a project's transportation impacts for CEQA purposes is the amount and distance that a project might cause people to drive. This approach captures two measures of transportation impacts: number of automobile trips generated and VMT. The proposed Project would result in an increase in six (6) daily employee commute trips by automobile (which are comprised of light-duty passenger vehicles and light-duty trucks). Consequently, for the purpose of quantifying automobile VMT, the proposed Project is expected to generate less than the 110 trips per day for employee commute trips and is screened out from a more detailed VMT analysis in accordance with OPR's guidance for small projects. Thus, the proposed Project would result in less-than-significant transportation impacts under SB 743 regarding employee trips.

²⁸ Governor's Office of Planning and Research, December 2018, Technical Advisory on Evaluating Transportation Impacts Under CEQA, https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf accessed January 10, 2021.

²⁹ South Coast coordinated with staff at OPR on January 12, 2021 to confirm how to address heavy-duty freight VMT in CEQA documents. OPR staff stated that the intent of SB 743 was to address passenger vehicle VMT impact and not freight VMT, as cited under CEQA Guidelines Section 15064.3(a). Therefore, lead agencies could exclude freight VMT from transportation VMT impact analyses under CEQA.

³⁰ California Air Resources Board, 2017, California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target, https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf accessed on March 18, 2019.

Truck VMT

As noted above, CEQA Guidelines Section 15064.3(a) specifies that VMT to be analyzed is defined as the amount and distance of *automobile travel* attributable to a project.³¹ It does not require any analysis of increased VMT from heavy-duty truck trips. In fact, in CARB's 2017 Scoping Plan the State's strategy for the goods movement sector is not via VMT reduction, but through advances in technology [ZE and NZE control strategies].³² Therefore, the analysis below is not required, but is included for informational purposes.

Spent lead acid batteries that are not locally recycled in the region are exported out of Southern California. Currently more than 40 percent of California-generated used lead acid batteries are being sent to secondary lead scrap recyclers outside of California. The most common domestic destinations are battery recycling facilities in Texas or further east; however, significant tonnage is also sent to Mexico, Canada, and Korea. Such export, whether domestic or foreign, results in transportation-related air pollutant and GHG emissions, as well as potential environmental impacts associated with less stringent regulations for lead acid battery recycling outside of California.

If the proposed Project is implemented, the Quemetco facility will see an increase of 15 daily round trip truck trips along with an increase in localized VMT and trip generation. Although the trips would be new to the facility, a concurrent reduction of 15 trips per day (and 5,475 trips per year) that are currently needed to export used batteries outside the state by truck or train and overseas by ship could potentially occur. For example, by truck it is 516 miles round trip from the Quemetco facility to the eastern state border (Arizona); implementation of the proposed Project could reduce truck travel within California by 7,740 miles per day and by 2,824,584 miles per year. Additionally, VMT from batteries exported out of the U.S.A. would travel much further than the distance to the Arizona-California state line. Since the actual destination of the exported batteries is not known, it would be deemed speculative; therefore, the actual VMT avoided by the proposed Project (displacement) is speculative and not estimated. Although this could result in a substantial decrease in transportation-related emissions within California, out of state and overseas, this potential reduction in transportation-related emissions and other environmental impacts is speculative and not evaluated further in the EIR.

The regional truck trips associated with transporting lead acid batteries to secondary lead scrap recyclers outside of California will be diverted locally with shorter driving distances, causing a regional reduction in the overall distances traveled for the purpose of transporting secondary lead scrap. Thus, on a regional basis, the proposed Project operations would be expected to reduce regional and statewide truck VMT.

³¹ South Coast AQMD staff conducted extensive research on the state's guidance for how to analyze truck VMT under SB 743 in CEQA documents. Searches included reviews of OPR's December 2018 Technical Advisory, CARB's 2017 Scoping Plan Update, the California Natural Resources Agency's rulemaking documents for the Updates to the 2019 CEQA Guidelines, which includes the incorporation of SB 743 requirements, and consultation with SCAG staff.

³² California Air Resources Board, 2017, California's 2017 Climate Change Scoping Plan: The Strategy for Achieving California's 2030 Greenhouse Gas Target, https://www.arb.ca.gov/cc/scopingplan/2030sp_pp_final.pdf, accessed on March 18, 2019.

TRANS-2: Project Impacts for Ramp Turning Radius for Trucks

Checklist Question d) Would the proposed Project result in a substantial increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Applicable South Coast AQMD Significance Criteria: Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.

In response to the Caltrans letter dated October 2, 2018, R&S prepared an evaluation of the truck turn movements for the northbound and southbound on- and off-ramps at the interchange of State Route 60 and S. 7th Avenue. The evaluation included a graphical depiction of the turning radius requirements over the existing on- and off-ramps, presented in Figures 4.6-1, 4.6-2, and 4.6-3.

The evaluation indicates that the existing ramp geometrics are adequate for the existing and proposed truck movements heading northbound and southbound on- and off-ramps at the interchange of SR-60 and S. 7th Avenue. Based on this technical evaluation, all turning radii are sufficient for the existing and proposed truck movements through these on- and off-ramps at 7th Avenue and SR-60. The Proposed Project's turning radius impacts would therefore be less than significant; no mitigation measures would be required.

Figure 4.6-1 State Route 60 Northbound On-Ramps





Figure 4.6-2 State Route 60 Northbound Off-Ramps



Figure 4.6-3 State Route 60 Southbound On- and Off-Ramps

4.6.3 Significance Determination

The assessment discussed in Section 4.6.2 provides substantial evidence that passenger vehicle VMT are below screening thresholds and traffic turning radii are adequate for the largest truck entering and leaving SR-60; for these reasons the passenger vehicle VMT and potential turning radii impacts from the proposed Project would be less than significant.

4.6.4 Cumulative Transportation Impacts

The Quemetco facility is located within the City of Industry jurisdiction within the industrial land activities use area within an existing secondary lead smelter. The proposed Project's would be the same activities that are currently being conducted at Quemetco's facility. These do not conflict with the City of Industry's General Plan Land Use Map nor trigger any land use permits or modifications (refer to Appendix A, NOP/IS, Section X: Land Use and Planning).

The turning movements of the on- and off-ramps with 7th Avenue and SR-60 intersections are functional and therefore, based on this assessment, cumulative baseline turning radii are not cumulatively significant. Thus, no further analysis is required. (CEQA Guidelines Section 15064(h)(1).)

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CHAPTER 5

PROJECT ALTERNATIVES

Introduction

Project Objectives

Significant Unavoidable Impacts

Alternatives Rejected as Infeasible

Description of Project Alternatives

Comparison of Project Alternatives

Environmentally Superior Alternative

5.0 PROJECT ALTERNATIVES

5.1 INTRODUCTION

CEQA requires that EIRs identify and discuss alternatives to the project that could avoid or substantially lessen the project's significant environmental impacts. (CEQA Guidelines § 15126.6(a)-(b); *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1988) 47 Cal.3d 376, 403). Chapter 4 of this EIR concludes that the proposed Project would not have any significant environmental effects. Nonetheless, this Chapter 5 - Project Alternatives provides a discussion of alternatives to the proposed Project to aid the public and the decisionmakers in understanding the proposed Project.

The identification and analysis of alternatives to a project is a fundamental part of the CEQA environmental review process. CEQA requires that an EIR “describe a range of reasonable alternatives to the project, or to the location of the project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives.” [(CEQA Guidelines Section 15126.6(a)]. CEQA Guidelines Section 15126.6(b) emphasizes that the focus of the alternatives analysis should be on alternatives that would avoid or substantially lessen any significant impacts of the project, even if the alternatives would impede to some degree the attainment of the project objectives, or would cause the project to be more costly.

An agency's selection of alternatives is governed by the rule of reason – the EIR shall present alternatives necessary to permit a reasoned choice [CEQA Guidelines Section 15126.6(f)]. The rule of reason and CEQA Guidelines Section 15126.6 requires the consideration and discussion of a range of reasonable alternatives to the proposed Project or to the location of the proposed Project, which would feasibly attain most of the basic objectives of the proposed Project but would avoid or substantially lessen any of the proposed Project's potentially significant effects and evaluate the comparative merits of the alternatives. When assessing feasibility, a lead agency may consider factors such as site suitability, economic viability, availability of infrastructure, general plan consistency, other plans, or regulatory limitations, jurisdictional boundaries, and whether the project proponent can reasonably acquire, control, or otherwise have access to an alternative site [CEQA Guidelines Section 15126.6(f)(1)]. “An EIR is not required to consider alternatives which are infeasible” [CEQA Guidelines Section 15126.6(a)]. Based on the analysis of the potential impacts in Chapter 4 the proposed Project would not result in any potentially significant impacts. Nonetheless, Chapter 5 of this EIR analyzes a range of reasonable alternatives to aid the public and decisionmakers in understanding the proposed Project.

Alternatives presented in this chapter were developed by identifying alternatives that may achieve most or some of the objectives of the proposed Project. Therefore, this chapter of the EIR analyzes the following project alternatives: Alternative 1 - No Project (i.e., not going forward with the proposed Project), Alternative 2 - Partial Increased Capacity Project, Alternative 3 - Offsite Facility, and Alternative 4 - Close the Facility. Comments made relative to the NOP/IS were also considered as part of developing the alternatives presented in this chapter.

5.2 PROJECT OBJECTIVES

As described in Chapter 2 – Proposed Project, Quemetco currently operates under a permit condition that limits the throughput to the rotary/kiln furnace and the reverberatory furnace to 600 tpd. This permit condition, originally issued to ensure the facility could operate in compliance with all applicable air pollutant emission regulations in effect at the time, was written prior to Quemetco making the following air pollution control improvements at the facility: 1) enclosing the battery wrecker building; and 2) installing the WESP, LOTOX®, and RTO.

With these air pollution control improvements in place, which have supported facility air toxic emission reductions to meet requirements of South Coast AQMD Rules 1402 and 1420.1, Quemetco now proposes to increase the daily feed rate limit and allow the facility to recycle more batteries, in order to accommodate the current demand for local and regional lead battery and secondary scrap recycling services. The proposed Project would also allow use of petroleum coke, in lieu of or in addition to calcined coke, as a smelting reagent in the reverberatory furnace and electric arc furnace and minor modifications to existing permit conditions for activities that have already been implemented and for minor facility improvements that have had (or will have) no effect on facility emissions and would not have any environmental impacts (refer to Chapter 2 – Proposed Project for a detailed project description).

Quemetco is proposing the Capacity Upgrade Project to allow the facility to recycle more batteries to accommodate the existing demand for local and regional lead-acid battery and secondary scrap recycling services, and to eliminate the existing daily Compliance Stop Period, which requires shutting down the rotary/kiln feed dryer and idling of the reverberatory furnace. As the only lead scrap (including lead-acid batteries) recycling facility in California, the proposed Capacity Upgrade Project at Quemetco will help bridge the gap between local and regionally-generated lead scrap and spent lead-acid batteries and the recycling capacity in the region. Currently, approximately 30-40% of lead scrap and spent lead-acid batteries that are not locally recycled in the region are exported out of California (Appendix E). The most common domestic destinations are battery recycling facilities in Texas or further east; however, significant tonnage is also sent to Mexico, Canada, and Korea. Furthermore, the global battery recycling market is projected to increase at a compound annual growth rate of 5.3% between 2019 and 2027 (Emergen Research, 2020). Since a large tonnage of lead scrap and spent lead-acid batteries is already exported out of state and overseas, there is a demonstrated need to increase the local and regional lead scrap and spent lead-acid battery recycling capacity in the region where it is generated. With this primary purpose, the objectives of the proposed Project are to:

1. Accommodate the existing and future need for local, regional, and state lead-acid battery and secondary scrap recycling services, to reduce diversion of lead-acid battery and lead scrap materials out of state.
2. Minimize the need to import calcined coke, if local supplies are not available as a smelting reagent, by allowing the substitution of locally available petroleum coke.
3. Maximize facility productivity and efficiency by more efficiently utilizing existing equipment and reducing inefficient fuel consumption, while assuring compliance with all applicable regulatory requirements.

4. Protect local jobs, including and especially union jobs, within the City of Industry through continued operation of the existing Quemetco facility.
5. Reduce the need for construction and operation of new battery recycling facilities elsewhere in the region, state, or country by improving the efficiency of an existing facility.

5.3 SIGNIFICANT UNAVOIDABLE IMPACTS

An EIR should focus on alternatives that can avoid or substantially lessen a project's significant environmental effects. [CEQA Guidelines Section 15126.6(a)-(b).] An EIR is not required to analyze alternatives that do not offer significant environmental advantages in comparison with the project. [CEQA Guidelines Section 15126.6(b).] As presented in Chapter 4 - Environmental Impact Analysis of this EIR, the proposed Project would result in less than significant impacts in all impact areas and therefore mitigation measures are not required. Therefore, the proposed Project would not result in any significant and unavoidable impacts in any of the environmental topic areas.

5.4 ALTERNATIVES REJECTED AS INFEASIBLE

CEQA Guidelines Section 15126.6(c) states that a CEQA document should identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reason underlying the lead agency's determination. CEQA Guidelines Section 15126.6(c) also states that the factors used to eliminate alternatives from detailed consideration in an EIR include: 1) failure to meet most of the basic project objectives; 2) infeasibility; or 3) inability to avoid significant environmental impacts. The following two alternatives were considered by the lead agency but rejected as infeasible.

5.4.1 Alternative 3 - Offsite Facility

Alternative 3 is the offsite facility alternative which contemplates accommodating the proposed Project activities at a different, offsite location, either elsewhere in the South Coast AQMD region, or elsewhere in California at large. This alternative would not shut down or close the existing Quemetco facility. The contemplation of closing the existing Quemetco facility is analyzed in Section 5.4.2: Alternative 4 - Closing the Facility.

Because no other lead-acid battery recycling facility currently exists in California, accommodating the proposed additional throughput elsewhere would require a new battery recycling facility to be constructed at another location.

Since the analysis of the proposed Project in Chapter 4 indicates that no significant adverse impacts will occur, the construction of a new battery recycling facility pursuant to Alternative 3 would not eliminate or reduce any impacts associated with the proposed Project. Instead, Alternative 3 would result in substantially greater impacts than the proposed Project since no construction is needed to implement the proposed Project. Even if the new facility is located within the South Coast AQMD region and subject to the same regulatory controls as the existing Quemetco facility, Alternative 3

would result in significantly greater environmental impacts due to construction of a new lead-acid battery recycling facility.

Specifically, construction of a new facility would result in construction-related air pollutant emissions, GHG emissions, construction noise, energy, and water consumption, and construction-related transportation impacts. While construction impacts would be temporary, the duration of construction activities could take several months to complete, and the construction emissions could be potentially significant.

In addition, the operational impacts of Alternative 3 would be potentially greater than the proposed Project. If the new facility were to be located outside of the South Coast AQMD region but within California, the new facility would be subject to CEQA, but it could be subject to less rigorous local regulations than the existing Quemetco facility, resulting in potentially significant emissions and hazardous-related impacts than the proposed Project. Similarly, if the new facility were to be located outside of California, the new facility, depending on the environmental regulations at the local and state level, could be subject to less rigorous local regulations than the existing Quemetco facility, resulting in potentially significant emissions and hazardous-related impacts than the proposed Project.

Because Alternative 3 would result in two operating lead-acid battery recycling facilities as opposed to one, increased emissions impacts when compared to the proposed Project would be expected to occur, even if the new facility were subject to the same regulations or other regulations with similar stringency as the existing Quemetco facility. Thus, Alternative 3 would be expected to create potentially significant environmental impacts when compared to the proposed Project.¹

Moreover, Alternative 3 would not meet project objectives 1, 3, 4 and 5. Alternative 3 would not meet project objective 1 to the same extent as the proposed Project, because it could result in the continued diversion of regional Southern California battery and scrap materials to other regions outside of Southern California and potentially outside of California altogether, depending on where the new facility is located. Project objective 3 would also not be achieved because a new facility would neither be able to take advantage of existing facility equipment and infrastructure, nor reduce inefficient fuel consumption while maximizing the productivity and efficiency of an already constructed and operating facility. While the new facility would create new jobs, as well as retain the existing jobs at the current facility, Alternative 3 would likely not increase local jobs, including union jobs, within the City of Industry, and would therefore not meet project objective 4 to the same extent as the proposed Project. Finally, Alternative 3 would accomplish the opposite of project objective 5, because it would increase, instead of reduce, the need for construction and operation of new battery recycling facilities elsewhere in the region, state, or country. Thus, Alternative 3 fails to meet most of the project objectives.

Finally, it is important to note that Alternative 3 is not realistic as a practical matter, as the Project applicant does not own or control any other industrial parcels of land at the size necessary to

¹ As discussed above, this alternative does not consider closure of the existing Quemetco facility and moving the entire facility (plus the throughput increase) to an alternative location. However, even if such an alternative was considered, impacts associated with closure of the existing facility, demolition of the existing structures, removal of equipment and hazardous materials, etc., would also likely result in significantly greater impacts than the proposed Project.

construct an entirely new battery recycling. It is speculative to anticipate that another entity not owned by RSR would build a new lead-acid battery recycling facility. The South Coast AQMD does not have any permit applications for such and further has no way of knowing what other new facilities are contemplated outside of its jurisdiction or outside of California. While the lack of ownership or control of land to accommodate a wholly new battery recycling facility does not make the alternative infeasible, Alternative 3 was rejected as infeasible and is not further analyzed in this EIR due to the inability of Alternative 3 to reduce environmental impacts overall and its failure to achieve most of the project objectives.

5.4.2 Alternative 4 - Closing the Facility

Alternative 4 is the facility closure alternative. Under Alternative 4, Quemetco would not implement the proposed Project and would shut down the facility. Alternative 4 would reduce existing emissions from the existing facility. Under Alternative 4, the entirety of the existing and proposed lead-acid battery recycling activities at the Quemetco facility would need to be diverted to other existing facilities located outside of the South Coast AQMD's jurisdiction and outside of California because there are no other lead-acid battery recycling facilities within California.

For example, in 2010, 12% of all used lead-acid batteries generated in the United States were exported to Mexico, which has a less stringent regulatory ambient air standard for lead that is 10 times larger than the lead NAAQS in the United States (Occupational Knowledge International and Fronteras Comunes, 2011). While required in the United States, the regulatory requirements in Mexico do not require capital repairs or emission control technology advancements to be implemented at secondary lead smelters. As a result, lead emissions reported by lead-acid battery recycling plants in Mexico are approximately 20 times higher than from comparable lead-acid battery recycling plants in the United States (Occupational Knowledge International and Fronteras Comunes, 2011).

Additional lead-acid battery recycling facilities are located overseas. Lead scrap export data shows Mexico, Korea, Canada, India and Ecuador as the largest export destinations for United States-generated lead scrap. When specifically examining spent lead-acid batteries (and not lead scrap as a whole), Mexico, Korea, and Canada are the first, second, and third largest export destinations, respectively. Of the aforementioned export destinations, the United States has the most stringent ambient air quality standard for lead. Refer to Appendix E for a comparison of the lead ambient air quality standards in the United States and top five lead scrap overseas export destinations.

Quemetco is the only lead-acid battery recycling facility located within California, and current market data suggests that 30-40% of lead scrap generated in California is being exported out of state and outside of the United States (Appendix E). The Association of Battery Recyclers, a group of companies which includes Quemetco, is involved in lead-acid battery recycling, and represents 10 recycling companies operating 17 lead-acid battery plant at various locations throughout the United States as shown in Figure 5.4-1. The nearest facility to Quemetco is located in Texas.

Once the permit is issued, South Coast AQMD ensures the facility is operating in compliance with those permit conditions and regulatory requirements through regular emissions testing and reporting and through regular facility inspections. If the facility is operating out of compliance with any requirements, a notice to comply or notice of violation may be issued. Where a facility is in violation, the South Coast AQMD may pursue the issuance of an order for abatement. Such an order, if issued, asks the facility to cease and desist from violations, which in some scenarios could fully prohibit the emissions associated with ongoing business activities. More commonly, an Order for Abatement requires a facility to refrain from a particular act unless certain conditions are met. While Quemetco has had recent violations, these violations are not of a nature that would require the South Coast AQMD to follow a process that would allow for shutting down of the facility. For a discussion of these violations, please refer to Appendix C.

Closing down the Quemetco facility is not a feasible alternative because it would defeat the project objectives. Moreover, South Coast AQMD's regulatory authority is limited to ensuring compliance with air quality laws. South Coast AQMD is not a land use agency and thus, does not control city or county zoning and planning decisions. As a result, South Coast AQMD does not have the ability to determine where a facility should be located or determine its siting in relation to other land uses. Alternative 4 is, therefore, legally infeasible in the context of this EIR.

Finally, Alternative 4 is inconsistent with the proposed Project's objectives, which seek to accommodate existing and future need for battery recycling services and maximize the efficiency and productivity of the existing facility equipment to reduce inefficient fuel consumption and the need for construction and operation of additional battery recycling facilities. In addition, Alternative 4 would result in lost jobs, including union jobs, from the City of Industry and the Southern California region at large.

Due to the failure to achieve most of the project objectives, Alternative 4 was rejected as infeasible and is not analyzed further in this EIR.

5.5 DESCRIPTION OF PROJECT ALTERNATIVES

Two alternatives to the proposed Project are analyzed, for the purpose of fostering informed decision-making and public participation. [CEQA Guidelines Section 15126.6(a)-(f).]

5.5.1 Alternative 1 – No Project

Alternative 1 is the No Project Alternative described in CEQA Guidelines Section 15126.6(e). Under Alternative 1, the proposed Project would not be implemented, no revisions to the current facility operations would occur, and the facility would continue to operate pursuant to its current Title V permit. Under the No Project Alternative, none of the project objectives would be achieved. Specifically, the No Project Alternative would not increase facility production by eliminating inefficiencies in operations, would not utilize existing facility infrastructure to accommodate the increased demand for local, regional, and state lead-acid battery recycling services, and would not increase facility efficiency by maximizing output of the existing equipment and avoiding stops in processing.

5.5.2 Alternative 2 – Partial Increased Capacity Project

Under Alternative 2, the existing facility would increase throughput, but only to a partial, lesser extent when compared to the proposed Project. Under this alternative, the following modifications would be made to the existing Quemetco facility: partially increasing the rotary/kiln feed dryer throughput limit from the existing 600 tpd limit; partially increasing the amount of total coke material (e.g., calcined coke, petroleum coke, or a combination thereof) allowed to be processed in the rotary/kiln feed dryer and reverberatory furnace from the existing 600,000 lbs/month ; and partially allowing petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric arc furnace.

5.6 COMPARISON OF PROJECT ALTERNATIVES

5.6.1 Alternative 1 – No Project

Under Alternative 1, no elements of the proposed Project, including the throughput increase, would be implemented. Without the throughput increase, 150 tpd of battery feed stock that the proposed Project seeks to recycle on-site, would instead continue to be diverted to other existing secondary lead smelter facilities located outside of South Coast AQMD's jurisdiction and outside of California because there are no other lead-acid battery recycling facilities within California.

For example, in 2010, 12% of all used lead batteries generated in the United States were exported to Mexico, which has a less stringent regulatory ambient air standard for lead that is 10 times larger than the lead NAAQS in the United States (Occupational Knowledge International and Fronteras Comunes, 2011). While required in the United States, the regulatory requirements in Mexico do not require capital repairs or emission control technology advancements to be implemented at secondary lead smelters. As a result, lead emissions reported by lead battery recycling plants in Mexico are approximately 20 times higher than from comparable plants in the United States (Occupational Knowledge International and Fronteras Comunes, 2011).

Quemetco is the only lead-acid battery recycling facility located within California, and current market data suggests that 30-40% of lead scrap generated in California is being exported out of state and outside of the United States (Appendix E). The nearest facility to Quemetco is located in Texas. Therefore, under Alternative 1, current diversion impacts would continue to occur.

In addition, facilities located outside of California may be subject to less stringent local and state regulatory standards (e.g., air quality, energy, hazards and hazardous waste, hydrology and water quality, noise, and transportation) than facilities located within California and the South Coast AQMD jurisdiction.

Specifically, lead-acid battery recycling activities occurring outside of South Coast AQMD's jurisdiction would not be subject to Rule 1420.1, which is comprised of established and enforceable emission standards for lead and TACs from large lead-acid battery recycling facilities. The domestic or international diversion of lead-acid batteries to other facilities, results in air

pollutant and GHG emissions associated with trucking, rail, and shipping miles traveled. These types of emission impacts occur in the existing baseline., As a result, Alternative 1 would also not serve to reduce any of these existing impacts associated with diversion activities.

Air Quality and GHGs: Under Alternative 1, the existing operations at the site would continue without implementing any of the operational changes from the proposed Project. In addition, spent lead-acid batteries would continue to be diverted to other recycling facilities in the United States and abroad under Alternative 1. The analysis of the proposed Project in Chapter 4 concluded that the emission increases associated with the increased allowable throughput would create less than significant air quality and GHG emission impacts. However, none of the criteria pollutant and GHG emission increases associated with the proposed Project would occur under Alternative 1. Therefore, the air quality and GHG emissions impacts for Alternative 1 are less than the impacts associated with the proposed Project. While there would be no direct impacts to air quality and GHG emissions, Alternative 1 would also not reduce any indirect impacts associated with the domestic and foreign export of spent batteries to other recycling facilities in the United States and abroad, including, among others, air quality and GHG impacts.

Energy: Under Alternative 1, the existing operations at the site would continue without implementing any of the operational changes from the proposed Project. In addition, spent lead-acid batteries would continue to be diverted to other recycling facilities in the United States and abroad under Alternative 1. Specific to energy consumption, the projected increase in energy consumption associated with the proposed Project would not occur under Alternative 1 because no capacity increase would occur. The analysis of the proposed Project in Chapter 4 concluded that the increased energy consumption associated with the increased allowable throughput would create less than significant energy impacts. However, although none of the direct energy impacts associated with the proposed Project would occur under Alternative 1, the inefficient ongoing use of energy during the idle time would continue. Therefore, the direct energy consumption-related impacts for Alternative 1 are less than the impacts associated with the proposed Project. While there would be no direct impacts to energy, indirect energy impacts such as fuel for transport associated with diverting lead-acid batteries outside of the region, state, and the United States would continue to occur under this alternative.

Hazards and Hazardous Materials: Under Alternative 1, the existing operations at the site would continue without implementing any of the operational changes from the proposed Project and no additional hazards or hazardous materials would be introduced to the Project site. In addition, hazardous materials (i.e., spent lead-acid batteries) would continue to be diverted to other recycling facilities in the United States and abroad under Alternative 1. The analysis of the proposed Project in Chapter 4 concluded that the increased impacts to hazards and hazardous materials would be less than significant. However, none of the direct hazards and hazardous materials impacts associated with the proposed Project would occur under Alternative 1. Therefore, the direct hazards and hazardous materials impacts for Alternative 1 are less than the impacts associated with the proposed Project. While there would be no direct impacts to hazards and hazardous materials, indirect hazards and hazardous materials impacts such as illegal or unsafe disposal or potential toxic spills or fires associated with diverting lead-acid batteries outside of the region, state, and the United States would continue to occur under this alternative.

Hydrology and Water Quality: Under Alternative 1, the existing operations at the site would continue without implementing any of the operational changes from the proposed Project such that no increase in the amount of water consumed or wastewater discharged will occur. The analysis of the proposed Project in Chapter 4 concluded that the increased impacts to hydrology and water quality would be less than significant. However, none of the hydrology and water quality impacts associated with the proposed Project would occur under Alternative 1. Therefore, the hydrology and water quality impacts for Alternative 1 are less than the impacts associated with the proposed Project. While there would be no direct impacts to hydrology and water quality, potential indirect hydrology and water quality impacts associated with diverting lead-acid batteries out of the region, state, and the United States would continue to occur under this alternative. Potential indirect hydrology and water quality impacts include lead groundwater and/or surface water contamination due to battery acid releases as a result of illegal or unsafe recycling operations. In the absence of proper neutralization systems, battery acid may be carelessly disposed of and can cause lead to leach into groundwater, rivers, and the sewage system (Toxics Link, 2019). This represents a potential indirect hydrology and water quality impact under Alternative 1.

Transportation: Under Alternative 1, the proposed Project's increased traffic to and from the Quemetco facility would not occur. Implementation of Alternative 1 means that the transport of spent lead-acid batteries that cannot be recycled at the existing facility due to the throughput cap would continue to be diverted to location outside of California and the United States. The analysis of the proposed Project in Chapter 4 concluded that the increased impacts to transportation would be less than significant. However, none of the direct transportation impacts associated with the proposed Project would occur under Alternative 1. Therefore, the transportation impacts for Alternative 1 are less than the impacts associated with the proposed Project. While there would be no direct impacts to transportation, indirect transportation impacts (such as an increase in trucking, rail, and shipping miles traveled to transport the spent lead-acid batteries elsewhere) associated with diverting lead-acid batteries outside of the region, state, and the United States would continue to occur under this alternative.

Project Objectives: Implementation of Alternative 1 would fail to achieve project objectives 1, 2, 3 and 5 and would achieve project objective 4.

Specifically, Alternative 1 would not achieve project objective 1 because the existing and future need for providing lead-acid battery recycling services within the region or state will not be accommodated. Moreover, Alternative 1 would not alleviate the ongoing diversion of lead-acid battery and scrap materials to other locations outside of California and the United States.

While the no project alternative would allow the continued operation of the existing Quemetco facility, Alternative 1 would not achieve project objective 2 because the need to import calcined coke will not be minimized since the substitution of locally available petroleum coke would not be allowed.

Under Alternative 1, project objective 3 would not be achieved because productivity and efficiency will not be maximized at the existing Quemetco facility, and inefficient fuel processing and fuel consumption during the Compliance Stop Period would continue to occur.

Alternative 1 will allow the continued operation of the existing Quemetco facility such that local jobs, including and especially union jobs, will be protected. Therefore, Alternative 1 would achieve the goals of project objective 4, but it would not result in the potential increase in jobs that would otherwise occur with the proposed Project.

Finally, project objective 5 would not be achieved under Alternative 1 because the ongoing diversion impacts would continue and potentially increase the need to construct and operate new lead-acid battery recycling facilities elsewhere in the region, state, or country for the near future until the time when the demand to recycle used electric vehicle batteries, hydrogen cell batteries, and other battery technologies displaces the demand for lead-acid battery recycling.

Summary: When compared to the proposed Project, Alternative 1 would have: 1) fewer direct impacts to air quality and GHG emissions, energy consumption, hazards and hazardous materials, hydrology and water quality, and transportation; and 2) the same indirect impacts to air quality and GHG emissions, energy, hazards and hazardous materials, and transportation due to the domestic and foreign export of spent batteries to other recycling facilities in the United States and abroad. Overall, Alternative 1 would result in similar, albeit slightly fewer, environmental impacts than the proposed Project. In addition, Alternative 1 would not reduce or eliminate any significant or potentially significant impacts since the proposed Project does not result in any significant or potentially significant impacts. In summary, implementation of Alternative 1 would fail to achieve project objectives 1, 2, 3, and 5 and would achieve project objective 4.

5.6.2 Alternative 2 – Partial Increased Capacity Project

Under Alternative 2, the existing facility would increase throughput, but only to a partial, lesser extent when compared to the proposed Project. Under this alternative, the following modifications would be made to the existing Quemetco facility: partially increasing the rotary/kiln feed dryer throughput limit from the existing 600 tpd limit; partially increasing the amount of total coke material (e.g., calcined coke, petroleum coke, or a combination thereof) allowed to be processed in the rotary/kiln feed dryer and reverberatory furnace from the existing 600,000 lbs/month limit; and partially allowing petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric arc furnace.

Under Alternative 2, a smaller portion of the battery feed stock would be processed than what is contemplated by the proposed Project (e.g., less than 150 tpd). With only a partial throughput increase, the remaining portion of battery feed stock that would not be processed would instead continue to be diverted to other existing secondary lead smelters located outside of South Coast AQMD's jurisdiction and outside of California because there are no other lead-acid battery recycling facilities within California.

For example, in 2010, 12% of all used lead-acid batteries generated in the United States were exported to Mexico, which has a less stringent regulatory ambient air standard for lead that is 10 times larger than the lead NAAQS in the United States (Occupational Knowledge International and Fronteras Comunes, 2011). While required in the United States, the regulatory requirements in Mexico do not require capital repairs or emission control technology advancements to be implemented at secondary lead smelters. As a result, lead emissions reported by lead battery

recycling plants in Mexico are approximately 20 times higher than from comparable plants in the United States (Occupational Knowledge International and Fronteras Comunes, 2011). Quemetco is the only lead-acid battery recycling facility located within California, and current market data suggests that 30-40% of lead scrap generated in California is being exported out of state and outside of the United States (see Appendix E). The nearest facility to Quemetco is located in Texas. Therefore, Alternative 2 would only partially reduce diversion impacts when compared to the proposed Project.

In addition, facilities located outside of California may be subject to less stringent local and state regulatory standards (e.g., air quality, energy, hazards and hazardous materials, hydrology and water quality, noise, and transportation) than facilities located within California and the South Coast AQMD jurisdiction. Specifically, lead-acid battery recycling activities occurring outside of South Coast AQMD's jurisdiction would not be subject to Rule 1420.1, which is comprised of established and enforceable emission standards for lead and TACs from large lead-acid battery recycling facilities.

The domestic or international diversion of lead-acid batteries to other lead smelting facilities results in air pollutant and GHG emissions associated with trucking, rail, and shipping miles traveled. These types of emissions impacts associated with diversion occur in the existing baseline, and therefore, Alternative 2 would not result in increased air pollutant and GHG emissions impacts when compared to the proposed Project. Moreover, Alternative 2 would not fully reduce any of these existing impacts associated with diversion activities.

Thus, under Alternative 2, a lesser portion of the direct environmental impacts associated with the proposed Project would be expected to occur. Lastly, Alternative 2 would also not fully reduce the indirect impacts associated with the domestic and foreign export of spent batteries to other recycling facilities in the United States and abroad.

Air Quality and GHGs: Under Alternative 2, the existing operations at the site would be expected to continue, but by implementing a partial throughput increase and allowing petroleum coke as a smelting reagent, to a lesser extent than what was contemplated by the proposed Project. Specific to air quality and GHG emissions, only a portion of the criteria pollutant and GHG emission increases associated with the proposed Project would be expected to occur. Thus, the projected partial increase in throughput under Alternative 2 would be expected to be less than the proposed Project. In addition, under Alternative 2, a portion of the spent lead-acid batteries would continue to be diverted to other recycling facilities in the United States and abroad, but at levels less than what would occur as a result of implementing the proposed Project. For this reason, Alternative 2 would not fully reduce the indirect impacts associated with the domestic and foreign export of spent batteries to other recycling facilities in the United States and abroad, including, among others, air quality and GHG impacts.

The analysis of the proposed Project in Chapter 4 concluded that the emission increases associated with the increased allowable throughput would create less than significant air quality and GHG emission impacts. Therefore, the air quality and GHG emissions impacts for Alternative 2 are less than the impacts associated with the proposed Project. Since the air quality and GHG emission

impacts of Alternative 2 would be less than the proposed Project, the air quality and GHG emission impacts for Alternative 2 would also be less than significant.

