BOARD MEETING DATE: September 4, 2015 AGENDA NO. 41

PROPOSAL: Proposed Amended Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities

SYNOPSIS: In March 2015, the Board adopted amendments to Rule 1420.1, lowering the ambient lead concentration limit and adding other housekeeping and maintenance measures. At the March Board Hearing, staff was directed to return to the Board with a rule proposal to lower the point source lead emission rate to 0.003 lb/hr and other options. Proposed Amended Rule 1420.1 will lower the point source emission rate, clarify that the rule applies during closure, and include new provisions to ensure lead and arsenic emissions are appropriately controlled during closure and clean-up activities.

COMMITTEE: Stationary Source, June 19, 2015, Reviewed

RECOMMENDED ACTIONS:
Adopt the attached resolution:
1. Certifying the Final Subsequent Environmental Assessment for Proposed Amended Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities; and
2. Amending Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities.

Barry R. Wallerstein, D.Env.
Executive Officer

PF:JW:SN:MM

Background

Rule 1420.1 – Emission Standards for Lead from Large Lead-acid Battery Recycling Facilities controls emissions of lead and other toxic air contaminants from large lead-acid battery recycling facilities. The rule applies to lead-acid battery recycling facilities that process more than 50,000 tons of lead annually, namely Exide Technologies located

in Vernon, and Quemetco Inc. located in the City of Industry. The rule includes ambient lead and arsenic concentration limits, facility mass point source limits, as well as housekeeping and maintenance provisions such as regular cleaning periods, inspections and proper handling of lead containing dust and waste. In March 2015 the Governing Board adopted amendments to the rule, lowering the ambient lead concentration limit to 0.100 $\mu g/m^3$ and lowering the point source lead emission rate to 0.023 lb/hr, effective January 1, 2016, as well as adding other housekeeping and maintenance measures. The Governing Board also directed staff to return to the Governing Board within six months with a rule proposal to further lower the point source lead emission rate to 0.003 lb/hr and other options. In April 2015, Exide notified the California Department of Toxic Substances Control (DTSC) that the facility was permanently closing.

Proposal

Proposed Amended Rule (PAR) 1420.1 proposes to lower the lead point source emission limit from 0.045 pounds of lead per hour effective currently and 0.023 pounds of lead per hour effective January 1, 2016 to 0.003 pounds of lead per hour, effective on the date of adoption. The proposed lead emission rate has been achieved in practice, based on more than six years of source testing, at Quemetco.

The proposal also clarifies that Rule 1420.1 remains applicable to any large lead-acid battery recycling facility during closure, and includes new provisions to ensure lead and arsenic emissions are appropriately controlled during closure and clean-up activities. During the decontamination and demolition process, the facility will be required to continue ambient monitoring of lead and arsenic; comply with ambient standards for lead and arsenic; and submit a Compliance Plan for Closure Activities describing measures to ensure that ambient standards are met and contingency measures will be implemented in the event of an exceedance. Applicability of the proposed amended rule will cease when all District permits have been surrendered, the District verifies that DTSC has approved the facility's certification of final closure, and there have been no exceedances of ambient lead or arsenic limits for 12 consecutive months with at least one month occurring after the date of submittal of certification of final closure.

Public Process

PAR 1420.1 was developed through a public process. A Public Workshop was held on June 30, 2015. The proposed rule was also presented to the Stationary Source Committee on June 19, 2015.

Key Outstanding Issue

Overlapping jurisdiction with DTSC

The SCAQMD staff has received comments from both Quemetco and Exide voicing concerns that the proposed closure provisions may be pre-empted by state laws relating to hazardous waste management. The large lead-acid battery recycling facilities have also commented that the rule proposal could lead to indefinite stoppages of the closure

process. However, those hazardous waste laws specifically state they are not intended to limit the authority of other state or local agencies. Staff has consulted with DTSC staff and DTSC agrees there are no legal or logistical issues. SCAQMD has greater expertise in air monitoring issues and SCAQMD closure requirements will focus on air-related issues. SCAQMD and DTSC staffs have been working cooperatively with respect to closure requirements, and that cooperation is expected to continue.

California Environmental Quality Act

Pursuant to the California Environmental Quality Act (CEQA) Guidelines §15162 and §15252 and SCAQMD Rule 110, the SCAQMD staff prepared a Draft Subsequent Environmental Assessment (SEA) for proposed amended Rule 1420.1. The Draft SEA included a project description and analysis of potential adverse environmental impacts that could be generated from the proposed project. The environmental analysis in the Draft SEA concluded that PAR 1420.1 would not generate any significant adverse impacts. Because the project will not result in significant adverse impacts, mitigation measures were not required and, thus, not made a condition of the approval of this project. Findings were not required pursuant to the provisions of CEQA Guidelines §15091 and, thus, not adopted for this project. The Draft SEA was released for a 30-day public review and comment period beginning on July 21, 2015 and ending on August 20, 2015.

Subsequent to the public release of the Draft SEA, minor additions and modifications were made to the SEA for clarification purposes. However, none of the additions or modifications alters any conclusions nor provides new information of significance relative to the Draft document. As a result, these minor revisions do not require recirculation of the document pursuant to CEQA Guidelines §15073.5. Therefore, the document is now a Final SEA and is included as an attachment to this Board package.

Socioeconomic Analysis

The proposed amendments to Rule 1420.1 would affect two large lead-acid battery recycling facilities that process more than 50,000 tons of lead annually. The total compliance cost from the proposed amendments is estimated to be $0.7 million annually, where 97 percent is attributed to ambient monitoring during facility closure. An annual compliance cost of this magnitude, when compared to the relative total value of the local economy (about $1 Trillion), is expected to have no significant regional economic impacts. The socioeconomic assessment is part of the staff report.

AQMP and Legal Mandates

Pursuant to Health & Safety Code Section 40460 (a), the SCAQMD is required to adopt an Air Quality Management Plan (AQMP) demonstrating compliance with all federal regulations and standards. The SCAQMD is required to adopt rules and regulations that carry out the objectives of the AQMP. PAR 1420.1 is not a control measure of the 2012

AQMP but is needed to reduce exposure and associated health risk impacts from lead, arsenic and other toxic emissions from large lead-acid battery recycling facilities. However, PAR 1420.1 will be submitted for inclusion into the State Implementation Plan as a contingency measure to become federally enforceable upon a determination by the U.S. Environmental Protection Agency that all or part of the District has failed to attain the National Ambient Air Quality Standard for Lead by the time required by the federal Clean Air Act.

Implementation and Resource Impact
Existing SCAQMD resources will be used to implement PAR 1420.1.

Attachments
A. Summary of Proposal
B. Key Issues and Responses
C. Rule Development Process
D. Key Contacts List
E. Resolution
F. Proposed Amended Rule 1420.1 Rule Language
G. Proposed Amended Rule 1420.1 Staff Report
H. Final Subsequent Environmental Analysis

ATTACHMENT A

SUMMARY OF PROPOSAL

Proposed Amended Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities

Applicability

- Clarifies that Rule 1420.1 is applicable throughout closure activities.

Lead Point Source Emissions Controls

- Effective upon date of adoption, the total facility mass lead emission rate from all point sources will be reduced from 0.045 pounds of lead per hour effective currently and 0.023 pounds of lead per hour effective January 1, 2016 to 0.003 pounds of lead per hour effective upon date of adoption.
- Removed single lead point emission limit of 0.01 pounds of lead per hour since the overall emission rate is substantially lower.

Source Testing

- Requires annual source testing for point sources that emit lead. Removes biennial source testing option.

Curtailment Requirements

- Curtailment provisions revised to be consistent with proposed changes to the overall lead point source limit.

Facility Closure

- Clarifies that continuance of daily lead and arsenic ambient monitoring and compliance with ambient lead and arsenic ambient concentration limits is required through closure.
- Requires the submittal of a Compliance Plan for Closure Activities which will contain the following:
    - Description of measures that will be implemented to ensure lead and arsenic ambient concentration limits can be met during closure activities.
    - Contingency measures to be implemented in the event of an exceedance.
- If there is an exceedance of lead or arsenic ambient concentration limits, requires temporary suspension of closure activities that contributed to the exceedance until contingency measures can be implemented.

Exemption

- Provides relief from specified provisions of the rule once a facility has permanently ceased production and notified the Executive Officer in writing that the facility is permanently closing.

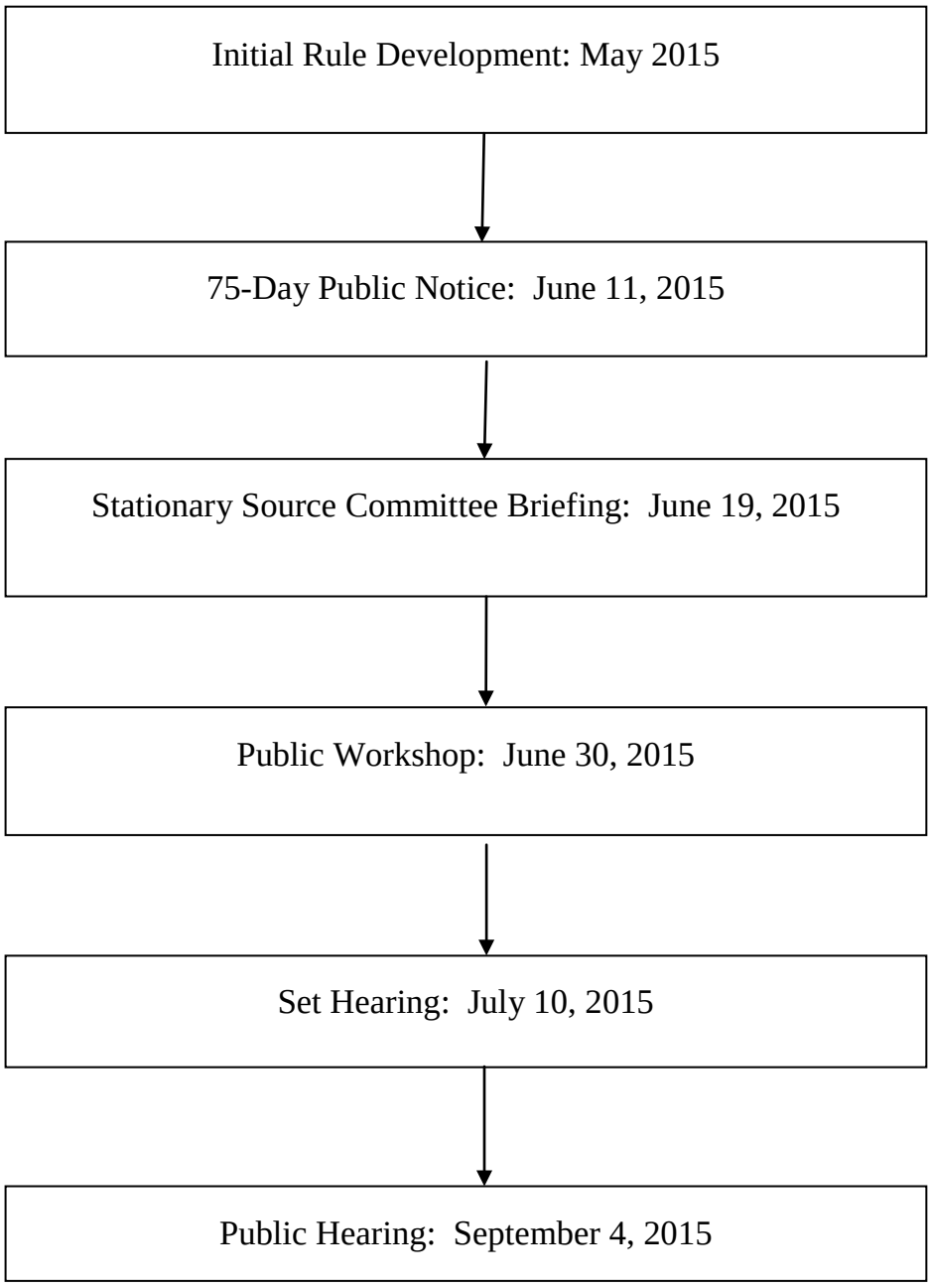
ATTACHMENT B
KEY ISSUES AND RESPONSES

Proposed Amended Rule (PAR) 1420.1 – Emissions Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities
• Overlapping Jurisdiction with DTSC: The SCAQMD staff has received comments from both Quemetco and Exide that the proposed closure provisions may overlap or conflict with DTSC's jurisdiction. The large lead-acid battery recycling facilities have commented that the District's rule may be pre-empted by state laws relating to hazardous waste management and the rule proposal could lead to indefinite stoppages of the closure process in conflict with DTSC's closure requirements. These claims lack merit because: o SCAQMD retains its authority to regulate air emissions from stationary sources. The state's hazardous waste laws specifically state they are not intended to limit the authority of other state or local agencies. o SCAQMD staff has consulted with DTSC staff and there are no legal or logistical conflicts between DTSC requirements and PAR 1420.1. DTSC's regulatory authority is flexible such that its plans and schedule can be modified if needed. o SCAQMD and DTSC staffs have been working cooperatively in developing the air emission control requirements for Exide and that cooperative process is expected to continue throughout the entire closure process. o The proposed rule's Compliance Plan for Closure Activities is a mechanism to prevent exceedances that could occur while conducting closure activities. The Compliance Plan for Closure Activities will also include contingency measures that can be quickly implemented if there is an exceedance of lead or arsenic ambient concentration limits.

ATTACHMENT C

RULE DEVELOPMENT PROCESS

Proposed Amended Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities



ATTACHMENT D
KEY CONTACTS LIST

Alta Environmental

Department of Toxic Substances Control

Duncan McKee (Quemetco Community Member)

East Yard Communities for Environmental Justice

E4 Strategic Solutions, Inc.

Exide Technologies

RSR Corporation

Sheppard & Mullin

Thomas Lohff (Quemetco Community Member)

ATTACHMENT E

RESOLUTION NO. 15-_____

A Resolution of the Governing Board of the South Coast Air Quality Management District (SCAQMD) certifying the Final Subsequent Environmental Assessment (SEA) for Proposed Amended Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-acid Battery Recycling Facilities.

A Resolution of the SCAQMD Governing Board Adopting Proposed Amended Rule (PAR) 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-acid Battery Recycling Facilities.

WHEREAS, the SCAQMD Governing Board finds and determines that the proposed amendments to PAR 1420.1 are considered a "project" pursuant to the California Environmental Quality Act (CEQA); and

WHEREAS, the Draft SEA determined the proposed project would result in no significant adverse environmental impacts; and

WHEREAS, the SCAQMD has had its regulatory program certified pursuant to Public Resources Code §21080.5 and has conducted CEQA review and analysis pursuant to such program (SCAQMD Rule 110); and

WHEREAS, the SCAQMD staff has prepared a Draft Subsequent Environmental Assessment (SEA) pursuant to its certified regulatory program and CEQA Guidelines §15162 and §15251, setting forth the potential environmental consequences of PAR 1420.1; and

WHEREAS, the Draft SEA was circulated for 30-day public review and comment period from July 22, 2015 to August 20, 2015; and

WHEREAS, no comment letters were received relative to the analysis presented in the Draft SEA and the Draft SEA has been revised such that it is now a Final SEA; and

WHEREAS, it is necessary that the adequacy of the Final SEA, including responses to comments, be determined by the SCAQMD Governing Board prior to its certification; and

WHEREAS, the Final SEA reflects the independent judgment of the SCAQMD; and

WHEREAS, a Mitigation Monitoring Plan pursuant to Public Resources Code §21081.6, has not been prepared since no mitigation measures are necessary; and

WHEREAS, the SCAQMD Governing Board finds and determines, taking into consideration the factors in section (d)(4)(D) of the Governing Board Procedures (codified as Section 30.5(4)(D) of the Administrative Code), that the modifications which have been made to PAR 1420.1 since notice of public hearing was published do not significantly change the meaning of the proposed project within the meaning of Health and Safety Code §40726 and would not constitute significant new information requiring recirculation of the Draft SEA pursuant to CEQA Guidelines §15073.5; and

WHEREAS, the SCAQMD Governing Board voting on PAR 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-acid Battery Recycling Facilities, has reviewed and considered the Final SEA prior to its certification; and

WHEREAS, lead has been identified as a toxic air contaminant by the Office of Environmental Health Hazard Assessment (OEHHA); and

WHEREAS, the SCAQMD Governing Board directed staff to return to the SCAQMD Governing Board with a proposal to lower the overall point source lead emission limit to 0.003 pounds per hour and other options; and

WHEREAS, the SCAQMD staff conducted a public workshop regarding PAR 1420.1 on June 30, 2015; and

WHEREAS, California Health and Safety Code §40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report; and

WHEREAS, PAR 1420.1 is needed to further protect public health by reducing lead emissions from large lead-acid battery recycling facilities. The proposed amended rule establishes a lower lead point source emission limit, clarifies that the rule remains applicable during closure activities, and establishes additional closure requirements necessary to ensure that attainment with the lead NAAQS will be maintained and that surrounding communities suffer no

degradation in air quality during closure, including demolition, cleanup and decontamination activities; and

WHEREAS, the SCAQMD Governing Board obtains its authority to adopt, amend or repeal rules and regulations from sections 39002, 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, 41700, and 41706 of the Health and Safety Code; and

WHEREAS, the SCAQMD Governing Board has determined that PAR 1420.1 is written and displayed so that the meaning can be easily understood by persons directly affected by it; and

WHEREAS, the SCAQMD Governing Board has determined that PAR 1420.1 will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Sections 40001 (rules to achieve and maintain ambient air quality standards), 41700 (nuisance), 41706(b) (emission standards for lead compounds from non-vehicular sources), Federal Clean Air Act Section 112 (Hazardous Air Pollutants), and CAA Section 116.

WHEREAS, the SCAQMD Governing Board has determined that PAR 1420.1 is in harmony with, and not in conflict with, or contradictory to, existing statutes, court decisions, or state or federal regulations; and

WHEREAS, the SCAQMD Governing Board has determined that PAR 1420.1 does not impose the same requirements as any existing state or federal regulations, and the proposed project is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD; and

WHEREAS, Health and Safety Code §40727.2 requires the SCAQMD to prepare a written analysis of existing federal air pollution control requirements applicable to the same source type being regulated whenever it adopts, or amends a rule, and that the SCAQMD's comparative analysis of PAR 1420.1 is included in the staff report; and

WHEREAS, PAR 1420.1 is not a control measure in the 2012 Air Quality Management Plan (AQMP) or the 2012 Lead State Implementation Plan and thus, was not ranked by cost-effectiveness relative to other AQMP control measures in the 2012 AQMP, and furthermore, pursuant to Health and Safety Code §40910, cost-effectiveness in terms of dollars per ton of pollutant reduced is only applicable to rules regulating ozone, carbon monoxide, sulfur dioxide, and nitrogen dioxide and does not apply to toxic air contaminants; and

WHEREAS, the SCAQMD Governing Board has determined that the Socioeconomic Assessment of PAR 1420.1 is consistent with the March 17, 1989 and October 14, 1994 Governing Board Socioeconomic Resolutions for rule adoption; and

WHEREAS, the SCAQMD Governing Board has determined that PAR 1420.1 will result in increased costs to the large lead-acid battery recycling facilities, yet are considered to be reasonable, with a total annualized cost as specified in the Socioeconomic Assessment; and

WHEREAS, the SCAQMD Governing Board has actively considered the Socioeconomic Assessment and has made a good faith effort to minimize such impacts; and

WHEREAS, the SCAQMD Governing Board has determined that the Socioeconomic Assessment is consistent with the provisions of the California Health and Safety Code Sections 40440.8, 40728.5, and 40920.6; and

WHEREAS, the SCAQMD Governing Board specifies the Director of PAR 1420.1 as the custodian of the documents or other materials which constitute the record of proceedings upon which the adoption of this proposed project is based, which are located at the South Coast Air Quality Management District, 21865 Copley Drive, Diamond Bar, California; and

WHEREAS, a public hearing has been properly noticed in accordance with all provisions of Health and Safety Code §40725; and

WHEREAS, the SCAQMD Governing Board has held a public hearing in accordance with all provisions of law; and

WHEREAS, the proposed amendments to Rule 1420.1 will be submitted for inclusion into the State Implementation Plan as a contingency measure to become federally enforceable upon a determination by U.S. Environmental Protection Agency that all or part of the South Coast Air Basin has failed to attain the National Ambient Air Quality Standard for lead by the time required by the Clean Air Act; and

WHEREAS, the SCAQMD staff has coordinated with the California Department of Toxic Substances Control regarding the closure provisions of PAR 1420.1.

NOW, THEREFORE BE IT RESOLVED, that the SCAQMD Governing Board does hereby certify that the Final SEA for PAR 1420.1 –

Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-acid Battery Recycling Facilities, was completed in compliance with CEQA and Rule 110 provisions; and that the Final SEA was presented to the SCAQMD Governing Board, whose members reviewed, considered and approved the information therein prior to acting on PAR 1420.1; and

BE IT FURTHER RESOLVED, that because no significant adverse environmental impacts were identified as a result of implementing PAR 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-acid Battery Recycling Facilities, a Statement of Findings, a Statement of Overriding Considerations, and a Mitigation Monitoring Plan are not required; and

BE IT FURTHER RESOLVED, that the SCAQMD Governing Board does hereby adopt, pursuant to the authority granted by law, PAR 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-acid Battery Recycling Facilities as set forth in the attached and incorporated herein by reference.