Energy: Under Alternative 2, the existing operations at the site would be expected to continue while implementing a partial throughput increase, to a lesser extent than what was contemplated by the proposed Project. In addition, under Alternative 2, a portion of the spent lead-acid batteries would continue to be diverted to other recycling facilities in the United States and abroad, but to a lesser extent than what would occur as a result of implementing the proposed Project. For this reason, Alternative 2 would not fully reduce the indirect energy impacts associated with diversion.

The analysis of the proposed Project in Chapter 4 concluded that the increased energy consumption associated with the increased allowable throughput would create less than significant energy impacts. Specific to energy consumption, although the projected increase in energy consumption associated with the Alternative 2 would be expected to be less than the proposed Project, a portion of the existing inefficient ongoing use of energy during the Compliance Stop Period would continue. Since the energy impacts of Alternative 2 are less than the proposed Project, the energy impacts for Alternative 2 would also be less than significant.

Hazards and Hazardous Materials: Under Alternative 2, the existing operations at the site would be expected to continue while implementing a partial throughput increase, to a lesser extent than what was contemplated by the proposed Project. In addition, under Alternative 2, a portion of the spent lead-acid batteries (e.g., hazardous materials) would continue to be diverted to other recycling facilities in the United States and abroad, but to a lesser extent than what would occur as a result of implementing the proposed Project. For this reason, Alternative 2 would not fully reduce the indirect hazards and hazardous materials impacts associated with diversion.

The analysis of the proposed Project in Chapter 4 concluded that the increased handling and processing of hazards and hazardous materials associated with the increased allowable throughput would create less than significant hazards and hazardous materials impacts. Specific to hazards and hazardous materials, the projected partial increase in handling hazardous materials would be expected to be less than the proposed Project. Since the hazards and hazardous materials impacts of Alternative 2 would be less than the proposed Project, the hazards and hazardous materials impacts for Alternative 2 would also be less than significant.

Hydrology and Water Quality: Under Alternative 2, the existing operations at the site would be expected to continue while implementing a partial throughput increase, to a lesser extent than what was contemplated by the proposed Project. Relative to hydrology and water quality, Alternative 2 would also be expected to increase the amount of water consumed but to a lesser extent than the proposed Project. Similarly, Alternative 2 would be expected to increase the amount of wastewater discharged, but to a lesser extent than the proposed Project. The analysis of the proposed Project in Chapter 4 concluded that the increased impacts to hydrology and water quality would be less than significant. Since the hydrology and water quality impacts of Alternative 2 would be less than the proposed Project, hydrology, and water quality impacts for Alternative 2 are also less than significant.

Transportation: Under Alternative 2, the existing operations at the site would be expected to continue while implementing a partial throughput increase, to a lesser extent than what was contemplated by the proposed Project. Specific to transportation, Alternative 2 would be expected to result in a partial increase in the transportation impacts originally contemplated by the proposed Project. The transportation impacts associated with Alternative 2 would be less than the proposed Project because fewer truck, rail, and other shipping-related trips would be needed. In addition, under Alternative 2, a portion of the spent lead-acid batteries would continue to be diverted to other recycling facilities in the United States and abroad, but at levels less than what would occur as a result of implementing the proposed Project. The analysis of the proposed Project in Chapter 4 concluded that the increased impacts to transportation would be less than significant. Since the transportation impacts of Alternative 2 would be less than the proposed Project, the transportation impacts for Alternative 2 would be also less than significant.

Project Objectives: Implementation of Alternative 2 would only partially achieve all of the project objectives.

Specifically, Alternative 2 would not fully achieve project objective 1 because the existing and future need for providing lead-acid battery recycling services within the region or State will only be partially accommodated. Moreover, Alternative 2 would only partially alleviate the ongoing diversion of lead-acid battery and scrap materials to other locations outside of California and the United States.

Alternative 2 would only partially achieve project objective 2 because the need to import calcined coke will not be completely minimized since the substitution of locally available petroleum coke will only be partially allowed.

Under Alternative 2, project objective 3 would not be fully achieved because productivity and efficiency will not be fully maximized at the existing Quemetco facility even though the facility's existing air pollution control devices and infrastructure have the capacity to handle a larger increase in throughput. Specifically, by underutilizing the process equipment and associated air pollution control devices, some inefficient fuel processing and fuel consumption would continue to occur, but to a lesser extent than if Alternative 2 was not implemented at all.

Alternative 2 will allow the continued operation of the existing Quemetco facility such that local jobs, including and especially union jobs, will be protected. Therefore, Alternative 2 would achieve the goals of project objective 4, but it would not fully realize the potential increase in jobs that would otherwise occur with the proposed Project.

Finally, project objective 5 would not be fully achieved under Alternative 2 because the ongoing diversion impacts would continue to occur.

Summary: When compared to the proposed Project, Alternative 2 would have: 1) fewer direct impacts to air quality and GHG emissions, energy consumption, hazards and hazardous materials, hydrology and water quality, and transportation; and 2) fewer indirect impacts to air quality and GHG emissions, energy, hazards and hazardous materials, and transportation due to the domestic and foreign export of spent batteries to other recycling facilities in the United States and abroad.

Overall, Alternative 2 would result in similar, albeit slightly fewer, environmental impacts as the proposed Project. In addition, Alternative 2 would not reduce or eliminate any significant or potentially significant impacts since the proposed Project does not result in any significant or potentially significant impacts. In summary, implementation of Alternative 2 would only partially achieve project objectives 1, 2, 3, and 5 and would achieve project object 4.

5.7 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As explained in the preceding analysis, Alternative 1 would result in fewer impacts when compared to the other alternatives analyzed in this EIR. While the least environmentally damaging alternative is Alternative 1, CEQA requires that a lead agency identify the next least-environmentally damaging alternative as the Environmentally Superior Alternative. Therefore, Alternative 2 is the Environmentally Superior Alternative.

However, as explained in the introduction as well as in the preceding discussions of Alternatives 1 and 2, the analysis of the proposed Project in Chapter 4 of this EIR concluded that the proposed Project’s potential environmental impacts would occur at less than significant levels. Thus, the Environmentally Superior Alternative would not reduce or avoid any significant and unavoidable, or potentially significant, impact associated with the proposed Project.

Table 5-1 presents a summary comparison of the impacts between the proposed Project and alternatives.

Table 5-1 Environmental Impacts of Alternatives as Compared to the Proposed Project

| Environmental Topic | Proposed Project | Alternative 1 - No Project | Alternative 2 - Partial Increased Capacity Project |
|---------------------------------|------------------|----------------------------|--|
| Air Quality and GHG Emissions | | | |
| - Operations | LTS | LTS(-) | LTS(-) |
| - Air Toxics | LTS | LTS(-) | LTS(-) |
| - GHG | LTS | LTS(-) | LTS(-) |
| Energy | LTS | LTS(-) | LTS(-) |
| Hazards and Hazardous Materials | LTS | LTS(-) | LTS(-) |
| Hydrology and Water Quality | LTS | LTS(-) | LTS(-) |
| Transportation | LTS | LTS(-) | LTS(-) |

Notes:

S = Significant

LTS = Less than Significant

(-) = Potential impacts are less than the proposed Project

(+) = Potential impacts are greater than the proposed Project

(=) = Potential impacts are approximately the same as the proposed Project

It is important to note that the analysis of the proposed Project in Chapter 4 of this EIR indicates that there are no environmental topic areas identified as having significant adverse effects. For a

project where the analysis of the impacts does not identify significant adverse effects, an alternatives analysis is not required under CEQA. Moreover, while Alternative 2 qualifies as the environmentally superior alternative, because the proposed Project would not have significant adverse impacts for any environmental topic area, the adoption of Alternative 2, even if it is designated as the environmentally superior alternative, is not required by CEQA.

CHAPTER 6

OTHER CEQA CONSIDERATIONS

Environmental Effects Found Not to Be Significant

Significant and Unavoidable Adverse Impacts

Significant Irreversible Environmental Changes

Growth-Inducing Impacts

Relationship Between Short-Term and Long-Term Environmental Goals

6.0 OTHER CEQA CONSIDERATIONS

CEQA Guidelines Section 15126 requires that all phases of a project must be considered when evaluating its impacts on the environment, including planning, acquisition, development, and operation. Therefore, the EIR must also identify: 1) significant environmental effects of the proposed Project; 2) significant environmental effects that cannot be avoided if the proposed Project is implemented; 3) the proposed Project's significant irreversible environmental changes; and 4) growth-inducing impacts.

6.1 ENVIRONMENTAL EFFECTS FOUND NOT TO BE SIGNIFICANT

CEQA Guidelines Section 15128 requires that an EIR “contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR.” This section presents a summary of the South Coast AQMD environmental checklist questions for the following environmental topic areas which were evaluated in the NOP/IS (see Appendix A) and would result in either less than significant impacts or no impacts. As such, these environmental topic areas are not further evaluated in this EIR.

- Aesthetics;
- Agriculture and Forestry Resources;
- Biological Resources;
- Cultural and Tribal Cultural Resources;
- Geology and Soils;
- Land Use and Planning;
- Mineral Resources;
- Noise;
- Population and Housing;
- Public Services;
- Recreation; and
- Solid and Hazardous Waste.

Similarly, during the preparation of the NOP/IS (see Appendix A), the analysis also identified certain checklist questions for the environmental topic areas requiring further analyses discussed in this EIR (e.g., air quality and GHG, energy, hazards and hazardous materials, hydrology and water quality, and transportation). After further analysis, the EIR concluded these impacts would be less than significant.

The South Coast AQMD has invited the public to participate in the CEQA process for the proposed Project by circulating the NOP/IS (see Appendix A) for public review and comment, and holding two CEQA Scoping meetings seeking public input. Comments received during circulation of the NOP/IS and during the CEQA Scoping meetings and responses to those comments are provided in Appendix B of this EIR. These were considered in the process of identifying issue areas that

should be analyzed in the EIR. The contents of this EIR were established based on the NOP/IS which was prepared in accordance with the Public Resources Code and CEQA Guidelines and contains input from the public, responsible agencies, and commenting agencies during the scoping process. Based on the conclusions reached in the NOP/IS and the input received during the scoping meetings, the following environmental topic areas were identified as requiring further review in the EIR: air quality and GHG, energy, hazards and hazardous materials, hydrology and water quality, and transportation.

In addition, subsequent to the release of the NOP/IS for public review and comment, the Natural Resources Agency adopted revisions to the CEQA Guidelines, which included updates to the Appendix G: Environmental Checklist Form. The revisions were approved by the Office of Administrative Law and filed with the Secretary of State on December 28, 2018. Integral to these updates were changes to many environmental checklist sections in Appendix G, which caused the South Coast AQMD to update its customized environmental checklist accordingly.

Table 6.1-1 compares the checklist questions that would have no impact or less than significant impact in the NOP/IS to the South Coast AQMD’s 2019 updates to its customized environmental checklist. Where there have been content changes, there is an additional column that includes additional discussion and supporting evidence in response to the changes. Since all of the impacts in the updated environmental checklist questions would either be less than significant impacts or no impacts, no further analysis in this EIR is required.

Table 6.1-1 Comparison of Updated Checklist Questions with Responses Concluding No Impacts or Less than Significant Impacts

| South Coast AQMD Environmental Checklist Questions Considered in 2018 NOP/IS | 2019 South Coast AQMD Updated Environmental Checklist | Changes? | Assessment of Changes |
|--|---|--|--|
| I. Aesthetics | | | |
| a) Have a substantial adverse effect on a scenic vista? | a) Have a substantial adverse effect on a scenic vista? | No change. | No change. |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | No change. | No change. |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage point(s).) If | c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question as the proposed Project |

CHAPTER 6: OTHER CEQA CONSIDERATIONS

| | | | |
|--|---|--|---|
| | the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality? | experienced from publicly accessible vantage point(s).) If the project is in an urbanized area, would the project conflict with applicable zoning or other regulations governing scenic quality? | has no effect on aesthetics and do not require additional analysis in this EIR. |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | No change. | No change. |
| II. Agriculture and Forestry Resources | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non-agricultural use? | No change. | No change. |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | No change. | No change. |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104 (g))? | c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104(g))? | No change. | No change. |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | d) Result in the loss of forest land or conversion of forest land to non-forest use? | No change. | No change. |
| | e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | e) Involve other changes in the existing environment which, due to their location or nature, could result in the conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use? | This new question does not require a change to the conclusion of no impact in the NOP/IS since the facility is already located in an industrialized area that is not designated as Farmland or forest |

| | | | |
|--|--|---|---|
| | | | land there would be no effect on any agricultural area. The nearest agricultural-zoned land (Zone A-1-20000, Light Agricultural) is located 0.5 mile from the facility (see Figure 6-1). |
| III. Air Quality and Greenhouse Gas Emissions | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | a) Conflict with or obstruct implementation of the applicable air quality plan? | No change. | No change. |
| e) Create objectionable odors affecting a substantial number of people? | d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question as the facility's odor control systems would ensure the proposed Project would not generate a significant impact and do not require additional analysis in this EIR. |
| IV. Biological Resources | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | No change. | No change. |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | No change. | No change. |

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| c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question because there are no wetlands on or adjacent to the facility and no additional analysis is required in this EIR. |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | No change. | No change. |
| e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | No change. | No change. |
| f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | No change. | No change. |
| V. Cultural and Tribal Cultural Resources | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? | a) Cause a substantial adverse change in the significance of a historical resource pursuant to CEQA Guidelines Section 15064.5? | No change. | No change. |
| b) Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5? | b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines Section 15064.5? | No change. | No change. |
| c) Directly or indirectly destroy a unique paleontological resource, site, or feature? | | | This environmental checklist question was relocated to |

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| | | | Section VII. Geology and Soils. |
| d) Disturb any human remains, including those interred outside formal cemeteries? | c) Disturb any human remains, including those interred outside of dedicated cemeteries? | e) Disturb any human remains, including those interred outside of dedicated cemeteries? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question because no known human remains, burial sites, or formal cemeteries have been identified at the facility and no ground disturbing activities will occur. Thus, the updates do not require additional analysis in this EIR. |
| e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074? | d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074, as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is either: <ul style="list-style-type: none"> Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k)? A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in Public Resources Code §5024.1(c)? (In applying the criteria set forth in Public Resources Code §5024.1(c), the lead agency shall consider the | d) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074, as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American Tribe, and that is either: <ul style="list-style-type: none"> Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code §5020.1(k)? A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the project does not call for ground disturbing activities. Further, South Coast AQMD conducted a tribal consultation in accordance with AB 52 and SB 18. In response to the consultation notice, South Coast AQMD and received the following comment letters from Native American Tribes: NOP-1 from the San Manuel Band of Mission Indians, NOP-2 from the Native American Heritage Commission, and NOP-3 from the Viejas Band of |

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| | significance of the resource to a California Native American tribe.) | pursuant to criteria set forth in Public Resources Code §5024.1(c)? (In applying the criteria set forth in Public Resources Code §5024.1(c), the lead agency shall consider the significance of the resource to a California Native American tribe.) | Kumeyaay Indians. These comment letters, along with the responses are included in Appendix B of this EIR and document the evaluation of tribal cultural resources and indicate that consultation has been completed. |
| VI. Energy | | | |
| a) Conflict with adopted energy conservation plans? | a) Conflict with or obstruct adopted energy conservation plans, a state or local plan for renewable energy, or energy efficiency? | a) Conflict with or obstruct adopted energy conservation plans, a state or local plan for renewable energy, or energy efficiency? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR. The facility will continue to optimize the operation of its furnaces and air pollution control equipment so that energy is used efficiently. Quemetco will also continue adhering to its energy management plan as part of the “Energy Management System” required for ISO 5001 certification. |
| b) Result in the need for new or substantially altered power or natural gas utility systems? | b) Result in the need for new or substantially altered power or natural gas utility systems? | No change. | No change. |
| c) Create any significant effects on local or regional energy supplies and on requirements for additional energy? | c) Create any significant effects on local or regional energy supplies and on requirements for additional energy? | No change. | No change. |
| e) Comply with existing energy standards? | e) Comply with existing energy standards? | No change. | No change. |
| VII. Geology and Soils | | | |

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| <p>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</p> <ul style="list-style-type: none"> • Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? • Strong seismic ground shaking? • Seismic-related ground failure, including liquefaction? | <p>a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:</p> <ul style="list-style-type: none"> • Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? • Strong seismic ground shaking? • Seismic-related ground failure, including liquefaction? • Landslides? | <p>a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:</p> <ul style="list-style-type: none"> • Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? • Strong seismic ground shaking? • Seismic-related ground failure, including liquefaction? • Landslides? | <p>The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the Project does not require any physical facility modifications that could potentially increase risks from landslides.</p> |
| <p>b) Result in substantial soil erosion or the loss of topsoil?</p> | <p>b) Result in substantial soil erosion or the loss of topsoil?</p> | <p>No change.</p> | <p>No change.</p> |
| <p>c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</p> | <p>c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?</p> | <p>No change.</p> | <p>No change.</p> |
| <p>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?</p> | <p>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?</p> | <p>d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial direct or indirect risks to life or property?</p> | <p>The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question as the facility was previously designed to comply with Los Angeles Building Code requirements and is graded, filled, compacted, and paved. Thus, these updates do not require additional analysis in this EIR.</p> |

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| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | No change. | No change. |
| | f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature? | f) Directly or indirectly destroy a unique paleontological resource or site or unique geological feature? | This new question has no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and does not require additional analysis in this EIR because the proposed Project does not require construction or other ground disturbing activities and this question was previously addressed in Cultural Resources section of NOP/IS. |
| VIII. Hazards and Hazardous Materials | | | |
| c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | No change. | No change. |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | No change. | No change. |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | No change. | No change. |
| g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, | | | This question has been relocated to a new environmental topic area, Section |

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| <p>including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?</p> | | | <p>XVIII. Wildfire. The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because this question was addressed in Section XVIII.</p> |
| <p>IX. Hydrology and Water Quality</p> | | | |
| <p>b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?</p> | <p>b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</p> | <p>b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?</p> | <p>The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the proposed Project does not utilize groundwater.</p> |
| <p>c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site?</p> | <p>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:</p> <ul style="list-style-type: none"> • Result in substantial erosion or siltation on- or off-site? • Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site? | <p>c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:</p> <ul style="list-style-type: none"> • result in substantial erosion or siltation on- or off-site? • substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or offsite? | <p>The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the proposed Project does not alter the existing drainage pattern of the facility.</p> |

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| | | <ul style="list-style-type: none"> • create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? • impede or redirect flood flows? | |
| d) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | | ↔ | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because this environmental checklist question was replaced by new question d). |
| e) Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows? | | ↔ | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because this environmental checklist question was replaced by new question d). |
| f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow? | | ↔ | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis |

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| | | | in this EIR because this environmental checklist question was replaced by new question d). |
| | d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the responses to former questions e) and f) are applicable to this new question. |
| g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects? | f) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, facilities or new storm water drainage facilities, the construction or relocation of which could cause significant environmental effects? | f) Require or result in the relocation or construction of new or expanded water, wastewater treatment or storm water drainage, facilities or new storm water drainage facilities, the construction or relocation of which could cause significant environmental effects? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR. |
| h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | g) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | g) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry and multiple dry years? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the additional clarifications in the question were previously addressed in the NOP/IS. |
| i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the | h) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | h) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require |

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| provider's existing commitments? | | demand in addition to the provider's existing commitments? | additional analysis in this EIR because this is a minor change in numbering. |
| X. Land Use Planning | | | |
| a) Physically divide an established community? | a) Physically divide an established community? | No change. | No change. |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | b) Cause an environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | b) Cause an environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question because the proposed Project does not require a change in zoning or land use and no soil or ground disturbances are required. Thus, the updates do not require additional analysis in this EIR. |
| XI. Mineral Resources | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | No change. | No change. |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | No change. | No change. |
| XII. Noise | | | |
| a) Exposure of persons to or generation of permanent noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the additional clarifications in the question were previously |

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| | | | addressed in the NOP/IS. |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | b) Generation of excessive groundborne vibration or groundborne noise levels? | b) Generation of excessive groundborne vibration or groundborne noise levels? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the additional clarifications in the question were previously addressed in the NOP/IS. |
| c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | | | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the original question was previously addressed in the NOP/IS. |
| d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the additional clarifications in the question were previously addressed in the NOP/IS. |
| XIII. Population and Housing | | | |
| a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through | a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or indirectly (e.g., | a) Induce substantial unplanned population growth in an area, either directly (e.g., by proposing new homes and businesses) or | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental |

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| extension of roads or other infrastructure)? | through extension of roads or other infrastructure)? | indirectly (e.g., through extension of roads or other infrastructure)? | checklist question and do not require additional analysis in this EIR because the additional clarifications in the question were previously addressed the NOP/IS. |
| b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere? | b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the additional clarifications in the question were previously addressed in the NOP/IS. |
| XIV. Public Services | | | |
| Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: | Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: | Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services: | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because the additional clarifications in the question were previously addressed in the NOP/IS. |
| a) Fire protection? | a) Fire protection? | No change. | No change. |
| b) Police protection? | b) Police protection? | No change. | No change. |
| c) Schools? | c) Schools? | No change. | No change. |
| d) Other public facilities? | d) Parks? | d) Parks? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental |

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| | | | checklist question and do not require additional analysis in this EIR because parks were previously evaluated in IS/NOP Section XV. Recreation. |
| | e) Other public facilities? | e) Other public facilities? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because this is a minor change in numbering. |
| XV. Recreation | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | No change. | No change. |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or recreational services? | b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because recreational services were previously addressed in the NOP/IS. |
| XVI. Solid and Hazardous Waste | | | |
| a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | a) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | a) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis |

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| | | | in this EIR because this topic was previously addressed in the NOP/IS. |
| b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste? | b) Comply with federal, state, and local management and reduction statutes and regulations related to solid and hazardous waste? | b) Comply with federal, state, and local management and reduction statutes and regulations related to solid and hazardous waste? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because this topic was previously addressed in the NOP/IS. |
| XVII. Transportation and Traffic | | | |
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | a) Conflict with a program plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because this topic was previously addressed in the NOP/IS. |
| b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b)? | b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b)? | As discussed in Section 4.6 - Transportation of this EIR, the proposed Project would generate 15 truck round trips and 6 employee round trips per day. This additional Project-related traffic is less than the 110 daily trips per day threshold for a less than significant impact for the new VMT assessment requirements (OPR, |

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| | | | 2018). Therefore, there would be no conflict with CEQA Guidelines Section 15064.3(b), and this would be a less than significant impact. |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | | | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because this topic was previously addressed in the NOP/IS. |
| d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? | c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because this topic was previously addressed in the NOP/IS. |
| e) Result in inadequate emergency access? | d) Result in inadequate emergency access? | d) Result in inadequate emergency access? | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question and do not require additional analysis in this EIR because this is a minor change in numbering. |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | | | The updates have no substantive effect on the conclusion reached in the NOP/IS for this environmental checklist question |

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| | | | and do not require additional analysis in this EIR because this topic was previously addressed in the NOP/IS. |
| XVIII. Wildfire | | | |
| | a) Substantially impair an adopted emergency response plan or emergency evacuation plan? | <p>XVIII. WILDFIRE - If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:</p> <p>a) Substantially impair an adopted emergency response plan or emergency evacuation plan?</p> | <p>Although this is a new section to CEQA Guidelines Appendix G, the NOP/IS evaluated the potential impacts from wildfires in Question g) of Section VIII. Hazardous and Hazardous Materials. The proposed Project does not require any ground disturbance and will occur within a developed industrial area. Further, the California Department of Forestry and Fire Protection (“CalFire”) generates Fire Hazard Severity Zone Maps for State Responsibility Area lands and separate Very High Fire Hazard Severity Zone Maps for Local Responsibility Area lands. The Quemetco facility is located outside very high fire hazard severity zones (see Figure 6-2). Additionally, the Quemetco facility most recently revised its</p> |

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| | | <p>Emergency Preparedness/Contingency Plan (“The Plan”) on February 22, 2019, which included an evaluation of fire hazards presented by the plant operations. The Plan discusses specific storage requirements for particular materials, including those classified as flammable. The Plan also details emergency procedures if a fire were to occur and discusses the emergency equipment in place within the facility (Quemetco, Inc. 2019).</p> <p>The NOP/IS concluded that there would be no impact from exposing people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands. Further, the NOP/IS concluded that the proposed Project would have a less than significant impact from emergency response plan or emergency evacuation plan (see Question VIII. f)).</p> |
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CHAPTER 6: OTHER CEQA CONSIDERATIONS

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| | | | Based on the wildfire hazards map for the facility and its recent Emergency Preparedness/Contingency plan, there is substantial evidence that the conclusion in the NOP/IS continue to be valid and that the proposed Project would have a less than significant impact for this new environmental topic area/ environmental checklist question. |
| | b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to, pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire? | See response to Section XVIII. Wildfire, question a) is also applicable to this question. |
| | c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines, or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | c) Require the installation or maintenance of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment? | See response to Section XVIII. Wildfire, question a) is also applicable to this question. |
| | d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes? | See response to Section XVIII. Wildfire, question a) is also applicable to this question. |
| | e) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury or death involving wildfires? | e) Expose people or structures, either directly or indirectly, to a significant risk of loss, | See response to Section XVIII. Wildfire, question a) |

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| | | injury or death involving wildfires? | is also applicable to this question. |
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| XIX. Mandatory Findings of Significance | | | |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | The updates to the environmental checklist questions as summarized in this table (See Section IV – Biological Resources and Section V – Cultural Resources) would neither create any new significant impacts nor alter the conclusions in the NOP/IS and EIR, as applicable. The proposed Project is at the site of an existing industrial facility that does not contain biological resources and does not require disturbance to the soil or physical environment. |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects) | b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects) | No change. | No change. |
| c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | No change. | No change. |

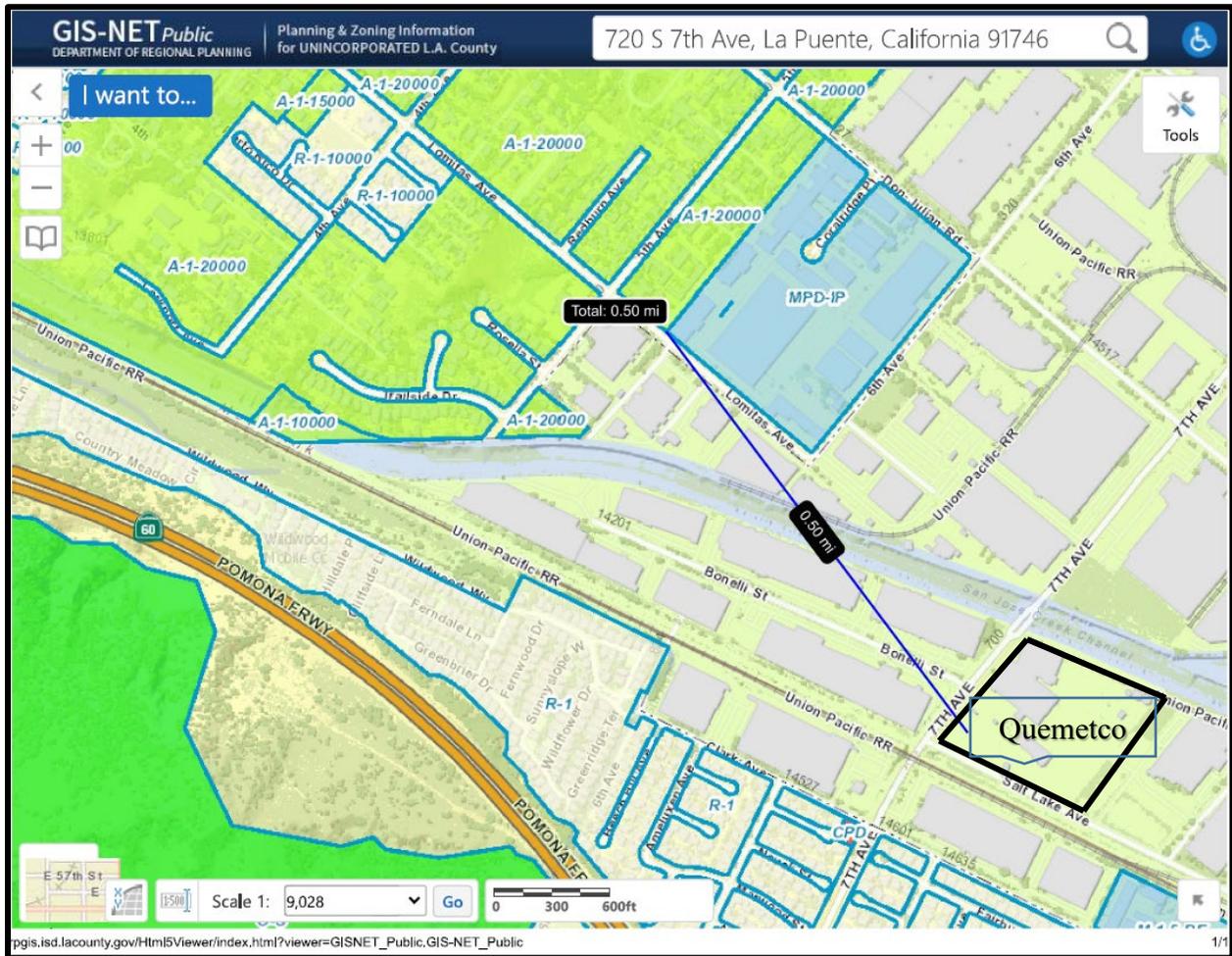


Figure 6.1-1 Distance from the Quemetco Facility to Agricultural-Zoned Land¹

¹ The nearest parcel to Quemetco which is zoned as agricultural is developed as an educational facility.

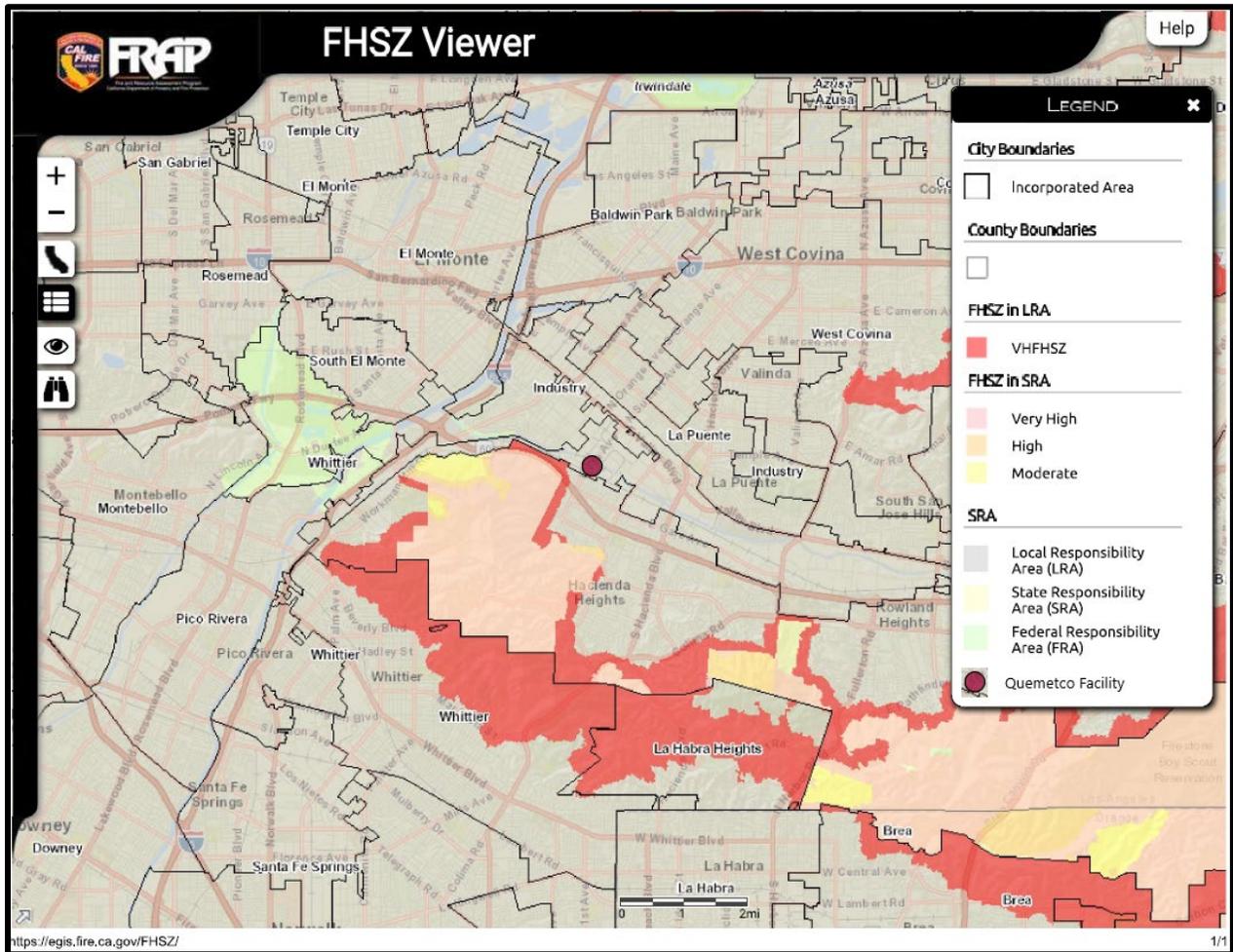


Figure 6.1-2 Proximity of Quemetco Facility to Fire Hazard Severity Zones

Further, Chapter 4 - Environmental Impact Analysis, conducts individual assessments of the changes to the South Coast AQMD’s NOP/IS environmental checklist questions by environmental impact area as follows:

- Air Quality and Greenhouse Gas – Table 4.2-1
- Energy – Table 4.3-1
- Hazards and Hazardous Materials – Table 4.4-1
- Hydrology and Water Quality – Table 4.5-1
- Transportation – Table 4.6-1

Table 6.1-2 summarizes the environmental checklist questions for environmental topic areas further evaluated in this EIR but that were concluded to have less than significant impacts.

Table 6.1-2 Environmental Checklist Questions Further Evaluated in the EIR with Less than Significant Impacts

| Environmental Topic Area/ Section of EIR | Environmental Checklist Question Evaluated in the EIR and Concluded to have Less than Significant Impacts |
|---|--|
| Section 4.2: Air Quality and GHG Emissions | b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation? |
| | b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)? |
| | d) Expose sensitive receptors to substantial pollutant concentrations? |
| | e) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)? |
| | f) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? |
| | g) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? |
| Section 4.3: Energy | d) Create any significant effects on peak and base period demands for electricity and other forms of energy? |
| | f) Result in a potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy, or wasteful use of energy resources, during project construction or operation? |
| | g) Require or result in the relocation or construction of new or expanded electric power, natural gas or telecommunication facilities? |
| Section 4.4: Hazards and Hazardous Materials | a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials? |

| | |
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| | b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment? |
| | d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment? |
| | g) Significantly increased fire hazard in areas with flammable materials? |
| Section 4.5: Hydrology and Water Quality | a) Violate any water quality standards, waste discharge requirements, or otherwise substantially degrade surface or ground water quality? |
| | e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan? |
| Section 4.6: Transportation | b) Conflict with or be inconsistent with CEQA Guidelines Section 15064.3(b) |
| | d) Result in a substantial increase in hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)? |

6.2 SIGNIFICANT AND UNAVOIDABLE ADVERSE IMPACTS

CEQA Guidelines Section 15126(b) requires a discussion of significant environmental effects, which cannot be avoided if the proposed Project is implemented. However, the analysis in this EIR did not identify significant impacts for any environmental topic area. Therefore, the proposed Project would not result in any significant, unavoidable impacts.

6.3 CEQA SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

CEQA Guidelines Sections 15126(c) and 15126.2(d) mandate that the EIR discuss any significant irreversible environmental changes which would be involved if the proposed Project is implemented. An impact would be considered significant and irreversible if any of the following criteria are met:

1. The proposed Project would involve a large commitment of non-renewable resources;
2. The primary and secondary impacts of the proposed Project would generally commit future generations of people to similar uses;
3. The proposed Project would involve uses in which irreversible damage could result from any potential environmental incidents associated with the project; and
4. The proposed irretrievable consumption of resources is not justified (i.e., the proposed Project could waste energy). (CEQA Guidelines 15126.2(d))

6.3.1 Criterion 1

The proposed Project is not expected to involve a large commitment of non-renewable resources because no construction activities will be necessary to implement the requested process changes. Further, while operational equipment would use non-renewable resources including fossil fuels, natural gas, and additive materials (mineral and non-mineral), the potential increased use of these resources would not qualify as a large commitment as concluded in the NOP/IS and as explained in Section 4.3: Energy of this EIR. The proposed Project's potential increased natural gas consumption, electricity consumption, and gasoline and diesel consumption would be under South Coast AQMD's significance threshold (Appendix A). Additionally, communication with SCG, SCE, and SGVWC, confirmed that they could serve the potential increased demand for natural gas, electricity, and water respectively (Yee & Warwick, 2015 and 2016; Zavala, 2015; Arrighi, 2015). Further, by eliminating the Compliance Stop Period, Quemetco would maximize the capacity of its existing equipment, eliminate inefficient fuel and electricity consumption during the Compliance Stop Period, and improve overall facility energy efficiency. During to the Compliance Stop Period, Quemetco turns off the rotary/kiln feed dryer and the reverberatory furnace continues to burn fuel to maintain minimal idle temperature even when not processing feed. All other equipment, processes, and air pollution control equipment continue to operate at full capacity. Since the operational activities would not use non-renewable resources in a wasteful and/or inefficient manner, the proposed Project does not require a large commitment of non-renewable resources in order to be implemented.

6.3.2 Criterion 2

The proposed Project is not expected to have primary and secondary impacts such that it would generally commit future generations of people to similar land uses because the proposed Project involves utilizing existing facility infrastructure and does not involve any construction activities. The proposed Project site is developed with an existing secondary lead smelter that has been in operation for approximately 60 years (Chapter 2 – Proposed Project and City of Industry, 2014a). Activities under the proposed Project would be the same activities that are currently being conducted at Quemetco's facility, which neither conflict with the City of Industry's General Plan Land Use Map (City of Industry, 2014a) nor trigger any land use permits or modifications, as concluded in Section 2.5.X of the NOP/IS (refer to Appendix A). Further, while the throughput increase would increase operations, the proposed Project would not commit future generations of people to a similar use because the proposed Project does not involve construction activities or infrastructure modifications. Since the operational activities do not require infrastructure or land use modifications, the proposed Project does not generate primary or secondary impacts which would generally commit future generations of people to similar uses in order to be implemented.

6.3.3 Criterion 3

The proposed Project is not expected to involve uses in which irreversible damage could result from any potential environmental incidents associated with the Project because the proposed Project aims to increase responsible management and recycling of spent lead-acid batteries, which is subject to local, state, and federal regulatory programs and repercussions. When improperly handled, toxic battery components containing lead and sulfuric acid leach into the ground and contaminate soil and water resources. Quemetco's facility ensures the proper handling and recycling of spent lead-acid batteries and other similar materials to generate secondary lead, plastics, and metals for reuse.

Further, the hazardous materials processed and hazardous waste generated are regulated by the local CUPA, state DTSC, and federal EPA. Collectively, these agencies require Quemetco to maintain an HMBP, ERP, Contingency Plan, UST Plan, and RMP documents. While the proposed Project includes an increase in throughput and operation activities, which would increase the use, transport, and generation of hazardous materials and hazardous waste, the Quemetco facility is equipped and prepared to safely manage the projected increases in accordance with local, state, and federal regulations, as explained in Section 4.4: Hazards and Hazardous Materials of this EIR.

Since the operational activities do not involve generating any new hazardous waste streams, but rather safely and responsibly managing existing hazardous materials and waste streams in larger quantities, the proposed Project would not be expected to involve new uses which could result in irreversible damage from any potential environmental incidents.

6.3.4 Criterion 4

The proposed Project is not expected to irretrievably consume resources in a manner which is not justified because the increase in resource consumption associated with the implementation of the proposed Project would be proportional to the increase in material throughput proposed. Further, the proposed Project would ultimately increase efficiency at the facility because it will allow the facility to continue to process materials during the now-required Compliance Stop Period, during which significant portions of the facility continue to operate and use energy while not recycling batteries.

The existing daily Compliance Stop Period requires idling of the rotary/kiln feed drying furnace and reverberatory furnace by combusting fuel to maintain consistent temperature even though no feed materials are processed. As a result, Quemetco continues to operate all air pollution control systems 24 hours per day, 7 days per week, including during the Compliance Stop Period, in accordance with South Coast AQMD air quality standards and requirements. As concluded in the NOP/IS and as explained in Section 4.3: Energy of this EIR, the proposed Project will eliminate the Compliance Stop Period such that the previously inefficient use of energy and resources during the Compliance Stop Period will cease and the energy resources utilized will more directly serve battery recycling operations, improving overall energy efficiency at the facility.

Further, the proposed Project would not require any construction so no energy resources would be needed during construction. During operation, the proposed Project would maximize the available capacity from the existing equipment, thereby improving the facility's overall efficiency and having the effect of consuming resources in a justifiable manner. Thus, the proposed Project would not be expected to irretrievably consume resources in a manner which is not justified in order to be implemented.

6.4 GROWTH INDUCING IMPACTS

CEQA Guidelines Sections 15126(d) and 15126.2(e) mandate that the EIR shall discuss whether the proposed Project could cause growth-inducing impacts that would:

- Cause economic or population growth or construction of new housing, either directly or indirectly, in the surrounding environment; or
- Remove obstacles to population growth; or
- Tax existing community service facilities requiring construction of new facilities that could cause significant environmental effects; or
- Encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively.

The Quemetco facility is zoned as industrial and is not designated for residential land uses. Additionally, the proposed Project does not involve any construction activities. Further, as analyzed in Section 2.5.XIII of the NOP/IS (see Appendix A), the proposed Project would require up to six new employees. While the creation of six new jobs could contribute to some economic growth in the City of Industry, these jobs could also potentially be satisfied locally. However, if the new jobs were filled by individuals who choose to relocate, the existing housing inventory is expected to be sufficient. Thus, the proposed Project would not involve or require new housing to be constructed. Additionally, the proposed Project is consistent with the City of Industry's General Plan and Zoning Ordinance, so any direct or indirect growth from the proposed Project is anticipated in City of Industry's regional plans. For these reasons, the proposed Project would not be expected to cause economic or population growth, or construction of new housing, directly or indirectly, in the surrounding environment.

The elimination of either physical or regulatory obstacles to growth is considered a growth inducing impact. A physical obstacle to growth typically involves the lack of public service infrastructure. As analyzed in Section 2.5.XIV of the NOP/IS (see Appendix A), the proposed Project would not substantially increase the need for public services such as police, fire, and schools. As described in Section 2.5.XVI of the NOP/IS (see Appendix A), the proposed Project would neither significantly increase the solid waste stream nor cause a need for new solid waste disposal facilities. Additionally, as explained in Section 2.5.VI of the NOP/IS (see Appendix A), the current electricity and natural gas suppliers have indicated that they can and will serve the expanded demand as part of the proposed Project. Similarly, as analyzed in Section 4.5: Hydrology and Water Quality of this EIR, the proposed increase in water use, and additional wastewater to be generated was concluded to have less than significant impacts. For these reasons, the proposed Project would not be expected to remove physical obstacles to population growth.

A regulatory obstacle to growth typically involves the elimination or change in regulatory processes, including existing plans, policies, and ordinances, which would allow for new or increased population growth to occur. As described in Section 2.7: Permits and Approvals of this EIR, the proposed Project would require discretionary approvals from the South Coast AQMD and the DTSC. Table 2-2 summarizes the anticipated permits and approvals that may be associated with the proposed Project. The proposed Project will result in a South Coast AQMD Title V permit revision, which is subject to U.S. EPA review. This permit revision and related agency actions would be consistent with existing regulatory processes. For these reasons, the proposed Project would not be expected to remove regulatory obstacles to population growth.

The impacts analyzed in Chapter 4 of this EIR include discussions of the proposed Project's potential cumulative environmental impacts for air quality and GHG emissions, energy, hazardous

and hazardous materials, hydrology and water quality, and transportation. These analyses have concluded that the proposed Project's operational and cumulative impacts relating to air quality, energy, hazards and hazardous materials, hydrology and water quality, and transportation would be less than significant. Additionally, the proposed Project does not involve any construction activities and involves utilizing existing facility infrastructure. For these reasons, the proposed Project would not be expected to induce growth that would in turn cause existing community service facilities to construct new facilities that could cause significant environmental effects. The proposed Project would also not be expected to encourage and facilitate other growth inducing activities that could significantly affect the environment, either individually or cumulatively.

6.5 RELATIONSHIP BETWEEN SHORT-TERM AND LONG-TERM ENVIRONMENTAL GOALS

In accordance with CEQA Guidelines Section 15065(a)(2), a project may have a significant effect on the environment if it has the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals.

Implementing the proposed Project is not expected to achieve short-term environmental goals at the expense of long-term environmental goals. Conversely, the proposed Project aims to increase responsible management and recycling of spent lead-acid batteries over the long term, which is subject to local, state, and federal regulatory programs and repercussions. Further, because the proposed Project would not result in any physical modifications requiring construction at the facility, there are no short-term construction impacts associated with the proposed Project.

In the long term, the proposed Project would generate an increase in the quantity and transport of materials in and out of the facility, including feed, additives, finished product, recycling, and waste which will have associated increases in air quality and greenhouse gas emissions, energy consumption, and water consumption and wastewater discharge. The potential impacts from air quality and GHG emissions, energy, hazardous and hazardous materials, hydrology and water quality, and transportation have been analyzed in Chapter 4 of this EIR for long-term operations on a cumulative basis. These analyses concluded the proposed Project's long-term operational and cumulative impacts would be less than significant for all environmental topic areas.

For example, the air quality analysis in Section 4.2: Air Quality and GHG Emissions of this EIR concluded that the proposed Project's localized ambient air quality short-and long-term impacts would be less than significant for federal and state averaging periods. Similarly, the proposed Project's HRA results show that the total cancer risk impacts, including both stationary and mobile sources, would be less than South Coast AQMD air quality significance threshold for MEIR and MEIW receptors. Additionally, non-cancer risk impacts from the proposed Project, which are examined on a chronic and acute basis, are also less than the applicable South Coast AQMD air quality significance thresholds.

As discussed in Chapter 5 - Project Alternatives of this EIR, based on Quemetco's market research, at least 40% of the spent lead-acid batteries generated within California are being diverted out of state, out of the country and overseas for recycling, which demonstrates the need to increase the

lead-acid battery recycling capabilities at the Quemetco facility. By increasing the throughput at the Quemetco facility, a higher percentage of existing lead-acid batteries generated in California can be recycled locally rather than being transported out of state or out of the country. The proposed Project is intended to enhance long-term environmental goals by utilizing existing facility infrastructure to process additional lead-acid battery throughput. Furthermore, because the increase in throughput associated with the proposed Project is supported by regional and in-state generation of used lead-acid batteries, and the Quemetco facility is subject to stringent regulatory requirements at the local, state and federal level, the proposed Project can achieve these long-term goals and help lessen the on-going carbon leakage and environmental impacts associated with the diversion of spent lead-acid batteries generated within California but transported out of state and out of the country. For these reasons, the proposed Project is not expected to achieve short-term environmental goals to the disadvantage of long-term environmental goals.



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CHAPTER 7

ACRONYMS AND ABBREVIATIONS

7.0 ACRONYMS AND ABBREVIATIONS

7.1 ACRONYMS AND ABBREVIATIONS

| SHORT FORM | DESCRIPTION |
|-------------|--|
| AAQA | Ambient Air Quality Analysis |
| AAQS | Ambient Air Quality Standard |
| AB | Assembly Bill |
| ADT | average daily traffic |
| AEC LLC | Advanced Environmental Compliance Limited Liability Corporation |
| AER | Annual Emissions Reporting |
| AERMOD | American Meteorological Society/U.S. Environmental Protection Agency Regulatory Model (version 18081) |
| AHM | acutely hazardous material |
| AIHA | American Industrial Hygiene Association |
| AISI | American Iron and Steel Institute |
| ALs | action levels |
| AMS | American Meteorological Society |
| ann. | Annual |
| AQMP | Air Quality Management Plan |
| AR5 | Fifth Assessment Report |
| ARM2 | Ambient Ratio Method Version 2 |
| As | arsenic |
| avg. | average |
| a.m. | “ante meridiem”; before midday |
| BACT | Best Available Control Technology |
| Basin | South Coast Air Basin |
| Basin plan | Los Angeles Regional Water Quality Control Board Water Quality Control Plan |
| BG | background or baseline |
| bhp | break horsepower |
| bhp-hr/gal | break horsepower-hour per gallon |
| BPIP-Prime | Building Profile Input Program with Plume Rise Model Enhancements |
| Busch units | 11 Busch International baghouse and high efficiency particulate air filtration and ventilation systems |
| CAA | Clean Air Act |
| CAAQS | California Ambient Air Quality Standards |
| CalARP | California Accidental Release Prevention |
| CalEPA | California Environmental Protection Agency |
| CalOSHA | California Occupational Safety and Health Administration |
| Caltrans | California Department of Transportation |
| CARB | California Air Resources Board |
| CAT | Climate Action Team |
| CCF | hundred cubic feet |

CHAPTER 7: ACRONYMS AND ABBREVIATIONS

| | |
|-------------------|--|
| CCR | California Code of Regulations |
| CEC | California Energy Commission |
| CEMS | Continuous Emissions Monitoring System |
| CEQA | California Environmental Quality Act |
| CFR | Code of Federal Regulations |
| CMP | Congestion Management Plan |
| CHP | California Highway Patrol |
| CH ₄ | methane |
| CO | carbon monoxide |
| CO ₂ | carbon dioxide |
| CO ₂ e | carbon dioxide equivalent |
| CPMS | continuous process monitoring system |
| CPUC | California Public Utilities Commission |
| CSI | California Solar Initiative |
| CSI | closed surface impoundment |
| CUPA | Certified Unified Program Agencies |
| CWA | Clean Water Act |
| days/year | days per year |
| days/yr | days per year |
| DPM | diesel particulate matter |
| DSCF | dry standard cubic feet |
| DTSC | Department of Toxic Substances Control |
| EAF | electric arc furnace |
| EERD | Enforcement and Emergency Response Division |
| e-GGRT | electronic Greenhouse Gas Reporting Tool |
| EFs | Emission Factors |
| EIR | Environmental Impact Report |
| EISA | Energy Independence and Security Act of 2007 |
| EMCC LLC | Environmental Management Compliance and Consulting Limited Liability Corporation |
| EMFAC2014 | Emission Factor 2014 version 1.0.7 |
| EMFAC2017 | Emission Factor 2017 version 1.0.2 |
| EnMS | Energy Management System |
| EO | Executive Order |
| EPACT92 | Energy Policy Acts of 1992 |
| EPCA | Energy Policy and Conservation Act |
| EPCP | Emergency Response and Contingency Plan |
| ERP | Emergency Response Plan |
| ERPG | Emergency Response Planning Guide |
| ETW | equivalent test weight |
| FAR | floor area ratio |
| FB | field blank |
| FIND | Facility Information Detail |
| FRMSA | former raw materials storage area |
| ft | feet |

| | |
|---------------------------|---|
| ft/sec | feet per second |
| FUA | Fuel Use Act of 1978 |
| gal | gallon |
| g/bhp-hr | grams per break horsepower-hour |
| g/gal | grams per gallon |
| GC-MS | gas chromatography - mass spectroscopy |
| GC-PID | gas chromatography – photo ionization detector |
| GC-TCD | gas chromatography – thermal conductivity detector |
| GHG | greenhouse gas |
| GHGRP | Greenhouse Gas Reporting Program |
| GPD | gallons per day |
| g/lb | gram(s) per pound |
| gr/dscf | grains of particulate matter per dry standard cubic foot of exhaust air |
| GVWR | gross vehicle weight rating |
| GWh | gigawatt-hours |
| GWP | global warming potential |
| GWMRP | Groundwater Monitoring and Response Plan |
| H ₂ S | hydrogen sulfide |
| HAP | hazardous air pollutant(s) |
| HARP | Hotspots Analysis and Reporting Program |
| HEPA | high-efficiency particulate air |
| HFCs | hydrofluorocarbons |
| HI | Hazard Index |
| HIA | Acute Hazard Index |
| HICR | Chronic Health Index, Resident |
| HICW | Chronic Health Index, Worker |
| HMBP | Hazardous Materials Business Plan |
| hp-hrs | horsepower-hours |
| HRA | health risk assessment |
| hr. | hour |
| HRA | Health Risk Assessment |
| hrs | hours |
| hrs/vehicle | hours per vehicle |
| HSC | Health and Safety Code |
| HWMU | hazardous waste management unit |
| iADAM | Intranet Aerometric Data Analysis & Management |
| ICE | internal combustion engine |
| IGP | Industrial General Permit |
| Inc. | Incorporated |
| IOU | investor-owned utilities |
| IPCC | Intergovernmental Panel on Climate Change |
| ISO | International Organization for Standardization |
| K | Kelvin |
| kg carbon/kg material | kilograms of carbon per kilogram of material |
| kg CH ₄ /MMBTU | kilograms of methane per million British Thermal Unit |
| kg CO ₂ /MMBTU | kilograms of carbon dioxide per million British Thermal Unit |

| | |
|---------------------------|---|
| kg/lb | kilogram per pound |
| kg/metric ton | kilograms per metric ton |
| kg/MT | kilograms per metric ton |
| kg N ₂ O/MMBTU | kilograms of nitrous oxide per million British Thermal Unit |
| kg pollutant/MMBTU | kilograms of pollutant per million British Thermal Unit |
| kg/ton | kilograms per ton |
| kWh | kilowatt-hour |
| kWh/MWh | kilowatt-hour per megawatt-hour |
| LACFD | Los Angeles County Fire Department |
| LACSD | Los Angeles County Sanitation District |
| LADWP | Los Angeles Department of Water and Power |
| LAP | Laboratory Approval Program |
| LARWQCB | Los Angeles Regional Water Quality Control Plan |
| lb/hr | pounds per hour |
| lb/MWh | pounds per megawatt-hour |
| lbs | pounds |
| lbs/day | pounds per day |
| lbs/hr | pounds per hour |
| lbs/mile | pounds per mile |
| lbs/month | pounds per month |
| lbs/ton | pounds per ton |
| lbs/yr | pounds per year |
| LDA | light duty automobile (passenger car) |
| LDH1 | light-heavy-duty trucks (GVWR 8,501-10,000 lbs) |
| LDH2 | light-heavy-duty trucks (GVWR 10,001-14,000 lbs) |
| LDT1 | light-duty trucks (GVWR < 6,000 lbs and ETW <= 3,750 lbs) |
| LDT2 | light-duty trucks (GVWR < 6,000 lbs and ETW 3,751-5,750 lbs) |
| Lead RM Guidelines | <u>Risk Management Guidelines for New, Modified, and Existing Sources of Lead</u> |
| LEED | Leadership in Energy and Environmental Design |
| LOS | Level of Service |
| LOTOX [®] | Low Temperature Oxidation, Linde Gas |
| LPG | liquefied petroleum gas |
| LTS | less than significant |
| LST | Localized Significance Threshold(s) |
| m | meter |
| MCL | maximum contaminant levels |
| MEIR | maximum exposed individual resident |
| MEIW | maximum exposed individual worker |
| metric ton/short ton | metric ton per short ton |
| mg/day | milligrams per day |
| mg/dscm | milligrams per dry standard cubic meter |
| mg/L | milligrams per liter |
| mg/m ³ | milligrams per cubic meter |
| MICR | maximum individual cancer risk |
| miles/trip | miles per trip |

| | |
|-------------------|--|
| min | minute |
| MMBTU | million British Thermal Unit(s) |
| MMBTU/ton | million British Thermal Units per ton |
| MMT | million metric tons |
| mo./yr | months per year |
| MPO | metropolitan planning organization |
| MRR | Mandatory Reporting of Greenhouse Gas Emissions |
| MS | matrix spike |
| MST | Major Source Thresholds |
| MT | metric ton |
| MTA | Los Angeles County Metropolitan Transportation Authority |
| MT/day | metric tons per day |
| MT/short ton | metric tons per short ton |
| MT/year | metric tons per year |
| MT/yr | metric tons per year |
| MW | megawatts |
| N ₂ O | nitrous oxide |
| NAAQS | National Ambient Air Quality Standard(s) |
| ND | none detected |
| NECPA | National Energy Conservation Policy Act |
| NED | National Elevation Dataset |
| NESHAP | National Emissions Standard(s) for Hazardous Air Pollutants |
| NF ₃ | nitrogen trifluoride |
| NFPA | National Fire Protection Association |
| ng/m ³ | nanograms per cubic meter |
| NO ₂ | nitrogen dioxide |
| NOAA | National Oceanographic and Atmospheric Administration |
| NOP | Notice of Preparation |
| NOP/IS | Notice of Preparation/Initial Study |
| NOV | Notice of Violation |
| NO _x | nitrogen oxides |
| NPDES | National Pollutant Discharge Elimination System |
| NSPS | New Source Performance Standard(s) |
| NSR | New Source Review |
| NTC | Notice to Comply |
| NZE | near-zero emissions |
| O ₂ | oxygen |
| OEHHA | Office of Environmental Health Hazard Assessment |
| OES | Office of Emergency Services |
| OPR | State of California Governor's Office of Planning and Research |
| OSHA | Occupational Safety and Health Administration |
| PCE | passenger-car equivalent |
| PAHs | polynuclear aromatic hydrocarbons |
| Pb | lead |
| PFCs | perfluorocarbons |
| PG&E | Pacific Gas and Electric |

| | |
|-----------------------|---|
| pH | potential of Hydrogen |
| PM | particulate matter |
| PM2.5 | particulate matter 2.5 microns or less in diameter |
| PM10 | particulate matter 10 microns or less in diameter |
| PMI | point of maximum impact |
| POTW | publicly owned treatment works |
| POU | publicly owned utilities |
| ppb | parts per billion |
| ppbv | parts per billion by volume |
| ppm | parts per million |
| ppmv | parts per million by volume |
| p.m. | “post meridiem”; after midday |
| PSD | prevention of significant deterioration |
| PSM | process safety management |
| PURPA | Public Utilities Regulatory Policies Act of 1978 |
| QA | quality assurance |
| QA/QC | quality assurance and quality control |
| QAI | quality assurance indicators |
| QAP | quality assurance program |
| QC | quality control |
| QF | qualifying facility |
| QIA IM | Quemetco Impact Area Interim Measures |
| R&D | research and development |
| R&S | Ruettgers & Schuler Civil Engineers |
| RCRA | Resource Conservation and Recovery Act |
| RECLAIM | Regional Clean Air Incentives Market |
| revenue ton-miles/gal | revenue ton-miles per gallon |
| RFI | Resource Conservation and Recovery Act Facility Investigation |
| RL | Reporting limit |
| RMP | risk management programs |
| RMPP | Risk Management and Prevention Plan |
| RPD | relative percent deviation |
| %RSD | relative standard deviation |
| RPS | Renewables Portfolio Standard |
| RRP | Risk Reduction Plan |
| RTO | regenerative thermal oxidizer |
| RTP | Regional Transportation Plan |
| RWQCB | Regional Water Quality Control Board |
| S | significant |
| S 7th Avenue | South 7th Avenue |
| SAP | Sampling and Analysis Plan |
| SB | Senate Bill |
| SCAG | Southern California Association of Governments |
| South Coast AQMD | South Coast Air Quality Management District |
| SCE | Southern California Edison |
| SCG | Southern California Gas |

| | |
|-----------------|--|
| SCPPA | Southern California Public Power Authority |
| SCS | Sustainable Communities Strategy |
| SDG&E | San Diego Gas and Electric |
| SF6 | sulfur hexafluoride |
| SGMA | Sustainable Groundwater Management Act |
| SGVCOG | San Gabriel Valley Council of Governments |
| SGVEWP | San Gabriel Valley Energy Wise Partnership |
| SGVWC | San Gabriel Valley Water Company |
| SIL | Significant Impact Level |
| SIP | State Implementation Plan |
| SMR | self-monitoring reports |
| SNMP | Salt and Nutrient Management Plan |
| SO ₂ | sulfur dioxide |
| SOPs | standard operating procedures |
| SO _x | sulfur oxides |
| SR | state route |
| SWMRP | Surface Water Monitoring and Response Plan |
| SWPPP | Storm Water Pollution Prevention Plan |
| T7 Single | heavy-heavy duty diesel trucks |
| TAC | toxic air contaminant |
| T-BACT | Best Available Control Technology for Toxics |
| TCLP | Toxicity Characteristic Leaching Procedure |
| TEU | twenty-foot equivalent unit |
| TFE | tetra-fluoro-ethylene |
| TGNMO | total gaseous non-methane organics |
| Title V | Title V of the Clean Air Act |
| TMD | Transportation Demand Management |
| tons/day | tons per day |
| ton/hr | ton(s) per hour |
| tons/month | tons per month |
| tons/year | tons per year |
| TPA | Transit Priority Area |
| tpd | tons per day |
| tpm | tons per month |
| tpy | tons per year |
| trips/day | trips per day |
| TSDF | treatment, storage, and disposal facilities |
| UNFCCC | United Nations Framework Convention on Climate Change |
| U.S.C. | United States Code |
| U.S. DOE | United States Department of Energy |
| U.S. DOT | United States Department of Transportation |
| U.S. EPA | United States Environmental Protection Agency |
| UST | underground storage tank |
| UST Plan | underground storage tank Monitoring and Emergency Plan |
| UTM | Universal Transverse Mercator |
| VFD | variable frequency drives |

CHAPTER 7: ACRONYMS AND ABBREVIATIONS

| | |
|-------------------|---|
| VMT | vehicle miles traveled |
| VOC | volatile organic compound |
| Watermaster | Main San Gabriel Basin Watermaster |
| WDID | Waste Discharge Identification |
| WESP | wet electrostatic precipitator |
| WQPS | Water Quality Protection Standards |
| WWTP | Wastewater Treatment Plant |
| yr | year |
| ZE | zero-emissions |
| µg | microgram(s) |
| µg/dscm | micrograms per dry standard cubic meter |
| µg/m ³ | micrograms per cubic meter |
| µm | micrometer(s) |
| °C | degrees Celsius |
| °F | degrees Fahrenheit |
| % v/v | percentage by volume |

CHAPTER 8

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 Organization

 Individuals Consulted

List of Environmental Impact Report Preparers

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Zavala, Joe. 2015. Service Planner. Southern California Edison. Telephone conversation with Valerie Rosenkrantz of Trinity Consultants, Inc. on March 10, 2015 confirming that Southern California Edison can and will serve the expanded electricity demand as part of the Quemetco Capacity Upgrade Project.

8.2 ORGANIZATIONS AND PERSONS CONSULTED

The CEQA Statutes and Guidelines require the EIR to identify the organizations and persons consulted. A number of organizations, state and local agencies, and private industry have been consulted. The following organizations and persons have provided input into this document.

8.2.1 Organizations

California Air Resources Board
California Energy Commission
City of Industry
Department of Toxic Substances Control
Republic Services
Ruetters & Schuler Civil Engineers
San Gabriel Valley Water Company
South Coast Air Quality Management District
Southern California Edison
Southern California Gas
US Ecology

8.2.2 Individuals Consulted

Dan Arrighi
San Gabriel Valley Water Company

Michael Yee and Joshua Warwick
Southern California Edison

Joe Zavala
Southern California Edison

8.3 LIST OF ENVIRONMENTAL IMPACT REPORT PREPARERS

South Coast Air Quality Management District
Diamond Bar, California

Trinity Consultants
Irvine, California

APPENDIX A

**NOTICE OF PREPARATION
OF A
DRAFT ENVIRONMENTAL IMPACT REPORT**



South Coast Air Quality Management District

21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

**SUBJECT: NOTICE OF PREPARATION OF A DRAFT ENVIRONMENTAL
IMPACT REPORT**

PROJECT TITLE: QUEMETCO CAPACITY UPGRADE PROJECT

In accordance with the California Environmental Quality Act (CEQA), the South Coast Air Quality Management District (SCAQMD), as the Lead Agency, has prepared this Notice of Preparation (NOP) and an Initial Study (IS). This NOP serves two purposes: 1) to solicit information on the scope of the environmental analysis for the proposed Quemetco Capacity Upgrade Project (Project); and 2) to notify the public and any Responsible, Trustee and Commenting Agencies that the SCAQMD will prepare a Draft Environmental Impact Report (EIR) to further assess potential environmental impacts that may result from implementing the proposed Project.

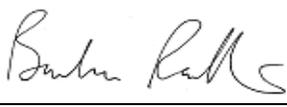
This letter, the NOP, and the attached IS are not SCAQMD applications or forms requiring a response from you. Their purpose is simply to provide information to you on the above Project. If the proposed Project has no bearing on you or your organization, no action on your part is necessary.

The IS and other relevant documents may be obtained by calling the SCAQMD Publication Request Line at (909) 396-2039; by contacting the SCAQMD Public Information Center by phone at (909) 396-2432 or by email at PICrequests@aqmd.gov, or by accessing the SCAQMD's CEQA website at: <http://www.aqmd.gov/home/research/documents-reports/lead-agency-permit-projects>.

Comments focusing on your area of expertise, your agency's area of jurisdiction, if applicable, or issues relative to the environmental analysis for the proposed Project will be accepted during a 32-day public review and comment period beginning Friday, August 31, 2018 and ending at 5:00 p.m. on Tuesday, October 2, 2018. **Please send any comments relative to the CEQA analysis in the NOP/IS to Ms. Diana Thai (c/o CEQA) at the address shown above.** Comments can also be sent via by facsimile to (909) 396-3982 or by email to dthai@aqmd.gov. Please include the name, address, phone number and email of the contact person. The proposed Project may have statewide, regional, or area-wide significance such that a CEQA scoping meeting is required pursuant to Public Resources Code Section 21083.9(a)(2) and will be held on Thursday, September 13, 2018 at Hacienda Heights Community Center, 1234 Valencia Avenue, Hacienda Heights, CA 91745 from 6:00 p.m. to 8:00 p.m.

Project Applicant: Quemetco, Inc.

Date: August 30, 2018

Signature: 

Barbara Radlein
Program Supervisor, CEQA Section
Planning, Rules and Area Sources

**SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT
21865 Copley Drive, Diamond Bar, CA 91765-4182**

**NOTICE OF PREPARATION (NOP)
OF A DRAFT ENVIRONMENTAL IMPACT REPORT**

Project Title: Quemetco Capacity Upgrade Project

Project Location: 720 S. 7th Avenue, City of Industry, CA 91746

Description of Nature, Purpose, and Beneficiaries of Project:

The Quemetco Capacity Upgrade Project (Project) is proposing to modify existing SCAQMD permits to: 1) increase the rotary feed drying furnace feed rate limit from 600 tons per day (tpd) to 750 tpd; 2) increase the amount of total coke material (e.g., calcined coke, petroleum coke, or a combination thereof) allowed to be processed in the rotary feed drying furnace and reverberatory furnace from 600,000 pounds per month (lbs/month) to 750,000 lbs/month; and 3) allow petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace. Currently, the facility's rotary feed drying furnace and reverberatory furnace operate approximately 20 hours per day; however, with the proposed increase in rotary feed drying furnace permit limit, the rotary feed drying furnace and reverberatory furnace may operate up to 24 hours per day and as a consequence, the refined lead product output will increase from approximately 460 tpd to 575 tpd. The purpose of this project is to allow the facility to recycle more batteries and to eliminate the existing daily idle time of the rotary feed drying furnace and reverberatory furnace. This facility is identified on lists compiled by the California Department of Toxic Substances Control per Government Code Section 65962.5.

Lead Agency:

South Coast Air Quality Management District

Division:

Planning, Rule Development and Area Sources

The NOP/IS and all supporting documentation are available at:

SCAQMD Headquarters
21865 Copley Drive
Diamond Bar, CA 91765

La Puente Library
15920 Central Avenue
La Puente, CA 91744

or by calling:

(909) 396-2039 or
(909) 396-2432

The NOP/IS can also be obtained by accessing the SCAQMD's website at:

<http://www.aqmd.gov/home/research/documents-reports/lead-agency-permit-projects>

The NOP is provided to the public through the following:

Los Angeles Times (August 31, 2018)

SCAQMD Website

SCAQMD Mailing List

Interested Parties Mailing List

NOP/IS Review Period (32 days): August 31, 2018 – October 2, 2018

Scheduled Public Meeting Dates (subject to change):

The proposed Project may have statewide, regional or area-wide significance; therefore, a CEQA scoping meeting is required pursuant to Public Resources Code Section 21083.9(a)(2). A CEQA Scoping Meeting will be held on Thursday, September 13, 2018 at Hacienda Heights Community Center, 1234 Valencia Avenue, Hacienda Heights, CA 91745 from 6:00 p.m. to 8:00 p.m.

Send CEQA Comments to:

Ms. Diana Thai

Phone:

(909) 396-3443

Email:

dthai@aqmd.gov

Fax:

(909) 396-3982

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Initial Study for:

Quemetco Capacity Upgrade Project

August 2018

State Clearinghouse No. TBD

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Deputy Executive Officer

Planning, Rule Development and Area Sources

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SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

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WAYNE NASTRI

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CHAPTER 1 PROJECT DESCRIPTION

- 1.1 Introduction**
- 1.2 California Environmental Quality Act**
- 1.3 Project Location**
- 1.4 Project Background**
- 1.5 Regulatory Requirements Applicable to Quemetco**
- 1.6 Project Description**
- 1.7 Related Permits and Approvals**
- 1.8 Incorporation by Reference**

1.1 INTRODUCTION

Quemetco currently operates an existing secondary lead smelting facility in the City of Industry, Los Angeles County, California. Western Lead Products first established the use of the Quemetco facility site for recycling lead acid batteries and other lead scrap materials in 1959 and Quemetco took over the site in 1970. Quemetco recovers and reprocesses lead from secondary sources (primarily used batteries). At this facility, used batteries are received, fragmented, and the lead containing materials are then stored, recovered, purified and sold to customers who use lead or lead alloys in their processes. There are four primary processes involved with secondary lead smelting which purify lead until final alloys are produced, including: the rotary feed drying furnace, the reverberatory furnace, the electric resistance heated slag reduction furnace, and the refining kettles.