DATE: _____ _____

CLERK OF THE BOARDS

ATTACHMENT F

(Adopted November 5, 2010)(Amended January 10, 2014)
(Amended March 7, 2014)(Amended March 6, 2015)
PAR 1420.1t August 2015

PROPOSED AMENDED RULE 1420.1.

EMISSION STANDARDS FOR LEAD AND OTHER TOXIC AIR CONTAMINANTS FROM LARGE LEAD-ACID BATTERY RECYCLING FACILITIES

(a) Purpose

(1) The purpose of this rule is to protect public health by reducing exposure and emissions of lead from large lead-acid battery recycling facilities, and to help ensure attainment and maintenance of the National Ambient Air Quality Standard for Lead. The purpose of this rule is to also protect public health by reducing arsenic, benzene, and 1,3-butadiene exposure and emissions from these facilities.

(b) Applicability

(1) This rule applies to all persons who own or operate a lead-acid battery recycling facility that has processed more than 50,000 tons of lead a year in any one of the five calendar years prior to November 5, 2010, or annually thereafter, hereinafter a large lead-acid battery recycling facility. Applicability shall be based on facility lead processing records required under subdivision (m) of this rule, and Rule 1420 – Emissions Standards for Lead. Compliance with this rule shall be in addition to other applicable rules such as Rules 1407 and 1420. This rule shall cease to apply once all District permits have been surrendered to the District and the facility closure requirements in paragraph (p)(4) have been satisfied.

(c) Definitions

For the purposes of this rule, the following definitions shall apply:

(1) AGGLOMERATING FURNACE means a furnace used to melt flue dust that is collected from an emission control device, such as a baghouse, into a solid mass.

(2) AMBIENT AIR for purposes of this rule means outdoor air.

(3) ARSENIC means the oxides and other compounds of the element arsenic included in particulate matter, vapors, and aerosols.

(4) BATTERY BREAKING AREA means the plant location at which lead-acid batteries are broken, crushed, or disassembled and separated into components.

(5) BENZENE means an organic compound with chemical formula C_6H_6 and Chemical Abstract Service number 71-43-2.

(6) 1,3-BUTADIENE means an organic compound with chemical formula C_4H_6 and Chemical Abstract Service number 106-99-0.

(7) DRYER means a chamber that is heated and that is used to remove moisture from lead-bearing materials before they are charged to a smelting furnace.

(8) DRYER TRANSITION PIECE means the junction between a dryer and the charge hopper or conveyor, or the junction between the dryer and the smelting furnace feed chute or hopper located at the ends of the dryer.

(9) DUCT SECTION means a length of duct including angles and bends which is contiguous between two or more process devices (e.g., between a furnace and heat exchanger; baghouse and scrubber; scrubber and stack; etc.).

(10) EMISSION COLLECTION SYSTEM means any equipment installed for the purpose of directing, taking in, confining, and conveying an air contaminant, and which at minimum conforms to design and operation specifications given in the most current edition of *Industrial Ventilation, Guidelines and Recommended Practices,* published by the American Conference of Government and Industrial Hygienists, at the time a complete permit application is filed with the District.

(11) EMISSION CONTROL DEVICE means any equipment installed in the ventilation system of a point source or emission collection system for the purposes of collecting and reducing emissions of arsenic, benzene, lead, 1,3-butadiene, or any other toxic air contaminant.

(12) FUGITIVE LEAD-DUST means any solid particulate matter containing lead that is in contact with ambient air and has the potential to become airborne.

(13) FURNACE AND REFINING/CASTING AREA means any area of a large lead-acid battery recycling facility in which:

(a) Smelting furnaces or agglomerating furnaces are located; or

(b) Refining operations occur; or

(c) Casting operations occur.

(14) LEAD-ACID BATTERY RECYCLING FACILITY means any facility, operation, or process in which lead-acid batteries are disassembled and recycled into elemental lead or lead alloys through smelting.

(15) LEAD means elemental lead, alloys containing elemental lead, or lead compounds, calculated as elemental lead.

(16) LEEWARD WALL means the furthest exterior wall of a total enclosure that is opposite the windward wall.

(17) MAINTENANCE ACTIVITY means any of the following activities conducted outside of a total enclosure that generates or has the potential to generate fugitive lead-dust:

(a) building construction, renovation, or demolition;

(b) replacement or repair of refractory, filter bags, or any internal or external part of equipment used to process, handle, or control lead-containing materials;

(c) replacement of any duct section used to convey lead-containing exhaust;

(d) metal cutting or welding that penetrates the metal structure of any equipment, and its associated components, used to process lead-containing material, such that lead dust within the internal structure or its components can become fugitive lead-dust;

(e) resurfacing, grading, repair, or removal of ground, pavement, concrete, or asphalt; or

(f) soil disturbances, including but not limited to, soil sampling, soil remediation, or activities where soil is moved, removed, and/or stored.

(18) MATERIALS STORAGE AND HANDLING AREA means any area of a large lead-acid battery recycling facility in which lead-containing materials including, but not limited to, broken battery components, reverberatory furnace slag, flue dust, and dross, are stored or handled between process steps. Areas may include, but are not limited to, locations in which materials are stored in piles, bins, or tubs, and areas in which material is prepared for charging to a smelting furnace.

(19) MEASURABLE PRECIPITATION means any on-site measured rain amount greater than 0.01 inches in any complete 24-hour calendar day (i.e., midnight to midnight).

(20) PARTIAL ENCLOSURE for purposes of this rule means a structure comprised of walls or partitions on at least three sides or three-quarters of the perimeter that surrounds areas where maintenance activity is conducted, in order to prevent the generation of fugitive lead-dust.

(21) POINT SOURCE means any process, equipment, or total enclosure used in a large lead-acid battery recycling facility, including, but not limited to, agglomerating furnaces, dryers, smelting furnaces and refining kettles, whose emissions pass through a stack or vent designed to direct or control the exhaust flow prior to release into the ambient air.

(22) PROCESS means using lead or lead-containing materials in any operation including, but not limited to, the charging of lead-containing materials to smelting furnaces, lead refining and casting operations, and lead-acid battery breaking.

(23) RENOVATION for purposes of this rule means the altering of a building or permanent structure, or the removal of one or more of its components that generates fugitive lead-dust.

(24) SENSITIVE RECEPTOR means, for the purposes of this rule, any residence including private homes, condominiums, apartments, and living quarters; education resources such as preschools and kindergarten through grade twelve (k-12) schools; daycare centers; and health care facilities such as hospitals or retirement and nursing homes. A sensitive receptor includes long term care hospitals, hospices, prisons, and dormitories or similar live-in housing.

(25) SLAG means the inorganic material by-product discharged, in molten state, from a lead smelting furnace that has a lower specific gravity than lead metal and contains lead compounds. This shall include, but is not limited to, lead sulfate, lead sulfide, lead oxides, and lead carbonate consisting of other constituents charged to a smelting furnace which are fused together during the pyrometallurgical process.

(26) SMELTING means the chemical reduction of lead compounds to elemental lead or lead alloys through processing in high temperatures greater than 980° C.

(27) SMELTING FURNACE means any furnace where smelting takes place including, but not limited to, blast furnaces, reverberatory furnaces, rotary furnaces, and electric furnaces.

(28) STATIC DIFFERENTIAL FURNACE PRESSURE means the difference between the absolute internal pressure of the smelting furnace (P_f, in inches water column) and the absolute atmospheric pressure in the immediate vicinity outside the smelting furnace (P_a, in inches water column) and is calculated as follows: $P_f - P_a$.

(29) TOTAL ENCLOSURE means a permanent containment building/structure, completely enclosed with a floor, walls, and a roof to prevent exposure to the elements, (e.g., precipitation, wind, run-off), with limited openings to allow access and egress for people and vehicles, that is free of cracks, gaps, corrosion, or other deterioration that could cause or result in fugitive lead-dust.

(30) TOXIC AIR CONTAMINANT is an air pollutant which may cause or contribute to an increase in mortality or serious illness, or which may pose a present or potential hazard to human health.

(31) WINDWARD WALL means the exterior wall of a total enclosure which is most impacted by the wind in its most prevailing direction determined by a wind rose using data required under paragraph (j)(5) of this rule, or other data approved by the Executive Officer.

(d) General Requirements

(1) Ambient Air Concentration of Lead

The owner or operator of a large lead-acid battery recycling facility shall not discharge emissions into the atmosphere which contribute to ambient air concentrations of lead that exceed the following:

Effective Date	Ambient Air Concentration of Lead, micrograms per cubic meter ($\mu g/m^3$), averaged over 30 consecutive days
Prior to January 1, 2016	0.150 $\mu g/m^3$
January 1, 2016 to December 31, 2016	0.110 $\mu g/m^3$
On and after January 1, 2017	0.100 $\mu g/m^3$

An exceedance of the ambient air concentrations of lead specified in the above table shall occur if it is measured by any monitor installed pursuant to subdivision (j) or at any District-installed monitor.

(2) The owner or operator of a large lead-acid battery recycling facility shall maintain and operate total enclosures pursuant to subdivision (e) and lead point source emission control devices pursuant to paragraphs (f)(1) and (f)(6) through (f)(8).

(3) The owner or operator of a large lead-acid battery recycling facility shall submit a Compliance Plan if emissions are discharged into the atmosphere which contribute to ambient air concentrations of lead or arsenic that exceed the ambient concentrations in paragraph (g)(1).

(4) The owner or operator of a large lead-acid battery recycling facility shall:

(A) Within 30 days of January 10, 2014, submit a Compliance Plan Schedule to the Executive Officer for review and approval to ensure that the facility will comply with the January 1, 2015 total facility mass emissions limits for arsenic, benzene, and 1,3-butadiene point sources specified in paragraph (f)(2). The Compliance Plan Schedule shall be subject to plan fees specified in Rule 306 and include:

(i) a list of all control measures to be implemented that includes a description of the control technology, the equipment that will be affected, the affected pollutants, the anticipated reductions, and the dates the measures will be implemented; and

(ii) a schedule that identifies dates for completion of engineering design(s), equipment procurement, construction, demolition (if any), equipment installation, and testing for each control measure described pursuant to clause (d)(4)(A)(i).

(B) Submit complete permit applications for all equipment specified in the Compliance Plan Schedule that requires a District permit within 90 days of January 10, 2014.

(C) Complete all construction within 180 days of receiving Permit to Construct approvals from the Executive Officer.

(D) The owner or operator of a large lead-acid battery recycling facility shall not be subject to requirements of subparagraphs (d)(4)(A) through (d)(4)(C) if the most recent District-approved source tests, conducted no earlier than January 1, 2011, show that the facility is meeting all of the emission limits specified in paragraph (f)(2).

(5) Ambient Air Concentration of Arsenic

The owner or operator of a large lead-acid battery recycling facility shall not discharge emissions into the atmosphere which contribute to an ambient air concentration of arsenic that exceeds 10.0 nanograms per cubic meter (ng/m^3) averaged over a 24-hour time period as determined by monitors

pursuant to subdivision (j) or by any District-installed monitor. An exceedance of 10.0 ng/m^3 averaged over a 24-hour period shall be based on the average of the analysis of two sample results on the same filter. A second analysis is required if the first sample exceeds 10.0 ng/m^3.

(6) If the ambient air concentration of arsenic is determined to exceed 10.0 ng/m^3 averaged over a 24-hour time period as calculated pursuant to paragraph (d)(5), then the owner or operator shall notify the Executive Officer in writing within 72 hours of when the facility knew or should have known it exceeded the ambient air arsenic concentration of 10.0 ng/m^3 averaged over a 24-hour time period.

(7) The owner or operator of a large lead-acid battery recycling facility shall fund and participate in a multi-metal continuous emissions monitoring system (CEMS) demonstration program to continuously monitor lead, arsenic, and other metals emitted from a stack within its facility for a period specified by the District. Participation and funding of the multi-metals CEMS demonstration program shall require the owner or operator to:

(A) Submit payment to the District for District personnel or its contractor to assemble, install, maintain, train, test, analyze, and decommission a multi-metals CEMS demonstration program not to exceed the following amounts and schedule:

(i) $63,500 by April 1, 2014; and an additional

(ii) $143,225 by September 1, 2014

(B) Provide continuous facility access to District personnel and its contractors to deliver, assemble, install, monitor, maintain, test, analyze, and decommission a multi-metals CEMS;

(C) Provide the necessary location and infrastructure for the multi-metals CEMS including:

(i) siting location with sufficient spacing, clearance, and structural support;

(ii) electric power circuits;

(iii) compressed air;

(iv) sampling port(s);

(v) access to wireless modem connection for data retrieval;

(vi) any necessary moving or lifting equipment and personnel to operate such equipment in order to install the system; and

(vii) day to day instrument and equipment operation.

(e) Total Enclosures

(1) Enclosure Areas

The owner or operator of a large lead-acid battery recycling facility shall enclose within a total enclosure the following areas in groups or individually:

(A) Battery breaking areas;

(B) Materials storage and handling areas, excluding areas where unbroken lead-acid batteries and finished lead products are stored;

(C) Dryer and dryer areas including dryer transition pieces, charging hoppers, chutes, and skip hoists conveying any lead-containing material;

(D) Smelting furnaces and smelting furnace areas charging any lead-containing material;

(E) Agglomerating furnaces and agglomerating furnace areas charging any lead-containing material; and

(F) Refining and casting areas.

(2) Total Enclosure Emissions Control

The owner or operator of a large lead-acid battery recycling facility shall vent each total enclosure to an emission collection system that ducts the entire gas stream which may contain lead to a lead emission control device and the entire gas stream which may contain arsenic to an arsenic emission control device, respectively, pursuant to subdivision (f).

(3) Total Enclosure Ventilation

Ventilation of the total enclosure at any opening including, but not limited to, vents, windows, passages, doorways, bay doors, and roll-ups shall continuously be maintained at a negative pressure of at least 0.02 mm of Hg (0.011 inches H_2O) measured pursuant to paragraph (e)(4).

(4) Digital Differential Pressure Monitoring Systems

The owner or operator of a large lead-acid battery recycling facility shall install, operate, and maintain a digital differential pressure monitoring system for each total enclosure as follows:

(A) A minimum of one building digital differential pressure monitoring system shall be installed and maintained at each of the following three walls in each total enclosure having a total ground surface area of 10,000 square feet or more:

(i) The leeward wall;

(ii) The windward wall; and

(iii) An exterior wall that connects the leeward and windward wall at a location defined by the intersection of a perpendicular line between a point on the connecting wall and a point on its furthest opposite exterior wall, and intersecting within plus or minus ten (±10) meters of the midpoint of a straight line between the two other monitors specified in clauses (e)(4)(A)(i) and (e)(4)(A)(ii). The midpoint monitor shall not be located on the same wall as either of the other two monitors described in clauses (e)(4)(A)(i) or (e)(4)(A)(ii).

(B) A minimum of one building digital differential pressure monitoring system shall be installed and maintained at the leeward wall of each total enclosure that has a total ground surface area of less than 10,000 square feet.

(C) Digital differential pressure monitoring systems shall be certified by the manufacturer to be capable of measuring and displaying negative pressure in the range of 0.01 to 0.2 mm Hg (0.005 to 0.11 inches H_2O) with a minimum increment of measurement of plus or minus 0.001 mm Hg (0.0005 inches H_2O).

(D) Digital differential pressure monitoring systems shall be equipped with a continuous strip chart recorder or electronic recorder approved by the Executive Officer. If an electronic recorder is used, the recorder shall be capable of writing data on a medium that is secure and tamper-proof. The recorded data shall be readily accessible upon request by the Executive Officer. If software is required to access the recorded data that is not readily available to the Executive Officer, a copy of the software, and all subsequent revisions, shall be provided to the Executive Officer at no cost. If a device is required to retrieve and provide a copy of such recorded data, the device shall be maintained and operated at the facility.

(E) Digital differential pressure monitoring systems shall be calibrated in accordance with manufacturer's specifications at least once every 12 calendar months or more frequently if recommended by the manufacturer.

(F) Digital differential pressure monitoring systems shall be equipped with a backup, uninterruptible power supply to ensure continuous operation of the monitoring system during a power outage.

(5) In-draft Velocity

The in-draft velocity of the total enclosure shall be maintained at ≥ 300 feet per minute at any opening including, but not limited to, vents, windows, passages, doorways, bay doors, and roll-ups. In-draft velocities for each total enclosure shall be determined by placing an anemometer, or an equivalent device approved by the Executive Officer, at the center of the plane of any opening of the total enclosure.

(f) Point Source Emissions Controls

The owner or operator of a large lead-acid battery recycling facility shall vent emissions from each lead, arsenic, benzene, and 1,3-butadiene point source to a lead, arsenic, benzene, and 1,3-butadiene emission control device, respectively, that meets the requirements of this subdivision and is approved in writing by the Executive Officer.

(1) Lead Point Source Emission Controls

The owner or operator of a large lead-acid battery recycling facility shall:

(A) On and after (date of adoption), meet a total facility mass lead emissions limit from all lead point sources that does not exceed 0.003 pound of lead per hour. ~~Prior to January 1, 2016, meet a total facility mass lead emissions from all lead point sources not to exceed 0.045 pounds of lead per hour. On and after January 1, 2016, meet a total facility mass lead emissions from all lead point sources not to exceed 0.023 pounds of lead per hour. The maximum emission rate for any single lead point source shall not exceed 0.010 pounds of lead per hour.~~ The total facility mass lead emission rate and maximum emission rates for any single lead point source shall be determined using the most recently approved source tests conducted on behalf of the facility or the District; and

(B) Install a secondary lead emission control device that controls lead emissions from the exhaust of the primary lead emission control device used for a dryer. The secondary lead emission control device shall be fitted with dry filter media, and the secondary lead control device shall only be used to vent the primary lead emission control

device used for the dryer. An alternative secondary lead control method that is equally or more effective for the control of lead emissions may be used if a complete application is submitted as part of the permit application required under paragraph (d)(2) and approved by the Executive Officer.

(2) Arsenic, Benzene and 1,3-Butadiene Point Source Emission Controls

The mass emissions from all arsenic, benzene, and 1,3-butadiene point sources at a large lead-acid battery recycling facility shall meet the following hourly emissions thresholds for the dates specified:

(A) No later than 60 days after January 10, 2014, the total facility emission rate for a large lead-acid battery recycling facility from all point sources shall not exceed 0.00285 pound of arsenic per hour.

(B) No later than January 1, 2015, the total facility emission rate for a large lead-acid battery recycling facility from all point sources shall not exceed 0.00114 pound of arsenic per hour.

(C) No later than January 1, 2015, the total emission rate for a large lead-acid battery recycling facility from all point sources excluding point sources from emission control devices on total enclosures shall not exceed the following:

(i) 0.0514 pound of benzene per hour; and

(ii) 0.00342 pound of 1,3-butadiene per hour.

(D) The point source mass emission rates shall be determined based on the average of triplicate samples, using the most recent District-approved source tests conducted by the facility or the District, pursuant to subdivision (k).

(E) For purposes of this rule, only point sources that have a source test result of greater than 1 part per billion shall be included in determining the total facility mass emission rates for benzene and 1,3-butadiene.

(3) Monitoring Device

The owner or operator of a large lead-acid battery recycling facility shall, for each smelting furnace, install, calibrate, operate and maintain a monitoring device that has been approved by the Executive Officer pursuant to paragraph (f)(4). The monitoring device shall measure and record the static differential furnace pressure in inches water column. Each smelting furnace shall be operated such that static differential furnace pressure, in inches of

water column averaged over 30 minutes, is maintained at a value -0.02 or more negative. A reverberatory furnace may be operated at an alternative static differential furnace pressure if the owner or operator can demonstrate that it can achieve emission reductions that are equivalent to or better than those achieved when operating at a pressure of -0.02 or more negative. Demonstration shall be based on source test protocols and source tests conducted pursuant to the requirements of subdivision (k) and approved by the Executive Officer. The alternative static differential furnace pressure shall not exceed 0.4 inches water column and must be approved by the Executive Officer in the Continuous Furnace Pressure Monitoring Plan of paragraph (f)(4). For the purposes of this requirement, the owner or operator shall ensure that the monitoring device:

(A) Continuously measures the instantaneous static differential furnace pressure;

(B) Has a resolution of at least 0.01 inches water column;

(C) Has an increment of measurement of 0.01 inches water column;

(D) Has a range from -10 inches to +10 inches water column for the measuring device;

(E) Is equipped with ports to allow for periodic calibration in accordance with manufacturer's specifications;

(F) Is calibrated according to manufacturer's specifications at a frequency of not less than twice every calendar year;

(G) Is equipped with a continuous data acquisition system (DAS). The DAS shall record the data output from the monitoring device at a frequency of not less than once every sixty (60) seconds;

(H) Generates a data file from the computer system interfaced with each DAS each calendar day. The data file shall be saved in electronic ASCII character format, Microsoft Excel (xls or xlsx) format, PDF format, or other format as approved by the Executive Officer. The file shall contain a table of chronological date and time and the corresponding data output value from the monitoring device in inches of water column. The operator shall prepare a separate data file each day showing the 30-minute average pressure readings recorded by this device each calendar day; and

(I) Is maintained in accordance with manufacturer's specifications.

(4) No later than 30 days after January 10, 2014, the owner or operator of a

large lead-acid battery recycling facility shall submit to the Executive Officer for approval an application for a Continuous Furnace Pressure Monitoring (CFPM) Plan for the monitoring device required in paragraph (f)(3). The CFPM Plan shall contain the information identified in Appendix 3 of this rule and is subject to the fees specified in Rule 306.

(5) The Executive Officer shall notify the owner or operator in writing whether the CFPM Plan is approved or disapproved. Determination of approval status shall be based on, at a minimum, submittal of information that satisfies the criteria set forth in paragraph (f)(4). If the CFPM Plan is disapproved, the owner or operator shall resubmit the CFPM Plan, subject to plan fees specified in Rule 306, within 30 calendar days after notification of disapproval of the CFPM Plan. The resubmitted CFPM Plan shall include any information necessary to address deficiencies identified in the disapproval letter. It is a violation of the rule for a facility not to have an approved CFPM Plan after the second denial. If the resubmitted CFPM Plan is denied, the operator or owner may appeal the denial by the Executive Officer to the Hearing Board pursuant to Rule 216 – Appeals and Rule 221 - Plans.

(6) For any emission control device that uses filter media other than a filter bag(s), including, but not limited to, HEPA and cartridge-type filters, the filter(s) used shall be rated by the manufacturer to achieve a minimum of 99.97% capture efficiency for 0.3 micron particles.

(7) For any emission control device that uses a filter bag(s), the filter bag(s) used shall be polytetrafluoroethylene membrane-type, or any other material that is equally or more effective for the control of lead emissions, and approved for use by the Executive Officer.

(8) Each emission collection system and emission control device subject to this subdivision shall, at minimum, be inspected, maintained, and operated in accordance with the manufacturer's specifications.

(9) The owner or operator of a large lead-acid battery recycling facility shall comply with the curtailment requirements in subdivision (o) if the total facility mass lead emissions from all lead point sources exceeds the limits specified in subparagraph (f)(1)(A), and/or the total facility emission rate from all arsenic point sources exceeds the limits specified in subparagraph (f)(2)(A) or (f)(2)(B).

(g) Compliance Plan

(1) The owner or operator of a large lead-acid battery recycling facility shall submit a Compliance Plan if emissions are discharged into the atmosphere which contribute to ambient air concentrations of lead or arsenic that exceed the following:

Air Contaminant	Effective Date	Ambient Air Concentration
Lead	Prior to January 1, 2016	0.120 μg/m^3, averaged over 30 consecutive days
	January 1, 2016 to December 31, 2106	0.110 μg/m^3, averaged over 30 consecutive days
	On and after January 1, 2017	0.100 μg/m^3, averaged over 30 consecutive days
Arsenic	On and after February 1, 2014	8 ng/m^3, averaged over a 24 hour time period as determined under paragraph (g)(8)

The ambient air concentrations of lead and arsenic shall be determined by monitors pursuant to subdivision (j) or at any District-installed monitor.

(2) The owner of operator of a large lead-acid battery recycling facility shall notify the Executive Officer in writing within 72 hours of when the facility knew or should have known it exceeded an ambient air concentration of lead or arsenic specified in paragraph (g)(1). Notification shall only be required the first time the ambient air concentration of lead or arsenic exceeds the concentration limits in paragraph (g)(1) for each monitor.

(3) The owner or operator of a large lead-acid battery recycling facility shall submit, within 30 calendar days of exceeding an ambient air concentration of lead or arsenic pursuant to paragraph (g)(1), a complete Compliance Plan to the Executive Officer for review and approval, subject to plan fees as specified in Rule 306. The Compliance Plan shall, at a minimum, include the following:

(A) A description of additional lead and/or arsenic emission reduction measures to achieve the ambient air concentration of lead as specified in paragraph (d)(1), or the ambient air concentration of

arsenic of 10.0 ng/m^3 averaged over a 24-hour time period, as required under paragraph (d)(5), including, but not limited to, requirements for the following:

(i) Housekeeping, inspection, and maintenance activities;

(ii) Additional total enclosures;

(iii) Modifications to lead and arsenic emission control devices;

(iv) Installation of multi-stage lead and arsenic emission control devices;

(v) Process changes including reduced throughput limits;

(vi) Conditional curtailments including, at a minimum, information specifying the curtailed processes, process amounts, and length of curtailment; and

(vii) Identification of lead and/or arsenic reduction measures to be implemented relative to increasing ranges of exceedance levels of the ambient air concentration limits.

(B) The locations within the facility and method(s) of implementation for each lead and/or arsenic reduction measure of subparagraph (g)(3)(A); and

(C) An implementation schedule for each lead and/or arsenic emission reduction measure of subparagraph (g)(3)(A) to be implemented if lead and/or arsenic emissions discharged from the facility contribute to ambient air concentrations of lead that exceed the requirements in paragraph (d)(1), or ambient air concentrations of arsenic that exceed 10.0 ng/m^3 averaged over a 24-hour time period, measured at any monitor pursuant to subdivision (j) or at any District-installed monitor. The schedule shall also include a list of the lead and/or arsenic reduction measures of subparagraph (g)(2)(A) that can be implemented immediately, prior to plan approval.

(4) The Executive Officer shall notify the owner or operator in writing whether the Compliance Plan is approved or disapproved. Determination of approval status shall be based on, at a minimum, submittal of information that satisfies the criteria set forth in paragraph (g)(2), and whether the plan is likely to lead to avoiding future exceedances of the ambient air concentration levels set forth in paragraph (g)(1). If the Compliance Plan is disapproved, the owner or operator shall resubmit the Compliance Plan, subject to plan fees specified in Rule 306, within 30 calendar days after

notification of disapproval of the Compliance Plan. The resubmitted Compliance Plan shall include any information necessary to address deficiencies identified in the disapproval letter. It is a violation of the rule for a facility not to have an approved Compliance Plan after the second denial. If the resubmitted Compliance Plan is denied, the operator or owner may appeal the denial by the Executive Officer to the Hearing Board under Rule 216 – Appeals and Rule 221 - Plans.

(5) The owner or operator shall implement measures based on the schedule in the approved Compliance Plan if lead emissions discharged from the facility contribute to ambient air concentrations of lead to exceed the requirements in paragraph (d)(1) or an ambient air concentration of arsenic of 10.0 ng/m^3 averaged over a 24-hour time period as determined in paragraph (d)(5), measured at any monitor pursuant to subdivision (j) or at any District-installed monitor.

(6) The owner or operator may make a request to the Executive Officer to modify or update an approved Compliance Plan.

(7) The owner or operator shall update the Compliance Plan 12 months from January 10, 2014 and annually thereafter, in order to update measures that have been implemented and to identify any new measures that can be implemented.

(8) An exceedance of an ambient air concentration of arsenic of 8.0 ng/m^3 averaged over a 24-hour period shall be based on the average of the analysis of two sample results on the same filter. A second analysis is required if the first sample exceeds 8.0 ng/m^3.

(h) Housekeeping Requirements

The owner or operator of a large lead-acid battery recycling facility shall control fugitive lead-dust by conducting all of the following housekeeping practices:

(1) Clean by wet wash or a vacuum equipped with a filter(s) rated by the manufacturer to achieve a 99.97% capture efficiency for 0.3 micron particles in a manner that does not generate fugitive lead-dust, the following areas at the specified frequencies, unless located within a total enclosure vented to a lead emission control device. Days of measurable precipitation in the following areas occurring within the specified timeframe of a required cleaning frequency may be counted as a cleaning:

(A) Monthly cleanings of roof tops on structures $\leq$ 45 feet in height that

house areas associated with the storage, handling or processing of lead-containing materials; and

(B) Quarterly cleanings, no more than 3 calendar months apart, of roof tops on structures > 45 feet in height that house areas associated with the storage, handling or processing of lead-containing materials; and

(C) Weekly cleanings of all areas where lead-containing wastes generated from housekeeping activities are stored, disposed of, recovered or recycled.

(D) Initiate immediate cleaning, no later than one hour, after any maintenance activity or event including, but not limited to, accidents, process upsets, or equipment malfunction, that causes deposition of fugitive lead-dust onto areas specified in subparagraph (h)(1)(A) through (h)(1)(C). If the facility can demonstrate that delays were due to safety or timing issues associated with obtaining equipment required to implement this requirement, immediate cleanings of roof tops shall be completed within 72 hours.

(2) Inspect all total enclosures and facility structures that house, contain or control any lead point source or fugitive lead-dust emissions at least once a month. Any gaps, breaks, separations, leak points or other possible routes for emissions of lead or fugitive lead-dust to ambient air shall be permanently repaired within 72 hours of discovery. The Executive Officer may approve a request for an extension beyond the 72-hour limit if the request is submitted before the limit is exceeded.

(3) Upon receipt, immediately send any lead-acid battery that is cracked or leaking to the battery breaking area for processing or storage pursuant to paragraph (h)(6).

(4) Pave, concrete, asphalt, or otherwise encapsulate all facility grounds as approved by the Executive Officer. Facility grounds used for plant life that are less than a total surface area of 100 square feet shall not be subject to encapsulation. Facility grounds requiring removal of existing pavement, concrete, asphalt or other forms of encapsulation necessary for maintenance purposes shall not require encapsulation while undergoing work, and shall be re-encapsulated immediately after all required work is completed. All work shall be conducted in accordance with subdivision (i).

(5) Remove any weather cap installed on any stack that is a source of lead emissions.

(6) Store all materials capable of generating any amount of fugitive lead-dust including, but not limited to, slag and any other lead-containing waste generated from the housekeeping requirements of subdivision (h) and maintenance activities of subdivision (i), in sealed, leak-proof containers, unless located within a total enclosure.

(7) Transport all materials capable of generating any amount of fugitive lead-dust including, but not limited to, slag and any other waste generated from housekeeping requirements of subdivision (h), within closed conveyor systems or in sealed, leak-proof containers, unless located within a total enclosure.

(8) Initiate removal of any lead-containing material, including sludge, from the entire surface area of any surface impoundment pond or reservoir holding storm water runoff or spent water from housekeeping activities within 1 hour after the water level is $\leq$ 1 inch above the bottom of the pond or reservoir. Removal of lead-containing material is required to be completed as soon as possible, and no later than six calendar days after the time initiation of the removal was required. Thereafter, surfaces shall be washed down weekly in a manner that does not generate fugitive lead-dust until the pond or reservoir is used again for holding water.

(9) Maintain and Use an Onsite Mobile Vacuum Sweeper or Vacuum

The owner or operator of a large lead-acid battery recycling facility shall maintain an onsite mobile vacuum sweeper that is in compliance with District Rule 1186, or a vacuum equipped with a filter(s) rated by the manufacturer to achieve a 99.97% capture efficiency for 0.3 micron particles to conduct the following sweeping activities:

(A) Vacuum sweep all paved, concreted or asphalted facility areas subject to vehicular or foot traffic three times per day and occurring at least once per operating shift with each event not less than four hours apart, unless located within a total enclosure vented to a lead control device.

(B) Immediately vacuum sweep any area specified in subparagraph (h)(9)(A), no later than one hour after any maintenance activity or event including accidents, process upsets, or equipment malfunction that results in the deposition of fugitive lead-dust.

(C) Vacuum sweeping activities specified in paragraph (h)(9) shall not be required during days of measurable precipitation.

(10) Except when inside a total enclosure, all lead or arsenic containing trash and debris shall be placed in covered containers that remain covered at all times except when trash or debris is actively transferred. Trash and debris containers shall be free of liquid or dust leaks.

(11) Post signs at all entrances and truck loading and unloading areas indicating a plant-wide speed limit of 5 miles per hour.

(i) Maintenance Activity

(1) The owner or operator of a large lead-acid battery recycling facility shall conduct any maintenance activity in a negative air containment enclosure, vented to a permitted negative air machine equipped with a filter(s) rated by the manufacturer to achieve a 99.97% capture efficiency for 0.3 micron particles, that encloses all affected areas where fugitive lead-dust generation potential exists, unless located within a total enclosure or approved by the Executive Officer. Any maintenance activity that cannot be conducted in a negative air containment enclosure due to physical constraints, limited accessibility, or safety issues when constructing or operating the enclosure shall be conducted:

(A) In a partial enclosure, barring conditions posing physical constraints, limited accessibility, or safety issues;

(B) Using wet suppression or a vacuum equipped with a filter(s) rated by the manufacturer to achieve a 99.97% capture efficiency for 0.3 micron particles, at locations where the potential to generate fugitive lead-dust exists prior to conducting and upon completion of the maintenance activity. Wet suppression or vacuuming shall also be conducted during the maintenance activity barring safety issues;

(C) While collecting 24-hour samples at monitors for every day that maintenance activity is occurring notwithstanding paragraph (j)(2);

(D) Shall be stopped immediately when instantaneous wind speeds are $\geq$ 20 mph. Maintenance work may be continued if it is necessary to prevent the release of lead emissions;

(E) All concrete or asphalt cutting or drilling performed outside of a total enclosure shall be performed under 100% wet conditions; and

(F) Grading of soil shall only be performed on soils sufficiently wet to prevent fugitive dust.

(2) Store or clean by wet wash or a vacuum equipped with a filter(s) rated by

the manufacturer to achieve a 99.97% capture efficiency for 0.3 micron particles, all lead-contaminated equipment and materials used for any maintenance activity immediately after completion of work in a manner that does not generate fugitive lead-dust.

(j) Ambient Air Monitoring and Sampling Requirements

The owner or operator of a large lead-acid battery recycling facility shall conduct ambient air monitoring and sampling as follows:

(1) Collect samples from a minimum of four sampling sites. Locations for sampling sites shall be approved by the Executive Officer.

(A) Locations for sampling sites shall be based on maximum expected ground level lead and/or arsenic concentrations, at or beyond the property line, as determined by Executive Officer-approved air dispersion modeling calculations and emission estimates from all lead and arsenic point sources and fugitive lead-dust and arsenic-dust sources, and other factors including, but not limited to, population exposure and seasonal meteorology.

(B) The Executive Officer may require one or more of the four sampling sites to be at locations that are not based on maximum ground level lead and/or arsenic concentrations, and that are instead at locations at or beyond the property line that are representative of upwind or background concentrations.

(C) Sampling sites at the property line may be located just inside the fence line on facility property if logistical constraints preclude placement outside the fence line at the point of maximum expected ground level lead and/or arsenic concentrations.

(2) Collect ambient lead and arsenic samples as follows:

(A) Lead samples shall be collected daily as 24-hour, midnight-to-midnight, samples at all sites.

(B) Arsenic samples shall be collected daily as 24-hour, midnight-to-midnight, samples collected at all sites.

(C) If a 24-hour, midnight-to-midnight sample was not collected due to a monitor malfunction or other occurrence beyond the control of the facility, the owner or operator shall:

(i) Report with a notification made to 1-800-CUT-SMOG within 2 hours of knowing that the 24-hour, midnight-to-midnight

sample was not collected providing the facility name, name of the monitor, the date of the occurrence, and the reason that the 24-hour midnight-to-midnight sample was not collected; and

(ii) The operator shall not miss a 24-hour, midnight-to-midnight sample for more than one day over a consecutive 30 day period.

(3) Submit samples collected pursuant to paragraphs (j)(1) and (j)(2) to a laboratory approved under the SCAQMD Laboratory Approval Program for analysis within three calendar days of collection and calculate ambient lead and arsenic concentrations for individual 24-hour samples within 15 calendar days of the end of the calendar month in which the samples were collected. Duplicate samples shall be made available and submitted to the District upon request by the Executive Officer.

(4) Sample collection for lead and/or arsenic shall be conducted using Title 40, CFR 50 Appendix B - *Reference Method for the Determination of Suspended Particulate Matter in the Atmosphere (High Volume Method)*, or U.S. EPA-approved equivalent methods, and sample analysis for lead shall be conducted using Title 40, CFR 50 Appendix G - *Reference Method for the Determination of Lead in Suspended Particulate Matter Collected from Ambient Air*, or U.S. EPA-approved equivalent methods. Sample analysis for arsenic shall be conducted using U.S. EPA Compendium Method IO-3.5 - *Determination of Metals in Ambient Particulate Matter Using Inductively Coupled Plasma/Mass Spectrometry (ICP/MS); EPA Compendium Method IO-3.5; In IO Compendium of Methods for the Determination of Inorganic Compounds in Ambient Air.* Alternatively, sample analysis for arsenic may be conducted using the District's *Standard Operating Procedure for The Determination of Metals in Ambient Particulate Matter by Inductively Coupled Plasma Mass Spectrometry (ICP-MS)*.

(5) Continuously record wind speed and direction data at all times using equipment approved by the Executive Officer at a minimum of one location and placement approved by the Executive Officer.

(6) Ambient air quality monitoring shall be conducted by persons approved by the Executive Officer and sampling equipment shall be operated and maintained in accordance with U.S. EPA-referenced methods.

(7) All ambient air quality monitoring systems required by this subdivision shall

be equipped with a backup, uninterruptible power supply to ensure continuous operation of the monitoring system during a power outage.

(8) Cleaning activities including, but not limited to, wet washing and misting, that result in damage or biases to samples collected shall not be conducted within 10 meters of any sampling site required under this subdivision.

(9) If the owner or operator of a large lead-acid battery recycling facility exceeds an ambient air lead concentration pursuant to paragraph (d)(1),the owner or operator shall comply with the curtailment provisions of subdivision (o).

(10) If a large lead-acid battery recycling facility exceeds an ambient air concentration of arsenic of 10.0 ng/m^3 pursuant to paragraph (d)(5), the owner or operator shall comply with the curtailment requirements of subdivision (o).

(11) The owner or operator of a large lead-acid battery recycling facility shall retain lead and arsenic samples collected pursuant to this subdivision for one year. The samples shall be stored in an individually sealed container and labeled with the applicable monitor and date. Upon request, the samples shall be provided to the Executive Officer within one business day.

(k) Source Tests

(1) The owner or operator of a large lead-acid battery recycling facility shall conduct a source test of all lead point sources at least annually to demonstrate compliance with the mass emissions standards specified in subdivision (f). ~~If the results of the most recent source test for a lead point source demonstrating compliance with the lead emission standard of subdivision (f) are below an emission rate of 0.0012 pounds of lead per hour, the next test for that lead point source shall be performed no later than 24 months after the date of the most recent test.~~

(2) The owner or operator of a large lead-acid battery recycling facility shall conduct a source test for all arsenic point sources, and all benzene and 1,3-butadiene point sources, excluding emission control devices on total enclosures, at least annually to demonstrate compliance with the mass emissions standards specified in subdivision (f). If the results of the most recent source test demonstrating compliance with the arsenic, benzene, and 1,3-butadiene mass emissions standards of subdivision (f) are below the emission rates specified in subparagraphs (k)(2)(A) through (k)(2)(C), the

next source test for those point sources shall be performed no later than 24 months after the date of the most recent source test.

(A) 0.000860 pound of arsenic per hour;

(B) 0.0386 pound of benzene per hour; and

(C) 0.00257 pound of 1,3-butadiene per hour.

(3) The owner or operator of a large lead-acid battery recycling facility with a new or modified lead control device with initial start-up on or after November 5, 2010 shall conduct the initial source test for it within 60 calendar days after initial start-up.

(4) Prior to conducting a source test pursuant to paragraph (k)(1), (k)(2), (k)(3), or (k)(13), the owner or operator of a large lead-acid battery recycling facility shall submit a pre-test protocol to the Executive Officer for approval at least 60 calendar days prior to conducting the source test. The pre-test protocol shall include the source test criteria of the end user and all assumptions, required data, and calculated targets for testing the following:

(A) Target arsenic, benzene, lead, or 1,3-butadiene mass emission standard;

(B) Preliminary target pollutant analytical data;

(C) Planned sampling parameters; and

(D) Information on equipment, logistics, personnel, and other resources necessary for an efficient and coordinated test.

(5) The owner or operator of a large lead-acid battery recycling facility shall notify the Executive Officer in writing one week prior to conducting any source test required by paragraph (k)(1), (k)(2), (k)(3), or (k)(13).

(6) The owner or operator of a large lead-acid battery recycling facility shall notify the Executive Officer within three business days, including Mondays, of when the facility knew or should have known of any source test result that exceeds any of the emission standards specified in subdivision (f). Notifications shall be made to 1-800-CUT-SMOG and followed up in writing with the results of the source tests within seven (7) days of notification.

(7) Source tests shall be conducted while operating at a minimum of 80% of equipment permitted capacity and in accordance with any of the following applicable test methods:

(A) SCAQMD Method 12.1 - *Determination of Inorganic Lead Emissions from Stationary Sources Using a Wet Impingement Train*

(B) ARB Method 12 – *Determination of Inorganic Lead Emissions from Stationary Sources*

(C) EPA Method 12 – *Determination of Inorganic Lead Emissions from Stationary Sources*

(D) ARB Method 436 – *Determination of Multiple Metal Emissions from Stationary Sources*

(E) EPA Method TO-15 – *Determination of Volatile Organic Compounds (VOCs) in Air Collected in Specially-Prepared Canisters and Analyzed By Gas Chromatography/Mass Spectrometry (GC/MS)*

(F) CARB Method 410A – *Determination of Benzene from Stationary Sources (Low Concentration Gas Chromatographic Technique)*

(G) CARB Method 422.102 – *Determination of Volatile Organic Compounds (VOCs) in Emissions from Stationary Sources*

(8) The average of triplicate samples, obtained according to approved test methods specified in paragraph (k)(7), shall be used to determine compliance or to report source test results required under paragraph (k)(13).