Quemetco also operates air pollution control equipment including: a wet electrostatic precipitator (WESP) to reduce metallic particulate matter (PM) emissions, including lead, and a regenerative thermal oxidizer (RTO) to reduce potential odors and volatile organic compound (VOC) emissions from the rotary feed drying furnace. All of the primary and control equipment processes and units have current Permits to Operate issued by the South Coast Air Quality Management District (SCAQMD).

In particular, the SCAQMD permit for the rotary feed drying furnace and reverberatory furnace contains a condition which limits the amount of feed to 600 tons per day. When the daily throughput is met, Quemetco turns off the rotary feed drying furnace and its burner and drops the firing rate of the burner in the reverberatory furnace from operational mode (e.g., 16-20 million BTU) to idle mode (e.g., 5-6 million BTU); this is known as the compliance stop period. Quemetco would like to recycle more batteries and eliminate the existing daily compliance stop periods.

In addition, the facility is currently permitted to use calcined coke as a reagent (catalyst) in the smelting process which recovers metals from lead bearing scrap, and petroleum coke¹ as a purifying agent in the refinery process. However, because there is a dwindling supply of calcined coke available in the local market, Quemetco would like to use petroleum coke, in addition to or in lieu of, calcined coke as a reagent for the smelting process that occurs in the reverberatory furnace and electric resistance heated slag reduction furnace.

For these reasons, Quemetco is proposing the Quemetco Upgrade Capacity Project (Project) to modify their existing SCAQMD permits to: 1) increase the rotary feed drying furnace feed rate limit from 600 tons per day (tpd) to 750 tpd; 2) increase the amount of total coke material (e.g., calcined coke, petroleum coke, or a combination thereof) allowed to be processed in the rotary feed drying furnace and reverberatory furnace from 600,000 pounds per month (lbs/month) to 750,000 lbs/month; and 3) allow petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace. Currently, the facility's rotary feed drying furnace and reverberatory furnace may operate approximately 20 hours per day; however, with the proposed increase in rotary feed drying furnace permit limit, the rotary feed drying furnace and reverberatory furnace may operate up to 24 hours

¹ Petroleum coke is a carbonaceous solid delivered from oil refinery processes and is also referred to as green coke. Calcined coke is derived from thermally processing petroleum coke in a rotary kiln to drive off excess compounds and moisture.

per day and as a consequence, the refined lead product output will increase from approximately 460 tpd to 575 tpd.

1.2 CALIFORNIA ENVIRONMENTAL QUALITY ACT

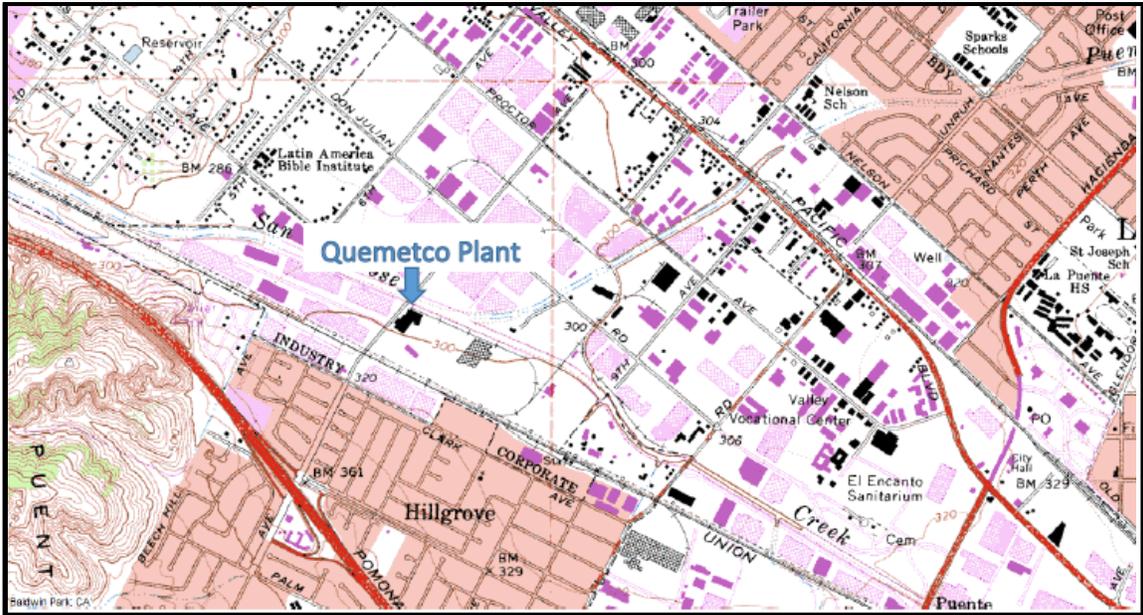
The California Environmental Quality Act (CEQA), Public Resources Code Section 21000 et seq., requires environmental impacts of proposed projects to be evaluated and feasible methods to reduce, avoid or eliminate significant adverse impacts of these projects to be identified and implemented. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project that may have a significant adverse effect upon the environment (Public Resources Code Section 21067). The proposed modifications at the Quemetco facility constitute a project as defined by CEQA. The SCAQMD has the primary responsibility for evaluating and approving or carrying out the entire project because the proposed modifications to the existing stationary source equipment permits issued by the SCAQMD require discretionary approval. Therefore, the SCAQMD is the most appropriate public agency to act as lead agency (CEQA Guidelines² Section 15051(b)). The California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) also has some discretionary approval power over the proposed Project, and as such will take the role of responsible agency for any of their required permits and/or approvals. The following is a list of any public agency that has jurisdiction by law with respect to the facility, and any city or county that borders on a city or county within which the facility is located: California Department of Transportation (CalTrans), City of Industry, Los Angeles County Fire Department (LACFD), Los Angeles County Health Department, Los Angeles County Public Works, Los Angeles County Sanitation District (LACSD), and the Regional Water Quality Control Board (RWQCB). These agencies are identified as commenting agencies because they may have interest in the proposed Project but none would have discretionary approval authority.

To fulfill the purpose and intent of CEQA, the SCAQMD is the lead agency for this proposed Project and has prepared a Notice of Preparation (NOP) of an Environmental Impact Report (EIR) and /Initial Study (IS) to address the potential environmental impacts associated with the proposed Project at the Quemetco facility. This NOP/IS informs the public, responsible agencies, and any other public agency that may have interest in the proposed Project, that the SCAQMD is seeking comment on the scope and content of the EIR. Since the proposed Project was identified in this NOP/IS as potentially having statewide, regional or areawide significance, a CEQA scoping meeting is required pursuant to Public Resources Code Section 21083.9(a)(2) and will be held on Thursday, September 13, 2018 at Hacienda Heights Community Center, 1234 Valencia Avenue, Hacienda Heights, CA 91745 from 6:00 p.m. to 8:00 p.m. Any comments received at the CEQA scoping meeting will be responded to and included in the EIR. Similarly, for any written comments received relative to the NOP/IS, responses will be prepared and the comment letters with responses will be included in the EIR.

1.3 PROJECT LOCATION

The proposed Project is located at the existing Quemetco facility, at 720 South 7th Avenue (S. 7th Avenue) in the City of Industry, County of Los Angeles, California (latitude – longitude coordinates of N 34.036 and W 117.98). The proposed Project is entirely within the property boundaries of the existing Quemetco facility on approximately 13 acres. The Quemetco facility is

² The CEQA Guidelines are codified at Title 14 California Code of Regulations Section 15000 *et seq.*



Note: Shaded pink areas are industrial/commercial and shaded light brown areas are industrial.

Figure 1-2
Project Site Location

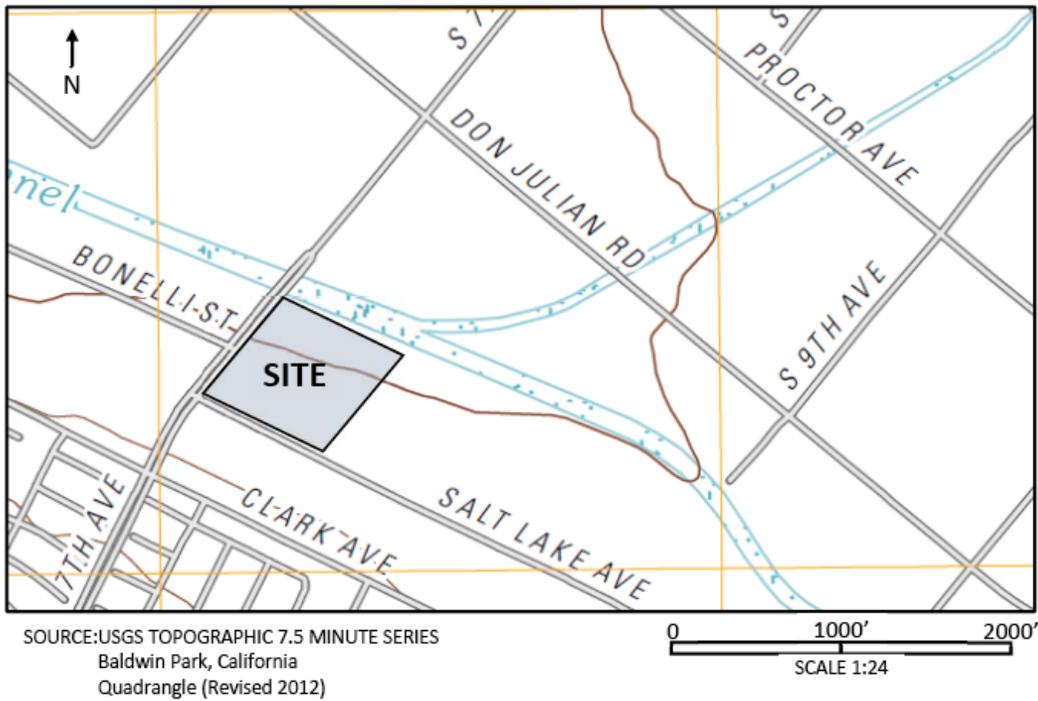


Figure 1-3
Focused Project Location



Figure 1-4
Project Site Aerial

1.4 PROJECT BACKGROUND

Quemetco is an existing secondary lead smelting processing facility that has been operating in its current location since 1970; Western Lead Products first established the use of the Quemetco facility site for recycling batteries and lead in 1959. Quemetco recovers, reprocesses, and recycles lead from allowed secondary scrap sources referred to as “feed stock,” which includes used automotive batteries, steel cases, and oversized batteries, along with other lead-bearing scrap ranging from boat keels to materials not meeting manufacturer specifications from battery manufacturers. The process of secondary lead smelting extracts lead from feed stock for reuse. The feed stock is fed through a crusher, a rotary feed drying furnace and then a series of furnaces and refining kettles which combine heat and smelting reagents (commonly carbon, such as coke, a refinery by-product) to form lead ingots or blocks. Quemetco is a 24-hour facility which is operated in three shifts. The following describes the detailed flow of feed stock through the Quemetco facility.

Figure 1-5 depicts the overview of Quemetco’s lead recycling process and air flow.

1.4.2 Battery Dismantling

After the used batteries are transferred into the feed hopper, they are conveyed into the battery wrecker, which is an electrically driven drum with metal teeth. The drum rotates and batteries roll around the circumference of the drum. The batteries are maneuvered between the battery wrecker teeth and a wall while the metal teeth puncture and break apart the batteries into various components (e.g., lead, plastics, sludge and acid). As the batteries break into pieces, the components drop to the bottom of the battery wrecker into a sink-float tank filled with a water solution. The battery components gravitationally separate in the sink-float system; as the lead and sludge sinks, the plastics float to the top, and the battery acid contained in the water solution is collected into a sump and sent to the on-site wastewater treatment system.

After the plastics are collected and removed from the sink-float tank, it is mechanically sorted for size, washed, and dried via a centrifugal water separator. All of this activity occurs in the battery wrecker building. A polymer is added to the primary sink float tank in order to precipitate solids. The polymer solution of about 50 percent is added to three to four thousand gallons of recycled water per day. Fifteen thousand gallons per day of recycled water is added to the sink float tank. The recycled water is introduced through rinsing sprays of the discharge augers at a rate of 30,000 to 35,000 gallons per day. The plastics washing water solution has a pH of 6-7; nothing is added to control water pH.

Recovered plastics are then placed into truck trailers. When full, each trailer is hauled off-site via heavy-duty truck to a plastics recycling facility in Bakersfield, California.

The steel cases that are manually sheered in the battery wrecker building, are also recovered, washed and placed in bins. When full, each bin is hauled off-site via heavy-duty truck to a local steel recycling facility in southern California.

1.4.3 Lead Processing – Furnaces and Refinery

The lead components that are recovered from the used batteries feed stock during the battery wrecking process (e.g., lead plates, posts and grids), are initially staged in the containment building (see Figure 1-5), and then fed to the rotary feed drying furnace via a front-end loader. The rotary feed drying furnace is a pre-dryer that is equipped with a 10 million British thermal units (BTU) burner that vaporizes excess water and dries the moisture-laden feed stock. The rotary feed drying furnace is direct fired and the inlet temperature into the following baghouse is approximately 300 degrees Fahrenheit. The furnace may incorporate oxygen enrichment for temperature control and reduce nitrogen levels. Emissions in the rotary feed drying furnace exhaust are first controlled by the rotary feed drying furnace baghouse to collect particulates (PM), including lead, and then by the RTO to destroy volatile organic compounds (VOCs), and finally to the WESP to collect more toxic PM.

After the lead material is dried in the rotary feed drying furnace, it is then routed to and processed in the reverberatory furnace which converts the solid lead-containing materials into molten lead. The reverberatory furnace is fully enclosed and operates at a temperature which exceeds 2,000 degrees Fahrenheit. The molten lead exiting the reverberatory furnace is poured into molds and cooled to form lead bullion blocks (hogs). The lead hogs from the reverberatory furnace are then transferred via forklift to the refinery where they are melted in the refinery kettles, purified and alloyed to meet customer specifications using commodities (e.g., antimony, silver, cobalt) as

needed. Remaining scrap, or slag from the reverberatory furnace is transferred to the electric resistance heated slag reduction furnace where it is processed to recover any remaining lead. The recovered lead from the electric resistance heated slag reduction furnace is poured into molds and cooled. The cooled, recovered lead from the electric resistance heated slag reduction furnace is also transported by forklift to the refinery where it is also melted in the refining kettles. Any remaining slag that is generated from the electric resistance heated slag reduction furnace does not contain recoverable amounts of lead. As such, this “second-pass” slag is conveyed to the containment building. Each load of slag is analyzed according to EPA’s Toxicity Characteristic Leaching Procedure (TCLP)³. Based on the results of the TCLP analysis the slag is sorted based on whether it meets the criteria of a hazardous waste or not. Slag from the electric resistance heated slag reduction furnace is periodically loaded into truck trailers to be hauled off-site by heavy-duty truck to an authorized landfill. See Section XVI - Solid and Hazardous Waste in Chapter 2 for further details regarding the off-site disposal of slag.

The exhaust emissions from the reverberatory furnace are controlled by an air pollution control system that consists of a reverberatory furnace baghouse to collect PM, a LoTox scrubber to remove NO_x, a reverberatory furnace scrubber to remove oxides of sulfur (SO_x), and the aforementioned WESP to collect more toxic PM. The exhaust emissions from the electric furnace are controlled by an air pollution control system that consists of an electric resistance heated slag reduction furnace baghouse to collect PM, an electric resistance heated slag reduction furnace scrubber to remove SO_x, and the aforementioned WESP to collect more toxic PM. Both the reverberatory furnace and electric resistance heated slag reduction furnace are operated within a building equipped with a high-efficiency particulate air (HEPA) filtration system that operates under negative air pressure to prevent fugitive PM emissions from being released into the ambient air.

Quemetco currently operates seven refinery kettles where lead bullion blocks (hogs) from the reverberatory furnace and electric resistance heated slag reduction furnace are further refined into final alloys that meet individual customer specifications before casting. For example, customers order either pure lead or lead mixed with alloys, based on their individual industrial process requirements. Emissions from the refinery kettles include: kettle process emissions, fugitive emissions, and refinery burner combustion exhaust gases. Each refinery kettle is equipped with a ventilation hood to capture the kettle process emissions from the refining activities and vent them to an air pollution control system. In particular, the kettle process emissions are controlled by a refinery baghouse to collect PM, and then the aforementioned WESP to collect more toxic PM. All seven of the refinery kettles are operated within a building equipped with a HEPA filtration system that operates under negative air pressure to prevent fugitive PM emissions from being released into the ambient air.

The rotary feed drying furnace and reverberatory furnace are currently subject to a daily “compliance stop period” because of a permit condition that specifically limits the feed rate to the rotary feed drying furnace to 600 tons per day. Because the process is designed such that the feed first goes into the rotary feed drying furnace and then to the reverberatory furnace, this permit condition has the effect of also limiting the amount of feed stock entering the reverberatory furnace. During this compliance stop period, when the daily throughput is met, Quemetco turns

³ U.S. EPA, SW-846 Test Method 1311: Toxicity Characteristic Leaching Procedure. <https://www.epa.gov/hw-sw846/sw-846-test-method-1311-toxicity-characteristic-leaching-procedure>

off the rotary feed drying furnace and its burner and drops the firing rate of the burner in the reverberatory furnace from operational mode (e.g., 16-20 million BTU) to idle mode (e.g., 5-6 million BTU). During idle mode, the temperature within the reverberatory furnace gradually decreases. It is important to note however, that all other equipment and processes and air pollution control equipment continue to operate at full capacity in accordance with SCAQMD permit conditions during the compliance stop period. For example, the electric resistance heated slag reduction furnace continues to process reverberatory furnace slag and the refinery kettles continue to process lead metal to meet customer specifications.

1.4.4 Fuels and Additives

The rotary feed drying furnace and reverberatory furnace are fueled with natural gas (or LPG) and oxygen; the refinery kettles are fueled with natural gas, and the electric resistance heated slag reduction furnace uses electricity for its operations. The natural gas is supplied by Southern California Gas and the electricity is supplied by Southern California Edison.

Calcined coke is an additive that is currently used as a reagent in the smelting process to enhance the removal of impurities from lead bearing scrap in the reverberatory furnace and electric resistance heated slag reduction furnace. Petroleum coke is also used exclusively in the refinery kettles as a purifying agent. Limestone (e.g., pebble lime and dolomite lime) and cobbled steel are also used in the smelting process. Other additives such as arsenic, caustic soda beads, cobalt, metallic sodium, pyrite, red phosphorus, silver, sodium nitrate, sulfur and tin may also be added to the refinery kettles at each customer's request.

Soda ash is utilized as needed for pH adjustment in the air pollution control system (e.g., the reverberatory furnace and electric resistance heated slag reduction furnace scrubbers). The soda ash is stored in existing on-site silos located next to the water quality system, so it can be transferred into a day tank, mixed into a slurry with water and pumped into the scrubbers.

Similar to soda ash, sulfuric acid is also used in Quemetco's on-site wastewater treatment system as a pH adjustment agent in the wastewater treatment process. Most of the sulfuric acid is obtained from the battery acid that is collected during the battery dismantling process that is described in Section 1.4.2; small amounts of sulfuric acid are occasionally purchased if additional supply is needed.

All additives are intermittently delivered to Quemetco by truck (up to two trucks per day) and stored in enclosed containers in the chemical product warehouse for use as needed. The consumption levels of some additives fluctuate by customer specification. For the quantities of each of the additives utilized by Quemetco, see Section 1.6, Table 1-1.

1.4.5 Water and Wastewater

Quemetco's wastewater treatment system is located at the northeast corner of the site. Potable water is provided by San Gabriel Water Company and is used for rinsing the plastics and steel recovered from the battery dismantling process, operating the WESP and SO_x scrubbers, washing the outside areas of the facility, supplying water to the employee drinking fountains, kitchen, showers, and restrooms and watering facility landscaping. As explained in section 1.4.4, Quemetco uses sulfuric acid and soda ash as pH adjustment agents in its wastewater treatment process. Solids are also removed using a filter press. Quemetco discharges the treated wastewater

into the LACSD's regional wastewater system in accordance with Quemetco's LACSD Wastewater Discharge Permit. Sanitary wastewater generated from the employee kitchen, showers and restrooms is discharged to the sewer without undergoing treatment through a separate discharge line from the on-site wastewater treatment system.

1.4.6 Other Existing Buildings and Work Areas

Other existing buildings and work areas at the Quemetco facility include: a security building, administrative offices, a laboratory, a storage warehouse for chemicals, additives and finished goods, a receiving and shipping warehouse, and equipment maintenance areas.

1.4.7 Air Pollution Control Systems

Quemetco has extensive air pollution control systems that are utilized throughout the facility, as depicted in Figures 1-5 and 1-6 and as previously described in Section 1.4.3. In particular, emissions in the rotary feed drying furnace exhaust are first controlled by the rotary feed drying furnace baghouse to collect PM, including lead, and then by the RTO to destroy VOCs, and finally to the WESP to collect more toxic PM. The exhaust emissions from the reverberatory furnace are controlled by an air pollution control system that consists of a reverberatory furnace baghouse to collect PM, a LoTox scrubber to remove NO_x, a reverberatory furnace scrubber to remove SO_x, and the aforementioned WESP to collect more PM. The exhaust emissions from the electric resistance heated slag reduction furnace are controlled by an air pollution control system that consists of an electric resistance heated slag reduction furnace baghouse to collect PM, an electric resistance heated slag reduction furnace scrubber to remove SO_x, and the aforementioned WESP to collect more toxic PM. Further, both the reverberatory furnace and electric resistance heated slag reduction furnace are operated within a building equipped with a HEPA filtration system that operates under negative air pressure to prevent fugitive PM emissions from being released into the ambient air.

In addition, the facility process buildings (including the battery wrecker, furnace buildings and refinery building) are equipped with 11 Busch International baghouse and HEPA air filtration and ventilation systems (building ventilation units) that create negative air pressure to prevent fugitive PM emissions from being released into the ambient air. The negative air pressure and ventilation system fans pull air into the building processing areas where PM emissions are captured by baghouse and HEPA filtration systems. Quemetco currently operates three diesel emergency internal combustion engines (ICEs) to supply backup power when there is a power outage to keep some of the air pollution control systems and ventilations systems operating with one ICE dedicated as backup power to the WESP.

There are air monitors on the fence lines of the facility to continuously monitor ambient lead and arsenic concentrations at the facility boundary; Quemetco is required to report to any exceedances SCAQMD under Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities.

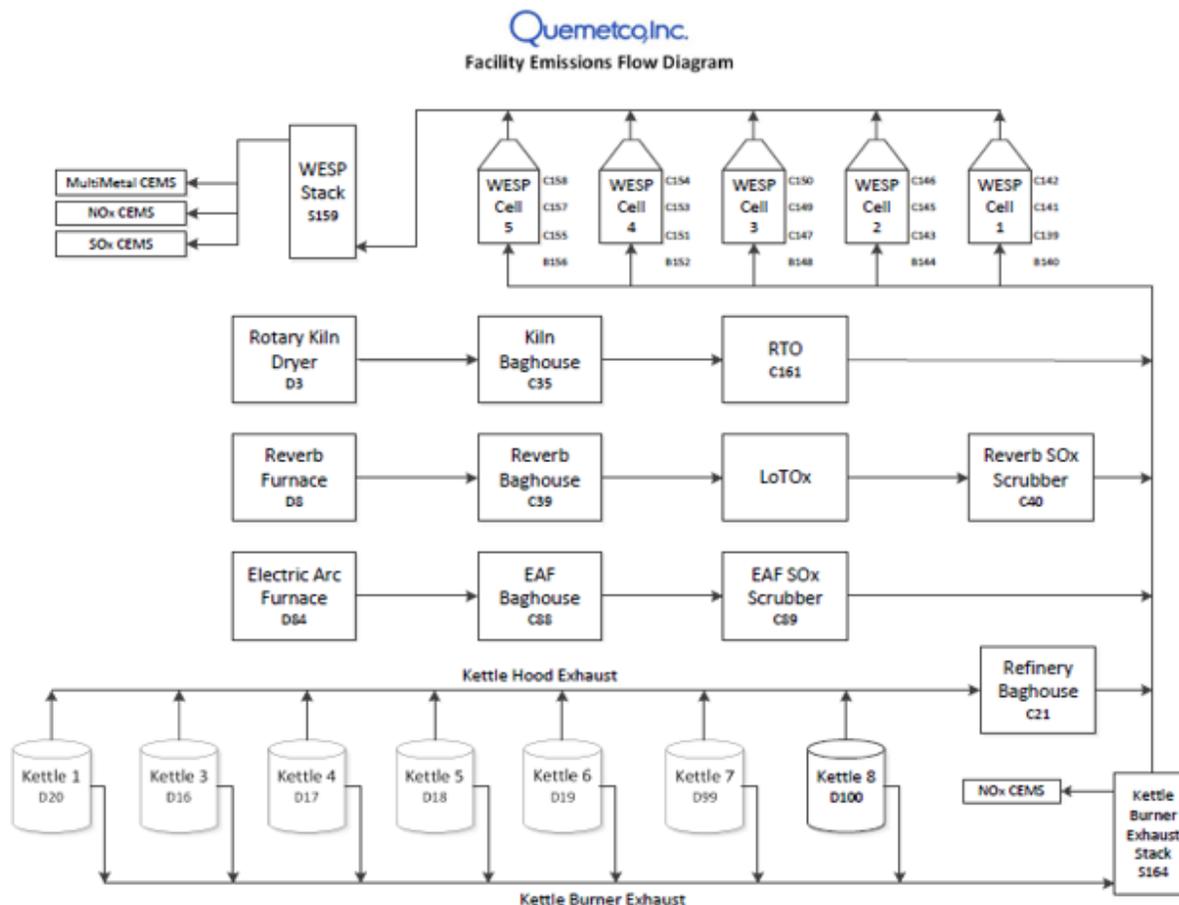


Figure 1-6
Overview of Quemetco Air Pollution Control Systems

1.5 REGULATORY REQUIREMENTS APPLICABLE TO QUEMETCO

Since 2008, Quemetco has completed several environmental improvement projects in support of compliance requirements with the recently revised NAAQS for lead as well as with SCAQMD Rules 1402 and 1420.1. These emission reduction projects included the installation and operation of the WESP and RTO and enclosing the battery wrecking operations. The following discussion elaborates on Quemetco’s compliance with major SCAQMD regulatory requirements.

Quemetco is required to comply with SCAQMD Rule 1402 - Control of Toxic Air Contaminants From Existing Sources, which applies to facilities subject to the Air Toxics “Hot Spots” Information and Assessment Act (AB2588) and facilities with emissions that exceed significant or action risk levels. Rule 1402 specifies limits to reduce health risks if emissions of toxic air contaminants from existing sources exceed thresholds for the maximum individual cancer risk (MICR), cancer burden, or non-cancer acute and chronic hazard index (HI). In some cases facilities are required to prepare and implement Risk Reduction Plans (RRPs) to achieve these risk limits, as required by AB2588 and Rule 1402. In addition, Quemetco’s air permit condition E448.2

requires additional Health Risk Assessments (HRAs) to be prepared and submitted under a separate schedule, that are not subject to all of the requirements of AB2588 or Rule 1402.

Quemetco has prepared HRAs for SCAQMD approval, in accordance with AB2588 and Rule 1402. An AB2588 HRA was initially submitted by Quemetco to SCAQMD for review in May 2014, but it was subsequently revised several times before being approved by SCAQMD on May 17, 2016. The approved HRA⁴ applied the 2015 Office of Environmental Health Hazard Assessment (OEHHA) updated Risk Assessment Guidelines (2015 OEHHA Guidelines). The 2015 OEHHA Guidelines can result in residential cancer risks three to five times higher compared to using the previous guidance, even at the same emission level. This is primarily due to updates in cancer impacts for children, and default assumptions about exposure parameters such as breathing rates and exposure duration. The AB2588 HRA modeling for Quemetco's existing operations, based on the 2015 OEHHA Guidelines, exceeded SCAQMD's Rule 1402 health risk thresholds for public notification and risk reduction; therefore, a RRP was required. Quemetco submitted the RRP to SCAQMD on November 14, 2016 and SCAQMD issued a Conditional Approval of the RRP on June 22, 2017. The main requirements of the RRP are an annual arsenic limit of 6.5 pounds and continuous monitoring of arsenic emissions from the WESP.

On November 5, 2010, the SCAQMD adopted Rule 1420.1 - Emission Standards For Lead and Other Toxic Air Contaminants From Large Lead-Acid Battery Recycling Facilities, which includes emission standards for lead and other toxic air contaminants from large lead-acid battery recycling facilities. Rule 1420.1 was most recently amended on September 4, 2015 to incorporate a lower facility-wide lead emission rate and administrative provisions for facilities that have closed. Rule 1420.1 was crafted to: 1) protect public health by reducing exposure to and emissions of lead from large lead-acid battery recycling facilities; 2) help ensure attainment and maintenance of the NAAQS for lead; and 3) protect public health by limiting arsenic, benzene, and 1,3-butadiene exposure and emissions from these facilities. Because each of these compounds can be produced as a part of the secondary lead smelting process, Quemetco is required to comply with Rule 1420.1. The following list includes a summary of the key requirements contained in Rule 1420.1, which are applicable to the Quemetco facility:

1. Established new ambient arsenic monitoring requirement with curtailment requirements if an ambient arsenic concentration averaged over a 24-hour period exceeds 10.0 nanograms per cubic meter (ng/m³) or greater at any monitoring location.
2. Established and maintains a current facility-wide stack emission rate for lead at 0.003 pounds per hour (26.3 pounds per year).
3. Established a facility-wide stack emission rate for arsenic of 0.00114 pounds per hour (10 pounds per year) beginning January 1, 2015.
4. Established a WESP stack emission rate for benzene of 0.0514 pounds per hour (450 pounds per year) beginning January 1, 2015.
5. Established a WESP stack emission rate for 1,3-butadiene of 0.00342 pounds per hour (30 pounds per year) beginning January 1, 2015.

⁴ Available here: <http://www.aqmd.gov/home/regulations/compliance/toxic-hot-spots-ab-2588/quemetco>

6. Established new ambient lead monitoring requirement with curtailment requirements if an ambient lead concentration averaged over 30 consecutive days exceeds 0.110 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) or greater at any monitoring station beginning January 1, 2016.
7. Established new ambient lead monitoring requirement with curtailment requirements if an ambient lead concentration averaged over 30 consecutive days exceeds 0.100 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) or greater at any monitoring station beginning January 1, 2017.

In particular, one requirement of Rule 1420.1 is for Quemetco to maintain 30-day, rolling-average fence line ambient lead concentrations at or below 0.110 micrograms per cubic meter ($\mu\text{g}/\text{m}^3$) through December 31, 2016 and at or below 0.100 $\mu\text{g}/\text{m}^3$ on and after January 1, 2017. The ambient monitoring stations at Quemetco's fence line are in place to verify that the ambient levels of lead concentrations are below both the aforementioned limits in SCAQMD Rule 1420.1 and the National Ambient Air Quality Standards (NAAQS) lead standards (0.15 $\mu\text{g}/\text{m}^3$ averaged over a rolling 90-day period).

However, during May 2017, an external power interruption resulted in ambient monitoring readings of arsenic and lead in excess of the Rule 1420.1 limits at one of the facility's four ambient monitoring stations. At approximately 7:06 pm on May 3, 2017, Southern California Edison notified the facility of a Demand Response Program event. This notification prompted power curtailment activity at the facility, which involves reducing power consumption and shutting down production operations. During this process, issues with electrical equipment affected operation of the WESP and compromised both the reverberatory furnace and the building negative pressure. As a result, recorded arsenic and lead concentrations exceeded Rule 1420.1 ambient limits. Immediately upon becoming aware of the exceedance, Quemetco activated the facility's SCAQMD-approved compliance plan and initiated a 50 percent process curtailment as required by SCAQMD Rule 1420.1, beginning on May 5, 2017. The curtailment period continued for a period of thirty (30) days from the date of occurrence (e.g., May 3, 2017). With the concurrence of SCAQMD, Quemetco resumed full production on June 3, 2017.

On-going source testing is required to be conducted to demonstrate compliance with the air quality permit and Rule 1420.1. Specifically, Rule 1420.1 requires source tests to be performed on all stacks at a minimum of once each year beginning in 2016. All source tests conducted for compliance purposes is governed by a SCAQMD-approved source testing methodology. Source test results for Years 2014-2016 will be included and analyzed in the EIR.

The proposed Project must also comply with all applicable SCAQMD rules and regulations, including but not limited to the following:

- Rule 203 - Permit to Operate
- Rule 212 - Standards for Approving Permits
- Rule 218 - Continuous Emissions Monitoring
- Rule 301 - Permitting and Associated fees
- Rule 401 - Visible Emissions
- Rule 402 - Nuisance
- Rule 404 - Particulate Emissions

- Regulation IX - New Source Performance Standards (NSPS) for Secondary Lead Smelters (40 CFR 60 Subpart L)
- Regulation X - National Emissions Standards for Hazardous Air Pollutants (NESHAP) from Secondary Lead Smelting (40 CFR 63 Subpart X)
- Regulation XIII – New Source Review (NSR), including key rule (Rule 1303 - Requirements)
- Rule 1401 - New Source Review of Toxic Air Contaminants
- Rule 1402 - Control of Toxic Air Contaminants from Existing Sources
- Rule 1407 - Control of Emissions of Arsenic, Cadmium and Nickel from Non-Ferrous Metal Melting Operations
- Rule 1420 - Emissions Standard for Lead
- Rule 1420.1 - Emissions Standard for Lead from Large Lead-Acid Battery Recycling Facilities
- Regulation XVII - Prevention of Significant Deterioration Permits
- Regulation XX - Regional Clean Air Incentive Market (RECLAIM) including key rules (Rule 2005 - NSR for RECLAIM Pollutants)
- Regulation XXX - Title V Permits

Quemetco currently complies with Rule 1402 that applies to facility risk based on reported emissions as well as applicable Risk Reduction Plan. Rule 1401 applies to permit units based on maximum potential to emit that will be evaluated in the CEQA document and during the issuance of the air quality permits. Quemetco's emissions control technology, such as the WESP and RTO, will need to be tested and demonstrated to be toxics best available control technology (TBACT). Quemetco's existing air pollution control systems have been tested and demonstrated to be in compliance with Rule 1407 and no change is expected as a result of the proposed Project.

The proposed Project is not modifying any existing operations equipment; compliance with Regulation IX - NSPS is expected. Existing Quemetco operations have demonstrated compliance with Regulation IX.

Rule 1420.1 is more stringent than Regulation X - NESHAP. Through on-going annual compliance demonstration of Rule 1420.1, Quemetco is also demonstrating compliance with Regulation X.

1.6 PROJECT DESCRIPTION

To allow the facility to recycle more batteries and to eliminate the existing daily idle time of the rotary feed drying furnace and reverberatory furnace, Quemetco is proposing to modify existing SCAQMD permits to: 1) increase the rotary feed drying furnace feed rate limit from 600 tpd to 750 tpd; 2) increase the amount of total coke material (e.g., calcined coke, petroleum coke, or a combination thereof) allowed to be processed in the rotary feed drying furnace and reverberatory furnace from 600,000 lbs/month to 750,000 lbs/month; and 3) allow petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace. Currently, the facility's rotary feed drying furnace and reverberatory furnace operate approximately 20 hours per day; however, with the proposed increase in the rotary feed drying furnace permit limit, the rotary feed drying furnace and

reverberatory furnace may operate up to 24 hours per day and as a consequence, the refined lead product output will increase from approximately 460 tpd to 575 tpd. The type of feed stock received for processing is not expected to change as a result of the proposed Project.

The proposed Project also includes the following modifications to existing permit conditions by:

- Adding a new permit condition that would require Quemetco to maintain a differential pressure monitor on the WESP to add another compliance assurance monitoring parameter;
- Updating the compliance demonstration to include the WESP since all emissions now are routed to this air pollution control device; and
- Removing permit conditions that reference obsolete SCAQMD compliance requirements.

Table 1-1 presents a summary of Year 2014 (baseline) and proposed Project operations. Year 2014 is the most representative baseline data at the time of the preparation of this NOP/IS because it represents the lowest level of baseline operations since submittal of the application. By choosing Year 2014, the “Project increment” will reflect the largest potential increase and thus represent the most conservative scenario for the Project impact analysis.

Quemetco currently operates 24-hours per day and the existing air pollution control systems will remain in full operation. Given that the daily compliance period runs from noon until noon, the reverberatory furnace typically idles during the morning hours just before noon each day; the proposed Project would allow the rotary feed drying furnace and reverberatory furnace to operate during these hours before noon. The proposed Project would be expected to increase the daily total feed through the rotary feed drying furnace and reverberatory furnace and downstream processes. Further, although there is no permit limit for how much product the refinery can produce, the proposed Project will increase the total refined lead product output from the refinery over baseline conditions. In addition, there are permit conditions for how much material can be processed that will need to be modified pursuant to the project. With regard to air quality impacts, the peak hourly and daily emissions for all of the increased activities will be evaluated in the EIR.

While petroleum coke is currently permitted for use as a purifying agent in the refinery process, the proposed Project is requesting a permit modification to allow petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace. In 2016, the SCAQMD issued a temporary research permit in accordance with SCAQMD Rule 441 - Research Operations that allowed the use of petroleum coke, in lieu of calcined coke, as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace. The permit was contingent upon Quemetco performing all of the source tests requested by SCAQMD to determine whether all emissions of pollutants from the air pollution control system would be different or worse from using petroleum coke instead of calcined coke in the reverberatory furnace and electric resistance heated slag reduction furnace.

Other than substituting petroleum coke for calcined coke in the reverberatory furnace and electric resistance heated slag reduction furnace, no physical changes were made to the facility or to any process or control equipment as part of conducting this research project. Quemetco completed the source tests of its air pollution control systems and provided SCAQMD the results which contained

the measured emission levels from using petroleum coke as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace. Quemetco is proposing a permit modification to permanently allow petroleum coke to be used for this purpose. The EIR will contain an air quality analysis of the effects of allowing petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace.

The proposed Project would generate an increase in the transport of materials -- including feed, additives, finished product, recycling and waste -- in and out of the facility. The proposed Project would not change the type of additives or any of the other materials used; it would increase the amount of feed (raw material scrap) and additives (smelting reagent, limestone, cobbled steel, other additives (including acids) and soda ash). The proposed Project would increase total gas and electricity consumption as presented in Table 1-1 and analyzed in Section VI - Energy.

Table 1-1 presents estimates for daily truck traffic increase at 15 round trips per day from additional feedstock to be processed. The proposed Project could increase daily traffic by up to 15 trucks and six employee round trips per day. The addition of a maximum of 15 daily truck trips would include: scrap material and additives delivery trips; waste disposal trips (metals and plastics to recycling facilities and slag to landfill); and finished products trips. Further details and analysis of materials movement is presented in Chapter 2 under Section XVI - Solid and Hazardous Waste, and Section XVII - Transportation and Traffic.

A summary of the direct and indirect environmental impacts from the proposed Project (post-Project less pre-Project baseline conditions) is presented in Chapter 2.

**Table 1-1
Summary of Quemetco Operations**

| | 2014 Baseline Conditions (pre-Project) | Proposed Project (post-Project) | Post-Project Increment |
|--|---|--|-----------------------------------|
| Feed Stock Process Limits in Permits (tons/day) | 600 | 750 | 150 |
| CEQA Evaluation Scenario of Feed Stock Process Limits (tons/day) | 510 | 750 | 240 |
| Feed Stock Process Limits (tons/month) | 15,340 | 21,099 | 5,759 |
| Additives (tons/month): | | | |
| 1) Smelting Reagents/Total Coke Material Processed in Rotary Feed Drying Furnace & Reverberatory Furnace | 224 | 338 | 114 |
| a. Calcined Coke | 224 | 0 | -224 |
| b. Petroleum Coke | * | 338 | 338 |

| | 2014 Baseline Conditions (pre-Project) | Proposed Project (post-Project) | Post-Project Increment |
|--|---|--|-----------------------------------|
| 2) Limestone | 73 | 116 | 43 |
| 3) Cobbled Steel | 286 | 401 | 114 |
| 4) Other additives** | 156 | 159 | 3 |
| Soda Ash (tons/month) | 1,771 | 2,654 | 883 |
| Electricity Consumption (annual KWh) | 38,912,004 | 52,009,717 | 13,097,713 |
| Natural Gas Consumption (annual Cubic Feet (CCF)) | 2,750,998 | 3,610,761 | 859,773 |
| Railcars Activity Per Month: | | | |
| Inbound | 2 | 3 | 1 |
| Outbound | 8 | 10 | 2 |
| TOTAL | 10 | 13 | 3 |
| Railcar Peak Day Trips (one-way) | 2 | 2 | 0 |
| Potable Water Consumed (gallons per day) | 272,022 | 369,435 | 97,413 |
| Wastewater Generated (gallons per day) | 193,019 | 275,329 | 82,310 |
| Solid Wastes (tons/year): | | | |
| Metals (recycled) | 1,613 | 1,892 | 252 |
| Plastics (recycled) | 6,340 | 9,440 | 3,100 |
| Slag (landfilled) | 11,232 | 15,346 | 4,114 |
| Truck Activity Per Month: | | | |
| Inbound | 1,084 | 1,409 | 325 |
| Outbound | 531 | 621 | 90 |
| TOTAL | 1,615 | 2,030 | 415 |
| Peak Daily Trucks (Inbound + Outbound) | 53 | 67 | 14 |
| Number of Employees | 244 | 250 | 6 |
| Peak Daily Employee Trips (Inbound + Outbound) | 244 | 250 | 6 |

Source: Quemetco, Inc. 2015-2016

Notes:

* Petroleum coke usage during the 2016 Research Permit Test Program was 115,720 pounds or approximately 58 tons.

** The amount and type of other additives that may be used are determined by the customer and can consist of arsenic, caustic soda beads, cobalt, metallic sodium, pyrite, red phosphorus, silver, sodium nitrate, sulfur and tin.

1.7 RELATED PERMITS AND APPROVALS

The proposed Project would require discretionary approvals from the SCAQMD, as well as subsequent action by the DTSC. Table 1-2 summarizes the anticipated permits and approvals that may be associated with the proposed Project. The proposed Project could, for example, require DTSC to modify its Quemetco Hazardous Waste Facility Operation and Post-Closure Permit in compliance with the Federal Resource Conservation and Recovery Act (RCRA Permit); DTSC may also rely on this Capacity Upgrade Project EIR for its own projects such as its RCRA Permit Renewal with Quemetco.

In addition, Quemetco submits reports to the United States Environmental Protection Agency (U.S. EPA) two times per year to certify compliance with all Title V requirements (implemented by the SCAQMD). The project will result in a SCAQMD Title V permit revision, which is subject to U.S. EPA review.

**Table 1-2
Project Permits and Approvals**

| Agency Permit or Approval | Permit/ Regulation | Applicability to Project |
|---|--|---|
| State | | |
| California Environmental Protection Agency, Department of Toxic Substance Control (DTSC) | Hazardous Waste Facility Operation and Post-Closure Permit | The Hazardous Waste Facility Operation and Post-Closure Permit was initially issued by DTSC on September 15, 2005 and is currently in a renewal process. This permit allows Quemetco to operate the equipment and processes at issue in the Capacity Upgrade Project as Miscellaneous Hazardous Waste Management Units (“HWMUs”) along with the other HWMUs at the facility. The current permit establishes maximum capacities for each piece of equipment and a maximum daily throughput for the reverberatory furnace, electric resistance heated slag reduction furnace and rotary feed drying furnace. Any revisions to this permit as a result of the Capacity Upgrade Project would be a separate but related activity and DTSC would be a CEQA responsible agency to the proposed Project with discretionary approval. |
| Regional | | |
| South Coast Air Quality Management | Quemetco Air Permits | The proposed Project requires the modification of existing air permits. See |

| Agency Permit or Approval | Permit/ Regulation | Applicability to Project |
|---------------------------|--------------------|------------------------------------|
| District (SCAQMD) | | Section 1.6 - Project Description. |

The following is a brief summary of the other agencies' rules, regulations and permits under which Quemetco operates and would not be subject to a discretionary action as a result of the proposed Project. These agencies would be considered commenting agencies.

1.7.1 California Department of Transportation (CalTrans)

Caltrans is the state agency responsible for highway, bridge, and rail transportation planning, construction, and maintenance. If the proposed Project were to affect a state facility, an encroachment permit would be required. Additionally, oversized loads would trigger special permits. No known aspects of the proposed Project would affect Caltrans operations. Because the proposed Project would not involve any construction of highways, bridges, or rail lines, and because there would be no substantial increases in traffic volumes due to increased workers or truck deliveries at the facility (as evaluated in Chapter 2, Section XVII - Transportation and Traffic), the proposed Project would not require an encroachment permit.

1.7.2 City of Industry

The City of Industry governs zoning and land development for the proposed Project area and is comprised of primarily industrial (92 percent) and commercial (8 percent) activities. As of the 2010 census, there were only 219 residents within the City of Industry. Because no soil or ground disturbances will occur from the production change, the proposed Project would not require any change in zoning or land use; therefore, the proposed Project would not require a land use action such as a building permit.

1.7.3 Los Angeles County Fire Department (LACFD)

Los Angeles County Fire Department (LACFD) regulates storage and handling of hazardous materials and hazardous waste. A Hazardous Materials Business Plan includes an inventory of hazardous materials and hazardous wastes, emergency response plan and procedures, employee-training program, and map showing the locations of the hazardous materials and wastes. This plan is updated annually or when any major changes in hazardous materials or waste on site occurs. The Hazardous Materials Business Plan inventory list of materials would not change. Quemetco will update the inventory quantities through a revision of the online reporting tool if necessary.

1.7.4 Los Angeles County Health Department

The Los Angeles County Health Department oversees public health and safety in Los Angeles County.

1.7.5 Los Angeles County Department of Public Works

The Los Angeles County Department of Public Works manages the San Jose channel, immediately adjacent to Quemetco, as part of their county wide flood control responsibilities.

1.7.6 Los Angeles County Sanitation District (LACSD)

Quemetco operates under an Industrial Wastewater Discharge Permit. Issued on April 11, 2011, the permit identifies the LACSD's and U.S. EPA wastewater discharge limits. U.S. EPA discharge limits are based on production data from July 1, 2009 to June 30, 2010. Quemetco submits production data quarterly to the LACSD in accordance with permit conditions. A production increase would increase wastewater discharge levels and is evaluated in Chapter 2 under Section IX - Hydrology and Water Quality.

1.7.7 Regional Water Quality Control Board (RWQCB)

Quemetco operates under a National Pollutant Discharge Elimination System (NPDES) Storm Water General Permit through the RWQCB. The General Permit regulates industrial activities exposed to rainfall where possible contaminants may enter the storm water drainage system. The proposed Project does not include construction activities that would involve or affect the facility's existing storm water drainage system, and therefore would not require separate coverage under the NPDES storm water permit for construction activities. Quemetco has recently implemented a voluntary storm water filtration project.

1.8 INCORPORATION BY REFERENCE

This NOP/IS incorporates by reference DTSC's previously certified Final EIR for its Hazardous Waste Management Operation and Post Closure Permit for Quemetco, Inc., August 2005, State Clearinghouse No. 1996041042 (DTSC 2001 and 2005). As discussed in CEQA Guidelines Section 15150, "an EIR or negative declaration may incorporate by reference all or portion of another document which is a matter of public record or is generally available to the public. Incorporation by reference is most appropriate for including long, descriptive, or technical materials that provide general background but do not contribute directly to the analysis of the problem at hand." A physical copy of this Final EIR is available for public review at the La Puente Library located at 15920 Central Avenue, La Puente, CA 91744. The Final EIR may be obtained from: SCAQMD's website at <http://www.aqmd.gov/home/research/documents-reports/lead-agency-permit-projects>; by visiting the Public Information Center at SCAQMD Headquarters located at 21865 Copley Drive, Diamond Bar, CA 91765; or by contacting Fabian Wesson, Public Advisor by phone at (909) 396-2039 or by email at PICrequests@aqmd.gov.

The incorporated part of the referenced document must be briefly summarized or described. [CEQA Guidelines Section 15150(b)]. The DTSC Hazardous Waste Management Operation and Post Closure Permit for Quemetco, Inc. Final EIR is hereby incorporated by reference (DTSC 2001 and 2005). These documents provide the historic environmental setting and analysis as well as public review for Quemetco's operations in accordance with RCRA (DTSC 2001 and 2005). The RCRA permit authorizes the treatment, storage and transfer of hazardous and non-hazardous wastes related to the recycling of automotive batteries and other lead bearing material. The DTSC Draft and Final EIR found the following significant impact area: water resources/water quality. Quemetco has been working under the direction of DTSC to complete investigations to confirm whether the facility has had an effect on surface or groundwater resources.

This Final EIR also evaluated the following impact areas: Land Use, Earth Resources, Air Quality, Noise, Risk of Upset (Hazards), Public Services, and Traffic/Transportation. The impact analysis of Quemetco's operations for these issue areas supported findings that there were no significant

impacts for the facility operation levels of 600 tons per day; no mitigation measures were required. There were no outstanding issues to be resolved as part of the DTSC Draft and Final EIR (DTSC 2001 and 2005).

The primary area of controversy for the DTSC RCRA permit EIR was lead toxicity. To address on-going lead toxicity concerns and regulatory requirements, Quemetco has been preparing and is required to continue preparing HRAs as part of its SCAQMD permit conditions and in compliance with AB 2588. All of the previous HRAs concluded that no emission levels exceed acceptable health risk thresholds until the 2015 OEHHA Guidelines were adopted. The AB2588 HRA modeling for Quemetco's existing operations, based on the 2015 OEHHA Guidelines, exceeded SCAQMD's Rule 1402 health risk thresholds for public notification and risk reduction; therefore, a RRP was required. The RRP was submitted on November 14, 2016. SCAQMD issued a Conditional Approval of the RRP on June 22, 2017. The requirements of the RRP pertaining to Arsenic emissions from the WESP stack have been placed in Quemetco's Title V permit. The updated Title V permit includes additional arsenic testing at the WESP stack location, monitoring and monitor third party verification through quality assurance testing. As discussed above, an updated HRA that evaluates the potential effects of the proposed Project from both stationary and mobile sources will be included as part of this Capacity Upgrade Project's EIR evaluation and may include an ecological risk evaluation.

Quemetco has implemented the following changes and upgrades since the 2005 DTSC Final EIR: 1) the WESP and RTO air pollution control devices were installed; 2) the battery wrecker building was enclosed to eliminate fugitive emissions released to the ambient air; 3) a centrifugal "dryer" was installed for the plastics recovery system; and 4) system tanks were replaced for maintenance. In addition, there have been no substantive changes to the immediate proposed Project area since the preparation of the DTSC EIR. The immediate area continues to be industrial and is surrounded by the same infrastructure: Union Pacific Railroad Company, San Jose Creek, S. 7th Avenue, and Salt Lake Avenue.

CHAPTER 2 ENVIRONMENTAL CHECKLIST

- 2.1 Introduction**
- 2.2 General Information**
- 2.3 Potentially Significant Impact Areas**
- 2.4 Determination**
- 2.5 Environmental Checklist and Discussion**

2.1 INTRODUCTION

The environmental checklist provides a standard evaluation tool to identify a project's adverse environmental impacts. This checklist identifies and evaluates potential adverse environmental impacts that may be created by implementing the proposed Project.

2.2 GENERAL INFORMATION

| | |
|---|---|
| Project Title: | Quemetco Capacity Upgrade Project |
| Lead Agency Name: | South Coast Air Quality Management District |
| Lead Agency Address: | 21865 Copley Drive, Diamond Bar, CA 91765 |
| CEQA Contact Person: | Diana Thai, (909) 396-3443, dthai@aqmd.gov |
| Quemetco Capacity Upgrade Project Contact Person: | Craig Clark, (626) 937-3212, cjclark@rsrcorp.com |
| Project Sponsor's Name: | Quemetco, Inc. and RSR Corporation subsidiary |
| Project Sponsor's Address: | 720 S. 7 th Avenue, City of Industry, CA 91746 |
| General Plan Designation: | Industrial |
| Zoning: | Industrial |
| Description of Project: | The Quemetco Capacity Upgrade Project (Project) is proposing to modify existing SCAQMD permits to: 1) increase the rotary feed drying furnace feed rate limit from 600 tpd to 750 tpd; 2) increase the amount of total coke material (e.g., calcined coke, petroleum coke, or a combination thereof) allowed to be processed in the rotary feed drying furnace and reverberatory furnace from 600,000 lbs/month to 750,000 lbs/month; and 3) allow petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace. Currently, the facility's rotary feed drying furnace and reverberatory furnace operate approximately 20 hours per day; however, with the proposed increase in the rotary feed drying furnace permit limit, the rotary feed drying furnace and reverberatory furnace may operate up to 24 hours per day and as a consequence, the refined lead product output will increase from approximately 460 tpd to 575 tpd. The purpose of this project is to allow the facility to recycle more batteries and to eliminate the existing daily idle time of the rotary feed drying furnace and reverberatory furnace. This facility is identified on lists compiled by the California Department of Toxic Substances Control per Government Code Section 65962.5. |
| Surrounding Land Uses and Setting: | The facility is located in an area that is predominantly zoned commercial and light industrial. Manufacturing operations surround Quemetco to the north, south, east and west. The northern boundary of the property is San Jose Creek, a concrete-lined channel that flows east to west. Salt Lake Avenue and the Union Pacific Railroad Company is located to the south. The |

nearest residents are located 600 feet southwest of the front gate/southern boundary of the facility and over 800 feet southwest of the WESP, separated by Salt Lake Avenue, the Union Pacific Railroad Company and another industrial facilities.

Other Public Agencies Whose Approval is Required:

Department of Toxic Substance Control (DTSC)

2.3 ENVIRONMENTAL IMPACT AREAS POTENTIALLY AFFECTED

The following environmental impact areas have been assessed to determine their potential to be affected by the proposed Project. Any checked items represent areas that may be adversely affected by the proposed Project. An explanation relative to the determination of impacts can be found following the checklist for each area.

- | | | |
|--|---|--|
| <input type="checkbox"/> Aesthetics | <input type="checkbox"/> Geology and Soils | <input type="checkbox"/> Population and Housing |
| <input type="checkbox"/> Agriculture and Forestry Resources | <input checked="" type="checkbox"/> Hazards and Hazardous Materials | <input type="checkbox"/> Public Services |
| <input checked="" type="checkbox"/> Air Quality and Greenhouse Gas Emissions | <input checked="" type="checkbox"/> Hydrology and Water Quality | <input type="checkbox"/> Recreation |
| <input type="checkbox"/> Biological Resources | <input type="checkbox"/> Land Use and Planning | <input type="checkbox"/> Solid and Hazardous Waste |
| <input type="checkbox"/> Cultural Resources | <input type="checkbox"/> Mineral Resources | <input type="checkbox"/> Transportation and Traffic |
| <input checked="" type="checkbox"/> Energy | <input type="checkbox"/> Noise | <input checked="" type="checkbox"/> Mandatory Findings of Significance |

2.4 DETERMINATION

On the basis of this initial evaluation:

- I find the proposed project COULD NOT have a significant effect on the environment, and that a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be significant effects in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect(s) on the environment, and an ENVIRONMENTAL IMPACT REPORT (EIR) is required.
- I find that the proposed project MAY have a "potentially significant impact" on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: August 30, 2018

Signature: 
Barbara Radlein
Program Supervisor, CEQA Section
Planning, Rules and Area Sources

2.5 ENVIRONMENTAL CHECKLIST AND DISCUSSION

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| I. AESTHETICS. | | | | |
| Would the project: | | | | |
| a) Have a substantial adverse effect on a scenic vista? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Substantially degrade the existing visual character or quality of the site and its surroundings? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

The proposed project impacts on aesthetics will be considered significant if:

- The project will block views from a scenic highway or corridor.
- The project will adversely affect the visual continuity of the surrounding area.
- The impacts on light and glare will be considered significant if the project adds lighting which would add glare to residential areas or sensitive receptors.

Discussion

The topography of the surrounding area of the Quemetco facility includes hills to the southwest and the San Gabriel Mountain range to the northeast. The Quemetco facility is industrial and the immediate area is developed with industrial facilities, a railroad corridor and State Route 60 and therefore has poor visual quality. The facility and the immediate industrial areas are surrounded by paving and fencing with limited landscaping and trees. The Quemetco facility is not located within any scenic viewshed.

I. a), b), and c) No Impact. The Quemetco facility is located in an industrialized setting in an area that is not characterized as having scenic vistas or scenic resources. Further, the facility is situated within the vicinity of State Route 60, which is not designated as a Scenic Highway. As described previously in Section 1.6 - Project Description, the components of the proposed Project will increase delivery and haul trips and railtrips. While they may be visible outside of the property line, these activities will not appear to be discernably different from the existing ongoing activities at the facility. For these reasons, the proposed Project would not be expected to adversely alter the existing visual character of the site or the visual continuity of the surrounding area.

I. d) No Impact. As described previously in Section 1.6 - Project Description, no component of the proposed Project would result in physical modifications requiring construction at the facility or change in lighting during operation, so no additional lighting would be required. Thus, the proposed Project is not expected to create a new source of substantial light or glare that would adversely affect day or nighttime views in the area of the facility. Therefore, the proposed project is not expected to create significant adverse aesthetic impacts.

Conclusion

Based on these considerations, no significant adverse impacts from the proposed Project on aesthetics would be expected. Since no potentially significant adverse aesthetic resource impacts were identified, no mitigation measures are necessary or required. Thus, no further evaluation will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| II. AGRICULTURE AND FORESTRY RESOURCES. | | | | |
| Would the project: | | | | |
| a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland mapping and Monitoring Program of the California Resources Agency, to non- agricultural use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with existing zoning for agricultural use, or a Williamson Act contract? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code §12220(g)), timberland (as defined by Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code §51104 (g))? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Result in the loss of forest land or conversion of forest land to non-forest use? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Project-related impacts on agriculture and forest resources will be considered significant if any of the following conditions are met:

- The proposed project conflicts with existing zoning or agricultural use or Williamson Act contracts.
- The proposed project will convert prime farmland, unique farmland or farmland of statewide importance as shown on the maps prepared pursuant to the farmland mapping and monitoring program of the California Resources Agency, to non-agricultural use.
- The proposed project conflicts with existing zoning for, or causes rezoning of, forest land (as defined in Public Resources Code §12220 (g)), timberland (as defined in Public Resources Code §4526), or timberland zoned Timberland Production (as defined by Government Code § 51104 (g)).
- The proposed project would involve changes in the existing environment, which due to their location or nature, could result in conversion of farmland to non-agricultural use or conversion of forest land to non-forest use.

Discussion

II. a), b), c), d), and e) No Impact. The proposed Project would occur within the confines of the existing facility, which is zoned as industrial. Further, the facility is not located on agricultural land. No agricultural or forestry resources are present at, or in the vicinity of the facility. The proposed Project would not convert farmland to non-agricultural use or involve other changes in the existing environment that could convert farmland to non-agricultural use or conflict with agricultural land uses, or Williamson Act contracts. Additionally, the proposed Project would not result in the loss of forestland or conversion of forestland to non-forest use. Finally, there is no conflict with existing zoning for agricultural or forest use nor would the proposed Project require rezoning of agricultural or forest-zoned areas.

Conclusion

Based on the above consideration, no significant adverse impacts from the proposed Project on agricultural resources would be expected. Since no potentially significant adverse agricultural or forestry resource impacts were identified, no mitigation measures are necessary or required. Thus, no further evaluation will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|-------------------------------------|---------------------------------------|-------------------------------------|--------------------------|
| III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS. | | | | |
| Would the project: | | | | |
| a) Conflict with or obstruct implementation of the applicable air quality plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Violate any air quality standard or contribute to an existing or projected air quality violation? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| d) Expose sensitive receptors to substantial pollutant concentrations? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Create objectionable odors affecting a substantial number of people? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Significance Criteria

To determine whether or not air quality criteria pollutants, greenhouse gas (GHG) and toxic emission impacts from implementing the proposed Project are significant, impacts will be evaluated and compared to the criteria in Table 2-1. If preliminary analysis of the proposed Project shows that overall emissions have the potential to equal or exceed any of the thresholds in Table 2-1, these potential impacts will be further evaluated in the EIR.

Table 2-1
SCAQMD Air Quality Significance Thresholds

| Mass Daily Thresholds ^a | | |
|---|--|-------------------------------|
| Pollutant | Construction ^b | Operation ^c |
| NOx | 100 lbs/day | 55 lbs/day |
| VOC | 75 lbs/day | 55 lbs/day |
| PM10 | 150 lbs/day | 150 lbs/day |
| PM2.5 | 55 lbs/day | 55 lbs/day |
| SOx | 150 lbs/day | 150 lbs/day |
| CO | 550 lbs/day | 550 lbs/day |
| Lead | 3 lbs/day | 3 lbs/day |
| Toxic Air Contaminants (TACs), Odor, and GHG Thresholds | | |
| TACs (including carcinogens and non-carcinogens) | Maximum Incremental Cancer Risk \geq 10 in 1 million Cancer Burden $>$ 0.5 excess cancer cases (in areas \geq 1 in 1 million) Chronic & Acute Hazard Index \geq 1.0 (project increment) | |
| Odor | Project creates an odor nuisance pursuant to SCAQMD Rule 402 | |
| GHG | 10,000 MT/yr CO ₂ eq for industrial facilities | |
| Ambient Air Quality Standards for Criteria Pollutants ^d | | |
| NO₂ 1-hour average annual arithmetic mean | SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 0.18 ppm (state) 0.03 ppm (state) and 0.0534 ppm (federal) | |
| PM₁₀ 24-hour average annual average | 10.4 $\mu\text{g}/\text{m}^3$ (construction) ^e & 2.5 $\mu\text{g}/\text{m}^3$ (operation) 1.0 $\mu\text{g}/\text{m}^3$ | |
| PM_{2.5} 24-hour average | 10.4 $\mu\text{g}/\text{m}^3$ (construction) ^e & 2.5 $\mu\text{g}/\text{m}^3$ (operation) | |
| SO₂ 1-hour average 24-hour average | 0.25 ppm (state) & 0.075 ppm (federal – 99 th percentile) 0.04 ppm (state) | |
| Sulfate 24-hour average | 25 $\mu\text{g}/\text{m}^3$ (state) | |
| CO 1-hour average 8-hour average | SCAQMD is in attainment; project is significant if it causes or contributes to an exceedance of the following attainment standards: 20 ppm (state) and 35 ppm (federal) 9.0 ppm (state/federal) | |
| Lead 30-day Average Rolling 3-month average | 1.5 $\mu\text{g}/\text{m}^3$ (state) 0.15 $\mu\text{g}/\text{m}^3$ (federal) at or below 0.110 $\mu\text{g}/\text{m}^3$ through December 31, 2016 and at or below 0.100 $\mu\text{g}/\text{m}^3$ on and after January 1, 2017 (SCAQMD Rule 1420.1) | |

^a Source: SCAQMD CEQA Handbook (SCAQMD, 1993), Revision: March 2015

^b Construction thresholds apply to both the South Coast Air Basin and Coachella Valley (Salton Sea and Mojave Desert Air Basins).

^c For Coachella Valley, the mass daily thresholds for operation are the same as the construction thresholds.

^d Ambient air quality thresholds for criteria pollutants based on SCAQMD Rule 1303, Table A-2 unless otherwise stated.

^e Ambient air quality threshold based on SCAQMD Rule 403.

KEY: lbs/day = pounds per day ppm = parts per million $\mu\text{g}/\text{m}^3$ = microgram per cubic meter \geq = greater than or equal to
MT/yr CO₂eq = metric tons per year of CO₂ equivalents $>$ = greater than

Discussion

III. a) Less than Significant Impact. The 2016 Air Quality Management Plan (AQMP) demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under federal law. Growth projections from local general plans adopted by cities in the district are provided to the Southern California Association of Governments (SCAG), the agency that develops regional growth forecasts, and they are then used to develop future air quality forecasts for the 2016 AQMP. Development consistent with the growth projections in the City of Industry is considered to be consistent with the 2016 AQMP. The City of Industry designates the Quemetco facility as industrial; the proposed Project is consistent with this land use. The proposed Project would be consistent with the City of Industry General Plan for the following reasons:

- Because no new construction workers would be needed for the proposed Project, no construction worker-related traffic will be generated.
- As described in both Section XIII - Population and Housing, and Section XVII - Transportation and Traffic, the operation of the proposed Project is expected to need six additional permanent employees that can be supplied by the existing labor pool in the southern California area. Therefore, no substantial increases in the demand for additional housing or recreational facilities would be expected. Similarly, for six additional employees, six new passenger vehicle round trips associated with additional worker-related traffic would be expected if the proposed Project is implemented.

Further, because the need for six additional employees would not exceed growth projections in the City of Industry General Plan, no General Plan amendment would be required. Thus, the proposed Project would be considered consistent with the City of Industry General Plan. Since the proposed Project would be consistent with the City of Industry General Plan, it would also be consistent with the 2016 AQMP.

Additionally, Quemetco is currently and will continue to be required under the proposed Project to comply with all applicable SCAQMD rules and regulations (as discussed previously in Section 1.5) and this compliance will ensure the integrity of the emission inventories in the 2016 AQMP.

For these reasons, the proposed Project is not expected to conflict with or obstruct implementation of the applicable air quality plan or diminish an existing air quality rule or future compliance requirement resulting in a significant increase in any air pollutants. Therefore, this topic will not be further analyzed in the EIR.

III. b) and f) Potentially Significant Impact. The Project is proposing to modify existing SCAQMD permits to: 1) increase the rotary feed drying furnace feed rate limit from 600 tpd to 750 tpd ; 2) increase the amount of total coke material (e.g., calcined coke, petroleum coke, or a combination thereof) allowed to be processed in the rotary feed drying furnace and reverberatory furnace from 600,000 lbs/month to 750,000 lbs/month; and 3) allow petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace. Currently, the facility's rotary feed drying furnace and reverberatory furnace operate approximately 20 hours per day; however, with the proposed increase in the rotary feed drying furnace permit limit, the rotary feed drying furnace and reverberatory furnace may operate up to 24 hours per day and as a consequence, the refined lead product output will increase from approximately 460 tpd to 575 tpd.

The facility has reported experiencing periodic loss of power at the site such as the one noted

earlier in Chapter 1. These events can result in the loss of negative pressure in the reverberatory and electric slag furnaces that can cause an increase in arsenic emissions. By increasing the processing hours and material, the frequency of these events and corresponding impact on emissions could increase. In addition, the use of petroleum coke has the potential for higher VOC and CO emissions. Finally, a breakdown of the RTO and WESP could result in higher toxic emissions.

The proposed Project has the potential to increase criteria pollutants and TAC emissions. In particular, the proposed Project will increase the usage of natural gas, electricity, water consumption, and wastewater treatment, which are all expected to potentially contribute towards significant adverse air quality impacts. The proposed Project will also increase the amount of feedstock, additives, finished product, and solid waste that is either delivered to the facility or hauled away for recycling and disposal. Thus, the proposed Project is expected to increase the amount of trucks trips, railcars, and additional workers visiting the facility and the emissions associated with these transportation activities (e.g., increased use of diesel fuel and gasoline) are also expected to potentially contribute towards significant adverse air quality impacts. All of these potential sources of emission impacts will be evaluated in the EIR. While the proposed Project will be required to comply with all applicable SCAQMD rules and regulations, for any areas that are concluded to have potentially significant adverse air quality impacts, feasible mitigation measures and an alternatives analysis may also be required in the EIR.

III. c) Potentially Significant Impact. Because the proposed Project has the potential to generate significant adverse air quality impacts, it also has the potential to generate significant adverse cumulative air quality impacts. Since the Project-specific air quality impacts may be significant, they may contribute to impacts that are cumulatively considerable. Therefore, cumulative air quality impacts are potentially significant and will be evaluated in the EIR.

III. d) Potentially Significant Impact. The proposed Project could potentially generate additional TAC emissions (e.g., combustion emissions, transport emissions, etc.) which will be subject to the requirements of SCAQMD Rule 1401 - Toxic Air Contaminants. The cancer and non-cancer health risk impacts of the TAC emissions that may result from implementing the proposed Project at the Quemetco facility, with particular focus on sensitive populations, including individuals at hospitals, nursing facilities, daycare centers, schools, and elderly intensive care facilities, as well as residential and off-site occupational areas, have the potential to exceed the significance threshold identified in Table 2-1 and, therefore, will be evaluated in the EIR.

III. e) Less than Significant Impact. The proposed Project is not anticipated to create any new, significant objectionable odors during construction or operation. The facility is equipped with air pollution control technology that is capable of reducing odors, particularly when the used battery feedstock is being broken down and rinsed in the battery wrecker building, and then dried in the rotary feed drying furnace while being conveyed to the reverberatory furnace. For example, the emissions from the rotary feed drying furnace are routed to an air pollution control system which utilizes a RTO which destroys VOCs and their associated odors. Further, the SCAQMD has not issued any Notices of Violation to Quemetco since the RTO was installed in 2008. Further, any additional odors that may be generated from increasing the feed stock and additives throughput as a result of implementing the proposed Project will also be routed to and destroyed by the existing air pollution control system. The existing materials warehouse would receive and store additional petroleum coke and other additives; this materials warehouse is dry and has not historically been

a source of facility odors. Quemetco maintains a 24-hour environmental monitoring program where operators are trained to report odors so that the source can be identified and remedied promptly, which helps to minimize the frequency and magnitude of odor events. For these reasons, the additional petroleum coke and other additives are not expected to be a new source of odors.

With regard to odors from all diesel-fueled vehicles (trucks and trains) and off-road equipment (e.g., forklifts) that are currently utilized and will continue to be utilized at the Quemetco facility, diesel fuel is required to have a low sulfur content (e.g., 15 ppm by weight or less) in accordance with SCAQMD Rule 431.2 – Sulfur Content of Liquid Fuels⁵. The deliveries of feed stock and additives and the removal of solid waste for disposal or recycling will occur within the confines of the Quemetco facility. Sufficient dispersion of diesel emissions over distance generally occurs such that odors associated with additional truck and train diesel emissions may not be discernable to offsite receptors depending on the location of the source(s) of the diesel exhaust within the facility and the distance relative to the nearest offsite receptor. Further, the current use and any increased use of diesel-fueled delivery or haul trucks will not be allowed to idle longer than five minutes in accordance with the CARB idling regulation⁶, so an increase in odors from any additional haul trucks visiting the facility as a result of the proposed Project would not be expected. Also, it is important to note that any additional trucks or trains or more frequent use of forklifts, for example, that may occur as a result of the proposed Project would be intermittent and over a relatively short period of time. Therefore, the proposed Project would not be expected to generate diesel exhaust odor greater than what is already typically present.