(9) The operator may use alternative or equivalent source test methods as defined in U.S. EPA 40 CFR 60.2, approved in writing by the Executive Officer, in addition to the Air Resources Board or the U.S. EPA, as applicable.

(10) The operator shall use a test laboratory approved under the SCAQMD Laboratory Approval Program for the source test methods cited in this subdivision. If there is no approved laboratory, then approval of the testing procedures used by the laboratory shall be granted by the Executive Officer on a case-by-case basis based on SCAQMD protocols and procedures.

(11) When more than one source test method or set of source test methods are specified for any testing, the application of these source test methods to a specific set of test conditions is subject to approval by the Executive Officer. In addition, a violation established by any one of the specified source test methods or set of source test methods shall constitute a violation of the rule.

(12) An existing source test conducted on and after January 1, 2009 for lead emission control devices existing before November 5, 2010 may be used as the initial source test specified in paragraph (k)(1) to demonstrate compliance with the control standard of subdivision (f) upon Executive Officer approval. The source test shall meet, at a minimum, the following

criteria:

(A) The test is the most recent conducted since January 1, 2009;

(B) The test demonstrated compliance with the control standard of subdivision (f);

(C) The test is representative of the method to control emissions currently in use; and

(D) The test was conducted using applicable and approved test methods specified in paragraphs (k)(7), (k)(9), or (k)(10).

(13) Beginning January 10, 2014, the owner or operator of a large lead-acid battery recycling facility shall conduct two source tests for benzene and 1,3-butadiene emissions from all emission control devices on total enclosures as follows:

(A) First source test conducted no later than March 1, 2014.

(B) Second source test conducted no later than September 1, 2014.

(C) Source tests on all emission control devices on total enclosures must be completed within a time period of 72 hours or less.

(14) Testing conducted by the facility, by the District, or by a contractor acting on behalf of the District or the facility to determine compliance with this rule shall be performed according to the most recent District-approved test protocol for the same purpose or compounds.

(15) Reports from source testing conducted pursuant to subdivision (k) shall be submitted to the District in 90 days or less after completion of testing.

(l) New Facilities

The owner or operator of a large lead-acid battery recycling facility beginning construction or operations on and after November 5, 2010 shall:

(1) Demonstrate to the satisfaction of the Executive Officer that the facility is not located in an area that is zoned for residential or mixed use;

(2) Demonstrate to the satisfaction of the Executive Officer that the facility is not located within 1,000 feet from the property line of a sensitive receptor, a school under construction, park, or any area that is zoned for residential or mixed use. The distance shall be measured from the property line of the new facility to the property line of the sensitive receptor; and

(3) Submit complete permit applications for all equipment required by this rule prior to beginning construction or operations, and otherwise on or before the time required by District rules.

(m) Recordkeeping

(1) The owner or operator of a large lead-acid battery recycling facility shall keep records of the following:

(A) Daily records indicating amounts of lead-containing material processed, including, but not limited to, purchase records, usage records, results of analysis, or other District-approved verification to indicate processing amounts;

(B) Results of all ambient air lead and arsenic monitoring, meteorological monitoring, and other data specified by subdivision (j);

(C) Records of housekeeping activities completed as required by subdivision (h), maintenance activities of subdivision (i), and emission control device inspection and maintenance requirements of paragraph (f)(8), including the name of the person performing the activity, and the dates and times on which specific activities were completed; and

(D) Records of unplanned shutdowns of any smelting furnace including the date and time of the shutdown, description of the corrective measures taken, and the re-start date and time.

(2) The owner or operator of a large lead-acid battery recycling facility shall maintain all records for five years, and keep records onsite for at least two years.

(n) Reporting

(1) Ambient Air Monitoring Reports

(A) The owner or operator of a large lead-acid battery recycling facility shall report by the 15th of each month to the Executive Officer, the results of all ambient air lead and wind monitoring for each preceding month, or more frequently if determined necessary by the Executive Officer. The report shall include the results of individual 24-hour samples and 30-day rolling averages for each day within the reporting period.

(B) The owner or operator of a large lead-acid battery recycling facility shall report by the 15th of each month to the Executive Officer, the results of all ambient air arsenic and wind monitoring for each

preceding month, or more frequently if determined necessary by the Executive Officer and the owner or operator is notified in writing of the required frequency.

(C) Any exceedances of ambient air concentrations specified in paragraphs (d)(1) and (d)(5) shall be reported with a notification made to the 1-800-CUT-SMOG within 24 hours of receipt of the completed sample analysis required in paragraph (j)(3), followed by a written report to the Executive Officer no later than three calendar days after the notification. The written report shall include the causes of the exceedance and the specific corrective actions implemented.

(D) On and after July 1, 2015, the owner or operator of a large lead-acid battery recycling facility shall report the following information in writing to the Executive Officer within 72 hours of when the facility knew or should have known that the ambient air concentration of lead was greater than 0.300 $\mu g/m^3$ for any 24-hour sample:

(i) Date of the occurrence;

(ii) Name of the monitor;

(iii) Ambient lead concentration at the monitor for the 24 hour sample;

(iv) Potential cause or causes of the occurrence; and

(v) Potential remedies to prevent the reoccurrence.

(2) Shutdown, Turnaround, and Maintenance Activity Notification

The owner or operator of a large lead-acid battery recycling facility shall:

(A) Notify the Executive Officer and the public within one hour after an unplanned shutdown of any emission control device has occurred, regardless of whether any emissions were associated with or caused by the unplanned shutdown. If the unplanned shutdown involves a breakdown pursuant to Rule 430, the breakdown notification report required by Rule 430 shall serve in lieu of this notification to the Executive Officer. The notification shall include the following information:

(i) Date and time the unplanned shutdown of the emission control device(s) occurred;

(ii) Description of the shutdown emission control device and the processes and/or equipment vented by the emission control

device;

(iii) Description of when the processes and/or equipment vented by the emission control device were shutdown, including expected shutdown time;

(iv) Reason why the emission control device was shutdown;

(v) Total duration of the unplanned shutdown, if known; and

(vi) Facility contact name and phone number for further information regarding the unplanned shutdown.

(B) If an unplanned shutdown of any emission control device occurs, and the reason for the unplanned shutdown cannot be determined within the one-hour reporting period under subparagraph (n)(2)(A), the owner or operator shall investigate the reason for the unplanned shutdown and notify the Executive Officer of the reason for the unplanned shutdown within 5 business days of the event. If the reason for the unplanned shutdown is still not known within 5 business days of the event, the owner or operator shall notify the Executive Officer within 5 business days of the event and:

(i) Use an independent third party approved by the Executive Officer to conduct an investigation at the facility to determine the reason for the unplanned shutdown of any emission control device subject to this rule. The investigation shall include but is not limited to:

(I) Physically inspecting the control equipment and surrounding portions of the facility which may provide information to understand the reason for the unplanned shutdown of emission control equipment; and

(II) Reviewing equipment maintenance and operation records, logs, and other documentation which may provide information to understand the reason for the unplanned shutdown of emission control equipment;

(ii) Use an independent third party approved by the Executive Officer to inspect all equipment repaired or replaced in response to the unplanned shutdown of emission control equipment, to ensure affected control equipment can operate properly; and

(iii) Within 30 calendar days of the reported unplanned shutdown, provide a written report to the Executive Officer and the Director of the California Department of Toxic Substances Control. The owner or operator shall notify the Executive Officer if an approved independent third party is not available for use, or the list of approved independent third parties has not yet been developed by the Executive Officer, and shall submit the written report 30 days from when an approved third party is available. The written report shall include the following information:

(I) Date of the unplanned shutdown of emission control equipment;

(II) Reason for the unplanned shutdown of emission control equipment;

(III) List of all equipment repaired or replaced in response to the unplanned shutdown and corrective actions taken to prevent recurrence of the unplanned shutdown of emission control equipment; and

(IV) Written verification that the affected emission control equipment is operational. If the affected equipment is not operational, provide an approximate date the subject equipment is expected to be operational.

(iv) The owner or operator shall be responsible for reimbursement to the District for any and all expenses incurred by the independent third-party investigator in the investigation, inspection, and generation of a written report to determine the cause of an unplanned shutdown of any emission control equipment subject to this rule, as required by subparagraph (n)(2)(B). The owner or operator shall reimburse the District within 30 days of notification from the Executive Officer that payment is due.

(v) The reimbursement specified in clause (n)(2)(B)(iv) shall not exceed $12,000 per third-party investigation.

(C) Notify the Executive Officer and the public at least ten calendar days prior to a planned turnaround or shutdown of any smelting furnace, battery breaker, or emission control device subject to this rule that

results in arsenic, benzene, 1,3-butadiene, or lead emissions. The notification shall specify the subject equipment and the start and end date of the turnaround or shutdown period.

(D) Notify the Executive Officer at least ten calendar days prior to the beginning of maintenance activity, as defined in paragraph (c)(17), that is conducted routinely on a monthly or less frequent basis. The notification and report required under subparagraph (n)(2)(F) shall include, at a minimum, the following:

(i) Dates, times, and locations of activities to be conducted;

(ii) Description of activities;

(iii) Name of person(s)/company conducting the activities;

(iv) Lead abatement procedures, including those specified in subdivision (i), to be used to minimize fugitive lead-dust emissions; and

(v) Date of expected re-start of equipment.

(E) Notify the public at least ten calendar days prior to the beginning of building construction, renovation, or demolition, and resurfacing, repair, or removal of ground pavement, concrete or asphalt if such activities are conducted outside of a total enclosure and generate fugitive lead-dust. The notification shall include, at a minimum, the following:

(i) Dates, times, and locations of activities to be conducted;

(ii) Description of activities; and

(iii) Date of expected re-start of equipment.

(F) Provide the notification to the Executive Officer required under subparagraphs (n)(2)(A), (n)(2)(C), and (n)(2)(D) to 1-800-CUT-SMOG followed by a written notification report to the Executive Officer no later than three business days, including Mondays, after the unplanned shutdown occurred.

(G) Provide notification to the public required under subparagraphs (n)(2)(A), (n)(2)(C), and (n)(2)(E) through a facility contact or pre-recorded notification center that is accessible 24 hours a day, 7 days a week, and through electronic mail using a list of recipients provided by the Executive Officer. Another method of notification to the public may be used provided it is approved by the Executive Officer.

(H) Install a sign indicating the phone number for the facility contact or pre-recorded notification center that meets the following requirements, unless otherwise approved in writing by the Executive Officer:

(i) Installed within 50 feet of the main entrance of the facility and in a location that is visible to the public;

(ii) Measures at least 48 inches wide by 48 inches tall;

(iii) Displays lettering at least 4 inches tall with text contrasting with the sign background; and

(iv) Located between 6 and 8 feet above grade from the bottom of the sign.

(I) Install a sign indicating the phone number for the facility contact or pre-recorded notification center that meets the following requirements, unless otherwise approved in writing by the Executive Officer:

(i) Installed at all entrances and at intervals of 330 feet or less along the property line of the site or along the perimeter of the facility;

(ii) Measures at least 30 inches wide by 30 inches tall;

(iii) Displays lettering at least 2 inches tall with text contrasting with the sign background; and

(iv) Located between 6 and 8 feet above grade from the bottom of the sign; and

(v) In addition to the phone number, the sign shall also display, in English and Spanish, the following information:

Caution
Lead-Acid Battery Recycling Facility
Call before digging

(J) Notify the Executive Officer at least ten calendar days prior to a planned breach or within one hour after an unplanned breach to a total enclosure such that it no longer meets the definition of a total enclosure pursuant to paragraph (c)(29). The notification shall include the following information:

(i) Date and time of planned or unplanned breach to the total enclosure;

(ii) Explanation of breach to the total enclosure;

(iii) Total duration or if not known, estimated duration of breach to the total enclosure; and

(iv) Facility contact name and phone number for further information.

(3) Initial Facility Status Report

(A) Initial Facility Status Report Due Date

The owner or operator of a large lead-acid battery recycling facility existing before November 5, 2010 shall submit an initial facility status report to the Executive Officer no later than January 1, 2011. Large lead-acid battery recycling facilities beginning construction or initial operations after November 5, 2010 shall submit the initial compliance status report upon start-up.

(B) The initial facility status report shall contain the information identified in Appendix 1.

(4) Ongoing Facility Status Report

The owner or operator of a large lead-acid battery recycling facility shall submit a summary report to the Executive Officer to document the ongoing facility status.

(A) Frequency of Ongoing Facility Status Reports

The report shall be submitted annually on or before February 1 for all sources and shall include information covering the preceding calendar year.

(B) The content of ongoing facility status reports shall contain the information identified in Appendix 2.

(5) Adjustments to the Timeline for Submittal and Format of Reports

The Executive Officer may adjust the timeline for submittal of periodic reports, allow consolidation of multiple reports into a single report, establish a common schedule for submittal of reports, or accept reports prepared to comply with other state or local requirements. Adjustments shall provide the same information and shall not alter the overall frequency of reporting.

(o) Curtailment Requirements

(1) The owner or operator of a large lead-acid battery recycling facility shall implement the following mandatory daily process curtailments if emissions are discharged into the atmosphere which contribute to monitored ambient air concentrations of lead, as determined pursuant to paragraph (d)(1), and/or

ambient air concentrations of arsenic, as determined pursuant to paragraph (d)(5), that exceed the thresholds listed below in Table 1:

Table 1 – Process Curtailments Based on Ambient Air Concentrations of Lead and/or Arsenic

Air Contaminant	Monitored Ambient Air Concentration	Reduction in Feedstock Charged to Reverberatory Furnace
Lead	Prior to January 1, 2016: >0.150 – 0.230 µg/m^3 January 1, 2016 to December 31, 2016: >0.110 – 0.230 µg/m^3 On and after January 1, 2017: >0.100 – 0.230 µg/m^3	15%
	>0.230 – 0.300 µg/m^3	25%
	>0.300 – 0.375 µg/m^3	50%
	>0.375 µg/m^3	75%
Arsenic	>10.0 – 15.0 ng/m^3	15%
	>15.0 – 20.0 ng/m^3	25%
	>20.0 – 25.0 ng/m^3	50%
	>25.0 ng/m^3	75%

(A) The process curtailments for exceedances of the ambient air concentration of lead thresholds in Table 1 shall remain in effect until the monitoring results at each affected monitoring station are at or below the ambient lead concentration limits specified in paragraph (d)(1) for a period of 30 consecutive days, or the monitoring results at each affected monitoring station are at or below 0.100 µg/m^3 for at least 10 consecutive days and no other monitor exceeds the thresholds specified in subdivision (d); and

(B) The process curtailments for exceedances of the ambient air concentration of arsenic thresholds in Table 1 shall remain in effect until the monitoring results at each affected monitoring station are at or below 10.0 ng/m^3 of arsenic averaged over a 24-hour time period, for a period of at least 30 consecutive days.

(2) The owner or operator of a large lead-acid battery recycling facility shall implement the following mandatory daily process curtailments if the total facility mass emissions from all lead and/or arsenic point sources exceed the

thresholds listed below in Table 2:

Table 2 – Process Curtailments Based on Total Facility Mass Lead and/or Arsenic Emissions From All Point Sources

Effective Date	Air Contaminant	Total Facility Mass Emission Rate (lbs/hour)	Reduction in Feedstock Charged to Reverberatory Furnace
On and after ~~January 10,~~ ~~2014~~(date of adoption)	Lead	~~Prior to January 1, 2016 >0.045 – 0.0675~~ ~~On and after January 1, 2016~~ >~~0.023~~0.003 – 0.0675	15%
		>0.0675 – 0.09	25%
		>0.09 – 0.1125	50%
		>0.1125	75%
No later than 60 days after January 10, 2014 to December 31, 2014	Arsenic	>0.00285 – 0.00428	15%
		>0.00428 – 0.00570	25%
		>0.00570 – 0.00713	50%
		>0.00713	75%
On and after January 1, 2015	Arsenic	>0.00114 – 0.00171	15%
		>0.00171 – 0.00228	25%
		>0.00228 – 0.00285	50%
		>0.00285	75%

(A) The process curtailments in Table 2 shall remain in effect until the facility demonstrates compliance using the most recent District-approved source tests conducted by the facility or the District, pursuant to subdivision (k).

(3) Reductions in feedstock charged to the reverberatory furnace required by paragraphs (o)(1) or (o)(2) shall be based on the daily average of materials charged to the reverberatory furnace over the previous 90 days of operation prior to when the facility knew or should have known of the exceedance.

(4) The process curtailments in Table 1 and Table 2 shall begin within 48 hours of the time when the owner or operator receives sampling results indicating

an exceedance of any lead and/or arsenic threshold listed in Table 1 or Table 2.

(5) The owner or operator of a large lead-acid battery recycling facility may temporarily exceed the mandatory process curtailments specified in Table 1 of paragraph (o)(1) and Table 2 of paragraph (o)(2), only for the period of time required to perform source tests to demonstrate compliance with this rule.

(p) Large Lead-Acid Battery Recycling Facility Closure Requirements

The owner or operator of a large lead-acid battery recycling facility that has notified the Executive Officer that the facility will be permanently closing shall do the following:

(1) Continue daily arsenic and lead ambient monitoring in accordance with subdivision (j) and comply with the requirements in paragraphs (d)(1), (d)(5) and (d)(6);

(2) Within 90 days from (date of adoption) or ~~*notification,*~~ the date a large lead-acid battery recycling facility notified the Executive Officer that the facility will be permanently closing, whichever is later, submit a Compliance Plan for Closure Activities to the Executive Officer for review and approval, and upon approval shall implement the approved Compliance Plan. A Compliance Plan for Closure Activities is subject to plan fees as specified in Rule 306. The Compliance Plan for Closure Activities shall, at a minimum, include the following:

(A) A description of measures to ensure the ambient air concentration of lead and arsenic as specified in paragraphs (d)(1) and (d)(5) will not be exceeded;

(B) Additional contingency measures that can be implemented in the event there is an exceedance of the lead or arsenic ambient concentrations specified in paragraphs (d)(1) and (d)(5); and

(C) A schedule for implementing measures that coincide with the various California Department of Toxic Substances Control closure phases including inventory removal, decontamination, confirmation soil sampling, removal of equipment, building decontamination, ~~*confirmation sampling for the building,*~~ soil and soil gas sampling, and building demolition. Measures in the Compliance Plan for Closure Activities shall be updated periodically to reflect the

progression of closure activities.

(3) If the ambient air concentrations of lead or arsenic exceed the limits in paragraphs (d)(1) and (d)(5), the owner or operator shall temporarily suspend closure-related activities that contributed to the exceedance until contingency measures in the Approved Compliance Plan for Closure Activities ~~*can be*~~ are implemented. If a previously unidentified activity which the contingency measures do not address contributes to the exceedances, then a revised Compliance Plan for Closure Activities will be required to be submitted and approved by the Executive Officer, in consultation with the California Department of Toxic Substances Control, before closure related activities that contributed to the exceedances resume~~;~~.

(4) The applicability and all provisions of this rule will no longer apply when the Executive Officer determines the following criteria have been met:

(A) All SCAQMD permits have been surrendered to the Executive Officer;

(B) The lead-acid battery recycling facility has submitted certification of final closure, approved by the California Department of Toxic Substances Control, to the Executive Officer;

(C) The owner or operator of the large lead-acid battery recycling facility has received written confirmation from the Executive Officer that the final closure has been verified; and

(D) The facility has had no exceedances of ambient lead or arsenic concentrations pursuant to paragraph (d)(1) and (d)(5) for 12 consecutive months with at least one month occurring after the date of submittal of certification of final closure.

(q) Exemption

The owner or operator of a large lead-acid battery recycling facility that has permanently ceased production and has notified the Executive Officer that the facility will be permanently closing is exempt from all requirements in the rule except for paragraphs (d)(1), (d)(5) and (d)(6), and subdivisions (j) and (p).

(~~p~~r) Severability

If any provision of this rule is held by judicial order to be invalid, or invalid or inapplicable to any person or circumstance, such order shall not affect the validity of the remainder of this rule, or the validity or applicability of such provision to other persons or circumstances.

Appendix 1 – Content of Initial Facility Status Reports

Initial compliance status reports shall contain, at a minimum, the following information:

1. Facility name, District Facility ID number, facility address, owner/operator name, and telephone number.
2. The distance from the property line of the facility to the property line of the nearest commercial/industrial building and sensitive receptor.
3. Worker and sensitive receptor locations, if they are located within one-quarter mile from the center of the facility.
4. Building parameters
    - Stack heights in feet (point sources); or
    - Building area in square feet (volume sources).
5. A description of the types of lead processes performed at the facility.
6. The following information shall be provided for each of the last five calendar years prior to November 5, 2010:
    - Annual amount of lead-containing material processed;
    - The maximum and average daily and monthly operating schedules;
    - The maximum and average daily and monthly lead-processing rates for all equipment and processes;
    - The maximum and average daily and annual emissions of lead from all emission points and fugitive lead-dust sources.
7. The approximate date of intended source tests for all lead emission control devices, as required by subdivision (k) of this rule.
8. Engineering drawings, calculations or other methodology to demonstrate compliance with paragraphs (d)(1) and (k).
9. Air dispersion modeling calculations using procedures approved by the Executive Officer to determine the location of sampling sites as required by subdivision (j).
10. All information necessary to demonstrate means of compliance with subdivision (j).
11. The name, title, and signature of the responsible official certifying the accuracy of the report, attesting to whether the source has complied with the provisions of this rule.
12. The date of the report.