Also, it is important to note that the nearest sensitive receptors (i.e., residences) are located more than 600 feet from the potential odor-causing activities occurring at the Quemetco facility. In addition, a warehouse/industrial building (not owned or operated by Quemetco), as well as train tracks and a major roadway are located between the Quemetco facility and the sensitive receptors, thus providing the sensitive receptors substantial buffers from odors that may be occurring at the Quemetco facility. Moreover, the proposed Project will be required to comply with all relevant SCAQMD rules and regulations, including Rule 402 - Nuisance, which will ensure that odors are not emitted that would cause an adverse impact.

Quemetco conducts 24-hour surveillance of the facility and has operators who are specifically trained to identify and report odors so that an odor source can be promptly remedied. These efforts help to minimize the frequency and magnitude of odor events. Further, increases in odors from the increased operations will be controlled by the existing air pollution control equipment currently in use to control Quemetco's existing odors. For these reasons, implementing the proposed Project is not expected to create significant adverse objectionable odors. Therefore, since no significant odor impacts were identified, no mitigation measures are required. Potential odor impacts from the proposed Project will not be further analyzed in the EIR.

III. g) and h) Potentially Significant Impact. The proposed Project will: 1) increase the rotary feed drying furnace feed rate limit from 600 tpd to 750 tpd ; 2) increase the amount of total coke material (e.g., calcined coke, petroleum coke, or a combination thereof) allowed to be processed

⁵ SCAQMD, Rule 431.2 – Sulfur Content of Liquid Fuels, September 15, 2000.
<http://www.aqmd.gov/docs/default-source/rule-book/rule-iv/rule-431-2.pdf>

⁶ CARB, Multi-Regulation Summary (MRS) Requirements for Diesel Truck and Equipment Owners,
<https://www.arb.ca.gov/msprog/onrdiesel/documents/multirule.pdf>

in the rotary feed drying furnace and reverberatory furnace from 600,000 lbs/month to 750,000 lbs/month; and 3) allow petroleum coke, in lieu of or in addition to calcined coke, to be used as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace. Currently, the facility's rotary feed drying furnace and reverberatory furnace operate approximately 20 hours per day; however, with the proposed increase in the rotary feed drying furnace permit limit, the rotary feed drying furnace and reverberatory furnace may operate up to 24 hours per day and as a consequence, the refined lead product output will increase from approximately 460 tpd to 575 tpd. All of the operational changes will increase the frequency of feedstock, additives, finished product, and solid wastes transported to and from the facility. Thus, the proposed Project will increase the amount of fuels combusted (e.g., natural gas, diesel fuel, and gasoline) that will generate GHGs. Consequently, the overall effects of these construction and operational activities have the potential to exceed the GHG emissions significance threshold in Table 2-1 and these effects will be evaluated in the EIR. The Quemetco facility is subject to federal and state GHG emission regulations (e.g., Assembly Bill 32). Potentially significant adverse impacts relating to GHG emissions, compliance with GHG plans and GHG reduction regulations will be evaluated in the EIR.

Conclusion

Based on these considerations, no significant adverse impacts from the proposed Project relative to the 2016 AQMP as discussed in III.a) and odors as discussed in III.e) would be expected. Since no potentially significant adverse impacts relative to the 2016 AQMP and odors were identified, no mitigation measures are necessary or required. Thus, no further evaluation of impacts relative to the 2016 AQMP and odors will be required in the EIR.

For the remaining questions (e.g., III.b), III.c), III.d), III.f), III.g) and III.h)), Project-specific and cumulative adverse air quality impacts associated with increased emissions of air contaminants (criteria air pollutants, greenhouse gases, and toxic air contaminants) during construction and operation activities associated with implementing the proposed Project will be evaluated in the EIR. For any areas in the EIR that are concluded to have potentially significant adverse impacts, feasible mitigation measures and an alternatives analysis would be required. Impacts to sensitive receptors will also be analyzed in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| IV. BIOLOGICAL RESOURCES. | | | | |
| Would the project: | | | | |
| a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Have a substantial adverse effect on federally protected wetlands as defined by §404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Conflicting with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Conflict with the provisions of an adopted Habitat Conservation plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Impacts on biological resources will be considered significant if any of the following criteria apply:

- The project results in a loss of plant communities or animal habitat considered to be rare, threatened or endangered by federal, state or local agencies.
- The project interferes substantially with the movement of any resident or migratory wildlife species.
- The project adversely affects aquatic communities through construction or operation of the project.

Discussion

IV. a), b), c), d), e) and f) No Impact. The proposed Project would occur at the existing Quemetco facility which is located in an industrial area, entirely within the boundaries of an existing industrial facility. The facility has been fully developed and is essentially void of vegetation except for landscaping at the fence line along S. 7th Avenue and in the parking lot. The facility controls the growth of vegetation at the site for fire prevention purposes. All native habitats have been removed from the site since the site was originally developed in 1959. There is a concrete drainage channel (San Jose Creek) to the north that is surrounded by industrial operations throughout the City of Industry. There are no native plants or protected habitats in the drainage channel.

The proposed Project does not include or require the acquisition of additional land for use by the facility. Because the proposed Project has no flora or fauna or sensitive habitats on or adjacent to the facility, there would be no direct or indirect biological impacts on any sensitive biological species, riparian habitat, or other sensitive natural habitat. The proposed Project would not result in the addition or the elimination of water ponds that could be used by animals or migratory fowl. Further, the proposed Project would not adversely affect federally protected wetlands as defined in §404 of the Clean Water Act as there are none on or adjacent to the facility. Because the proposed Project site is completely developed and managed as an industrial operation, there are no rare, endangered, or threatened species on the proposed Project site. There are no significant plant or animal resources, locally designated species, natural communities, wetland habitats, or animal migration corridors that would be adversely affected by the proposed Project. The proposed Project would not impact any local policies or ordinances that protect biological resources or conflict with the provisions of a Habitat Conservation Plan or other similar plan. Because the area in and near the proposed Project is devoid of native habitat, impacts to other, non-listed species are not expected; therefore, no impacts on biological resources are expected from the proposed Project. Finally, because the proposed Project does not include any additional physical ground disturbance (e.g., no excavation, grading or paving), the proposed Project does not have the potential to impact biological resources.

Conclusion

Based on these considerations, no significant adverse impacts from the proposed Project to biological resources are expected. Since no potentially significant adverse biological resources impacts were identified, no mitigation measures are necessary or required. Thus, no further evaluation of biological resources will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| V. CULTURAL RESOURCES. | | | | |
| Would the project: | | | | |
| a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Cause a substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Directly or indirectly destroy a unique paleontological resource, site, or feature? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Disturb any human remains, including those interred outside formal cemeteries? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Impacts to cultural resources will be considered significant if:

- The project results in the disturbance of a significant prehistoric or historic archaeological site or a property of historic, cultural significance, or tribal cultural significance to a community or ethnic or social group or a California Native American tribe.
- Unique paleontological resources or objects with cultural value to a California Native American tribe are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

Discussion

V. a), b) and c) No Impact. CEQA Guidelines Section 15064.5 states that resources listed in the California Register of Historical Resources or in a local register of historical resources are considered “historical resources.” Additionally, CEQA Guidelines Section 15064.5(a)(3) states that “generally, a resource shall be considered by the lead agency to be ‘historically significant’ if the resource meets the criteria for listing in the California Register of Historical Resources including the following:

- Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
- Is associated with the lives of persons important in our past;
- Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values;
- Has yielded or may be likely to yield information important in prehistory or history.

The proposed Project is located at the Quemetco facility which is an existing industrial facility in an industrial zone and has been previously graded and paved. The proposed Project would be located within the confines of the existing facility and would not involve any ground disturbances within Quemetco's property or in the surrounding area.

No cultural resources have been found during past construction projects. There are no buildings listed as a historic resource within the proposed Project area. The entire proposed Project site has been previously graded and developed. The entire site is already paved and this project would not involve any excavation or soil exposure. There are no known prehistoric or historic structures or objects within the facility or adjacent areas.

Previous construction activities at the proposed Project site have not uncovered any archaeological or paleontological resources. Further, any archaeological or paleontological resources that may have been present prior to development of the facility are not expected to be found at the site since no ground disturbing activities will occur at the Quemetco facility. Therefore, any unique paleontological resources that may exist on the facility property are not expected to be disturbed.

There are no existing structures at the facility which are considered architecturally or historically significant by the County of Los Angeles, the City of Industry or any other group. Also, because there would be no ground disturbing activities, no buildings or structures will be physically altered, the proposed Project would not cause an adverse change in the significance of a resource listed in the California Register of Historical Resources or in a local register of historical resources; cause substantial adverse change in the significance of an archaeological resource as defined in CEQA Guidelines Section 15064.5; or directly or indirectly destroy a unique paleontological resource, site, or feature.

For these reasons, the proposed Project does not have the potential to impact cultural resources.

V. d) No Impact. No known human remains, burial sites, or formal cemeteries have been identified at the proposed Project site during previous construction activities. Further, since there would be no ground disturbing activities as part of the proposed Project, the proposed Project is not expected to disturb any soils that would affect or disturb human remains, if any, including those interred outside formal cemeteries.

V. e) No Impact. The proposed Project is not expected to require physical changes, feature, place, cultural landscape, sacred place or object with cultural value to a California Native American Tribe. Furthermore, the proposed Project is not expected to result in a physical change to a resource determined to be eligible for inclusion or listed in the California Register of Historical Resources or included in a local register of historical resources. For these reasons, the proposed

Project is not expected to cause a significant adverse change in to any tribal cultural resource as defined in Public Resources Code §21074.

As part of releasing this CEQA document for public review and comment, the SCAQMD also provided a formal notice of the proposed Project to all California Native American Tribes (Tribes) that requested to be on the Native American Heritage Commission's (NAHC) notification list per Public Resources Code §21080.3.1(b)(1). In addition, Public Resources Code Section 21080.3.1(d) provides a 30-day period during which a Tribe may respond to the formal notice, in writing, requesting consultation on the proposed Project.

In the event that a Tribe submits a written request for consultation during this 30-day period, the SCAQMD will initiate a consultation with the Tribe within 30 days of receiving the request in accordance with Public Resources Code §21080.3.1(b). Consultation ends when either: 1) both parties agree to measures to avoid or mitigate a significant effect on a Tribal Cultural Resource and agreed upon mitigation measures shall be recommended for inclusion in the environmental document [see Public Resources Code §21082.3(a)]; or, 2) either party, acting in good faith and after reasonable effort, concludes that mutual agreement cannot be reached [see Public Resources Code §21080.3.2(b)(1)-(2) and §21080.3.1(b)(1)].

Conclusion

Based upon these considerations, no significant adverse impacts to cultural resources would be expected. Since no potentially significant adverse cultural resources impacts were identified, no mitigation measures are necessary or required. Thus, no further evaluation of the environmental topic area will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|---|-------------------------------------|---------------------------------------|-------------------------------------|--------------------------|
| VI. ENERGY. | | | | |
| Would the project: | | | | |
| a) Conflict with adopted energy conservation plans? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Result in the need for new or substantially altered power or natural gas utility systems? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Create any significant effects on local or regional energy supplies and on requirements for additional energy? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Create any significant effects on peak and base period demands for electricity and other forms of energy? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) Comply with existing energy standards? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Significance Criteria

Impacts to energy resources will be considered significant if any of the following criteria are met:

- The project conflicts with adopted energy conservation plans or standards.
- The project results in substantial depletion of existing energy resource supplies.
- An increase in demand for utilities impacts the current capacities of the electric and natural gas utilities.
- The project uses non-renewable resources in a wasteful and/or inefficient manner.

Discussion

VI. a) and e) Less Than Significant Impact. The proposed Project includes an increase in operation levels which would lead to increased consumption of natural gas, oxygen and electricity in the existing furnaces and air pollution control systems, diesel for additional trucks, forklifts, cranes and railcars and gasoline for additional worker commutes. Because the compliance stop period currently occurs in the morning periods before noon, Quemetco anticipates that the effect of no longer having a compliance stop period if the proposed Project is implemented would generate additional demand of natural gas, oxygen and electricity during morning periods before noon. With the implementation of the proposed Project, Quemetco will continue its standard practice of optimizing the operation of its furnaces and air pollution control systems so that natural gas, oxygen, and electricity are consumed in the most efficient manner possible. Further, implementing the proposed Project will take full advantage of the furnaces by eliminating the compliance stop period and idle time and thereby eliminate the natural gas consumed solely to keep the reverberatory furnace in idle mode until production can resume.

In addition, Quemetco has an energy management plan in place as a part of the “Energy Management System” required for ISO 50001 certification. ISO 50001 is a voluntary International Standard developed by the International Organization for Standardization (ISO) to provide organizations an internationally recognized framework to manage and improve their energy performance. The certification must be reissued once every three years after the completion of a third-party audit process.

The standard addresses the following:

- Energy use and consumption
- Measurement, documentation, and reporting of energy use and consumption
- Design and procurement practices for energy-using equipment, systems, and processes
- Development of an energy management plan and other factors affecting energy performance that can be monitored and influenced by the organization.

ISO 50001 certification provides a framework through which each organization can set and pursue its own goals for improving energy performance. An energy management system is a series of processes that enables people of varied responsibilities across an organization to use data and information to maintain and improve energy performance, while improving operational efficiencies, decreasing energy intensity, and reducing environmental impacts. For these reasons, implementation of the proposed Project is not expected to conflict with energy conservation plans or existing energy standards, or use non-renewable resources in a wasteful manner.

VI. b) & c) Less Than Significant Impact.

Natural Gas

Natural gas and oxygen are currently utilized to operate the feed system, rotary feed drying furnace, reverberatory furnace, refinery kettles and RTO. Southern California Gas Company provides natural gas and Quemetco creates its own oxygen on-site while Noble America provides back up supplies of oxygen to the Quemetco facility, as needed. As previously explained in Section 1.4 - Project Background, Quemetco’s air pollution control systems and other operations, including the battery wrecker and the electric resistance heated slag reduction furnace, continue to operate even when the rotary feed drying furnace and reverberatory furnace are in idle mode. During the current daily compliance stop period, the rotary feed drying furnace burner is turned off so no natural gas is burned during this time. However, the reverberatory furnace burner continues to operate during daily compliance stop period in “idle mode” which means that natural gas and oxygen are consumed, albeit at a reduced rate when compared to normal operations, in order to maintain the minimum temperature necessary for the lead in the furnace to remain in a molten state. Other activities that require natural gas to operate (e.g., up to seven refinery kettles and the RTO) will continue to burn natural gas throughout the daily compliance stop period. The proposed Project would eliminate the compliance stop period such that the rotary feed drying furnace and reverberatory furnace will increase operations by approximately one to six hours per day, to effectively allow operations up to 24 hours per day. This means that additional natural gas and oxygen will be burned in these two units to meet the increased operations.

As previously described in Section 1.6 – Project Description, Year 2014 was chosen for the

baseline year for natural gas consumption. The baseline natural gas usage and the projected natural gas usage was provided by Quemetco and is presented in Table 2-2. On a worst-case basis, the additional natural gas consumption that may occur as a result of the proposed Project is projected to be approximately 852,073 hundred cubic feet (ccf) per year. The California Energy Commission projects that the natural gas consumption for Southern California Gas in 2020 will be 7,388 million (MM) therms for all sectors and 3,782 MM therms for the industrial sector. The proposed Project increase would be 0.0118% of all sectors and 0.023% of the industrial sector. As indicated in Table 2-2, the anticipated increase in natural gas usage from implementing the proposed Project does not exceed the SCAQMD's CEQA significance threshold for energy.

The Southern California Gas Company has indicated that they can and will serve the expanded demand for natural gas if the proposed Project is implemented and that the existing natural gas delivery system has sufficient capacity to handle the projected increase (Yee and Warwick personal communication⁷). For this reason, the proposed Project does not require the installation of additional natural gas infrastructure or the modification of existing natural gas infrastructure that currently serves the Quemetco facility. Additionally, Quemetco's existing oxygen generation facility and on-site distribution system can handle the additional demand that may result from implementing the proposed Project. For this reason, the installation of a new or an alteration to Quemetco's existing oxygen generation facility or on-site distribution system is not expected.

Table 2-2
Existing and Proposed Project Natural Gas Usage

| | Total Natural Gas Usage | |
|--|--------------------------------|----------------------|
| | (ccf / year) | (therms/year) |
| 2014 Baseline Conditions (pre-Project) ^a | 2,750,988 | 2,806,018 |
| Proposed Project (post-Project) ^a | 3,603,061 | 3,675,123 |
| Post-Project Increment (net change between 2014 baseline and proposed Project) | 852,073 | 869,105 |
| Total Southern California Gas Industrial Demand 2020^b | 3,707,843,000 | 3,782,000,000 |
| Percent of Southern California Gas Industrial Demand 2020 | 0.023% | 0.023% |
| Significant?^c | NO | NO |

Notes: One therm is approximately the energy equivalent of burning one hundred cubic feet (ccf) of natural gas.

^a Source: Quemetco 2015

^b Source: California Energy Commission 2015

^c SCAQMD's energy threshold for natural gas used is 1 percent of fuel supply.

Electricity

Electricity is required to operate the battery wrecker, electric resistance heated slag reduction furnace, WESP, RTO, HEPA ventilation systems, oxygen generation, LoTox system and basic system operations. The Southern California Edison Company provides electricity to the Quemetco

⁷ Yee, Michael and Joshua Warwick. 2015 and 2016. Senior Account Representative. Southern California Gas (SCG). Telephone conversations and email verification with Valerie Rosenkrantz of Trinity Consultants, Inc. on March 23, 2015 and May 23, 2016 confirming that SCG can and will serve the increased gas demand as part of the Capacity Upgrade Project.

facility. As described in the Section 1.4 - Project Background, these systems, including the battery wrecker and electric resistance heated slag reduction furnace, continue to operate even when the rotary feed drying furnace and reverberatory furnace are in idle mode.

The proposed Project would consume additional electricity to allow for processing the additional feedstock of 150 tons per day due to: 1) additional batteries that will be processed in the battery wrecker; 2) increased use of the electric resistance heated slag reduction furnace; 3) additional refinery processing; 4) additional water consumption and wastewater treatment; and 5) increased generation of oxygen. The following existing operations are not affected by the amount of feed stock processed because they currently operate during the idle period and as such, will not cause more electricity to be consumed if the feed stock throughput is increased as part of the proposed Project: 1) all of the baghouses and scrubber blowers; 2) the WESP; and 3) facility support functions including break areas, locker rooms, administrative functions, shipping and receiving, and maintenance operations. The rotary feed drying furnace feed limit restriction does not directly impede the facility's existing electricity-based operations, including the electric resistance heated slag reduction furnaces, the air pollution control systems, the battery wrecker or the water treatment operations; all of these processes continue to operate during the daily compliance stop period.

The proposed Project electricity consumption for the Year 2014 (baseline) and proposed Project conditions is presented in the Table 2-3. On a worst-case basis, the additional electricity consumption that may occur as a result of the proposed Project is projected to be approximately 13,097,713 kilowatt hours (kWh) per year and 1.5 megawatts (MW) of instantaneous electricity demand on a daily basis. The California Energy Commission projects the electricity consumption for Southern California Gas in 2020 is 136,079 million kWh for all sectors and 38,825 million kWh for the industrial sector. The proposed Project increase would be 0.0096% of all sectors and 0.034% of the industrial sector. As shown in Table 2-3, the anticipated increase in electricity usage from implementing the proposed Project does not exceed the SCAQMD's CEQA significance threshold for energy.

Southern California Edison Company has indicated that they can and will serve the expanded demand for electricity as part of the proposed Project; there would be no secondary construction-related impacts to this service increase (Zavala personal communication⁸). For this reason, the proposed Project does not require the Southern California Edison Company to install an additional electricity infrastructure or to modify the existing electrical infrastructure that currently serves the Quemetco facility.

⁸ Zavala, Joe. 2015. Service Planner. Southern California Edison. Telephone conversation with Valerie Rosenkrantz of Trinity Consultants, Inc. on March 10, 2015 confirming that Southern California Edison can and will serve the expanded electricity demand as part of the Capacity Upgrade Project.

**Table 2-3
Existing and Project Annual Electricity Usage**

| | Total Electricity Usage (kWh / year) | Instantaneous Electricity Demand^b (MW) |
|--|---|--|
| 2014 Baseline Conditions (pre-Project) | 38,912,004 | 4.44 |
| Proposed Project (post-Project) | 52,009,717 | 5.94 |
| Post-Project Increment (net change between 2014 Baseline and proposed Project) | 13,097,713 | 1.5 |
| Total Electricity Demand from Industrial Section 2020 | 38,825,000,000 | 4,432.08 |
| Percent Total Industrial Demand 2020 | 0.034% | 0.034% |
| Significant?^a | NO | NO |

Source: Quemetco 2015, Trinity Consultants 2015 and California Energy Commission 2014.

^a SCAQMD's energy threshold for natural gas used is 1 percent of fuel supply.

^b Daily instantaneous electricity demand derived by dividing annual kWh usage by 365 to establish a daily usage, then 24 to establish hourly, then 1000 to convert kWh to MW.

Diesel and Gasoline

Diesel is required for internal facility off-road diesel equipment such as cranes, loaders and forklifts, the delivery of feed stock and additives, distribution of finished goods and disposal of solid wastes. Gasoline is used in passenger vehicles driven by employees and contractors who commute to and from the Quemetco facility. The proposed Project would generate up to six permanent additional employees (and 12 additional commuter one-way trips) and up to 15 additional diesel truck deliveries (30 one-way trips) per day for the delivery of feed stock and additives, distribution of finished goods and disposal of solid wastes.

Table 2-4 presents an estimate of the additional gasoline and diesel consumption from the proposed Project. These estimates are based 14.7 average miles per trip and 15 miles per gallon for gasoline commuter vehicles and 16.6 average miles per trip and 5 miles per gallon for diesel heavy-duty trucks.

On a worst-case basis, the additional gasoline and diesel consumption that may occur as a result of the proposed Project is projected to be approximately 4,292 gallons per year of gasoline and 36,354 gallons per year of diesel. The California Energy Commission reports California Retail Fuel Outlet for fuel sales by county; the most recent year available is 2016. In Los Angeles County in 2016, the gasoline usage was 3,577 million gallons and the diesel usage was 302 million gallons. The proposed Project increase would be 0.00012% of 2016 gasoline usage for Los Angeles County and 0.012% of 2016 diesel usage for Los Angeles County. As indicated in Table 2-4, the anticipated increase in gasoline and diesel usage from implementing the proposed Project does not exceed the SCAQMD's CEQA significance threshold for energy.

**Table 2-4
Projected Additional Gasoline and Diesel Usage**

| | Projected Fuel Usage (gallons/year) |
|--|--|
| Additional Gasoline (gallons) | 4,292 |
| Additional Diesel (gallons) | 36,354 |
| 2016 Los Angeles County Gasoline Consumption | 3,577,000,000 |
| 2016 Los Angeles County Diesel Consumption | 302,000,000 |
| Percent Gasoline Consumption | 0.0012% |
| Percent Diesel Consumption | 0.012% |
| Significant?^a | NO |

Notes: Based on 2016 reports of annual sales of gasoline and diesel fuels from California Energy Commission California Retail Fuel Outlet Annual Reporting (CEC-A15) Results, website accessed on April 16, 2018 at:

http://www.energy.ca.gov/almanac/transportation_data/gasoline/piira_retail_survey.html

^a SCAQMD's energy threshold for diesel and gasoline fuel use is 1 percent of fuel supply.

Given that the increases in natural gas, electricity, gasoline and diesel consumption would all be less than the SCAQMD's energy threshold of one percent, Quemetco's energy consumption impacts would therefore be less than significant.

VI. d) Potentially Significant. The proposed Project will increase the amount of electricity, natural gas, diesel and gasoline consumed. As previously explained in Section VI. b) and c), the projected increases in diesel and gasoline use would be substantially less than the SCAQMD's threshold of significance for energy demand (e.g., one percent of the area sales of these fuels) for both construction and operations phases. Additionally, the time of day when the additional usage of diesel and gasoline would be needed would be distributed throughout the day such that no significant effects on peak and base period demands would be expected. . For this reason, the projected usage of diesel and gasoline fuels would have a less than significant impact on the peak and base period energy demands for these fuel types.

Also as discussed in Section VI. b) and c), the projected increases in natural gas consumption would be substantially less than the SCAQMD's threshold of significance for energy demand (e.g., one percent of the regional demand for 2020). Additionally, the time of day when the additional usage of natural gas would be needed is not expected to affect the ability of the Southern California Gas Company to provide natural gas services to the facility because the pipeline has sufficient capacity to handle the projected increased demand throughout the day such that no significant effects on peak and base period demands would be expected. For this reason, the projected increased demand for natural gas would have a less than significant impact on the peak and base period energy demand for natural gas.

In particular to electricity, however, Quemetco anticipates that the additional demand of electricity will occur during morning periods (during the existing compliance stop period). Because mornings are potentially the time of day when peak load periods occur for electricity service providers, the proposed Project would therefore have a potentially significant impact on peak and

base period demands on electricity loads. Therefore, peak and base period demands on electricity loads will be evaluated in the EIR.

Conclusion

Based on these considerations, less than significant impacts from the proposed Project would be expected to occur relative to energy resources (e.g., natural gas, electricity, gasoline and diesel fuels) for the following checklist questions: VI.a) adopted energy conservation plans; VI.b) need for new or modified utility systems; VI.c) energy supplies; and VI.e) energy standards. Since no significant adverse energy resource impacts were identified for these questions, no mitigation measures are necessary or required. Thus, no further evaluation will be required in the EIR relative to checklist questions VI.a), VI.b), VI.c) and VI.e).

In addition, for checklist question VI.d), less than significant impacts would also be expected to occur relative to peak and base period demands for diesel, gasoline and natural gas. Since no significant adverse energy resource impacts were identified for peak and base period demands for diesel, gasoline and natural gas use, no mitigation measures are necessary or required. Thus, no further evaluation of peak and base period demands diesel, gasoline and natural gas use will be required in the EIR.

However, for checklist question VI.d), potentially significant adverse impacts would be expected to occur relative to peak and base period demands on electricity loads. Project-specific and cumulative energy impacts relative to peak and base period demands on electricity loads will be evaluated in the EIR. If the EIR concludes that potentially significant adverse impacts to peak and base period demands on electricity loads will occur, mitigation measures and an alternatives analysis would also be required.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| VII. GEOLOGY AND SOILS. | | | | |
| Would the project: | | | | |
| a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: | | | | |
| • Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| • Strong seismic ground shaking? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| • Seismic-related ground failure, including liquefaction? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in substantial soil erosion or the loss of topsoil? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Be located on a geologic unit or soil that is unstable or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Impacts on the geological environment will be considered significant if any of the following criteria apply:

- Topographic alterations would result in significant changes, disruptions, displacement, excavation, compaction or over covering of large amounts of soil.

- Unique geological resources (paleontological resources or unique outcrops) are present that could be disturbed by the construction of the proposed project.
- Exposure of people or structures to major geologic hazards such as earthquake surface rupture, ground shaking, liquefaction or landslides.
- Secondary seismic effects could occur which could damage facility structures, e.g., liquefaction.
- Other geological hazards exist which could adversely affect the facility, e.g., landslides, mudslides.

Discussion

Activities that may occur during Project implementation would be similar to, if not identical, with the current uses and ongoing activities at the Quemetco facility. The proposed Project is located in the Los Angeles Area, an area of known seismic activity (seismic Zone 4). The most significant potential geologic hazard at the proposed Project site is estimated to be seismic shaking from future earthquakes generated by active or potentially active faults in the region. Quemetco is not located within an Alquist-Priolo Earthquake Fault Zone (USGS 2014). However, there are several active faults and fault systems within 60 miles of the City of Industry including the Walnut Creek fault; it is only known as a subsurface water barrier (California Department of Conservation 1998). Most of the materials used at the facility are stored within buildings or in secure containment structures and these practices are not expected to change after the proposed Project is implemented. The existing materials storage warehouse would accommodate any potential increase in storage volume. Further, Quemetco is required to comply with all rules and regulations applying to hazardous materials management and emergency preparedness and response and these practices are not expected to change after the proposed Project is implemented. For these reasons, any existing risks of an earthquake-related chemical release are small and these risks are expected to remain unchanged after the proposed Project.

VII. a) No Impact. Quemetco is not located within an Alquist-Priolo Earthquake Fault Zone (USGS 2014). Also the existing facility was previously designed to comply with Los Angeles County Building Code (which represents the California Uniform Building Code) requirements for geologic hazards for the Los Angeles area. The Quemetco facility, as an industrial lead recycling facility, is subject to numerous regulations that would control the escape of hazardous substances in the event of a seismic event. For instance, as required by CCR Title 8 Section 3220. Quemetco has developed an Emergency Response Plan outlining procedures in the event of an emergency. Additionally, all existing staff have completed and all new staff will be required to complete the 24-hour Hazardous Waste Operations and Emergency Response Standard training and the annual 8-hour review.

The Project site is also located a substantial distance (approximately 600 feet) from the nearest residences, and separated from those residences by an existing industrial building and train tracks. This distance would further mitigate any impacts associated with a seismic event. For these reasons, the proposed Project would not be expected to expose people or structures to any new substantial adverse effects, including impacts resulting in the risk of loss, injury, or death involving the rupture of an earthquake fault, seismic ground-shaking, or seismic-related ground failure including liquefaction.

VII. b) and c) No Impact. As described previously in Section 1.6 - Project Description, the proposed Project is anticipated to require no physical modifications that would result in construction at the facility. For these reasons, the proposed Project would have no impacts on soil erosion or topsoil loss.

VII. d) No Impact. The existing Quemetco facility was previously designed to comply with Los Angeles County Building Code requirements for geologic hazards for the Los Angeles area. Activities that may occur during Project implementation would be similar to, if not identical, with the current uses and ongoing activities at the Quemetco facility. The Quemetco facility (and much of the City of Industry) is located on soil known as Quaternary Deposit (see Figure 5.5-2, City of Industry General Plan Draft EIR (Industry, City of, 2014b)). The Quemetco facility is sitting on a mix of sandy clays, silty clays, gravelly clays, clays, silts, gravelly sands, and sands. Clays tend to adsorb water and expand and are considered expansive soils.

Because the site has been graded, filled, compacted, and paved, and there is no ground disturbance proposed, there are low risks related to unstable soils. For these reasons, the proposed Project would not be expected to create substantial risks to life or property and thus, would have no impact on landslides, lateral spreading, subsistence, collapse or expansive soils.

VII. e) No Impact. As described previously in Section 1.6 - Project Description, the proposed Project is anticipated to require no physical modifications that would result in construction at the facility that would cause ground disturbance. Also, as described in Section 1.4.5, the facility is already connected to a sewer and operates its own wastewater treatment system. While the proposed Project would require the use of additional water that would generate additional wastewater as analyzed in Section IX – Hydrology and Water Quality, the proposed Project would not require the use of new septic tanks or alternative wastewater systems. Therefore, implementation of the proposed Project will have no impact relative to the use of septic tanks or alternative wastewater systems that would release directly to soils.

Conclusion

Based on these considerations, no significant adverse impacts from the proposed Project to geology and soils are expected. Since no potentially significant adverse geology and soils impacts were identified, no mitigation measures are required. Thus, no further evaluation will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|-------------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|
| VIII. HAZARDS AND HAZARDOUS MATERIALS. | | | | |
| Would the project: | | | | |
| a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code §65962.5 and, as a result, would create a significant hazard to the public or the environment? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or a private airstrip, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| h) Significantly increased fire hazard in areas with flammable materials? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Significance Criteria

Impacts associated with hazards will be considered significant if any of the following occur:

- Non-compliance with any applicable design code or regulation.
- Non-conformance to National Fire Protection Association standards.
- Non-conformance to regulations or generally accepted industry practices related to operating policy and procedures concerning the design, construction, security, leak detection, spill containment or fire protection.
- Exposure to hazardous chemicals in concentrations equal to or greater than the Emergency Response Planning Guideline (ERPG) 2 levels.

Discussion

Quemetco is a Large Quantity Waste Generator permitted through the U.S. EPA and DTSC, as described in Section 1.7 - Related Permits and Approvals. Quemetco is also permitted through the LACFD to store hazardous materials and hazardous waste. The LACFD permit does not limit the quantity of hazardous materials or hazardous waste stored on-site. Quemetco submits updated inventory information to the Los Angeles County Fire Department annually or when there is a significant change in the inventory.

VIII. a), b) and d) Potentially Significant Impact.

As described previously in Section 1.6 - Project Description, the proposed Project is anticipated to require no physical modifications that would result in construction at the facility. Thus there would be no materials for solid or hazards waste disposal generated. For these reasons, Quemetco anticipates that there would be no significant hazards or hazardous materials during construction activities.

During operation, the proposed Project would increase the amount of (e.g., total volume) hazardous materials currently received and hazardous wastes landfilled (Table 1-1). The proposed Project would not receive any new types of hazardous materials or generate any new types of hazardous waste streams; it would only increase the amounts of the existing materials already handled as summarized in Table 2-5.

**Table 2-5
Summary of Hazardous Materials and Hazardous Waste**

| | 2014 Baseline Conditions (pre-Project) | Proposed Project (post-Project) | Post-Project Increment |
|--|---|--|-------------------------------|
| Feed Stock Process Limits in Permits (tons/day) | 600 | 750 | 150 |
| CEQA Evaluation Scenario of Feed Stock Process Limits (tons/day) | 510 | 750 | 240 |
| Feed Stock Process Limits (tons/month) | 15,340 | 21,099 | 5,759 |
| Additives (tons/month): | | | |
| 1) Smelting Reagents/Total Coke Material Processed in Rotary feed drying furnace & Reverberatory Furnace | 224 | 338 | 114 |
| a. Calcined Coke | 224 | 0 | -224 |
| b. Petroleum Coke | * | 338 | 338 |
| 2) Limestone | 73 | 116 | 43 |
| 3) Cobbled Steel | 286 | 401 | 114 |
| 4) Other additives** | 156 | 159 | 3 |
| Soda Ash (tons/month) | 1,771 | 2,654 | 883 |
| Solid Wastes (tons/year): | | | |
| Metals (recycled) | 1,613 | 1,892 | 252 |
| Plastics (recycled) | 6,340 | 9,440 | 3,100 |
| Slag (landfilled) | 11,232 | 15,346 | 4,114 |

Source: Quemetco, Inc. 2015-2016

Notes:

* Petroleum coke usage during the 2016 Research Permit Test Program was 115,720 pounds or approximately 58 tons.

** The amount and type of other additives that may be used are determined by the customer and can consist of arsenic, caustic soda beads, cobalt, metallic sodium, pyrite, red phosphorus, silver, sodium nitrate, sulfur and tin.

The data in Table 2-5 summarizes the maximum increase in hazardous materials used and solid wastes (including hazardous) generated based on the permitted capacity increase from 600 to 750 tons per day in allowed feed stock processing. There would be an increase of approximately 5,760 tons per month in raw material scrap generated. There would be an increase in the amounts of additives used by 114 tons/month of smelting reagent, 43 tons/month of limestone, 114 tons/month of cobbled steel and three tons/month of other additives. There would be an increase in metals and plastics recycled in the amounts of 252 tons/year and 3,100 tons/year, respectively. Landfilled slag would increase by up to 4,114 tons/year; each slag batch is tested and sent to either a RCRA or a non-RCRA landfill, based on the contents of each load.

Public Resources Code §21092.6 requires the lead agency to consult the lists compiled pursuant to Government Code §65962.5, managed by DTSC, to determine whether the proposed Project and any alternatives (to be analyzed in the Draft EIR) are located on a site which is included on such list. The proposed Project is a site listed pursuant to Government Code §65962.5 as a hazardous waste facility subject to corrective action and is under DTSC management with respect to its Hazardous Waste Facility Operations and Post-Closure Permit. DTSC is a responsible agency for the proposed Project; any updates to Quemetco's Post-Closure Permit would only be related to the volume of materials being processed at the facility; no new hazardous materials would be introduced to facility operations.

Increases in potential hazards associated with the implementation of the proposed Project could potentially alter the probability for upset and accident conditions that could cause a release of hazardous materials into the environment. The potential effects of the management and an accidental release of the additional hazardous materials being stored, used, and transported (including raw material scrap, additives (smelting reagent, limestone, cobbled steel, other additives (including acids) and soda ash), recycled waste, landfilled waste, discharged waste and finished product) as part of implementing the proposed Project will be evaluated in the EIR.

VIII. c) No Impact. The proposed Project is not located within one-quarter mile of an existing or proposed school site. The nearest school is Palm Elementary School, more than 0.6 miles to the southwest. Appendix A provides a list and image of all the schools within a two-mile radius of the Quemetco facility. The proposed Project is not expected to impact school sites from handling hazardous materials or wastes. Because there are no schools located within a quarter mile, there would be no hazardous emissions impacts on schools nearest to the Quemetco facility.

VIII. e) No Impact. The nearest airport, El Monte, is approximately seven miles from the Quemetco facility. Because the proposed Project site is not located within an airport land use plan or within two miles of a public or private use airport, the proposed project will not have any impact on safety hazards for people residing or working within two miles of an airport.

VIII. f) Less Than Significant Impact. Quemetco is under DTSC management with respect to its Hazardous Waste Facility Operations and Post-Closure Permit, and maintains a Hazardous Materials Business Plan. As a permitted Treatment, Storage and Disposal Facility, Quemetco has developed an Emergency Response Plan in full compliance with CCR Title 8 Section 3220. Additionally, all existing staff have completed and all new staff will be required to complete the 24-hour Hazardous Waste Operations and Emergency Response Standard training and the annual 8-hour review. All existing and proposed activities will be subject to the facility's existing Emergency Response Plan, Hazardous Materials Business Plan and Hazardous Waste Facility Operation and Post-Closure Permit. Quemetco is currently handling petroleum coke for other processes, and therefore, the additional amounts of petroleum coke that will be delivered, stored and used at the facility as part of the proposed Project will not create new or additional environmental, fire hazards or emergency response conflicts with its use of petroleum coke. As Quemetco's capacity increase is not proposing to modify its facility operating procedure, it is anticipated that Quemetco will not be required to update its existing emergency response plans. For these reasons, the proposed Project would not impair implementation of or physically interfere

with emergency response plans or emergency evacuation plans, and therefore would have a less than significant impact.

VIII. g) No Impact. As explained in Section IV – Biological Resources, the proposed Project would occur at the existing Quemetco facility which is located in an industrial area, entirely within the boundaries of an existing industrial facility. The facility has been fully developed and is essentially void of vegetation except for landscaping at the fence line along S. 7th Avenue and in the parking lot. The facility controls the growth of vegetation at the site for fire prevention purposes. All native habitats have been removed from the site since the site was originally developed in 1959. There is a concrete drainage channel (San Jose Creek) to the north that is surrounded by industrial operations throughout the City of Industry. There are no native plants or protected habitats in the drainage channel and there are no wildlands surrounding the facility. Finally, the facility is not located in an area where residences are intermixed with wildlands. For these reasons, the proposed Project would not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees or expose people or structures to wildland fires. Therefore, the proposed Project would not impact people or structures due to fire hazards from wildland fires.

VIII. h) Potentially Significant Impact. The proposed Project would increase the amount of hazardous materials and hazardous wastes handled and stored at the Quemetco facility. The potential effects of fire hazards in areas with flammable materials that are currently or will be stored, used, and transported as part of implementing the proposed Project will be evaluated in the EIR.

Conclusion

Based on these considerations, the increase in the amount of hazardous materials and hazardous wastes being transported, hazardous materials management pursuant to Government Code §65962.5, and the potential effects of fire hazards in areas with flammable materials being stored, used and transported as part of the proposed Project have been identified as having potentially significant impacts in checklist questions VIII.a), VIII.b), VIII.d), and VIII.h) and as such, will be evaluated in the EIR. For any of these areas that are concluded in the EIR to have potentially significant adverse impacts, then mitigation measures and alternatives will be required and analyzed in the EIR.

As indicated in the responses to checklist questions VIII.c), VIII.e), VIII.f) and VIII.g), the proposed Project will not create any significant adverse hazards and hazardous materials impacts to: 1) schools, residences, or daycares within one-quarter mile of the facility; 2) airport safety; 3) emergency response or emergency evacuation plans; or 4) wildlands. Since no potentially significant adverse hazards and hazardous materials impacts were identified for these checklist questions, no mitigation measures are necessary or required. Thus, no further evaluation of these checklist questions will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|-------------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|
| IX. HYDROLOGY AND WATER QUALITY. | | | | |
| Would the project: | | | | |
| a) Violate any water quality standards, waste discharge requirements, exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board, or otherwise substantially degrade water quality? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g. the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Substantially alter the existing drainage pattern of the site or area, including through alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner that would result in substantial erosion or siltation on- or off-site or flooding on- or off-site? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Place housing or other structures within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map, which would impede or redirect flood flows? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|-------------------------------------|--------------------------|
| f) Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| g) Require or result in the construction of new water or wastewater treatment facilities or new storm water drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| i) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Significance Criteria

Potential impacts on water resources will be considered significant if any of the following criteria apply:

Water Demand:

- The existing water supply does not have the capacity to meet the increased demands of the project, or the project would use more than 262,820 gallons per day of potable water.
- The project increases demand for total water by more than five million gallons per day.

Water Quality:

- The project will cause degradation or depletion of ground water resources substantially affecting current or future uses.
- The project will cause the degradation of surface water substantially affecting current or future uses.
- The project will result in a violation of National Pollutant Discharge Elimination System (NPDES) permit requirements.

- The capacities of existing or proposed wastewater treatment facilities and the sanitary sewer system are not sufficient to meet the needs of the project.
- The project results in substantial increases in the area of impervious surfaces, such that interference with groundwater recharge efforts occurs.
- The project results in alterations to the course or flow of floodwaters.

Discussion

Quemetco currently uses approximately 270,000 gallons per day (Year 2014) of reused water in the battery dismantler, reverberatory furnace, scrubber, oxygen generation and facility washdown (Table 2-6). Water is supplied to the facility by the San Gabriel Valley Water Company. Wastewater is collected and transferred to the on-site wastewater treatment unit, which adjusts pH levels and reduces suspended solids prior to either reusing or discharging. Wastewater entering the treatment unit is first adjusted for pH using different caustics and acids including acid removed from dismantled batteries. The wastewater is transferred to a series of clarifiers and pressure filters to settle out suspended solids. During the daily compliance stop period, most of the water-consuming activities at the facility continue. The air pollution control equipment that utilize water (e.g., the scrubbers and the WESP) are operated throughout the daily compliance stop period. Soda ash deliveries and use will continue; water additions to the main soda ash tank necessary to achieve target density will also continue. The battery wrecker scrubber continues to operate during the daily compliance stop period. All aspects of the water treatment continue to operate during the daily compliance stop period. Housekeeping activities including washdowns and wet scrubbing continue during the compliance stop period. All facility support areas including break areas, kitchen, locker rooms, administrative functions and maintenance continue through the compliance stop period.

Quemetco is permitted through its Industrial Waste Discharge Permit from the LACSD to discharge treated wastewater generated at the facility. The wastewater discharge is tested quarterly by a third party laboratory for metals. Quemetco submits quarterly reports to the LACSD.

Because of the proposed increase in the feed rate, there will be an increase in water demand (albeit not proportional to the feed rate increase). The projected increase in water demand is presented in Tables 1-1 and 2-6 which show an increase of approximately 100,000 gallons of water use.

Table 2-6 presents Year 2014 baseline and proposed Project water demand and wastewater flow. Increases in water use will be necessary for battery crushing and during the separation process as a result of the feed stock increase. Quemetco currently uses acid collected from the dismantled batteries to neutralize the process wastewater in the on-site wastewater treatment facility. However, the acid collected from the dismantled batteries does not always supply adequate volumes of acid necessary for the wastewater treatment and occasionally additional acid additives are required and purchased from a supplier. If the proposed Project is implemented, an increased amount of acid will also be collected from the additional feed stock processing and utilized in the existing water treatment process. The chemicals listed in Table 2-6 are currently within the permitted limits and the proposed Project will not cause an exceedance of these limits.

Quemetco contacted the San Gabriel Valley Water Company to inquire as to whether the proposed increase in water demand could be supplied. A representative from the San Gabriel Valley Water Company confirmed that an increase in water demand from Quemetco of up to 100,000 gallons

per day would provide no impact on the ability to serve water to Quemetco or its other customers because they have adequate water rights (Arrighi personal communication)⁹.

Table 2-6
Water Usage and Wastewater Effluent

| Parameter | Permitted | 2014 Baseline Conditions – Average (pre-Project) | Proposed Project - Maximum Conservative Estimate (post-Project) | Post-Project Increment |
|--------------------------------|------------------|---|--|-------------------------------|
| Water Demand, Average (GPD) | N/A | 272,022 | 369,435 | 97,413 |
| Wastewater Flow, Average (GPD) | N/A | 193,019 | 275,329 | 82,310 |
| pH | 5 | 8.23 | 6.14 – 10.38 | N/A |
| Suspended Solids (mg/L) | N/A | 13.75 | 3.75 – 38.75 | N/A |
| Cyanide (mg/L) | 10 | 0.014 | 0.005 – 0.061 | N/A |
| Soluble Sulfide (mg/L) | 0.1 | < 0.1 | < 0.1 | N/A |
| Arsenic, Total (mg/L) | 3 | 0.044 | 0.028 – 0.062 | N/A |
| Cadmium, Total (mg/L) | 15 | 0.340 | 0.113 – 0.863 | N/A |
| Chromium, Total (mg/L) | 10 | 0.028 | 0.008 – 0.076 | N/A |
| Copper, Total (mg/L) | 15 | 0.052 | 0.002 – 0.119 | N/A |
| Lead, Total (mg/L) | 40 | 0.057 | 0.012 – 0.138 | N/A |
| Nickel, Total (mg/L) | 12 | 0.693 | 0.240 – 1.625 | N/A |
| Zinc, Total (mg/L) | 25 | 0.145 | 0.075 – 0.250 | N/A |
| Antimony, Total (mg/L) | 2.06 | 0.543 | 0.300 – 0.925 | N/A |

Source: Quemetco 2013

Quemetco currently operates under a NPDES Industrial Storm water permit. Storm water from process and service areas are contained within walled or bermed area. Storm water drains into a series of stainless steel sumps and is pumped to a storm water storage tank. The storm water is screened and pumped to a recycle tank that is used in the process instead of city water. Storm water in non-process areas enter storm water drains. No aspects of the proposed project would

⁹ Arrighi, Dan. 2015. Water Quality Manager, San Gabriel Valley Water Company. Telephone conversation with Valerie Rosenkrantz of Trinity Consultants, Inc. on January 20, 2015 and email confirmation on April 29, 2016 that San Gabriel Valley Water Company can serve increased water service. A copy of the email confirmation is included in Appendix B.

cause a change in the facility footprint or paved areas or disturb any storm water drains. For this reason, the proposed Project will not require a change to the existing storm water system.

IX. a) Potentially Significant. The facility pre-treats and neutralizes wastewater prior to discharge and has a history of meeting water quality standards with the RWCQB. However, LACSD has questioned whether the facility currently generates high sulfide levels in its wastewater discharge and whether increasing the water demand and in turn, increasing the amount of wastewater generated would cause substantial changes to water quality. For these reasons, the proposed Project would be expected to a potentially significant adverse impact on water quality standards and waste discharge requirements and these potential impacts will be evaluated in the EIR.

IX. b), c) and h) Less Than Significant Impact. As previously explained, water is provided by the San Gabriel Valley Water Company and a representative from the San Gabriel Valley Water Company confirmed that an increase in water demand from Quemetco of up to 100,000 gallons per day would provide no impact on the ability to serve water to Quemetco or its other customers because they have adequate water rights (Arrighi personal communication)¹⁰. The source of the water is from the main San Diego groundwater basin. Because the amount of water needed for the proposed project is less than the significance thresholds for potable water and total water, the increased need for water would have less than significant impacts on water demand. Further, because the San Gabriel Valley Water Company can supply the additional water needed to implement the proposed project, the proposed project would have less than significant impacts on water supply including groundwater. Finally, because the source of the additional water for the proposed Project will be from the main San Diego groundwater basin, no stream or river water will be utilized for the proposed project; thus, implementation of the proposed project would not alter the course of a stream or river. For these reasons, the proposed Project would have less than significant impacts on water demand, water supply, groundwater resources, and drainage and drainage patterns at Quemetco.

IX. d) Less Than Significant Impact. All on-site wash down water is currently treated at the on-site water treatment facility. As part of existing Rule 1420.1 housekeeping measures, the Quemetco facility is routinely washed down; the frequency is not tied to the furnace feed rate. No aspects of the proposed Project would cause a change in the facility footprint or paved areas, disturb any storm water drains, or change the frequency of facility washdown. For this reason, the proposed Project would not substantially affect how much water is used for washdown at the facility, will not require a change to the existing storm water system and will not increase the drainage runoff in the event of rain. The proposed Project would also not require the construction of any new storm drainage facilities and 4) For the aforementioned reasons, the proposed Project would be expected to have a less than significant impact on existing stormwater drainage systems and would not provide substantial additional sources of polluted water runoff. The proposed Project would therefore have a less than significant impact on drainage patterns at the Quemetco facility.

¹⁰ Arrighi, Dan. 2015. Water Quality Manager, San Gabriel Valley Water Company. Telephone conversation with Valerie Rosenkrantz of Trinity Consultants, Inc. on January 20, 2015 and email confirmation on April 29, 2016 that San Gabriel Valley Water Company can serve increased water service. A copy of the email confirmation is included in Appendix B.

IX. e) No Impact. The proposed Project does not require the construction of new housing and the Quemetco site is outside the 100- and 500-year floodplains and not within a flood hazards area on the City of Industry flood hazards map (City of Industry 2014b, Chapter 5.8 Hydrology and Water Quality). Thus, no new housing or new structures will be built within a 100-year flood hazard area. For this reason, the proposed Project would not be expected to impede or redirect flood flows or create a new flood hazard impact. Thus, no flood hazard impacts are expected to result from implementing the proposed Project.

IX. f) No Impact. The Quemetco site is located outside of the 100- and 500-year floodplains (City of Industry 2014b, Chapter 5.8 Hydrology and Water Quality). Quemetco is also located outside of the City of Industry's potential seiche zone from the Sante Fe and/or Whittier Narrows Dams. The City of Industry and Quemetco are located approximately 25 miles east of the Pacific Ocean so there would be negligible, if any, risks from being impacted by flood waters from a tsunami, if one occurs. While a heavy downpour could make the Puente Hills susceptible to mudflows, Quemetco is sufficient distance from the Puente Hills to avoid impacts from mudflows ((City of Industry 2014b, Chapter 5.8 Hydrology and Water Quality).

Because the proposed Project will occur at Quemetco and no physical modifications would be made that would alter the facility's proximity to the floodplains, dams, hilly areas susceptible to mudflows, and the ocean, the proposed Project will not expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam, or inundation by seiche, tsunami, or mudflow. Further, the proposed Project will not disturb any floodplains so no modifications to any floodplains would be expected. For these reasons, no flooding or inundation impacts from natural disasters, such as flooding, seiche, tsunami, or mudflow, would be expected if the proposed Project is implemented.

IX. g), and i) Less Than Significant Impact. Quemetco is permitted through its Industrial Waste Discharge Permit from the LACSD to discharge treated wastewater generated at the facility. The wastewater discharge is currently tested by a third party laboratory on a quarterly basis to determine the metals content. Quemetco also submits quarterly reports to the LACSD and is currently in compliance with its LACSD permit. The proposed Project is expected to increase the amount of wastewater discharged because it is projected to use an additional 100,000 gallons in water to process additional feed stock in the battery breaker, sink-float tank, and plastics rinsing process.

The additional wastewater to be generated will be treated and recycled on-site at Quemetco's wastewater treatment facility and reused in air pollution control systems and internal facility washdown. As described in Section 1.4.5 – Water and Wastewater, water is used in the WESP and scrubbers; the water usage is not tied to the furnace feed rate. As discussed above in Section IX. D), facility wash down is required as part of existing Rule 1420.1 housekeeping measures; the frequency is not tied to the furnace feed rate and reused water is not used for any outdoor facility wash down activities. The on-site Quemetco wastewater treatment facility has the capacity to treat and reuse additional wastewater through its system. The additional wastewater generation would use additional additives and additional filter cakes, as described above in Section 1.6 - Project Description and Table 1-1; the use of these additives will neutralize the wastewater in accordance with LACSD permit requirements. The proposed Project will increase the amount of feed processed in one day without changing in the type of feedstock to be processed; as such, this increase in wastewater discharge volume through the existing facility wastewater treatment plant

capacity will be expected to comply with the existing LACSD permit. Also as explained in Section IX.d), the proposed Project would also not require the construction of any new storm drainage facilities. For these reasons, the proposed Project would therefore have a less than significant impact on wastewater treatment facilities.

Conclusion

Based upon these considerations, as indicated in the response to checklist question IX.a), the proposed Project's potential to increase the amount of wastewater generated could create substantial changes to water quality which could cause potentially significant adverse water quality impacts. Therefore, checklist question IX.a) will be evaluated in the EIR and If the analysis in the EIR concludes that potentially significant adverse wastewater generation impacts will occur, then mitigation measures and alternatives would be required.

For checklist questions IX.b) through IX.i), no significant adverse impacts to groundwater, drainage, storm water runoff, flood hazards, water or wastewater treatment capacity, or water supplies were identified; thus, no mitigation measures are necessary or required. Thus, no further evaluation of these hydrology and water quality issues will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| X. LAND USE AND PLANNING. | | | | |
| Would the project: | | | | |
| a) Physically divide an established community? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Land use and planning impacts will be considered significant if the project conflicts with the land use and zoning designations established by local jurisdictions.

Discussion

X. a) No Impact. Because the proposed Project would occur entirely within the boundaries of the existing Quemetco facility and, therefore, would not disrupt or divide an established community, it would therefore, have no land use impact on dividing an established community.

X. b) No Impact. The Quemetco facility is located within the City of Industry area within the Industrial land use area within an existing secondary lead smelter (City of Industry, 2014a). Activities under the proposed Project would be the same activities that are currently being conducted at Quemetco's facility, which do not conflict with the City of Industry's General Plan Land Use Map (2014a) nor trigger any land use permits or modifications.

Because no soil or ground disturbances will occur, the proposed Project would not require any change in zoning or land use; therefore, the proposed Project would not require a land use action such as building permit. The components of the proposed Project would similarly not result in any conflicts with the City of Industry's General Plan. Because the proposed Project at the Quemetco facility is not expected to conflict with any applicable land use plan, policy or regulation, there would be no land use impact.

Conclusion

Based on these considerations, no significant adverse impacts from the proposed Project on land use and planning would be expected to occur. Since no potentially significant adverse land use and planning impacts were identified, no further evaluation will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| XI. MINERAL RESOURCES. | | | | |
| Would the project: | | | | |
| a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Project-related impacts on mineral resources will be considered significant if any of the following conditions are met:

- The project would result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state.
- The proposed Project results in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan.

Discussion

XI. a) and b) No Impact. The Project proposes to increase the amount of feedstock processed and the use of petroleum coke, limestone, cobbled steel and other additives such as arsenic, caustic soda beads, cobalt, metallic sodium, pyrite, red phosphorus, silver, sodium nitrate, sulfur and tin at the Quemetco facility. However, none of these components are a known mineral resource that is of value to the region and the residents of the state such as aggregate, coal, clay, shale, et cetera, or of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. Thus, there are no provisions in the proposed Project that would result in the loss of availability of a known mineral resource.

Conclusion

Based upon these considerations, significant adverse mineral resource impacts are not expected from implementation of the proposed Project. Since no potentially significant adverse mineral resource impacts were identified, no mitigation measures are necessary or required. Thus, no further evaluation of mineral resources will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|
| XII. NOISE. | | | | |
| Would the project result in: | | | | |
| a) Exposure of persons to or generation of permanent noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| d) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public use airport or private airstrip, would the project expose people residing or working in the project area to excessive noise levels? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Noise impact will be considered significant if:

- Construction noise levels exceed the local noise ordinances or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three “a-weighted” decibels (dBA) at the site boundary. Construction noise levels will be considered significant if they exceed federal Occupational Safety and Health Administration (OSHA) noise standards for workers.
- The proposed Project operational noise levels exceed any of the local noise ordinances at the site boundary or, if the noise threshold is currently exceeded, project noise sources increase ambient noise levels by more than three dBA at the site boundary.

Discussion

Noise is generally defined as loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity, and that interferes with or disrupts normal activities. Although exposure to high noise levels has been demonstrated to cause hearing loss, the principal human response to environmental noise exposure levels is annoyance. The responses of individuals to similar noise events are diverse and are influenced by many factors, including: the type of noise; the perceived importance of the noise; its appropriateness to the setting; the time of day and the

type of activity during which the noise occurs; and individual noise sensitivity. Sound is a physical phenomenon consisting of minute vibrations that travel through a medium, such as air, and are sensed by the human ear.

Sound is generally characterized by several variables, including frequency and amplitude. The standard unit of sound pressure measurement is the decibel (dB). Sound from a tuning fork contains a single frequency (a pure tone), but most sounds one hears in the environment do not consist of a single frequency but rather a broad band of many frequencies differing in sound level. Because of the broad range of audible frequencies, methods have been developed to quantify these values into a single number. Human hearing is less sensitive at low frequencies and extremely high frequencies than at the mid-range frequencies. This process of discriminating frequencies based upon human sensitivity is termed “A-weighting,” and the resulting dB level is termed the “A-weighted” decibel (dBA). A-weighted sound pressure levels of typical sources of noise are shown in Table 2-7.

Table 2-7
Sound Levels of Typical Noise Sources and Noise Environments

| Noise Source (at a given distance) | Scale of dBA Sound Levels | Noise Environment | Human Judgment of Noise Loudness (Relative to a Reference Loudness of 70 dBs*) |
|---|--|---|---|
| Commercial Jet Take-Off (200 feet) | 120 | Airport runway | Threshold of pain *32 times as loud |
| Pile Driver (50 feet) | 110 | Rock Music Concert | *16 times as loud |
| Ambulance Siren (100 feet) Newspaper Press (5 feet) Power Lawn Mower (3 feet) | 100 | Outdoors | Very loud *8 times as loud |
| Motorcycle (25 feet) Propeller Plane Flyover (1,000 feet) Diesel Truck, 40 mph (50 feet) | 90 | Boiler Room Printing Press Plant | *4 times as loud |
| Garbage Disposal (3 feet) | 80 | High Urban Ambient Sound | *2 times as loud |
| Passenger Car, 65 mph (25 feet) Vacuum Cleaner (10 feet) | 70 | Various | Moderately loud *70 decibels (Reference loudness) |
| Normal Conversation (5 feet) Air Conditioning Unit (100 feet) | 60 | Data Processing Center Department Store | *1/2 as loud |
| Light Traffic (100 feet) | 50 | Private Business Office | *1/4 as loud |
| Bird Calls (distant) | 40 | Lower Limit of Urban Ambient Sound | Quiet *1/8 as loud |

| Noise Source (at a given distance) | Scale of dBA Sound Levels | Noise Environment | Human Judgment of Noise Loudness (Relative to a Reference Loudness of 70 dBS*) |
|---------------------------------------|------------------------------------|----------------------|---|
| Whisper (5 feet) | 30 | Quiet Bedroom | |
| Soft Whisper | 20 | Recording Studio | Quiet |
| Calm breathing | 10 | Quiet room | Very quiet |
| No sound | 0 | Quiet room | Threshold of hearing |

Source: URS Corporation (2007).

Notes: dB = decibel, dBA = A-weighted decibel, mph = miles per hour

Under the Occupational Safety and Health Act of 1970 (29 United States Code § 651 et seq.), the Department of Labor, OSHA has adopted regulations designed to protect workers against the effects of occupational noise exposure (29 Code of Federal Regulations § 1910.95). These regulations list permissible noise exposure levels as a function of the amount of time during which the worker is exposed. See Table 2-8 for the applicable OSHA worker noise exposure standards.

Table 2-8
OSHA Worker Noise Exposure Standards

| Duration of Noise (hours per day) | A-Weighted Noise Level (dBA) |
|--------------------------------------|---------------------------------|
| 8.0 | 90 |
| 6.0 | 92 |
| 4.0 | 95 |
| 3.0 | 97 |
| 2.0 | 100 |
| 1.5 | 102 |
| 1.0 | 105 |
| 0.5 | 110 |
| 0.25 | 115 |

Source: 29 Code of Federal Regulations § 1910.95

Notes: dBA = A-weighted decibels

OSHA = Occupational Safety and Health Administration

California Government Code Section 65302(f) encourages each local governmental entity to perform noise studies and implement a noise element as part of its general plan. In addition, the California Office of Planning and Research has published guidelines for preparing noise elements, which include recommendations for evaluating the compatibility of various land uses as a function of community noise exposure. The State of California, Office of Noise Control, prepared the Model Community Noise Control Ordinance, which provides guidance for acceptable noise levels in the absence of local noise standards; this would be applicable for CEQA purposes to the proposed Project as the City of Industry's municipal code addresses noise nuisance, and relies on the State's noise guidelines. This model also defines a simple tone, or "pure tone," as one-third

octave band sound pressure levels that can be used to determine whether a noise source contains annoying tonal components. The Model Community Noise Control Ordinance further recommends that, when a pure tone is present, the applicable noise standard should be lowered (made more stringent) by 5 dBA. The California OSHA has promulgated occupational noise exposure regulations (California Code of Regulations, Title 8, §§ 5095-5099) that set employee noise exposure limits. These standards are equivalent to federal OSHA standards (see Table 2-8).

The City of Industry is devoted to industrial and commercial uses that are less sensitive to noise than typical sensitive receptors: residential uses, schools, hospitals and senior centers. Certain land uses are particularly sensitive to noise and vibration, including residential, school, and open space/recreation areas where quiet environments are necessary for enjoyment, public health, and safety. Excessive noise levels are not only a potential annoyance but can constitute a health threat resulting in temporary or permanent hearing loss and mental distress. City of Industry Municipal Code regulates noise nuisances under Chapter 1.30, which addresses public nuisances; and under Chapter 17.12, which addresses noise from entertainment uses. Industrial and warehousing operations are major noise sources in the City of Industry. In addition to on-site mechanical equipment, which generates noise, warehousing and industrial land uses generate substantial truck traffic, which results in additional noise on local roadways in the vicinity of industrial operations. (City of Industry 2014a)

Community Noise Equivalent Level (CNEL) is an average sound level over a 24-hour period between 7:00 p.m. and 7:00 a.m., with weighted penalties (a 10 dB penalty applied to nighttime sounds occurring between 10:00 p.m. and 7:00 a.m.). City of Industry General Plan Noise analysis (based on a Federal Highway Administration (FHWA) noise prediction model) estimates noise levels in the proposed Project area at: 1) 74.7 dBA CNEL at S. 7th Avenue and south of Don Julian Road; and 2) 80 dBA CNEL immediately next to the State Route 60 (City of Industry 2014b). Based on this data, exterior noise levels at the existing Project vicinity fence line would be 75 dBA CNEL based on noise attenuation formulas and the project setback from the adjacent roads and existing facility operations; these ambient noise levels are typical in industrial areas near railroads.

The nearest “sensitive noise” receptors would be a residential community approximately 600 feet to the south from the southern facility fence line and 800 feet to the south of the WESP. Salt Lake Avenue and the Union Pacific Railroad Company separate the proposed Project from the nearest residences, with State Route 60 in close vicinity; these transportation corridors are the dominant source of off-site ambient background noise (City of Industry 2014b).

XII. a), b) and c) Less Than Significant Impact. The Project proposes to alter feed rate permit conditions without requiring ground disturbance or modifications to existing process equipment or air pollution control equipment. The increased feed rate would cause additional feed and additives to be received at the facility, the furnaces to operate more hours in a day and daily traffic to increase by up to 15 truck visits per day, six employee round trips per day and three additional railcars per month (Table 1-1).

The proposed Project would allow Quemetco to continue to operate its lead smelting furnaces/processes for up to 24-hours per day; this would extend daily operations by one to six hours over existing operations. As discussed previously, a number of noise-causing sources (e.g., bag houses, building ventilation units, the RTO, the LoTox and other scrubbers, the WESP, materials receiving, the battery dismantler, the refinery, etc.) currently operate 24-hours per day at the facility, regardless of whether the rotary feed drying furnace and reverberatory furnace are operating. The compliance period is from noon to noon each day, and the reverberatory furnace

is generally idle during the morning hours between 6:00 a.m. and noon, and most frequently idle in the hours just before noon. Thus, any increase in facility operations that may occur from ceasing the idle period would be during the morning hours.

With the exception of additional truck, worker vehicle, and train traffic (see Table 1-1), the day-to-day operations of the proposed Project will occur within the existing boundaries of the Quemetco facility. The additional employee trips would occur at the beginning and end of each shift.

Additionally, all operations at the facility occur within existing enclosed buildings, and there are intervening structures and a railroad berm that serve as a noise buffer between the Quemetco facility and nearby residences. The existing building structure acts as a buffer to absorb the furnace noise from increased furnace activity. Air pollution control devices and other activities within the existing Quemetco operation further absorb increased noise levels from furnace operations into the exterior background noise. For these reasons, the noise from the additional furnace operations would not make a substantial addition to the existing noise levels at the Quemetco property line.

The Project would potentially increase the amount of feed stock processed by an additional 240 tons per day within the enclosed battery dismantler building. Similar to the furnace activity described above, the battery wrecker building structure would reduce exterior noise levels from increased battery dismantling activity. Similarly, the on-going operations of the existing air pollution control systems and facility operations generate more noise than the enclosed battery dismantler, which is only one component of the Quemetco facility. For these reasons, the additional feed stock processed in the battery wrecker building would not make a measurable addition to the existing noise levels at the Quemetco property line.

The existing exterior ambient noise environment is dominated by exterior (arterial and railroad) and on-site (air pollution control devices, vehicle movement of materials and worker vehicles at the start and end of shifts) activities. Further, off-site activities, local traffic, rail and freeway noise sources dominate the area noise characteristics outside the facility fence line. Any additional exterior noise sources from the proposed Project operations (additional truck deliveries, forklift movements and additional employee vehicle ingress and egress at shift change) could incrementally add to the existing exterior noise environment. As described above and in Table 1-1, the proposed Project would generate up to six employee roundtrips a day, 15 additional trucks a day and three additional railcars per month. The additional employee activity would occur at shift change. The 15 additional trucks would generate no more than one additional truck per hour. One truck per hour passing by at 15 to 25 miles per hour would generate a noise effect of less than 35 dBA averaged over an hour. The facility buildings as well as nearby industrial buildings and the railroad berm would act as barriers between the noise generated by this additional truck activity and the nearest residents (approximately 600 feet south of the facility fence line and on the opposite side of the railroad berm). The potential noise impact from a project is evaluated at the nearest sensitive receptor, which is over 600 feet to the south of the Quemetco facility boundary. Noise levels diminish over a distance from a noise source, and can be estimated using noise attenuation formulas. For example, 75 dB(A) reduces to 49.75 dB(A) over 600 feet with no intervening structures, 80 dB(A) attenuates to 54.75, 85 dB(A) attenuates to 59.75 dB(A), and 90 dB(A) attenuates to 64.75 without any intervening noise barriers. In the case of Quemetco, there are intervening structures and a railroad berm that serve as a noise buffer between the Quemetco facility and nearest residences 600 feet to the south. Thus, additional noise from Quemetco would be reduced further than the attenuation scenarios presented above. For these reasons, an additional six employee roundtrips a day, 15 trucks a day and three additional railcars per month would not

be expected to substantially change the exterior noise environment of 75 dB(A) CNEL at the facility fence line. With respect to the three railcars, those cars would occur on the existing railroad right-of-way adjacent to Quemetco. Furthermore, three railcars per month would not substantially increase existing environmental noise because such noise would be extremely intermittent and in limited duration (up to three additional times per month). Finally, unloading of the railcar would occur at the northern boundary of the project site, thus further attenuating unloading noise by adding the facility as a buffer.

The proposed Project would not be expected to result in substantial noise over the existing noise levels that would be noticeable to the residences over 600 feet to the south of the fence line and 800 feet south of the WESP for the following reasons:

- 1) There would be no ground disturbance activities;
- 2) The noise from removing one diesel emergency generator and installing two new natural gas emergency generators are temporary and would occur during the daytime;
- 3) For operational noise, there is an industrial building and a railroad berm creating a noise buffer between Quemetco and the nearest sensitive receptors;
- 4) Post-Project operations-related noise levels are expected to be substantially similar to existing noise levels particularly given the proposed Project is ultimately a minor change in facility operations that would allow Quemetco to operate the rotary feed drying furnace and reverberatory furnace, both interior equipment, 24-hours a day given the existing facility is operating 24-hours a day; and
- 5) Any additional furnace and battery dismantler operations would be absorbed within the existing buildings and background noise already created by the Quemetco facility, as well as other nearby sources.

Therefore, the proposed Project and associated increase in operations is not expected to substantially affect the existing industrial noise environment. For these reasons, the proposed Project-related noise levels would be less than significant.

XII. d) No Impact. The nearest airport, El Monte, is approximately seven miles from the Quemetco facility. Thus, the proposed Project is not located within an airport land use plan, within two miles of a public use airport, or within the vicinity of a private airstrip. Therefore, the proposed Project would not expose people residing or working in the project area to excessive noise levels.

Conclusion

Based on these considerations, no significant adverse impacts from the proposed Project on noise would be expected. Since no potentially significant adverse noise impacts were identified, no mitigation measures are necessary or required. Thus, no further evaluation of noise will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|-------------------------------------|--------------------------|
| XIII. POPULATION AND HOUSING. | | | | |
| Would the project: | | | | |
| a) Induce substantial growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (e.g. through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Significance Criteria

Impacts of the proposed project on population and housing will be considered significant if the following criteria are exceeded:

- The demand for temporary or permanent housing exceeds the existing supply.
- The proposed project produces additional population, housing or employment inconsistent with adopted plans either in terms of overall amount or location.