Appendix 2 – Content of Ongoing Facility Status Reports

Ongoing facility status reports shall, at a minimum, contain the following information:

1. Facility name, District Facility ID number, facility address, owner/operator name, and telephone number.
2. The beginning and ending dates of the calendar year for the reporting period.
3. The following information shall be provided for each of the last 12 calendar months of the reporting period:
    - Annual amounts of lead-containing material processed;
    - The maximum and average daily and monthly lead-processing rates for all equipment and processes;
    - The maximum and average daily and annual emissions of lead from all emission points and fugitive lead-dust sources.
4. Worker and sensitive receptor distances, if they are located within ¼ of mile from the center of the facility and facility maximum operating schedule, if changed since submittal of the initial compliance status report or prior year's ongoing compliance status and emission reports.
5. A description of any changes in monitoring, processes, or controls since the last reporting period.
6. The name, title, and signature of the responsible official certifying the accuracy of the report.
7. The date of the report.

Appendix 3 – Continuous Furnace Pressure Monitoring (CFPM) Plan

The CFPM Plan shall, at a minimum, contain the following information:

1. A description of the type and design of the differential pressure monitoring device(s).
2. The specifications of the resolution, increment of measurement, and range of the differential pressure monitoring device(s).
3. A drawing and description of the exact location where each differential pressure monitoring device is to be located.
4. If differential pressure monitoring device(s) are already installed, all available recorded data of the static differential furnace pressure(s) as requested by the Executive Officer.
5. If applicable, the maximum alternative static differential furnace pressure in inches water column that the owner or operator will operate the reverberatory furnace at, and a demonstration that it can achieve emission reductions that are equivalent to or better than those achieved when operating at a pressure of -0.02 or more negative. The alternative static differential furnace pressure shall not exceed 0.4 inches water column.

ATTACHMENT G

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Staff Report
Proposed Amended Rule 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities

August 2015

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INTRODUCTION

Rule 1420.1 – Emission Standards for Lead from Large Lead-Acid Battery Recycling Facilities controls emissions of lead and other toxic air contaminants from large lead-acid battery recycling facilities. The rule applies to lead-acid battery recycling facilities that process more than 50,000 tons of lead annually, namely Exide Technologies located in Vernon, and Quemetco Inc. located in the City of Industry. The rule includes ambient lead and arsenic concentration limits, facility mass point source limits, as well as housekeeping and maintenance provisions such as regular cleaning periods, inspections and proper handling of lead containing dust and waste.

In January 2014 the SCAQMD staff reported to the Governing Board on the review of two studies that examined the technical, economic, and physical feasibility of achieving a total facility mass lead emission rate of 0.003 lb/hour from all lead point sources. Based on elevated levels of lead found in soil and surface dust at Exide by the California Department of Toxics Substances Control (DTSC), the Governing Board directed staff to begin rulemaking. In March 2015 the Governing Board adopted amendments to the rule lowering the ambient lead concentration limit to 0.100 μg/m^3 effective in 2017 and the point source lead emission rate to 0.023 lb/hour effective in 2016, as well as adding other housekeeping and maintenance measures. The Governing Board also directed staff to return to the Governing Board with a rule proposal to further lower the point source lead emission rate to 0.003 lb/hour and other options. Shortly thereafter, one of the two facilities, Exide Technologies, announced that it was permanently closing.

BACKGROUND

Lead

Lead is deemed a toxic air contaminant (TAC) and probable human carcinogen by the Office of Environmental Health Hazard Assessment (OEHHA). Chronic health effects include nervous and reproductive system disorders, neurological and respiratory damage, cognitive and behavioral changes, and hypertension. Exposure to lead can also potentially increase the risk of contracting cancer or result in other adverse health effects. Lead has been classified as a probable human carcinogen by the International Agency for Research on Cancer, based mainly on sufficient animal evidence, and is reasonably anticipated to be a human carcinogen by the U.S. National Toxicology Program. Young children are especially susceptible to the effects of environmental lead because their bodies accumulate lead more readily than do those of adults, and because they are more vulnerable to certain biological effects of lead including learning disabilities, behavioral problems, and deficits in IQ.

Under the federal Clean Air Act, lead is classified as a "criteria pollutant." Lead has observed health effects at ambient concentrations. The U.S. EPA has thoroughly reviewed the lead exposure and health effects research, and has prepared substantial documentation in the form of a Criteria Document to support the selection of the 2008 NAAQS for lead. The Criteria Document used for the development of the 2008 NAAQS for lead states that studies and evidence strongly substantiate that blood lead levels in a range of 5-10 μg/dL, or possibly lower, could likely result in neurocognitive effects in children. There is substantial scientific justification provided through EPA's development of the 2008 Lead NAAQS and the 2015 Proposed Rule to Retain the Current Lead NAAQS evidence-based framework to support the policy decision to establish

more protective rule limits. As a regional air agency, developing a source-specific rule for lead-acid battery recycling facilities, the SCAQMD staff is recommending policy decisions that are more health protective for communities, particularly young children, that are affected by lead-acid battery recycling facilities regulated under Proposed Rule 1420.1.

Lead National Ambient Air Quality Standard

In October 1978, the U.S. Environmental Protection Agency (EPA) promulgated the first primary and secondary NAAQS for lead under Section 109 of the Clean Air Act. Both primary and secondary standards were set at a level of 1.5 $\mu g/m^3$ averaged over a calendar quarter. Primary standards set limits to protect public health, including the health of "sensitive" populations such as asthmatics, children, and the elderly. Secondary standards set limits to protect public welfare, including protection against visibility impairment, damage to animals, crops, vegetation, and buildings.

On October 15, 2008, the EPA amended both the primary and secondary NAAQS for lead from a level of 1.5 $\mu g/m^3$ to 0.15 $\mu g/m^3$ averaged over a rolling 3-month period, and made changes to monitoring and reporting requirements. On December 31, 2010, the EPA designated a portion of Los Angeles County as nonattainment for the 2008 NAAQS for lead based on monitored air quality data from 2007-2009 that indicated a violation of the NAAQS near and due to a large lead-acid battery recycling facility. In May of 2014, the U.S. EPA released its "Policy Assessment for the Review of the Lead National Ambient Air Quality Standards", reaffirming the primary (health-based) and secondary (welfare-based) staff conclusions regarding whether to retain the current standards. In January 2015 the U.S. EPA announced their proposal to retain the ambient lead concentration standard of 0.15 $\mu g/m^3$ averaged over a rolling 3-month period.

Arsenic

Arsenic is a known human carcinogen by inhalation and oral routes of exposure (NTP, 2011). Occupational exposure to inorganic arsenic compounds, especially in mining and copper smelting, has been associated with increased risk of lung cancer. Exposure to arsenic also has been associated with increased risks of cancer of the kidney, digestive tract, and lymphatic and hematopoietic systems. Exposure to arsenic in drinking water increases the risks of urinary-bladder, kidney, skin, lung, liver, and colon cancer.

Arsenic is listed under California Proposition 65 as a developmental toxicant. The oxidation state influences the toxicity, with trivalent arsenic compounds possessing greater teratogenic potential than pentavalent compounds. In studies with laboratory animals, reproductive effects observed include increased fetal death, decreased fetal weight, and congenital anomalies. Reported adverse effects of chronic inorganic arsenic exposure in children include skin lesions, neurodevelopment effects such as decreased IQ and related effects, risk of lung disease expressed in later years, and reproductive effects. Several studies have reported effects on the developing intellectual function of exposed children (OEHHA, 2008). The Office of Environmental Health Hazard Assessment (OEHHA) adopted long term and 8-hour Reference Exposure Levels for arsenic to be protective against neurological effects in children. Breathing high levels of inorganic arsenic can result in a sore throat or irritated lungs. Ingesting very high levels of arsenic can result in death. Exposure to high levels can cause nausea and vomiting, decreased production of red and white blood cells, abnormal heart rhythm, damage to blood

vessels, and a sensation of "pins and needles" in hands and feet. Ingesting inorganic arsenic for a long time can cause a darkening of the skin and the appearance of small "corns" or "warts" on the palms, soles, and torso. Skin contact with inorganic arsenic may cause redness and swelling.

Closure of Exide Technologies of Vernon, CA

On April 7, 2015 Exide Technologies withdrew their California Department of Toxic Substance Control (DTSC) permit application and provided notification of its intent to permanently close. On May 15, 2015, Exide Technologies submitted a revised Closure Plan to DTSC. The Closure Plan describes the current status of the facility and contains decontamination and demolition plans. The Closure Plan also includes groundwater monitoring information, engineering controls, waste characterization, and air monitoring plans. The Closure Plan is separate from, but is occurring simultaneously with, the DTSC Corrective Action imposed on Exide. The Corrective Action requires off-site cleanup of nearby residential and industrial areas as well as cleanup of on-site contaminated groundwater.

The closure is expected to occur in three phases. Phase 1 will address the inventory removal, equipment decontamination and removal, decontamination and deconstruction of buildings, and soil sampling. Exide will retain a third-party environmental consultant to monitor and document implementation of dust mitigation measures and to conduct real-time air monitoring. Exide plans to continue operating air pollution control equipment to maintain negative pressure on associated buildings until the inventory is removed and gross cleaning of duct work is complete. Once the duct work has been removed up to the emission control equipment, the duct shall be blinded and the interior of the equipment cleaned following the manufacturer's operating procedures. Staff has recommended that Exide operate the total enclosures with all associated ducting until the enclosure structure itself is demolished. Decontamination of structures will be done under negative pressure by vacuum cleaning vented to HEPA filters and then pressure washing.

Phase 2 will address potential below-grade decontamination. These additional activities may require the removal of contaminated soil beneath the concrete floor at the closure areas; capping and installation of boundary markers where contaminated soils are left in place; and development of a deed notice/land use covenant. The scope of Phase 2 will be determined using data generated during Phase 1 and may be influenced by data generated during the Corrective Action. Generally areas will be excavated to a depth of five feet in and around structures. Dust control measures such as temporary enclosures and water will be used during floor removal and excavation activities. The temporary enclosure will remain in-place and/or the area will be covered until the excavation is complete.

When Phase 1 and Phase 2 are completed, the facility will submit certification by both the facility and an independent, qualified engineer registered in the State of California within 60 days of the completion of final closure, to DTSC, SCAQMD and the City of Vernon. This certification will state that the facility has been closed in accordance with the approved closure plan. Phase ~~I~~ 1 of the closure is expected to commence March 2016 and be completed by May 2018. Phase ~~II~~ 2 is scheduled for completion by June 2020.

Phase 3 (ongoing) would include postclosure and contingent postclosure work to implement long-term inspections, monitoring, and maintenance. Phase 3 is scheduled to last until 2049.

Rule 1420.1 Regulatory History

Large lead-acid battery recycling facilities were originally regulated under Rule 1420 - Emission Standards for Lead which was adopted in 1992 and is applicable to any facility that uses or processes lead-containing materials. In November 2010, Rule 1420.1 was adopted to establish additional requirements for large facilities that process more than 50,000 tons of lead annually to ensure compliance with the NAAQS. Rule 1420.1 included an ambient lead concentration limit of 0.150 µg/m^3 and a point source limit of 0.01 lb/hour from any single source and 0.045 lb/hour from all point sources. Additionally, the rule included a series of housekeeping provisions to further control fugitive lead emissions. ~~The Governing Board strengthened the rule by requiring facilities to submit a compliance plan identifying additional lead reductions strategies, a curtailment plan, and a study assessing the economic, technical, and physical feasibility of achieving a lower point source emission limit of 0.003 lb/hour, if the ambient lead concentration exceeded 0.120 µg/m^3 over a 30 day rolling average.~~

In March 2013, the approved AB 2588 Health Risk Assessment for Exide Technologies reported a Maximum Individual Cancer Risk (MICR) of 156 in one million, a non-cancer chronic hazard index (HI) of 63, a non-cancer acute HI of 3.8, and a cancer burden of 10. To put this in perspective, the Action Risk Level triggering risk reduction requirements in Rule 1402 – Control of Toxic Air Contaminants from Existing Sources, are 25 in one million for MICR, 3.0 for chronic or acute HI, or a cancer burden of 0.5. Arsenic, and to a lesser extent benzene, and 1,3-butadiene emissions were the main contributors to the high cancer risk. As a result, on January 10, 2014, Rule 1420.1 was amended to include an arsenic ambient concentration limit of 10.0 ng/m^3 averaged over a 24-hour period and point source emission limits for arsenic, benzene, and 1,3-butadiene. Curtailment provisions for lead and arsenic and requirements for installation and operation of differential pressure monitors were also included in the amendments. <u>The Governing Board also strengthened the rule by requiring facilities to submit a compliance plan identifying additional lead reduction strategies, a curtailment plan, and a study assessing the economic, technical, and physical feasibility of achieving a lower point source emission limit of 0.003 lb/hour, if the ambient lead concentration exceeded 0.120 µg/m^3 over a 30-day rolling average.</u>

In March 2014, Rule 1420.1 was amended to include requirements for the large lead-acid battery recycling facilities to participate in a multi-metals continuous emissions monitoring program with the SCAQMD.

The rule was recently amended in March 2015, to further lower the ambient lead concentration limit to 0.120 µg/m^3 effective January 1, 2016 and 0.100 µg/m^3 effective January 1, 2017 and <u>to lower</u> the point source lead emission rate to 0.023 lb/hour, as well as adding additional housekeeping and maintenance requirements. The Governing Board also directed staff to return to the Governing Board with a rule proposal to lower the point source lead emission rate to 0.003 lb/hour and other options.

PROPOSED AMENDED RULE 1420.1

Proposed Amended Rule (PAR) 1420.1 would include revisions to the lead point source emission rate, clarify rule applicability, and add additional provisions for facility closures.

Applicability

The proposed rule will clarify that Rule 1420.1 remains applicable to lead-acid battery recycling facilities during closure activities. PAR1420.1 expressly states that the rule requirements apply until the proposed closure requirements in paragraph (p)(4) are satisfied. The clarification of the continued applicability of the rule and the imposition of additional closure requirements are necessary to ensure that attainment with the lead NAAQS will be maintained and that surrounding communities suffer no degradation in air quality during closure, including demolition, cleanup and decontamination activities.

Lead Point Source Emission Rate

PAR 1420.1 will lower the lead point source emission limit. Staff is proposing to reduce the total facility mass lead emissions from all lead point sources under subparagraph (f)(1)(A) from 0.045 lb/hour to 0.003 lb/hour, effective on the date of adoption. As seen in Table 1 below, the point source emission rates at Quemetco were all below the proposed emission limit. The lead emission rates have been achieved in practice based on more than six years of testing and six years of operation at Quemetco. Exide will not experience difficulty in meeting this requirement because it has permanently ceased operations.

Table 1 – Quemetco Lead Point Source Test Rates
(Test Method 436, three run average)

Test Date	Lead Emission Rate (lb/hour)	Lead Emission Rate (lb/year)
Nov 2008	0.001	8.8
Nov 2009	0.0002	1.4
Nov 2010	0.0005	4.0
Sep 2012	0.0003	2.2
Nov 2013[a]	0.0005	4.2
Nov 2013[b]	0.0005	4.6
Feb 2014	0.0003	3.0
Proposed	0.003	26.3

a. Quetmeco co-testing
b. SCAQMD co-testing

Source Testing
PAR 1420.1 will require annual source testing for point sources that emit lead. Currently, facilities are allowed biennial source testing if the lead point source emits 5% or less than the current lead point source emission rate in the rule. With the proposed lead point source emission rate being lowered to 0.003 lb/hour, the biennial source test rate would drop to 0.00015 lb/hour. This level has not been achieved during any source test and retaining this option is no longer feasible.

Curtailment Provisions
Staff is proposing to reduce the lead point source emission rate ~~and arsenic ambient concentration limit~~ effective upon adoption. Under the current provisions of Rule 1420.1, sources are required to curtail their process if they exceed either ambient limits or total facility mass emission rates. The rate of curtailment is dependent on the level of exceedance with the first tier coinciding with the respective limits as found in Tables 1 and 2 of Rule 1420.1. Thus, effective upon adoption, ~~the first tier of the monitored ambient air concentration rate for mandatory daily process curtailments in Table 1 of subparagraph (p)(1) and~~ the first tier of the total facility mass emission rate for process curtailments in Table 2 of subparagraph (p)(2) will be reduced to coincide with the proposed limits.

Facility Closure
The proposed amendments clarify the applicability of existing provisions and include new provisions for lead-acid battery recycling facility owners and operators to ensure no degradation to air quality occurs during facility closure activities such as demolition, decontamination, and cleanup. Facility closure entails permanently stopping production and notifying the Executive Officer in writing that the facility will no longer be in operation.

In the proposal, facilities that are going through the closure process of decontamination and demolition will be required to continue conducting daily lead and arsenic ambient monitoring (paragraphs (d)(1), (d)(5) and (d)(6)) and submit a Compliance Plan for Closure Activities. The Compliance Plan for Closure Activities would be submitted in advance of decontamination and demolition actions taking place and approved by the Executive Officer. It would specify the logistics of meteorological and ambient monitoring, air emission controls, housekeeping and maintenance measures, and contingency measures to be taken to prevent lead or arsenic ambient exceedances. The housekeeping and maintenance measures in the plan are expected to be drawn from housekeeping and maintenance provisions in the existing rule as well as measures proposed in the closure plan submitted to DTSC. The facility can tailor the plan to address specific decontamination or demolition procedures. For example, the plan could include building washing provisions while the building remains intact but discontinuing building washing provisions once the buildings have been demolished. Similarly, depending on the nature of the closure activities, the washing schedule may be more or less stringent than the washing schedule used during normal operations. The plan is expected to be updated as closing activities proceed to provide added flexibility. The plan would also require that contingency provisions be included that can be implemented in the event there is an exceedance of the lead or arsenic ambient concentrations. These contingency ~~plans~~ measures would likely be additional applicable housekeeping and maintenance measures such as increased frequency of washing, sweeping and vacuuming as well as specific measures for demolition-related emissions.

If the lead or arsenic ambient concentrations exceed rule requirements, all closure related activities that contributed to the exceedances, as determined by the Executive Officer, shall be suspended until contingency measures in the approved Compliance Plan for Closure Activities ~~can be~~are implemented. If the exceedance is due to an activity not addressed by the contingency measures, then a revised Compliance Plan for Closure Activities will be required to be submitted and approved by the Executive Officer before closure-related activities that contributed to the exceedances can resume. While the revised plan is not intended to be as comprehensive as the Compliance Plan for Closure Activities, it is necessary to address the cause of the exceedances prior to resuming closure activities to ensure that attainment with the lead NAAQS will be maintained and that surrounding communities suffer no degradation in air quality.

Facilities will be required to continue monitoring and abiding by the Compliance Plan for Closure Activities until the lead-acid battery recycling facility has surrendered all SCAQMD permits to the Executive Officers, submitted DTSC-approved certification of final closure to SCAQMD, receives written confirmation from the Executive Officer that final closure has been verified, and demonstrates there are no exceedances of ambient lead or arsenic concentrations have occurred for 12 consecutive months, with at least one month occurring after the date of submittal of certification of final closure.

Exemption

An exemption has been included to specify which provisions of the rule do not apply to a facility that has permanently ceased production and has notified the Executive Officer in writing that the facility is permanently closing. If the facility has ceased production, point source emission rate limits, operational Compliance Plans, source testing and curtailment of production requirements are no longer necessary.

COMMENTS AND RESPONSES

Comment 1: The proposed rule requires a permanently closing facility to submit a Compliance Plan for Closure Activities ("Closure Compliance Plan") for review and approval before starting the closure process. For numerous reasons, Exide does not believe this provision should be in the rule. The District's proposed requirement for a Closure Compliance Plan likely is preempted by State law and conflicts with DTSC's statutory authority over hazardous waste facility closure. According to the Health and Safety Code, DTSC has jurisdiction over hazardous waste facility closure. The Closure Compliance Plan also creates other potential legal and logistical conflicts. If the District refuses to approve the air emission control requirements approved by DTSC, the affected hazardous waste facility would have no alternatives and would have no reasonable way to satisfy both agencies.

Response: SCAQMC disagrees that PAR 1420.1 is preempted (expressly or impliedly) by State law. To the contrary, the statutes governing hazardous waste control expressly state: "No provision of this chapter shall limit the authority of any state or local agency in the enforcement or administration of any provision of law which it is specifically permitted or required to enforce and administer." (Cal. Health & Saf. Code §25105.) Thus, even though DTSC has authority with respect to the closure of hazardous waste facilities, SCAQMD retains its authority to regulate air emissions from stationary sources. In addition, there are no legal or logistical conflicts between DTSC requirements and PAR 1420.1. DTSC's regulatory authority is flexible such that its plans and schedule are subject to amendment and modification. (See e.g., Cal. Health & Saf. Code §25247; 22 Cal. Code Regs, tit. 22, §66265.112(c).) Similarly, PAR 1420.1 and the Compliance Plan for Closure Activities provides flexibility for a facility based on the specific circumstances encountered. Instead of having to to comply with all the operational, housekeeping, maintenance, source testing and other current provisions in the rule for a fully operational lead-acid battery recycling facility, it is envisioned that the plan will contain the air emission control requirements approved by DTSC, some housekeeping and maintenance provisions from the current rule and contingency measures in the event of an exceedance. The plan would be regularly updated by Exide to allow for rapid changes that could not be accommodated by the rule development process. That plan also allows the SCAQMD to enforce dust minimization provisions to avoid exceedances of the rule and of the lead NAAQS. As noted by Exide, SCAQMD and DTSC have been working cooperatively in developing the air emission control requirements and that process is expected to continue throughout the entire closure process.

Comment 2: Exide appreciates that the District wants to avoid ambient air exceedances, but eliminating the provision in the rule requiring a Closure Compliance Plan has no impact on the District's ability to take enforcement action against Exide if there is an exceedance. The District can still take actions it deems necessary to enforce its air quality rules. The District does not need to grant itself pre-approval authority over the closure process in order to enforce its existing air quality rules.

Response: The Compliance Plan for Closure Activities is a mechanism to provide the SCAQMD with an opportunity to prevent exceedances while allowing the closing facility maximum flexibility during closure. Having agreed-upon air emission control requirements, housekeeping, maintenance, and contingency measures will ~~amplify the need to~~help avoid exceedances and help to avoid misunderstandings about what is expected during closure. With a plan in place, if there were an exceedance, contingency measures could be adopted immediately. In the situation where an exceedance occurs from an unforeseen closure-related activity, both SCAQMD and DTSC agree that the closure-related activity should be temporarily suspended until a mitigation measures can be implemented. While this may slow closure, SCAQMD and DTSC envision that closure of a lead-acid battery recycling facility is a carefully controlled process that may require detailed technical evaluations and public input.

Comment 3: If the Closure Compliance plan is not removed from the rule, then Exide proposes the following rewording of paragraph (p)(3) as follows:

> *If during closure the ambient air concentrations of lead or arsenic exceed the limits in paragraphs (d)(1) or (d)(5), the owner or operator shall submit a written report assessing the root cause of the exceedances and, if closure-related activities are determined to have contributed to the exceedances, the owner or operator shall temporarily suspend the closure-related activities that contributed to the exceedances and provide a mitigation plan designed to avoid additional exceedances. The closure-related activities that contributed to the exceedances shall not re-commence until the Executive Officer, in consultation with the Department of Toxic Substances Control, approves the mitigation plan and the mitigation measures are implemented.*

This suggested revision balances the District's interest in avoiding additional exceedances while recognizing DTSC's jurisdiction over the closure process and ensuring the efficiency of closure.

Response: SCAQMD will continue to require contingency provisions to be included in the Compliance Plan for Closure Activities that can be implemented immediately if closure-related activities are determined to have contributed to an exceedance. If, in the case of an exceedance for which there is no contingency measure included in the plan, the closure-related activity that contributed will be temporarily suspended until a mitigation plan is approved, in consultation with DTSC.

Comment 4: Exide requests clarification that "all permits" means "all permits issued by the South Coast Air Quality Management District" and not permits issued by other agencies.

Response: "All permits" is limited to SCAQMD permits only and the language has been revised to reflect this clarification.

Comment 5: Exide requests clarification that "final closure" has the same definition found in 22 CCR § 66260.10, and does not include postclosure activities.

Response: "Final closure" has the same definition found in 22 CCR § 66260.10, and does not include postclosure activities, again as defined in 22 CCR § 66260.10.

Comment 6: As written, the proposed rule may apply longer than necessary to confirm compliance. Exide requests that the District shorten the period of consecutive months of compliance with the ambient lead and arsenic limits to allow closure to six months, with one month occurring after the date final closure is certified.

Response: SCAQMD believes that a full year of compliance with ambient lead and arsenic limits is necessary to ensure that, under normal circumstances, no further ambient exceedances would be expected indefinitely. A compliance time frame of six months may preclude consideration of changes in weather patterns (i.e. Santa Ana winds, winter storms, etc.) that could impact ambient monitoring.

ANALYSIS OF ALTERNATIVE CONTROL MEASURES

Health and Safety Code Section 40440.5, subsection (c)(3) requires an analysis of alternative control measures. In March 2015 the Governing Board adopted amendments to the rule lowering the ambient lead concentration limit to 0.100 μg/m^3 effective in 2017 and the point source lead emission rate to 0.023 lb/hour effective in 2016, as well as adding other housekeeping and maintenance measures. During the rule development process, staff considered alternative ambient lead concentration limits and point source lead emission rates. The Governing Board directed staff to return to the Governing Board with a rule proposal to further lower the point source lead emission rate to 0.003 lb/hour and other options. The current rule proposal is a result of Governing Boar direction. Additionally, one of the two facilities subject to the rule permanently closed. Staff originally proposed prescriptive closure provisions to address potential fugitive emissions during decontamination and demolition. After consultation with DTSC and interested stakeholders, staff is proposing to require a Compliance Plan for Closure Activities which will allow the facility to specify, upon approval by the Executive Officer, the logistics of meteorological and ambient monitoring, air emission controls, housekeeping and maintenance measures, and contingency measures to be taken to prevent lead or arsenic ambient exceedances.

SOCIOECONOMIC ASSESSMENT

PAR 1420.1 would include revisions to the lead point source emission rate and facility closure provisions.

Affected Facilities and Industries

The proposed amendments affect two facilities that process greater than 50,000 tons of lead annually. These two facilities belong to the industry of secondary lead smelting, refining, and alloying of nonferrous metal [North American Industrial Classification System (NAICS) 331492].

Compliance Costs

The proposed lead point source limit of 0.003 lb/hour has already been achieved by Quemetco. No additional costs are expected.

PAR 1420.1 would also require a facility that is closing to submit a Compliance Plan for Closure Activities. The plan is expected to be updated throughout the closure process. The cost of developing the plan is estimated at $20,000 for each facility and is expected to be updated annually. PAR 1420.1 would also require additional ambient monitoring for lead and arsenic ~~ambient monitoring~~. The proposal requires twelve consecutive months of ambient test results free of exceedances to cease ambient monitoring. Assuming the ambient monitoring continues after closure is complete, up to six monitors daily will require analysis. The updated cost for each lead and arsenic analysis is $312. The annual cost to analyze six monitors on a daily basis for an entire year is $683,280. The total estimated annual cost to comply with the proposed rule is $703,280 with all of the costs burdening the closing facility.

When the annual compliance cost is less than one million dollars, the Regional Economic Impact Model (REMI) is not used to analyze impacts on jobs and other socioeconomic impacts because the impact results would be very small and would fall within the noise of the model. A major

portion of the socioeconomic report covers the regional jobs and other socioeconomic impacts generated from the REMI model. As such, when the REMI model is not run, the socioeconomic assessment is included in the staff report.

Rule Adoption Relative to the Cost-Effective Schedule

On October 14, 1994, the Governing Board adopted a resolution that requires staff to address whether rules being proposed for adoption are considered in the order of cost-effectiveness. The 2012 Air Quality Management Plan (AQMP) ranked, in the order of cost-effectiveness, all of the control measures for which costs were quantified. It is generally recommended that the most cost-effective actions be taken first. PAR 1420.1 is not a control measure in the 2012 Air Quality Management Plan (AQMP), and thus was not ranked by cost-effectiveness relative to other AQMP control measures in the 2012 AQMP.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Pursuant to the California Environmental Quality Act (CEQA) and SCAQMD Rule 110, SCAQMD staff ~~will evaluate~~evaluated the proposed project and ~~make~~ made the appropriate CEQA determination. The public workshop meeting ~~will also provide~~ provided an opportunity to solicit public input on any potential environmental impacts from the proposed project. Comments received at the public workshop on any environmental impacts ~~will be~~were considered when making the CEQA determination.

DRAFT FINDINGS UNDER CALIFORNIA HEALTH AND SAFETY CODE SECTION 40727

Requirements to Make Findings

California Health and Safety Code Section 40727 requires that prior to adopting, amending or repealing a rule or regulation, the SCAQMD Governing Board shall make findings of necessity, authority, clarity, consistency, non-duplication, and reference based on relevant information presented at the public hearing and in the staff report.

Necessity

PAR 1420.1 is needed to further protect public health by reducing lead emissions from large lead-acid battery recycling facilities. For a toxic air contaminant such as lead, for which there is no level of exposure that can yet be identified with confidence as clearly not being associated with some risk of deleterious health effects, the intent of this proposed rule is to further reduce lead emissions to the extent feasible. PAR 1420.1 is also needed to minimize lead exposure during and after facility closure activities.

Authority

The SCAQMD Governing Board has authority to adopt PAR 1420.1 pursuant to the California Health and Safety Code Sections 39002, 39650 et. seq., 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, 41700 and 41706.

Clarity

PAR 1420.1 is written or displayed so that its meaning can be easily understood by the persons directly affected by it.

Consistency
PAR 1420.1 is in harmony with and not in conflict with or contradictory to, existing statutes, court decisions or state or federal regulations. The proposed amended rule requirements are in addition to, and consistent with DTSC's authority to regulate hazardous waste and enforce closure plans.

Non-Duplication
PAR 1420.1 will not impose the same requirements as any existing state or federal regulations. The proposed amended rule is necessary and proper to execute the powers and duties granted to, and imposed upon, the SCAQMD.

Reference
By adopting PAR 1420.1, the SCAQMD Governing Board will be implementing, interpreting or making specific the provisions of the California Health and Safety Code Sections 40001 (rules to achieve and maintain ambient air quality standards), 41700 (nuisance), 41706(b) (emission standards for lead compounds from non-vehicular sources), Federal Clean Air Act Section 112 (Hazardous Air Pollutants), and CAA Section 116.

COMPARATIVE ANALYSIS

Health and Safety Code section 40727.2 requires a comparative analysis of the proposed amended rule with any Federal or District rules and regulations applicable to the same source. See Table 3 below.

Table 3: Comparison of PAR 1420.1 with SCAQMD Rule 1420.1, SCAQMD Rule 1420, the 2008 Lead NAAQS, and the NESHAP for Secondary Lead Smelters

Rule Element	PAR 1420.1	SCAQMD Rule 1420.1	SCAQMD Rule 1420	CARB 1998-12-30 Non Ferrous Metal Melting ATCM	2008 Lead NAAQS	NESHAP from Secondary Lead Smelting	California Health & Safety Code §25245 et seq	Cal. Code Reg, tit. 22, §66265.110 et seq
Applicability	Rule will apply to owners or operators during closure activities	Lead-acid battery recycling facilities that have ever processed more than 50,000 lead-tons/year	Facilities that use or process lead-containing materials	Facilities that melt non-ferrous metals including lead	All States	Secondary lead smelters	Owner or operator of a hazardous waste facility	Owner or operator of a hazardous waste management facility
Lead Ambient Air Quality Standard	No proposed changes	January 1, 2016, to December 31, 2016 meet 0.110 µg/m^3 averaged over 30 consecutive days. On and after January 1, 2017 meet 0.100 µg/m^3averaged over 30 consecutive days.	1.5 µg/m^3 averaged over 30 days	None	0.15 µg/m^3: 3-month rolling average Demonstrated over a 3-year period.	None	None	None
Arsenic Ambient Air Quality Standard	No proposed changes	10.0 ng/m^3	None	None	None	None	None	None
Total Enclosures	No proposed changes	Total enclosures for main areas where processing, handling and storage of lead-containing materials occur	None	Enclosed storage area for dust-forming material including, but not limited to, dross, ash, or feed material	None	Total or partial enclosures for: - Smelting furnace and dryer charging hoppers, chutes, and skip hoists; - Smelting furnace lead taps, and molds during tapping; - Refining kettles; - Dryer transition pieces; and Agglomerating furnace product taps	None	None

Rule Element	PAR 1420.1	SCAQMD Rule 1420.1	SCAQMD Rule 1420	CARB 1998-12-30 Non Ferrous Metal Melting ATCM	2008 Lead NAAQS	NESHAP from Secondary Lead Smelting	California Health & Safety Code §25245 et seq	Cal. Code Reg, tit. 22, §66265.110 et seq
Emission Standard and Requirements for Lead Control Devices	Total facility mass emission rate of 0.003 lb/hour of lead from all lead point sources; Maximum emission rate, use of filters and secondary lead controls on dryer remain unchanged.	Total facility mass emission rate of 0.023 lb/hour of lead from all lead point sources; maximum emission rate of 0.010 lb/hour of lead for any individual lead point source Use of filters or bags that are rated by the manufacturer to achieve 99.97 percent control efficiency on 0.3 micron particles or made of PTFE membrane material Secondary lead controls on dryer	99% control efficiency for particulate matter; 98% control efficiency for lead	99% control efficiency	None	Concentration of 2.0 mg/dscm from lead point sources	None	None
Compliance Plan	Additional Compliance Plan for Closure Activities required to address emissions during closure	Only required if a facility exceeds ambient lead concentration limit of 0.110 µg/m^3 from January 1, 2016 to December 31, 2016 or 0.100 µg/m^3on or after January 1, 2017Identifies additional lead control measures beyond the rule.	Specifies general facility information	None	None	None	Hazardous waste facility closure and postclosure plan	- Closure plan which includes schedule, description of decontamination, soil and groundwater monitoring - Process to amend closure plan - Notification requirements
Ambient Air Monitoring Requirements	- Monitoring required during facility closure activities	Daily sampling for lead and arsenic Provisions included for monitor failure	Minimum of two monitors at facility locations approved by the Executive	None	For states, a minimum of: - One source-oriented monitor	None	None	None

Rule Element	PAR 1420.1	SCAQMD Rule 1420.1	SCAQMD Rule 1420	CARB 1998-12-30 Non Ferrous Metal Melting ATCM	2008 Lead NAAQS	NESHAP from Secondary Lead Smelting	California Health & Safety Code §25245 et seq	Cal. Code Reg, tit. 22, §66265.110 et seq
		One year sample retention Minimum of four monitors at facility locations approved by the Executive Officer Samples collected at least once every three days Results reported monthly Daily sampling if 0.120 µg/m^3 is exceeded after January 1, 2015	Officer Samples collected every six days Results reported quarterly		at all facilities emitting 1.0 tons of lead/year; and - One non-source-oriented monitor in urban areas with a population of at least 500,000 people - Samples collected every six days			
Housekeeping and Maintenance Requirements	- Housekeeping and Maintenance required during facility closure activities	Prescribed requirements for cleaning frequencies of specific areas; maintenance activity; building integrity inspections; storage and transport of lead-containing materials; onsite mobile sweeping; and surface impoundment cleanings	Requirements for storage of dust-forming material; weekly cleaning of surfaces subject to vehicular or foot traffic; and storage, disposal, recovery, and recycling of lead or lead-containing wastes generated from housekeeping activities	Surfaces subject to vehicular or foot traffic shall be vacuumed, wet mopped or otherwise maintained	None	Periodic wash down of plant roadways (lower frequency than PAR 1420.1); wet suppression of battery breaking area storage piles; vehicle wet washing of vehicles exiting the materials handling and storage areas	None	None
Reporting Requirements	- No proposed changes	- Reporting to Executive Officer within 72 hours of daily ambient air lead concentration of 0.300 µg/m^3 with the following information:	Ambient air lead and wind monitoring for any lead-processing facility that is required or elects to do ambient air monitoring	- Source test results Amount of metal processed if requesting exemption	For states: - State Implementation Plan submittal; - Periodic emissions reports from stationary source monitors; - Ambient air	- Lead control alarm/failure reports including fugitive dust control measures performed during failures	- None	- None

Rule Element	PAR 1420.1	SCAQMD Rule 1420.1	SCAQMD Rule 1420	CARB 1998-12-30 Non Ferrous Metal Melting ATCM	2008 Lead NAAQS	NESHAP from Secondary Lead Smelting	California Health & Safety Code §25245 et seq	Cal. Code Reg, tit. 22, §66265.110 et seq
		o Date of the occurrence; o Name of the monitor; o Ambient lead concentration at the monitor for the 24 hour sample; o Potential cause or causes of the occurrence; and o Potential remedies to prevent the reoccurrence. o Caution signs posted at entrances and perimeter - Notification of breach of total enclosure			quality data and associated assurance data			
Facility Closure	- Continue ambient monitoring of lead and arsenic - Submit Compliance Plan for Closure Activities to minimize lead and arsenic emissions during closure - Establish end of rule applicability	- None	- None	- None	- None	- None	- Financial assurances that facility can be closed and maintained for 30 years - Submit facility closure and postclosure plans to estimate cost of closure and subsequent maintenance and to protect public health or safety, or the environment.	- Close facility in manner than minimizes maintenance and protects human health and environment - Schedule for removal of wastes - Interim procedures while facility is unclosed but not operating - Proper disposal of equipment, structures and soil - Certification of closure

Rule Element	PAR 1420.1	SCAQMD Rule 1420.1	SCAQMD Rule 1420	CARB 1998-12-30 Non Ferrous Metal Melting ATCM	2008 Lead NAAQS	NESHAP from Secondary Lead Smelting	California Health & Safety Code §25245 et seq	Cal. Code Reg, tit. 22, §66265.110 et seq
								- Post-closure care and use of property limitations - Post-closure amendment procedures and public notifications - Post-closure certification

APPENDIX A - JUSTIFICATION FOR LOWERING AMBIENT AIR TO 0.100 µG/M^3

JUSTIFICATION FOR LOWERING AMBIENT AIR TO 0.100 μg/m^3

The following provides the justification for the ambient lead limit included in Rule 1420.1. An ambient concentration limit of 0.100 μg/m^3 is supported by scientific information presented during the development of the 2008 Lead National Ambient Air Quality Standard (NAAQS) and the 2015 Proposed Rule to Retain the Current Lead NAAQS. The following discusses the general approach and key assumptions that were the basis of EPA's evaluation of the Lead NAAQS. As explained in more detail below, in proposing an ambient concentration limit of 0.100 μg/m^3, the SCAQMD made policy decisions that are more protective of human health than the choices made by EPA in proposing to retain an ambient concentration limit of 0.15 μg/m^3. In particular, the SCAQMD proposes a more prophylactic approach for protecting the health of children, particularly those under five years of age, that live in communities near lead-acid battery recycling facilities in the Basin. We also note that, while EPA has proposed retaining its existing standard of 0.150 μg/m^3, it has not finalized whether to lower the standard or not. (EPA, 2015)

Establishing the 2008 Lead NAAQS and the 2015 Proposed Rule to Retain the Current Lead NAAQS

The 2008 Lead NAAQS and 2015 Proposed Rule to Retain the Current Lead NAAQS reflect an evidenced-based framework that took into consideration the much-expanded evidence on the neurocognitive health effects of lead in children. EPA focused on the developmental neurotoxicity in children, with IQ decrement as the risk metric. After examining the wide variety of health endpoints associated with lead exposures, EPA concluded that "there is general consensus that the developing nervous system in young children is the most sensitive and that neurobehavioral effects (specifically neurocognitive deficits), including IQ decrements, appear to occur at lower blood levels than previously believed (i.e., at levels <10 μg/dL). (EPA, 2008)

In establishing the lead NAAQS, the EPA used an evidence-based framework, referred to as the air-related IQ loss framework, which shifts focus from identifying an appropriate target population mean blood lead level and instead focuses on the magnitude of effects of air-related lead on neurocognitive functions such as IQ loss (73 FR 66971). The two primary inputs to EPA's evidence-based, air-related IQ loss framework are air-to blood ratios and concentration-response (C-R) functions for the relationship between blood lead and IQ response in young children. The framework derives estimates of mean air-related IQ loss through multiplication of the following factors:

- Ambient lead standard level (μg/m^3),
- Air-to-blood ratio in terms of μg/dL blood lead per μg/m^3 air concentration, and
- Slope for the concentration-response (C-R) function in terms of points IQ decrement per μg/dL blood lead.

Application of the framework also entailed consideration of an appropriate level of protection from air-related IQ loss to be used in conjunction with the framework, such as an average of level of IQ loss and an adequate margin of safety. The framework provides for estimation of a mean air-related IQ decrement for young children in the high end of the national distribution of air-related exposures. It does so by focusing on children exposed to air-related lead in those

areas with elevated air lead concentrations equal to specific potential standard levels. (EPA, 2014).

Air-to-Blood Level Ratio

The air-to-blood level ratio represents the relationship between the lead concentration in the air measured in μg/m^3 and the associated blood lead level measured in ug/deciliter (ug/dL). A ratio of 1:5 means that 1 μg/m^3 increase of lead in the air will result in a blood lead level of 5 ug/dL for a given population. In the 2008 Lead NAAQS and 2015 Proposed Rule to Retain the Current Lead NAAQS, EPA concluded that for each μg/m^3 increase of lead in air, children's blood lead levels increase by 5–10 μg/dL, i.e., the air-to-blood ratio ranged from 1:5 to 1:10. EPA selected an air-to-blood ratio of 1:7 "as a generally central value within this range." (73 FR 67002-67004).