Discussion

XIII. a) and b) Less Than Significant Impact. The construction and operation activities associated with the proposed Project are not expected to require the relocation of individuals, require new housing or commercial facilities, or change the distribution of the population. The reason for this conclusion is that the construction activities will be performed by current Quemetco employees. Additionally, the proposed Project operation is expected to require no more than six new permanent employees; these positions would be related to materials handling including shipping and receiving and inventory management. The reason for this conclusion is that Quemetco, as an existing established facility, can draw from the large existing labor pool in the local southern California area to supply the additional permanent employees for the proposed Project without having to relocate individuals, build new housing or commercial facilities, change the distribution of the population, or expand the “footprint” of the facility site due to the proposed Project. For these reasons, the proposed Project is expected to have less than significant impacts on growth inducement and no impact on displacing population or housing and population distribution.

Conclusion

Based on these considerations, no significant adverse impacts from the proposed Project on population and housing would be expected. Since no potentially significant adverse population and housing impacts were identified, no mitigation measures are necessary or required. Thus, no further (population and housing) evaluation will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|------------------------------|-----------|
|--|--------------------------------|---------------------------------------|------------------------------|-----------|

XIV. PUBLIC SERVICES.

Would the proposal result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the following public services:

| | | | | |
|-----------------------------|--------------------------|--------------------------|-------------------------------------|-------------------------------------|
| a) Fire protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Police protection? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Schools? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Other public facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Significance Criteria

Impacts on public services will be considered significant if the project results in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered government facilities, the ground disturbing activities which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

Discussion

XIV. a) Less Than Significant Impact. The Los Angeles County Fire Department provides fire protection to the existing Quemetco facility. Quemetco has an Emergency Response Plan in place in the event of fires or another emergency. In addition, the proposed Project would not include ground disturbing activities or changes to existing processes that would require additional fire protection. The facility's emergency preparedness includes: 24-hour Hazardous Waste Operations and Emergency Response Standard training for employees upon assignment; 8-hour annual refresher training; and an annual emergency response drill with the fire department for each shift. Quemetco is already a 24-hour facility; the proposed Project would not add hours of operation. Quemetco must already comply with all applicable code and ordinance requirements for access, water mains, fire flows and fire hydrants. The proposed Project would increase the number of hours for which the smelting furnaces are operating are full capacity and would increase the daily volume of feedstock and additives processed.

Because: (1) Quemetco is an existing 24-hour operation; (2) the proposed Project is increasing the production levels at an existing operation with no ground disturbing activities; (3) Quemetco is currently successfully handling the materials (feedstock and additives) proposed for increase; (4) Quemetco facility is reviewed by the Los Angeles County Fire Department as part of its Emergency Response Plan at least annually and already meets requirements for access, water mains, fire flows and fire hydrants; (5) Los Angeles County Fire Department already provides

Quemetco with emergency response services; and (6) Quemetco has Hazardous Waste Operations and Emergency Response Standard training in place for its staff which is renewed annually; therefore, the proposed Project (increasing production levels and handling of feedstock and additives) would not substantially affect the Los Angeles County Fire Department's service levels. The proposed Project would therefore have a less than significant impact on fire services.

XIV. b) Less Than Significant Impact. The Los Angeles County Sheriff Department provides law enforcement services for the City of Industry and Quemetco. Law enforcement units continuously patrol the entire community over a 24-hour period. In addition, Quemetco provides its own on-site security force permanently stationed 24 hours a day, seven days a week. The existing Quemetco facility is fenced and a 24-hour security force would continue to be maintained. Entry and exit of the work force is currently and would continue to be monitored with the existing security force.

This proposed Project is an existing industrial activity within an existing industrial area. Because: (1) the proposed Project is not requiring any ground disturbing activities; (2) it is already within a secured facility; and (3) Quemetco already employs its own security patrol; the proposed Project is anticipated to have less than significant impact upon the usability, adequacy and responsiveness of existing law enforcement services within the City of Industry.

XIV. c) No Impact. There would be no ground disturbing activities and no construction workers, but the operation of the proposed Project may need six additional permanent on-site employees. However, Quemetco can draw from the large existing labor pool in the local southern California area to supply the additional permanent employees for the proposed Project without having to relocate individuals, build new housing or commercial facilities, change the distribution of the population, or expand the "footprint" of the facility. Lastly, the proposed Project would not require existing schools to be altered, or require new schools to be built. For these reasons, the proposed Project would have no impact on school services.

XIV. d) Less Than Significant Impact. The proposed Project would require discretionary approvals from the SCAQMD, as well as subsequent action by the DTSC. Table 1-2 summarizes the anticipated permits and approvals that may be associated with the proposed Project. The proposed Project could, for example, require DTSC to modify its Quemetco Hazardous Waste Facility Operation and Post-Closure Permit in compliance with the Federal Resource Conservation and Recovery Act (RCRA Permit); DTSC may also rely on this Capacity Upgrade Project EIR for its own projects such as its RCRA Permit Renewal with Quemetco. In addition, Quemetco submits reports to the United States Environmental Protection Agency (U.S. EPA) two times per year to certify compliance with all Title V requirements (implemented by the SCAQMD). The project will result in a SCAQMD Title V permit revision, which is subject to U.S. EPA review. Other agencies, such as CalTrans, the City of Industry, Los Angeles County Health Department, LACSD, and the RWQCB are identified as commenting agencies because they may have interest in the proposed Project but none would have discretionary approval authority. While these other public services may be affected by the proposed Project, the impacts would not require new government facilities to be built or existing government facilities to be physically altered in order to maintain acceptable service ratios, response times, or other performance objectives.

In addition to these public service agencies, public roadways may be impacted by the proposed Project. The proposed Project is anticipated to generate approximately 15 truck and six employee

round trips per day (see Table 1-1). Due to the small number of additional trips that may be needed, the existing roadways should be able to accommodate this minor increase in daily traffic levels without requiring the construction of new roadways. Therefore, the proposed Project would neither require additional maintenance of public roadways, nor would it create an increased demand for additional public roadways to be built.

Therefore, the proposed Project is anticipated to have less than significant impacts to other public services.

Conclusion

Based on these considerations, no significant adverse impacts from the proposed Project on public services would be expected. Since no potentially significant adverse public service impacts were identified, no mitigation measures are necessary or required. Thus, no further evaluation of public services will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|------------------------------|-------------------------------------|
| XV. RECREATION. | | | | |
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Does the project include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment or recreational services? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

Significance Criteria

Impacts to recreation will be considered significant if:

- The project results in an increased demand for neighborhood or regional parks or other recreational facilities.
- The project adversely affects existing recreational opportunities.

Discussion

XV. a) and b) No Impact. As discussed earlier in Section XIV - Population and Housing, there are no provisions in the proposed Project that would affect or increase the demand for or use of existing neighborhood and regional parks or other recreational facilities or require the construction of new or the expansion of existing recreational facilities that might have an adverse physical effects on the environment because the proposed Project will not directly or indirectly increase or redistribute population. Based upon these considerations, including the conclusion of “less than significant impact” for the topic of “Population and Housing,” significant recreation impacts are not expected from implementing the proposed project.

Conclusion

Based on these considerations, no significant adverse recreation impacts from the proposed Project are expected. Since no potentially significant adverse recreation impacts were identified, no mitigation measures are necessary or required. Thus, no further evaluation of recreation will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|--------------------------------|---------------------------------------|-------------------------------------|--------------------------|
| XVI. SOLID AND HAZARDOUS WASTE. | | | | |
| Would the project: | | | | |
| a) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Comply with federal, state, and local statutes and regulations related to solid and hazardous waste? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Significance Criteria

The proposed project impacts on solid and hazardous waste will be considered significant if the following occurs:

- The generation and disposal of hazardous and non-hazardous waste exceeds the capacity of designated landfills.

Discussion

XVI. a) and b) Less Than Significant Impact. Quemetco's operation is a secondary lead smelting process; this involves recycling automobile and industrial batteries, thereby reducing the volume of hazardous waste that would normally be sent to a landfill. The "feed" material is separated at the receiving end and managed in accordance with the DTSC permit so that: 1) plastics and metals, which are recyclable materials, are rinsed in preparation for recycling; 2) liquids are neutralized at an on-site water treatment facility and re-used for facility operations; 3) the lead is smelted and refined into blocks and ingots and returned to the market for reuse; and 4) "slag," comprised of leftover, unusable impurities, is hauled off to a landfill. An increase in the amount of total feed processed at Quemetco would generate an additional 4,114 tons per year or less than 12 tpd of "slag" that would be need to be sent to a landfill for disposal(see Table 1-1).

This additional 4,114 tons per year would require 178 additional truck loads per year (see Section XVII - Transportation and Traffic, Table 2-9) of landfill bound slag. The slag is tested for its level of impurities and hazards, in accordance with the DTSC permit, and separated into either slag bound for the RCRA certified landfill in Beatty, Nevada or nonhazardous slag bound for the landfill in Parker, Arizona. Operators of both landfills confirmed that the landfills have sufficient capacity to handle this additional amount of slag (Reid personal communication and Sawyer personal communication)¹¹. Further, most of the additional slag can be added to the existing trucks already landfill bound; worst-case scenario is that the 178 additional truck loads per year would

¹¹ Reid, Jessica. 2014 Customer Service Representative, US Ecology, Beatty, Nevada. Telephone conversation with Valerie Rosenkrantz of Trinity Consultants, Inc. on December 17, 2014 to confirm landfill's capacity to accept additional amounts of slag. Sawyer, Willis D. 2016. Arizona Area Environmental Manager, Republic Services. La Paz County Landfill, Parker, Arizona. Email verification on May 3, 2016 confirming landfill's capacity to accept additional amounts of slag.

lead to 3.5 additional truck trip loads per week split between the two landfills (see Section XVII - Transportation and Traffic, Table 2-9). In practical application, this would generate an increase of one load every 3 to 5 days to each landfill. Since both landfills have the capacity to receive additional materials bound for landfill disposal and because Quemetco has historically and would continue to comply with rules and regulations governing the disposal of waste; the proposed Project would have a less than significant solid and hazardous waste disposal impact.

Conclusion

Based on these considerations, no significant impacts to solid/hazardous waste would be expected from the proposed Project. Since no potentially significant adverse solid waste impacts were identified, no mitigation measures are necessary or required. Thus, no further evaluation of solid/hazardous waste will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|---|--------------------------------|---------------------------------------|-------------------------------------|-------------------------------------|
| XVII. TRANSPORTATION AND TRAFFIC. | | | | |
| Would the project: | | | | |
| a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Conflict with an applicable congestion management program, including but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| d) Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| e) Result in inadequate emergency access? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |

Significance Criteria

Impacts on transportation and traffic will be considered significant if any of the following criteria apply:

- Peak period levels on major arterials are disrupted to a point where level of service (LOS) is reduced to D, E or F for more than one month.
- An intersection's volume to capacity ratio increase by 0.02 (two percent) or more when the LOS is already D, E or F.
- A major roadway is closed to all through traffic, and no alternate route is available.
- The project conflicts with applicable policies, plans or programs establishing measures of effectiveness, thereby decreasing the performance or safety of any mode of transportation.
- There is an increase in traffic that is substantial in relation to the existing traffic load and capacity of the street system.
- The demand for parking facilities is substantially increased.
- Water borne, rail car or air traffic is substantially altered.
- Traffic hazards to motor vehicles, bicyclists or pedestrians are substantially increased.
- The need for more than 350 employees
- An increase in heavy-duty transport truck traffic to and/or from the facility by more than 350 truck round trips per day
- Increase customer traffic by more than 700 visits per day.

Discussion

The proposed Project could increase daily traffic by up to 15 truck and six employee round trips per day (Table 1-1 in Section 1.6 - Project Description). Table 2-9 provides the number of truck trips by the type of materials being moved through the secondary lead smelter facility on an annual basis. This annual summary of Project-related materials movements provides the distribution of the additional 3,422 raw material scrap trips, 283 plastic, metal and slag trips and 551 additives trips. On a daily basis, at its peak the proposed Project would generate no more than an additional 15 truck trips.

**Table 2-9
Annual Traffic Generation from Materials Movement**

| Materials Movement | Year 2014 Baseline Conditions (pre-Project) | Proposed Project (post-Project) | Post-Project Increment |
|---------------------------------------|--|--|-------------------------------|
| Plastics (trucks/year) | 410 | 497 | 87 |
| Metals (trucks/year) | 118 | 136 | 18 |
| Slag (trucks/year) | 506 | 684 | 178 |
| Additives (trucks/year): | | | |
| - Coke (smelting reagents) | 172 | 212 | 40 |
| -Limestone | 35 | 116 | 43 |
| -Cobbled Steel | 157 | 401 | 114 |
| - Soda Ash | 803 | 1,154 | 351 |
| -Other Additives | 156 | 159 | 3 |
| Raw Materials Scrap (trucks/year) | 11,843 | 15,265 | 3,422 |
| Finished Product (trucks/year) | 5,335 | 6,135 | 800 |
| Finished Product (railcars/year) | 124 | 155 | 31 |
| Total Trucks/Year (Round Trip) | 19,659 | 24,914 | 5,084 |
| Total Trucks/Day (Round Trip) | 53.86 | 68.26 | 13.93 |

Source: Quemetco 2015.

The operations of roadway segments and intersections are described with the term “level of service” (LOS). LOS is a qualitative assessment of the motorists’ and passengers’ perceptions of traffic conditions. Six service levels are defined by the Transportation Research Board, designated by letters ranging from “A” for most favorable “free flow” conditions to “F” for least favorable. LOS E corresponds to conditions nearing “at-capacity” operations. Within the City of Industry, LOS D is the lowest acceptable operations at area intersections during peak-hours.

S. 7th Avenue is a four lane divided roadway. The intersection of S. 7th Avenue and Salt Lake Avenue is signalized. Access to Quemetco is from Salt Lake Avenue. Based on the recently adopted City of Industry EIR Traffic study, existing intersection LOS with S. 7th Avenue and the

State Route 60 ramps is “A” for the am peak hour and “C” for the pm peak hour; both are within the acceptable LOS of “D” or better (City of Industry 2014b). Figure 2-1 depicts the area roadways.

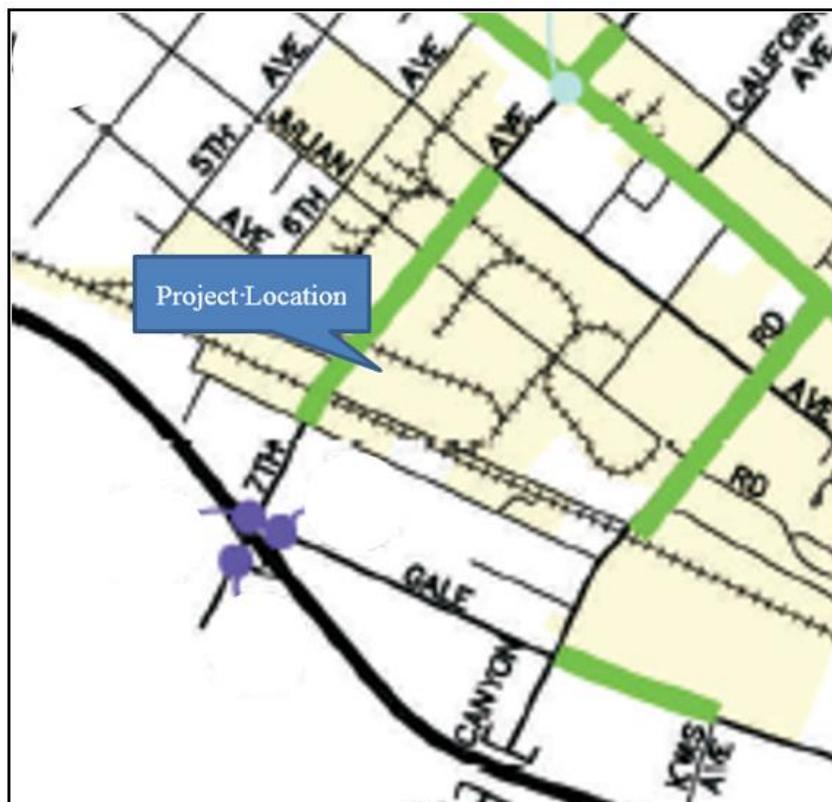


Figure 2-1
Overview of Project Area Roadways

XVII. a) and b) Less Than Significant Impact. The proposed Project could increase daily traffic by up to 15 truck and six employee round trips per day (Table 1-1). These additional truck trips would be spread out over a 24-hour period and would not be focused within a peak hour given all deliveries are scheduled. These trucks would most likely be travelling from State Route 60 along S. 7th Avenue to the facility. The most congested intersections along this path are State Route 60 ramps with S. 7th Avenue. Even one additional truck trip during a peak hour would not be expected to cause any significant impacts to the existing LOS “A” for the a.m. peak hour and “C” for the p.m. peak hour at these intersections.

The six additional employee round trips would arrive and depart from the facility during the shift changes. Assuming two employees added per shift and three shifts per day, two round trips (ingress and egress) would occur during each shift change. Given the nature of the Quemetco facility, and that these additional jobs could be filled by the available area work pool, it is highly likely that these would be re-directed regional trips, rather than new regional trips. Further, the origin of these additional round trips from the six new employees would be dispersed from various directions and would not all pass through the State Route 60 ramps with S. 7th Avenue, the most

congested intersections in the proposed Project vicinity. The intersections and roadways proximate to the Quemetco access are operating at accepted levels (City of Industry 2014b). Thus, the employee trips would only be adding traffic to the immediate facility intersection; given this intersection is operating at an acceptable LOS, six additional vehicle trips during the p.m. peak hour would create a less than significant impact at the intersection of S. 7th Avenue and Salt Lake Avenue.

Given the information above, the six new employee trips and 15 new truck trips would have no effect on area roadway and intersection LOS during the peak hours. Because: (1) there would be three construction-related round trips for equipment delivery; (2) the additional operations trips would likely add no more than six peak hour passenger vehicle trips and 15 truck trips dispersed over 24 hours; (3) the Project-related traffic would be less than the SCAQMD thresholds of 350 additional employees and 350 truck round trips per day; and (4) all local intersections and roadways are operating an acceptable LOS and the trips generated by the proposed Project would be spread throughout the day and would be negligible to existing movements on local streets, and these trips would have no measurable effect on peak hour regional roadway operations or local area intersection operations (City of Industry 2014b); therefore, the proposed Project would have a less than significant impact on applicable plans, ordinances and policies, or congestion management plans (including level of service standards).

XVII. c) No Impact. As explained in XVII. a) and b), the proposed Project will cause an increase of roadway traffic, but not air traffic. The proposed Project would require three heavy-duty diesel flatbed truck trips, and would only generate an additional 15 truck and six employee roundtrips per day.

The nearest airport, El Monte, is located approximately seven miles from the Quemetco facility. In addition, Quemetco is not located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport. Physical actions that would be taken to comply with the proposed Project, such as increased truck trips, are not expected to have any influence or impact on air traffic patterns. Also, implementing the operational changes of the proposed Project (e.g., increasing the rotary feed drying furnace feed rate limit and the amount of total coke material allowed to be processed in the rotary feed drying furnace and reverberatory furnace, allowing petroleum coke to be used as a smelting reagent in the reverberatory furnace and electric resistance heated slag reduction furnace, and increasing the amount of refined lead product output) will not have any influence or impact on air traffic patterns.

Therefore, implementation of the proposed Project would have no impact on air traffic patterns, and would not cause an increase in traffic levels or a change in location that results in substantial safety risks.

XVII. d) and e) Less Than Significant Impact. The proposed Project is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the site. The proposed Project does not include construction of roadways on-site or off-site that could include design hazards. Emergency access at the Quemetco facility would not be impacted by the proposed Project in that no on-site roadways would be altered as a result of the proposed Project and Quemetco would continue to maintain the existing emergency access gates to its facility.

Therefore, the proposed Project would have less than significant impacts to emergency response plans.

XVII. f) Less Than Significant Impact. The proposed Project would require an increase in six permanent employees which would result in an additional six round trips per day and 15 truck round trips per day during operations at the Quemetco facility.

Due to the relatively small number of additional road way trips that would occur as a result of implementing the proposed Project, no conflicts with any policies, plans, or programs regarding alternative transportation would be expected. Furthermore, the projected increases in roadway trips are not anticipated to generate significant traffic demand (see responses to questions XVII.a) and b)) or cause a significant increase in the use of alternative transportation since the anticipated truck trips cannot be served by such means. Therefore, alternative transportation facilities, including bicycle facilities, bus turnouts or other means of facilitating alternative transportation, or any associated plans, policies, and programs would have a less than significant impact from the proposed Project.

Conclusion

Based upon these considerations, significant adverse impacts to transportation and traffic are not expected to occur if the proposed Project is implemented. Since no potentially significant adverse transportation and traffic impacts were identified, no mitigation measures are necessary or required. Thus, no further evaluation of transportation/traffic will be required in the EIR.

| | Potentially Significant Impact | Less Than Significant With Mitigation | Less Than Significant Impact | No Impact |
|--|-------------------------------------|---------------------------------------|-------------------------------------|--------------------------|
| XVIII. MANDATORY FINDINGS OF SIGNIFICANCE. | | | | |
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory? | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects) | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly? | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

Discussion

XVIII. a) Less Than Significant Impact. The proposed Project would not have the potential to adversely affect the quality of the environment, reduce or eliminate any plant or animal species, or destroy prehistoric records. The proposed Project is located at a site that is part of an existing industrial facility, and does not contain biological resources; further the proposed Project would not include any demolition, excavation or disturbance to the soil or the physical environment. The Quemetco facility has been previously disturbed, graded, and developed; the proposed Project would not extend into environmentally sensitive areas, but would remain within the confines of an existing, operating Quemetco facility. Finally, the facility controls the growth of vegetation at the site for fire protection purposes. For additional information, see Section IV - Biological Resources, and Section V - Cultural Resources.

XVIII. b) Potentially Significant Impact. The proposed Project has the potential to result in air quality impacts (including criteria pollutants, toxic air contaminants, and greenhouse gas emissions), energy impacts, hazards and hazardous materials impacts, hydrology and water quality impacts, and has the potential to result in cumulative impacts in these areas. The potential cumulative impacts will be analyzed, as necessary, in the EIR. Potential adverse air quality and hazards and hazardous materials impacts could also adversely affect humans, either directly or indirectly. Potential adverse effects on humans will be included in the air quality and hazards and hazardous materials analyses.

XVIII. c) Potentially Significant Impact. The proposed Project has the potential to result in air quality impacts (including criteria pollutants, toxic air contaminants, and greenhouse gas emissions), energy impacts, hazards and hazardous materials impacts, hydrology and water quality impacts and has the potential to result in cumulative impacts in these areas. The potential cumulative impacts will be analyzed, as necessary, in the EIR. Potential adverse air quality and hazards and hazardous materials impacts could also adversely affect humans, either directly or indirectly. Potential adverse effects on humans will be included in the air quality and hazards and hazardous materials analyses.

Conclusion

Based on the review of the environmental impacts associated with the proposed Project, the proposed Project may result in significant adverse environmental impacts in the areas of air quality, energy, hazards and hazardous materials and hydrology and water quality impacts. Therefore, the preparation of an EIR is required.

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ACRONYMS

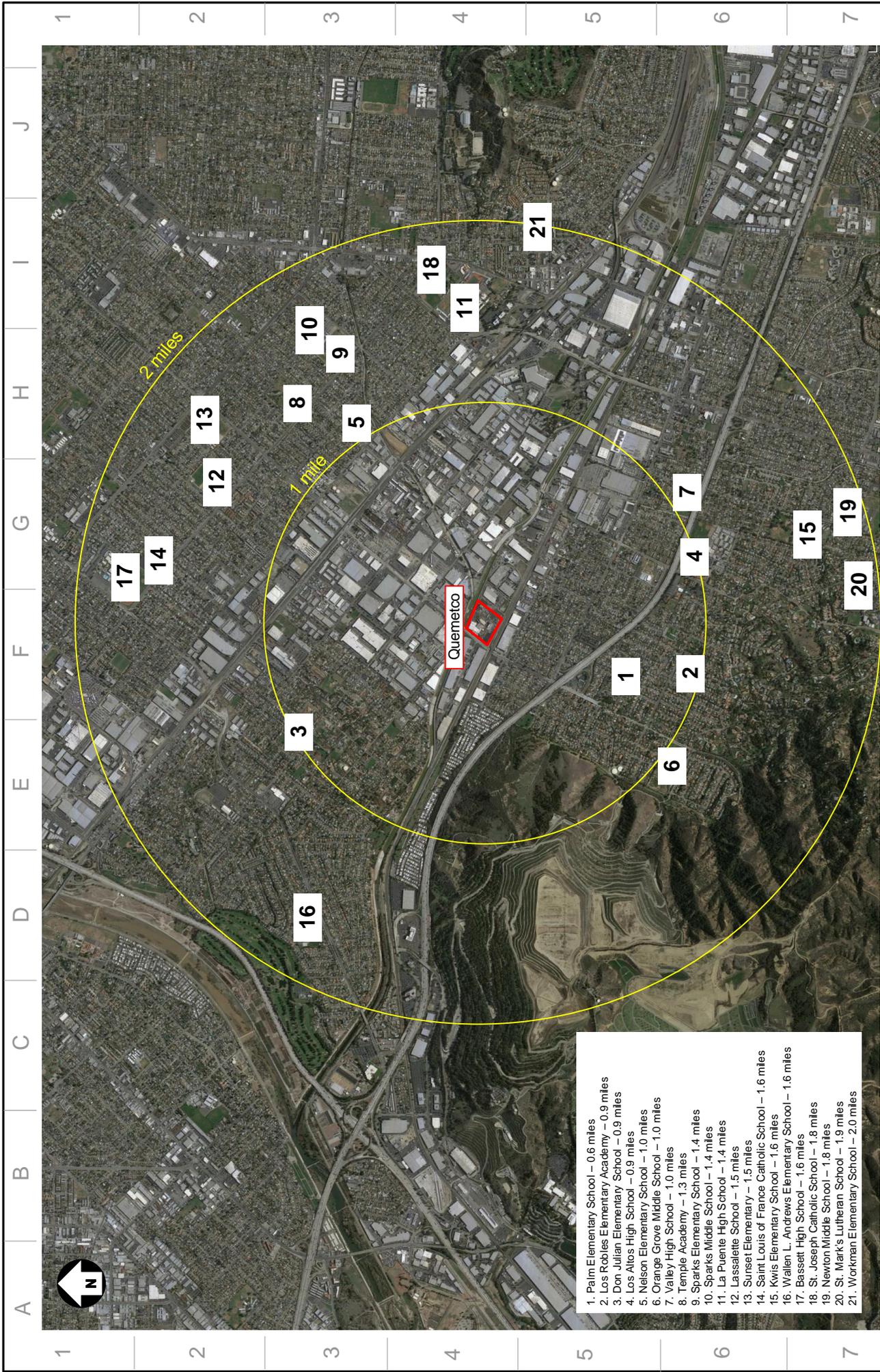
| Acronym/Abbreviation | Definition |
|-----------------------------|---|
| AAQS | Ambient Air Quality Standard |
| AST | Above Ground Storage Tank |
| AQMP | Air Quality Management Plan |
| BACT | Best Available Control Technology |
| BMP | Best Management Plan |
| BTU | British thermal unit |
| CARB | California Air Resources Board |
| CalTrans | California Department of Transportation |
| Ccf | hundred cubic feet |
| CEQA | California Environmental Quality Act |
| CEC | California Energy Commission |
| CH ₄ | Methane |
| CNEL | Community Noise Equivalent Level |
| CO | Carbon Monoxide |
| CO ₂ | Carbon Dioxide |
| CO ₂ e | Carbon Dioxide Equivalencies |
| CY | calendar year |
| dB | decibel |
| dBA | A-weighted decibel |
| DTSC | Department of Toxic Substance Control |
| EIR | Environmental Impact Report |
| ERPG | Emergency Response Planning Guide |
| FHWA | Federal Highway Administration |
| GHG | Greenhouse gases |
| HARP | Hotspot Analysis and Reporting Program |
| HEPA | high-efficiency particulate air filtration system |
| HFC | Hydrofluorocarbon |
| HIC | chronic hazard index |
| HICR | Residential Chronic Health Index |
| HICW | Worker Chronic Health Index |
| HRA | Health Risk Assessment |
| H ₂ S | Hydrogen Sulfide |
| IS | Initial Study |
| LACFD | Los Angeles County Fire Department |
| LACSD | Los Angeles County Sanitation District |
| LOS | Level of Service |
| MEIR | Maximum Exposed Individual Resident |
| MEIW | Maximum Exposed Individual Worker |
| MICR | maximum individual cancer risk |
| MMTCO ₂ e | Million Metric Tons of Carbon Dioxide equivalent |
| mg/m ³ | milligrams per cubic meter |

| Acronym/Abbreviation | Definition |
|-----------------------------|---|
| MMBtu | Million British Thermal Unit |
| NAAQS | National Ambient Air Quality Standards |
| NESHAP | National Emissions Standards for Hazardous Air Pollutants |
| N ₂ O | Nitrous Oxide |
| NO | Nitric Oxide |
| NO ₂ | Nitrogen Dioxide |
| NO _x | Nitrogen Oxides |
| NOP | Notice of Preparation |
| NPDES | National Pollutant Discharge Elimination System |
| OSHA | Occupational Safety and Health Administration |
| O ₃ | Ozone |
| PCF | perfluorocarbons |
| PM ₁₀ | Suspended Particulate Matter; Ten micron Particulates |
| PM _{2.5} | Fine Particulate Matter |
| ppm | Parts per million |
| PTE | potential to emit |
| RCRA | Resource Conservation and Recovery Act |
| RWQCB | Regional Water Quality Control Board |
| ROG | Reactive Organic Gases |
| RTO | Regenerative Thermal Oxidizer |
| SCAQMD | South Coast Air Quality Management District |
| SF ₆ | Sulfur Hexafluoride |
| SAAQS | State Ambient Air Quality Standards |
| SCAG | Southern California Association of Governments |
| SO ₂ | Sulfur Dioxide |
| TAC | Toxic Air Contaminants |
| TCLP | Toxicity Characteristic Leaching Procedure |
| U.S. EPA | United States Environmental Protection Agency |
| µg/m ³ | micrograms per cubic meter |
| VOC | Volatile Organic Compound |
| WESP | Wet Electrostatic Precipitator |

**APPENDIX A – SCHOOLS WITHIN TWO-MILE RADIUS OF
THE QUEMETCO FACILITY**

Schools Within Two Miles of the Proposed Project

| School Name | Address | City | Zip Code | Distance (mi.) |
|---------------------------------------|-------------------------|------------------|----------|----------------|
| K-8 Schools | | | | |
| St. Mark's Lutheran School | 2323 Las Lomitas Dr. | Hacienda Heights | 91745 | 1.9 |
| Lassalette School | 14333 Lassalette St. | La Puente | 91744 | 1.5 |
| St. Joseph Catholic School | 15650 E. Temple Ave. | La Puente | 91744 | 1.8 |
| Saint Louis of France Catholic School | 630 Ardilla Ave. | La Puente | 91746 | 1.6 |
| Elementary Schools | | | | |
| Kwis Elementary School | 1925 Kwis Ave. | Hacienda Heights | 91745 | 1.6 |
| Workman Elementary School | 16000 Workman St. | La Puente | 91744 | 2.0 |
| Los Robles Elementary Academy | 1530 Ridley Ave. | Hacienda Heights | 91745 | 0.9 |
| Palm Elementary School | 14740 Palm Ave. | Hacienda Heights | 91745 | 0.6 |
| Wallen L. Andrews Elementary School | 1010 S. Caraway Dr. | Whittier | 90601 | 1.6 |
| Don Julian Elementary School | 13855 Don Julian Rd. | La Puente | 91746 | 0.9 |
| Sunset Elementary | 800 Tonopah Ave. | La Puente | 91744 | 1.5 |
| Temple Academy | 635 N. California Ave. | La Puente | 91744 | 1.3 |
| Sparks Elementary School | 15151 E. Temple Ave. | La Puente | 91744 | 1.4 |
| Nelson Elementary School | 330 N. California Ave. | La Puente | 91744 | 1.0 |
| Middle Schools | | | | |
| Newton Middle School | 15616 Newton St. | Hacienda Heights | 91745 | 1.8 |
| Orange Grove Middle School | 14505 Orange Grove Ave. | Hacienda Heights | 91745 | 1.0 |
| Sparks Middle School | 15100 E. Giordano St. | La Puente | 91744 | 1.4 |
| High Schools | | | | |
| Los Altos High School | 15325 Los Robles Ave. | Hacienda Heights | 91745 | 0.9 |
| La Puente High School | 15615 Nelson Ave. | La Puente | 91744 | 1.4 |
| Valley High School | 15430 Shadybend Dr. | Hacienda Heights | 91745 | 1.0 |
| Bassett High School | 755 Ardilla Ave. | La Puente | 91746 | 1.6 |



Prepared By:



Quemetco Capacity Upgrade Project
 720 S. 7th Avenue
 City of Industry, CA 91746

Description

Schools Within Two Miles of the Proposed Project

Scale

1" ~ 3500'

Date

April 2018

Figure

1

**APPENDIX B – SAN GABRIEL VALLEY WATER COMPANY
EMAIL**

Valerie Rosenkrantz

From: Dan Arrighi <darrighi@sgvwater.com>
Sent: Friday, April 29, 2016 2:29 PM
To: Valerie Rosenkrantz
Cc: Emily Lower; Robert J. DiPrimio; Matt Y. Yucelen; Kristofer J. Olsen
Subject: RE: request for confirmation of proposed water service expansion

Good afternoon Ms. Rosenkrantz:

San Gabriel Valley Water Company ("San Gabriel") is a public utility regulated by the California Public Utilities Commission ("Commission"). San Gabriel supplies water to customers in its service area in accordance with the company's tariff schedules and rules filed with the Commission.

The subject property is located entirely within San Gabriel's service area and San Gabriel currently provides public utility water service to the property through existing water distribution facilities. San Gabriel has the ability to produce and provide the additional water supply needed by Quemetco.

If you have any question or need additional information, please contact me.

Dan Arrighi

Water Resources Manager
San Gabriel Valley Water Company

From: Valerie Rosenkrantz [mailto:vrosenkrantz@insenv.com]
Sent: Friday, April 29, 2016 11:29 AM
To: Dan Arrighi
Cc: Emily Lower
Subject: request for confirmation of proposed water service expansion

Dear Mr. Arrighi,

As we just discussed, Quemetco located in the City of Industry has applied for an air permit amendment to increase its production levels. This could increase its water consumption by 100,000 gallons per day. Please confirm by reply email that San Gabriel Valley Water Company has the ability to produce the water to meet Quemetco's water needs through a "Will Serve" verification.

Thanks so much,
Valerie

VALERIE N. ROSENKRANTZ | Senior Consultant
Trinity Consultants, Inc.
719-685-1054 (Office) | 352-562-1520 (C) | email: vrosenkrantz@trinityconsultants.com
www.trinityconsultants.com



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