Concentration-Response Functions

In establishing the 2008 Lead NAAQS and the 2015 Proposed Rule to Retain the Current Lead NAAQS, EPA considered the evidence regarding the quantitative relationships between IQ loss and blood lead levels. EPA focused on those concentration-response functions that are based on blood lead levels which most closely reflect today's population of children in the U.S., although recognizing that the evidence does not include analyses involving mean blood lead levels as low as the mean blood lead level for today's children. EPA identified four analyses that have a mean blood lead level closest to today's mean for U.S. children; these yielded four slopes ranging from -1.56 to -2.94, with a median of -1.75 IQ points per μg/dL. In addition, the Administrator determined that it is appropriate to give more weight to the central estimate for this set of functions, which is the median of the set of functions, and not to rely on any one function. (73 FR 67003-67004)

IQ Decrement

EPA also concluded that the concentration-response relationship between blood level and IQ loss is nonlinear, with greater incremental IQ loss occurring at lower blood lead levels. Accordingly since studies show that the average lead blood levels for children in the United States has decreased over the years, and that even at these lower levels there are significant neurocognitive impacts such as IQ loss, the analyses of children with blood lead levels closest to those of children in the United States today were most relevant. In selecting the lead NAAQS, the EPA Administrator concluded that, "an air-related IQ loss of 2 points should be used in conjunction with the evidence-based framework in selecting an appropriate level for the standard." (73 FR 67002 - 67005)

Establishing the 2008 Lead NAAQS

Table 1-1 below summarizes the estimates of air-related mean IQ loss for children exposed to various ambient air lead concentrations and was used in establishing the 2008 Lead NAAQS. As previously discussed, EPA's evidence-based air-related IQ loss framework found that the air-to-blood ratio ranged from 1:10 to 1:5 and the EPA Administrator selected a 1:7 air-to-blood ratio as a generally central value within this range. Based on an air-to-blood ratio of 1:7 and use of a mean air-related IQ loss of no more than 2 points, EPA selected an ambient lead concentration limit of 0.15 μg/m^3 (see highlighted box in Table 1-1). At this level, children's IQ levels would be decreased by 1.8 points, assuming a 1:7 air to blood ratio. At an ambient lead concentration

of 0.10 µg/m^3, children's IQ level would be decreased by 1.2 points using the same 1:7 air to blood level ratio assumption.

Table 1-1
Estimates of Air-Related Mean IQ Loss for the Subpopulation of Children Exposed at the Level of the Highlighting an Ambient Lead Concentration Limit of 0.150 µg/m^3
(Source: 73 FR 67005 and 67006)

Potential level for standard (µg/m^3)	Air-related mean IQ loss (points) for the subpopulation of children exposed at level of the standard		
	IQ loss estimate is based on median slope of 4 C–R functions with blood Pb levels closer to those of today's U.S. children (range shown for estimates based on lowest and highest of 4 slopes)		
	Air-to-blood ratio		
	1:10	1:7	1:5
0.50	>5*	>5*	4.4 (3.9–7.4)
0.40		4.9 (4.4–8.2)	3.5 (3.1–5.9)
0.30	5.3 (4.7–8.8)	3.7 (3.3–6.2)	2.6 (2.3–4.4)
0.25	4.4 (3.9–7.4)	3.1 (2.7–5.1)	2.2 (2.0–3.7)
0.20	3.5 (3.1–5.9)	2.5 (2.2–4.1)	1.8 (1.6–2.9)
0.15	2.6 (2.3–4.4)	1.8 (1.6–3.1)	1.3 (1.2–2.2)
0.10	1.8 (1.6–2.9)	1.2 (1.1–2.1)	0.9 (0.8–1.5)
0.05	0.9 (0.8–1.5)	0.6 (0.5–1.0)	0.4 (0.4–0.7)
0.02	0.4 (0.3–0.6)	0.2 (0.2–0.4)	0.2 (0.2–0.3)

*For these combinations of standard levels and air-to-blood ratios, the appropriateness of the C–R function applied in this table becomes increasingly uncertain such that no greater precision than ">5" for the IQ loss estimate is warranted.

At a level of 0.15 µg/m^3, the Administrator recognized that use of a 1:10 ratio produces an estimate greater than 2 IQ points and use of a 1:5 ratio produces a lower IQ loss estimate. Given the uncertainties and limitations in the air-related IQ loss framework, the Administrator decided to place primary weight on the results from this central estimate (1:7 ratio) rather than estimates derived using air-to-blood ratios either higher or lower than this ratio. (73 FR 67005).

The 2014 Policy Assessment concluded that "The limited amount of new information available in this review has not appreciably altered the scientific conclusions reached in the last review regarding relationships between Pb in ambient air and Pb in children's blood or with regard to the range of ratios." As a result the EPA Administrator is recommending to maintain the central estimate of 1:7 rather than estimates derived using higher air-to-blood ratios. During the proposed rulemaking for reviewing the 2008 Lead NAAQS, RSR Corporation the parent company of Quemetco provided comments supporting an ambient limit of 0.100 µg/m^3.

Selecting a 0.100 µg/m^3 Ambient Lead Limit for Rule 1420.1

Rule 1420.1 requires an ambient lead limit of 0.100 µg/m^3 effective January 1, 2017. This is a policy decision that is supported by the same evidence-based framework used to establish the 2008 Lead NAAQS and the 2015 Proposed Rule to Retain the Current Lead NAAQS.

In developing the 2008 Lead NAAQS, EPA recognized that policy judgments must be made regarding the level of health protection and margin of safety. The available evidence supports a range of choices in setting that level. In reviewing all of the scientific information through the development of the 2008 Lead NAAQS and the 2015 Proposed Rule to Retain the Current Lead NAAQS, the EPA Administrator made a series of policy decisions. For example, the Administrator used a "central value" between 1:10 and 1:15 to represent the air-to-blood lead

ratio and a decrement of 2 IQ points, all within the evidence-based framework for establishing a "national" standard for ambient lead. In doing so, the EPA Administrator recognized that:

> "…there are currently no commonly accepted guidelines or criteria within the public health community that would provide a clear basis for reaching a judgment as to the appropriate degree of public health protection that should be afforded to protect against risk of neurocognitive effects in sensitive populations, such as IQ loss in children." (73 FR 67004).

EPA further acknowledged that "different public health policy judgments could lead to different conclusions regarding the extent to which the current standard provides projection of public health with an adequate margin of safety." (EPA, 2014)

The NAAQS is a national standard for lead which applies uniformly to all parts of the United States. In contrast, Rule 1420.1 is a source-specific rule that regulates lead-acid battery recycling facilities. By establishing an ambient lead limit of 0.100 $\mu g/m^3$, and implementing other requirements in Rule 1420.1, the rule is designed to minimize the release of point source and fugitive lead emissions from lead-acid battery recycling facilities and thereby to minimize the accumulation of lead surface and soil dust, both of which are meant to be more health protective. The proposed level considers that communities with children live around these facilities, and it provides additional protection for the population most at-risk from lead emissions: pre-school children under the age of five. EPA has specifically recognized the significant health risks posed in this instance:, "…situations of elevated exposure, such as residing near sources of ambient lead can also contribute to increased blood lead levels and increased risk of associated health effects from air-related lead." (73 FR 66976)

As discussed below, the EPA Administrator made a series of policy decisions based on evidenced-based air-related IQ loss framework. Two policy decisions that the SCAQMD staff has focused on are the air-to-blood lead ratio and the IQ decrement, particularly as these issues relate to Rule 1420.1 as a source-specific rule. In addition, as discussed below, the SCAQMD staff further considered the vulnerability of children to lead. SCAQMD staff is recommending a more preventative approach with an ambient lead limit of 0.100 $\mu g/m^3$ to provide greater health protection for communities, and more specifically for young children, that live near lead-acid battery recycling facilities.

1:10 Air-to-Blood Lead Ratio

An air-to-blood lead ratio of 1:10 would support a more protective standard for children (CHPAC, 2008b). As discussed above, EPA's evidence-based air-related IQ loss framework found that the air-to-blood lead ratio ranges from 1:10 to 1:5, and the EPA Administrator selected a 1:7 air-to-blood ratio as a "generally central value within this range." (73 FR 67005 and 67006). As we now explain, the ambient lead concentration limit of 0.100 $\mu g/m^3$ under Rule 1420.1 is supported by EPA's evidence-based air-related IQ loss framework, assuming EPA's judgment of air-related IQ loss of 2 points and an air-to-blood ratio of 1:10. The SCAQMD's policy decision to use an air-to-blood ratio of 1:10 is also supported by EPA's evidence based air-related IQ loss data and is even more health protective, particularly for young children living near lead-acid battery recycling facilities.

An air-to-blood ratio of 1:10 is supported by comments made by scientists, physicians, and researchers. During the development of the 2008 Lead NAAQS, EPA received scientific recommendations from the Clean Air Scientific Advisory Committee (CASAC), a federal advisory committee independently chartered to provide extramural scientific information and advice to the EPA Administrator and other officials of the EPA[1]. The CASAC recommended that EPA consider an air-to-blood ratio ''closer to 1:9 to 1:10 as being most reflective of current conditions.'' (73 FR 67001). The higher attained blood lead concentrations that are modeled with a ratio of 1:10 would support a more protective standard for children. (CHPAC, 2008b). Similar to the advice from CASAC, many commenters, including EPA's Children's Health Protection Advisory Committee, the Northeast States For Coordinated Air Use Management (NESCAUM) and the Michigan Department of Environmental Quality recommended that EPA consider ratios higher than the upper end of the range used in the proposal (1:7), such as values on the order of 1:9 or 1:10 or somewhat higher. They also rejected the lower ratios used in the proposal as being inappropriate for application to today's children. Commenters supporting such higher ratios cited ratios resulting from a study noted by CASAC (Schwartz and Pitcher, 1989), as well as others by Hayes et al. (1994) and Brunekreef et al. (1983) They also cited air-to-blood ratio estimates from the exposure/ risk assessment (73 FR 67001). The exposure/risk assessment evaluated the quantitative human exposure and health risk assessments in order to inform EPA during the 2008 review of the NAAQS for lead.

As shown in Table 1-2, when EPA's same evidence-based framework is employed using an air-to-blood ratio of 1:10, with a loss of less than 2 IQ points, the corresponding ambient limit of 0.100 $\mu g/m^3$ is necessary to protect public health.

[1] The CASAC for the 2008 NAAQS is made up of the following members: Rogene Henderson, Ph.D., Chair, Clean Air Scientific Advisory Committee, Scientist Emeritus, Lovelace Respiratory Research Institute; Donna Kenski, Ph.D., Director of Data Analysis, Lake Michigan Air Directors Consortium, (LADCO); Ellis Cowling, Ph.D., University Distinguished Professor At-Large, Emeritus, North Carolina State University; Armistead (Ted) Russell, Ph.D., Gerogia Power, Distinguished Professor of Environmental Engineering, Georgia Institute of Technology; James D. Crapo, M.D., Professor, Department of Medicine, National Jewish Medical and Research Center; Jonathan M. Samet, M.D., Professor and Chairman, Department of Epidemiology, Bloomberg School of Public Health, John Hopkins University; Douglas Crawford-Brown, Ph.D., Director, Institute for Environment; and Professor, Department of Environmental Sciences and Engineering, University of North Carolina at Chapel Hill

Table 1-2
Estimates of Air-Related Mean IQ Loss for the Subpopulation of Children Exposed at the Level of the Highlighting an Ambient Lead Concentration Limit of 0.100 µg/m^3
(Source: 73 FR 67005 and 67006)

Potential level for standard (µg/m³)	Air-related mean IQ loss (points) for the subpopulation of children exposed at level of the standard		
	IQ loss estimate is based on median slope of 4 C–R functions with blood Pb levels closer to those of today's U.S. children (range shown for estimates based on lowest and highest of 4 slopes)		
	Air-to-blood ratio		
	1:10	1:7	1:5
0.50	>5*	>5*	4.4 (3.9–7.4)
0.40		4.9 (4.4–8.2)	3.5 (3.1–5.9)
0.30	5.3 (4.7–8.8)	3.7 (3.3–6.2)	2.6 (2.3–4.4)
0.25	4.4 (3.9–7.4)	3.1 (2.7–5.1)	2.2 (2.0–3.7)
0.20	3.5 (3.1–5.9)	2.5 (2.2–4.1)	1.8 (1.6–2.9)
0.15	2.6 (2.3–4.4)	1.8 (1.6–3.1)	1.3 (1.2–2.2)
0.10	1.8 (1.6–2.9)	1.2 (1.1–2.1)	0.9 (0.8–1.5)
0.05	0.9 (0.8–1.5)	0.6 (0.5–1.0)	0.4 (0.4–0.7)
0.02	0.4 (0.3–0.6)	0.2 (0.2–0.4)	0.2 (0.2–0.3)

*For these combinations of standard levels and air-to-blood ratios, the appropriateness of the C–R function applied in this table becomes increasingly uncertain such that no greater precision than ''>5'' for the IQ loss estimate is warranted.

Population Significance of Loss of IQ Points

Communities that are near lead-acid battery recycling facilities can suffer a significant loss of IQ points. In its July 2008 advice to EPA, CASAC commented that ''a population loss of 1–2 IQ points is highly significant from a public health perspective.'' CASAC further emphasized its view that an IQ loss of 1–2 points should be ''prevented in all but a small percentile of the population—and certainly not accepted as a reasonable change in mean IQ scores across the entire population.'' Recommendations from several commenters, including the American Academy of Pediatrics (AAP) and state health agencies commenting on this issue, generally agreed with the view emphasized by CASAC that air-related IQ loss of a specific magnitude, such as on the order of 1 or 2 points, should be prevented in a very high percentage (e.g., 99.5%) of the population. (73 FR 67000).

The issue of individual-level versus population-level risk also pertains to the implications of the magnitude of decrease in cognitive function or increase in behavioral problems per unit increase in blood lead level. Although fractional changes in Full Scale Intelligence Quotient (FSIQ), memory, or attention may not be consequential for an individual, they may be consequential on a population level. At that level, small lead-associated decreases in cognitive function could increase the number of individuals at additional risk of educational, vocational, and social failure. It could also decrease the number of individuals with opportunities for academic and later-life success. (EPA, 2013) Small shifts in the population mean IQ can be highly significant from a public health perspective. Such shifts could translate into a larger proportion of the population functioning at the low end of the IQ distribution, as well as a smaller proportion of the population functioning at the high end of the distribution. (EPA, 2013). Additionally, small lead-associated increases in the population mean blood pressure could result in an increase in the proportion of the population with hypertension that is significant from a public health perspective. (EPA, 2013)

Ambient Limit of 0.100 µg/m^3 is More Health Protective for Children

Establishing an ambient limit of 0.100 µg/m^3 will be more protective children that live around facilities subject to Rule 1420.1, particularly younger children. Lead poisoning is a preventable disease. No safe blood level of lead in children has been identified. (CDC, 2012a). Preventing lead exposure rather than responding after the exposure has taken place is consistent with recommendations from the Centers for Disease Control and Prevention's (CDC) Advisory Committee for Childhood Lead Poisoning Prevention, which recommends that the CDC as well as other local, state, and federal agencies "shift priorities to primary prevention." (CDC, 2012b).

Neurocognitive health effects in young children are recognized as the most sensitive endpoint associated with blood lead concentrations. Evidence continues to indicate that neurocognitive effects in young children may not be reversible and may have effects that persist into adulthood. (EPA, 2014). In addition, in a letter to EPA in 2008 the Academy of Pediatrics stated that "No study has determined a level of lead in blood that does not impair child cognition. Further, the effects are long-lasting. Damage to a child's developing brain from lead is not reversible." (AAP, 2008). Similarly, EPA states in its 2013 Integrated Science Assessment for Lead that, "Evidence suggests that some lead-related cognitive effects may be irreversible and that the neurodevelopmental effects of lead exposure may persist into adulthood." (EPA, 2013).

Among the wide variety of health endpoints associated with lead exposures, there is general consensus that the developing nervous system in children is among the sensitive-- if not the most sensitive-endpoints. (73 FR 66976). Multiple epidemiologic studies conducted in diverse populations of children consistently demonstrate the harmful effects of lead exposure on cognitive function. The effects can be measured by IQ decrements, decreased academic performance and poorer performance on tests of executive function. (EPA, 2013). Lead-associated decline of several points might be sufficient to drop that individual into the range associated with increased risk of educational, vocational, and social failure. (EPA 2008). In addition, a study found that in a group of 7-year old children exposed to lead before the age of 3 years old, IQ continued to fall, even after the blood lead level had declined. (AAP, 2008; Chen et al, 2005).

Compounding the effects of lead on developing children are studies indicating that children are more vulnerable than adults when exposed to lead. Air-to-blood ratios are generally higher for children than those for adults, and they are higher for young children than older children. (EPA, 2014). Pre-school children or children under five years old are the most vulnerable to exposure and adverse health effects, and thereby represent the greatest at-risk population. Higher blood lead levels in pre-school aged children compared to the rest of childhood are related to behaviors that increase environmental exposure, such as hand-to-mouth activity. Children may have increased exposure to lead compared with adults because of children's behaviors and activities (including increased hand-to-mouth contact, crawling, and poor hand-washing), differences in diets, and biokinetic factors (absorption, distribution, metabolism, and excretion). (EPA, 2013).

In addition, younger children absorb substantially more lead than adults, especially children below 2 years of age. These children have a faster metabolic rate, resulting in a proportionately greater daily intake of lead through food. They also have a less developed blood-brain barrier

and therefore greater neurological sensitivity; a faster resting inhalation rate; and a rapidly developing nervous system. (OEHHA, 2009). As previously referenced, multiple studies of the relationship between lead exposure and blood lead in children have shown young children's blood lead levels reflect lead exposures from ambient air levels as well as exposure due to lead in surface dust. (EPA, 2014).

Blood lead levels are extensively used as an index or biomarker of exposure by national and international health agencies, as well as in epidemiological and toxicological studies of lead health effects and dose-response relationships. Blood lead concentrations, even those below 10 ug/dL, are inversely associated with children's IQ scores at three and five years of age, and associated declines in IQ are greater at these concentrations than at higher concentrations. (Canfield, et al, 2003). Based on a growing body of studies concluding that blood lead levels <10 µg/dL harm children, the Centers for Disease Control and Prevention (CDC) Advisory Committee on Childhood Lead Poisoning Prevention (ACCLPP) recommends a reference level of 5 ug/dL to identify children with blood lead levels that are much higher than most children's levels. This level is based on the 97.5th percentile of the National Health and Nutrition Examination Survey (NHANES)'s blood lead distribution in children. This recommendation is grounded on the weight of evidence that includes studies with a large number and diverse group of children with low blood lead levels and associated IQ deficits. Effects at blood lead levels < 10 µg/dL are also reported for other behavioral domains, particularly attention-related behaviors and poorer academic achievement. Furthermore, new findings suggest that the adverse health effects of blood lead levels at less than 10 µg/dL in children extend beyond cognitive function to include cardiovascular, immunological, and endocrine effects. (CDC, 2012a).

The SCAQMD staff believes that the CDC's action to establish a reference level of 5 ug/dL, in lieu of the previous "level of concern" of 10 ug/dL, further substantiates the policy decision to establish an ambient lead concentration limit of 0.100 µg/m^3. EPA's 2014 Policy Assessment states that, "The CDC decision, while emphasizing the critical importance of primary prevention of lead exposure, provides no new guidelines or criteria with regard to the significance of specific IQ decrements…" (EPA, 2014). However, the Academy of Pediatrics cautioned against focusing solely on IQ loss or gain stating, "There are ramifications of lead exposure on other endpoints that have societal and individual implications of great importance." In addition, CASAC member Dr. Susan Korrick, stated that, "the discussion of health policy judgments needs to be carefully considered in light of the fundamental and far reaching public health value of childhood cognitive and neurobehaviorial health." (CASAC, 2013).

EPA's Children's Health Protection Advisory Committee[2] (CHPAC), is a body of external researchers, academicians, health care providers, environmentalists, state and tribal government employees, and members of the public who advise EPA on regulations, research, and communications related to children's health. CHPAC stated in a letter to USEPA Administrator McCarthy that "lead affects children's IQs at exposure levels appreciably lower than recognized…" (CHPAC, 2015). In addition, in a letter to the Administrator on June 16, 2008

[2] The legal authority for CHPAC is the Federal Advisory Committee Act (FACA), 5 USC App 2. CHPAC acts in the public interest and supports EPA in performing its duties and responsibilities under Executive Order 13045 of April 21, 1997 (62 Fed Reg 19885; April 23, 1997). CHPAC provides advice on topics such as air and water pollution regulations, chemical safety programs, risk assessment policies, and research, which reflect the wide ranging environmental issues which affect the health of children.

regarding the Proposed Rulemaking for the National Ambient Air Quality Standards for Lead, CHPAC stated there is clear scientific evidence to support an ambient lead concentration of 0.100 $\mu g/m^3$. The letter specifically referenced the special relevance of such a standard to children because there is a steeper dose-response curve for children's neurological effects at lower levels of exposure. This is due to the fact that a higher ratio of lead air-to-blood lead ratios has been observed in children at lower air lead concentrations. (CHPAC, 2008b).

Summary Conclusion

An ambient lead concentration limit of 0.100 $\mu g/m^3$ will be more health protective for communities that live around lead-acid battery recycling facilities, particularly younger children. There is substantial scientific justification provided through EPA's development of the 2008 Lead NAAQS and the 2015 Proposed Rule to Retain the Current Lead NAAQS evidence-based framework to support the policy decision to establish an ambient limit of 0.100 $\mu g/m^3$. The above discussion provides a description of EPA's evidence-based framework to establish the 2008 Lead NAAQS of 0.15 $\mu g/m^3$ and key policy judgments made regarding the level of health protection and margin of safety for the national standard. As previously stated, there are currently no commonly accepted guidelines or criteria within the public health community that would provide a clear basis for reaching a judgment as to the appropriate degree of public health protection that should be afforded to protect against risk of neurocognitive effects in sensitive populations, such as IQ loss in children." (73 FR 67004). As a regional air agency, developing a source-specific-rule for lead-acid battery recycling facilities, the SCAQMD staff is recommending policy decisions that are more health protective for communities, particularly young children, that are affected by lead emissions from lead-acid battery recycling facilities regulated under Rule 1420.1. The above discussion substantiates the policy decision to establish an ambient lead concentration limit of 0.100 $\mu g/m^3$, with some key points of the above discussion highlighted below:

- No safe blood level of lead in children has been identified (CDC, 2012a)
- The developing nervous system in children is among the sensitive-- if not the most sensitive-endpoints. (73 FR 66976)
- Lead affects children's IQs at exposure levels appreciably lower than recognized. (CHPAC, 2105)
- Pre-school children or children under five years old are the most vulnerable to exposure and adverse health effects, and thereby represent the greatest at-risk population. (EPA, 2013)
- Younger children absorb substantially more lead than adults, especially children below 2 years of age. (OEHHA, 2009)
- No study has determined a level of lead in blood that does not impair child cognition. Further, the effects are long-lasting. Damage to a child's developing brain from lead is not reversible. (AAP, 2008)
- CASAC commented that ''a population loss of 1–2 IQ points is highly significant from a public health perspective.'' (EPA, 2008)
- Air-to-blood ratio of 1:10 is also supported by EPA's evidence based air-related IQ loss data and is even more health protective (CHPAC, 2008b)

Based on all the foregoing, the evidence supports the District's policy decision to establish a final lead limit in ambient air at 0.100 $\mu g/m^3$.

REFERENCES

REFERENCES

AAP, 2005. Lead Exposure in Children: Prevention, Detection, and Management. *Pediatrics* Vol. 116 No. 4. American Academy of Pediatrics Committee on Environmental Health, October 2005.

AAP, 2008. Letter to Administrator Stephen L. Johnson. American Academy of Pediatrics Committee on Environmental Health, January 16, 2008.

AAP, 2012. "AAP Commends CDC for Recognizing That for Children, There is No Safe Level of Lead Exposure", AAP Press Room, American Academy of Pediatrics Committee on Environmental Health, May 16, 2012. https://www.aap.org/en-us/about-the-aap/aap-press-room/pages/AAP-Statement-CDC-Revised-Lead-Exposure-Guidelines.aspx.

Bergeson & Campbell, 2013. Letter from Bergeson & Campbell on behalf of RSR Corporation to the Oficer of Air and Radiation Docket, United States Environmental Protection Agency. Re: Docket ID No. EPA-HQ-OAR-2010-0108. February, 2013.

Brunekreef, et. al., 1983. Blood lead levels of Dutch city children and their relationship to lead in the environment. J. Air Pollut. Control Assoc. 33: 872-876. Brunekreef, B.; Noy, D.; Biersteker, K.; Boleij, J. (1983).

Budtz-Jorgensen, et. al., 2013. "An International Pooled Analysis for Obtaining a Benchmark Dose for Environmental Lead Exposure in Children," Risk Analysis, Vol. 33, No. 3, 2013. DOI: 10.1111/j.1539-6924.2012.01882.x. Budtz-Jorgensen E, Bellinger D, Lanphear B, and Grandjean P., 2013.

Canfield, et. al., 2003a. "Intellectual impairment in children with blood lead concentrations below 10 ug per deciliter," New England Journal of Medicine 348: 1517-1526. Canfield RL, Henderson CR, Cory-Slechta DA, Cox C, Jusko TA, and Lanphear BP, 2003.

Canfield, et. al., 2003b. Intellectual impairment in children with blood lead concentrations below 10 microg per deciliter. *N Engl J Med*. 2003;348(16):1517-1526. Canfield RL, Henderson CR, Jr., Cory-Slechta DA, Cox C, Jusko TA, Lanphear BP, 2003.

CASAC, 2013. CASAC Review of the EPA's "Policy Assessment for the Review of the Lead National Ambient Air Quality Standards (External Review Draft – January 2013," (CASAC) Environmental Protection Agency, June 4, 2013.

CDC, 2012a. "Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention, Report of the Advisory Committee on Childhood Lead Poisoning Prevention of the Centers for Disease Control and Prevention," Centers for Disease Control and Prevention (CDC), January 2012.

CDC, 2012b. "CDC Response to Advisory Committee on Childhood Lead Poisoning Prevention Recommendations in "Low Level Lead Exposure Harms Children: A Renewed Call for Primary Prevention," Centers for Disease Control and Prevention (CDC), January 2012.

CDC, 2012c. CDC Response to Advisory Committee on Childhood Lead Poisoning Prevention Recommendations in "Low Level Lead Exposure Harms Children: A Renewed Call of Primary Prevention", Centers for Disease Control and Prevention, June 7, 2102. Page 5.

CHPAC, 2008b. Letter to Stephen L. Johnson, Administrator of United States Environmental Protection Agency Regarding Proposed Rulemaking for the National Ambient Air Quality Standard for Lead. Children's Health Protection Advisory Committee, (CHPAC), June 16, 2008.

CHPAC, 2008b. Letter to Stephen L. Johnson, Administrator of United States Environmental Protection Agency Regarding OAQPS Final Staff Paper/Policy Assessment of Scientific and Technical Information and Advanced Notice of Proposed Rulemaking for Lead NAAQS, Children's Health Protection Advisory Committee, (CHPAC), January, 2008.

CHPAC, 215. Letter to Gina McCarthy, Administrator of United States Environmental Protection Agency. Re: National Ambeint Air Quality Standards for Lead, Children's Health Protection Advisory Committee, (CHPAC), January 2015.

Chen, et. al., 2005. IQ and blood lead from 2 to 7 years of age: are the effects in older children the residual of high blood lead concentrations in 2-year-olds? *Environ Health Perspect*. 2005;113(5):597-601. Chen A, Dietrich KN, Ware JH, Radcliffe J, Rogan WJ, 2005.

DTSC, 2015. "DTSC Review of Step-out Dust and Soil Sampling Report and Order to Perform Emergency Response Interim Measures to Clean Up Off-site Contaminated Soil, Dust, and Sediment, Exide Technologies, Vernon, CA (Corrective Action Consent Order, Docket Number P3-01/02-100)"
P3-01 /02-010)", Department of Toxics Substances Control, https://www.dtsc.ca.gov/HazardousWaste/Projects/upload/Exide_Technologies_Letter_Emergency_Response_Intertim_Measure.pdf, accessed January 12, 2015.

EPA, 2001. "Prioritization of Toxic Air Contaminants Under the Children's Health Act," United States Environmental Protection Agency, Office of Environmental Health Hazard Assessment, October 2001.

EPA, 2006. "Air Quality Criteria Document for Lead, Volumes I-II," United States Environmental Protection Agency, Office of Research and Development, October 2006.

EPA, 2007. "Lead: Human Exposure and Health Risk Assessments for Selected Case Studies." United States Environmental Protection Agency, October 2007.

EPA 2008a. "Responses to Significant Comments on the 2008 Proposed Rule on the National Ambient Air Quality Standards for Lead" United States Environmental Protection Agency, May 2008.

EPA, 2008b. "National Ambient Air Quality Standards for Lead; Final Rule," 40 CFR Parts 50, 51, 53, and 58, Federal Register Volume 73, No. 219, 66964-67062, United States Environmental Protection Agency, November 2008.

EPA, 2009. "Lead in Air," United States Environmental Protection Agency, (*http//www.epa.gov/air/lead.html*), June 12, 2009.

EPA, 2013. "2013 Final Report: Integrated Science Assessment for Lead." United States Environmental Protection Agency, June 2013.

EPA, 2014. "Policy Assessment for the Review of the Lead National Ambient Air Quality Standards." United States Environmental Protection Agency, May 2014

EPA, 2015. "National Ambient Air Quality Standards for Lead." United States Environmental Protection Agency, January 2015.

Hayes, et. al., 1994. "Long-term trends in blood lead levels among children in Chicago: Relationship to air lead levels," Pediatrics 93: 195-200. Hayes, EB, McElvaine, MD, Orbach HG, Fernandez AM, Lyne, S, and Matte, TD, 1994.

Henderson, R., 2008. Letter from Dr. Rogene Henderson, Chair, Clean Air Scientific Advisory Committee, to Administrator Stephen L. Johnson. Re: Clean Air Scientific Advisory Committee's (CASAC) Review of the Notice of Proposed Rulemaking for the NAAQS for lead. July 18, 2008.

OEHHA, 2009. "Revised California Human Health Screening Levels for Lead," Office of Environmental Human Health (OEHHA). September 2009.

Lanphear, et. al. 2005a.) "Low-level environmental lead exposure and children's intellectual function: An international pooled analysis," Environmental Health Perspectives 113: 894-899. Lanphear BP, Hornung R, Khoury J, Yolton K, Baghurst P, Bellinger DC, Canfield RL, Dietrich KN, Bornschein R, Greene T, Rothenberg SJ, Needleman HL, Schnaas L, Wasserman G, Graziano J, and Roberts R, 2005.

Lanphear, et. al. 2005b. Low-level environmental lead exposure and children's intellectual function: an international pooled analysis. *Environ Health Perspect*. Jul 2005;113(7):894-899. Lanphear BP, Hornung R, Khoury J, et. al., 2005.

Lubischer, 2015. Letter from James T. Lubischer to Gina McCarthy, Administrator of United States Environmental Protection Agency, M.D., Pediatrician to , RE: Docket ID No. EPA-HQ-OAR-2010-0108 (40 CFR Part 50, National Ambient Air Quality Standards
for Lead; Proposed Rule - Federal Register / Vol. 80, No. 2 / Monday, January 5, 2015, p 278-324.), March, 2015.

RSR, 2015. Letter from RSR Corporation to the Office of Air and Radiation Docket, United States Environmental Protection Agency. Re: Docket ID No. EPA-HQ-OAR-2010-0108. April, 2015.

SCAQMD, 2014. "Staff Report for Proposed Amended Rule 1420.1: Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities," South Coast Air Quality Management District, January 2014.

SCAQMD, 2015. "Staff Report for Proposed Rule 1420.1: Emission Standards for Lead from Large Lead-Acid Battery Recycling Facilities," South Coast Air Quality Management District, February 2015.

Schwartz, J., and Pitcher, H. (1989). The relationship between gasoline lead and blood lead in the United States. J Official Statistics 5(4):421-431. Schwartz, J., and Pitcher, H., 1989.

WHO, 2015. "Lead poisoning and health", http://www.who.int/mediacentre/factsheets/fs379/en/, World Health Organization, Media Centre, Fact Sheet, 2015

ATTACHMENT H

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

Final Subsequent Environmental Assessment for:

Proposed Amended Rule 1420.1 Emissions Standard for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities

August 2015

SCAQMD No. 150721CC
SCH No. 2015011039

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PREFACE

This document constitutes the Final Subsequent Environmental Assessment (SEA) for Proposed Amended Rule (PAR) 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities. This SEA is subsequent to PAR 1420.1 Final EA –January 2014. The Draft SEA was released for a 30-day public review and comment period from July 22, 2015 to August 20, 2015. No comment letters were received from the public relative to the environmental analysis in the Draft SEA.

Subsequent to the release of the Draft SEA, minor additions and modifications were made to this SEA for clarification purposes. To facilitate identifying the modifications in the document, changes are included as underlined text and text removed from the document are indicated by ~~strikethrough~~. None of the modifications alter any conclusions reached in the Draft SEA. As a result, these minor revisions do not require recirculation of the document pursuant to CEQA Guidelines §15073.5. Therefore, this document now constitutes the Final SEA for PAR 1420.1.

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INTRODUCTION

Rule 1420.1 – Emission Standards for Lead from Lead-Acid Battery Recycling Facilities was adopted on November 5, 2010 and applies to large lead-acid battery recycling facilities that process more than 50,000 tons of lead a year. Rule 1420.1 was amended on January 10, 2014 to reduce other toxic (i.e. arsenic, benzene, and 1,3-butadiene) emissions from affected facilities. It was amended again on March 7, 2014, to include a multi-metals demonstration program to continuously monitor lead, arsenic, and other metals and clarify language that requires affected facilities to reimburse the South Coast Management District (SCAQMD or District) for funds spent to deploy independent third-party contractors who conduct investigations of unplanned shutdowns according to Rule 1420.1. The amendment renamed the rule as Rule 1420.1 - Emission Standards for Lead and Other Toxic Air Contaminants from Large Lead-Acid Battery Recycling Facilities, to reflect these changes. The March 2015 amendment lowered the ambient lead concentration limit and point source lead emission rate, as well as adding other housekeeping and maintenance measures. The purpose of Rule 1420.1 is to protect public health by reducing exposure to emissions of lead, arsenic, benzene, and 1,3 butadiene from these facilities and to help ensure attainment of the National Ambient Air Quality Standard for lead.

SCAQMD staff is currently proposing amendments to Rule 1420.1 to further reduce lead emissions at large lead acid battery recycling facilities to continue to protect public health. Proposed Amended Rule (PAR) 1420.1 lowers the point source limit to reduce the amount of lead emitted into the air from point sources; thereby reducing the further accumulation of lead dust in and around the facility to better ensure protection of public health.

CALIFORNIA ENVIRONMENTAL QUALITY ACT

Amending Rule 1420.1 is a discretionary action, which has the potential to result in direct or indirect changes to the environment and, therefore, is considered a "project" as defined by the California Environmental Quality Act (CEQA). SCAQMD is the lead agency for the proposed project and has prepared this ~~Draft~~ Final Subsequent Environmental Assessment (SEA) pursuant to its Certified Regulatory Program (CEQA Guidelines § 15251). California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report or negative declaration once the Secretary of the Resources Agency has certified the regulatory program. SCAQMD's regulatory program was certified by the Secretary of the Resources Agency on March 1, 1989, and is codified as SCAQMD Rule 110.

CEQA and SCAQMD Rule 110 require that potential adverse environmental impacts of proposed projects be evaluated and that feasible methods to reduce or avoid significant adverse environmental impacts of these projects be identified. To fulfill the purpose and intent of CEQA, this ~~Draft~~ Final SEA addresses the potential adverse environmental impacts associated with the proposed project according to CEQA Guidelines § 15252. It states that the lead agency has an obligation to identify and evaluate the environmental effects of the project. The Draft SEA is an informational document intended to: (a) provide the lead agency, responsible agencies, decision makers and the general public with information on the environmental effects of the proposed project; and, (b) identify possible ways to minimize the significant effects.

A Subsequent EA is the appropriate CEQA document for the proposed project because there are subsequent changes proposed to Rule 1420.1 (CEQA Guidelines §15162). The proposed project is a

modification of an earlier project and this analysis considers only the incremental effects of the proposed project.

The California Environmental Quality Act (CEQA) Guidelines Sections 15162 through 15164 set forth the criteria for determining the appropriate additional environmental documentation, if any, to be completed when there is a previously adopted EIR or Negative Declaration covering the project for which a subsequent discretionary action is required. The SCAQMD prepared this SEA to the previously adopted EA. This SEA is governed by Section 15162 (a) of the CEQA Guidelines, which provides that where a negative declaration has been adopted for a project, "no subsequent EIR shall be prepared for that project unless the lead agency determines, on the basis of substantial evidence in the light of the whole record, one or more of the following:

1) Substantial changes are proposed in the project which will require major revisions of the previous EIR or negative declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects;

2) Substantial changes occur with respect to the circumstances under which the project is undertaken which will require major revisions of the previous EIR or Negative Declaration due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant effects; or

3) New information of substantial importance, which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete or the Negative Declaration was adopted, shows any of the following:

a) The project will have one or more significant effects not discussed in the previous EIR or negative declaration;

b) Significant effects previously examined will be substantially more severe than shown in the previous EIR;

c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative; or

d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative."

Section 15162(b) provides that if a subsequent EIR is not required under 15162 (a), then "the lead agency shall determine whether to prepare a subsequent negative declaration, an addendum, or no further documentation."

SCAQMD's review of the proposed project shows that the proposed project is not expected to generate significant adverse affects on the environment. Pursuant to CEQA Guidelines §§ 15126.4 (a)(3), and 15126.6, mitigation measures and alternatives are not required for effects which are not found to be significant, thus, no mitigation measures or alternatives to the project are included in

the ~~draft~~ Final SEA. In addition, because SCAQMD has a certified regulatory program, the Environmental Assessment is an appropriate substitute for an EIR or Negative Declaration. Pursuant to CEQA Guidelines § 15252(a)(2)(B) and supported by the environmental checklist (in Chapter 2), if the project would not have any significant or potentially significant effect on the environment, "no alternatives or mitigation measures are proposed to avoid or reduce any significant effects on the environment." ~~Comments received on the Draft SEA during the 30-day public review period will be addressed and included in the Final SEA.~~ The Draft SEA was released for a 30-day public review and comment period from July 22, 2015 to August 20, 2015. No comment letters were received on the Draft SEA during the comment period.

PROJECT LOCATION

The SCAQMD has jurisdiction over an area of 10,473 square miles, consisting of the four-county South Coast Air Basin (Basin) and the Riverside County portions of the Salton Sea Air Basin (SSAB) and the Mojave Desert Air Basin (MDAB). The Basin, which is a subarea of the SCAQMD's jurisdiction, 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 6,745 square-mile Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino counties. The Riverside County portion of the SSAB and MDAB is bounded by the San Jacinto Mountains in the west and spans eastward up to the Palo Verde Valley (see Figure 1-1).

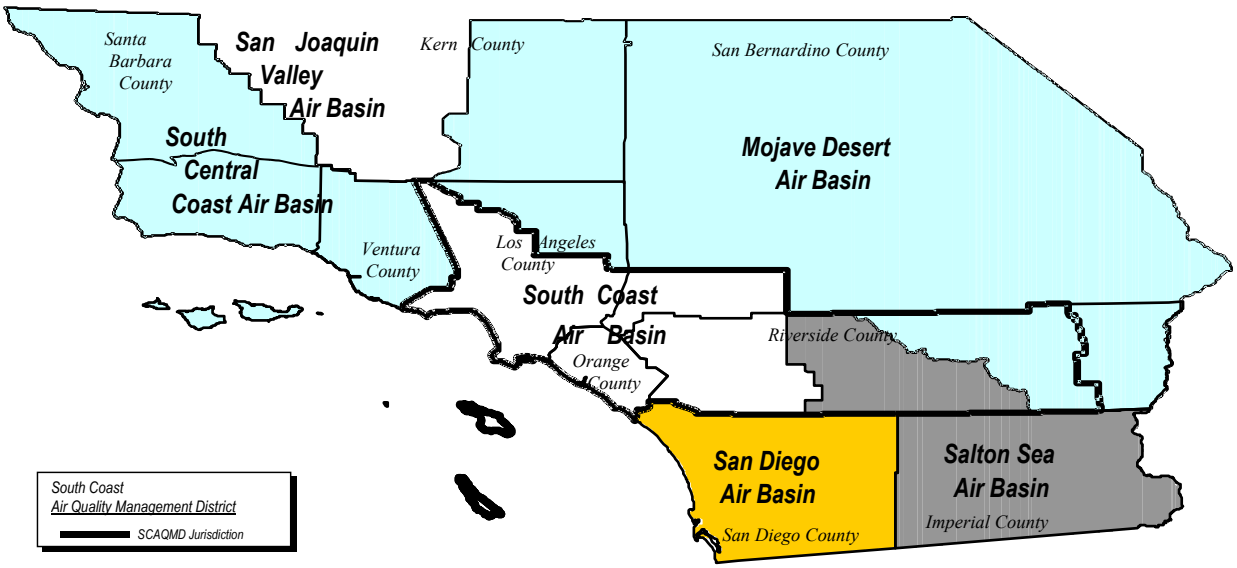

Figure 1-1 Boundaries of the South Coast Air Quality Management District

PROJECT OBJECTIVES

The objectives of PAR 1420.1 are to protect public health by further reducing lead emissions from large lead-acid battery recycling facilities by:

- Reducing the total facility point source emission limit for lead; and
- Clarifying applicability for large lead-acid battery recycling facilities that are closing and closure requirements.

PROJECT BACKGROUND

Health Effects of Lead

Lead is classified as a "criteria pollutant" under the federal Clean Air Act. It is also identified as a carcinogenic toxic air contaminant (TAC) by the Office of Environmental Health Hazard Assessment (OEHHA). Chronic health effects include problems such as nervous and reproductive system disorders, neurological and respiratory damage, cognitive and behavioral changes, and hypertension. Also, exposure to lead may increase the risk of contracting cancer or result in other adverse health effects. Young children are especially susceptible to the effects of environmental lead given that their bodies accumulate lead more readily than do adults and because they are more vulnerable to certain biological effects of lead including learning disabilities, behavioral problems, and deficits in IQ.

During the U.S. EPA's recent review of the lead NAAQS the U.S. EPA Administrator concluded that the current lead NAAQS of 0.15 $\mu g/m^3$ should be retained given that it provides requisite protection of public health. However, the Administrator noted that a threshold blood-lead level with which nervous system effects, and specifically, cognitive effects, occur in young children cannot be discerned from the currently available studies. Further, in the U.S. EPA's recent Policy Assessment for the Review of the Lead NAAQS, the U.S. EPA explicitly stated "with regard to our understanding of the relationship between exposure or blood lead levels in young children and neurocognitive effects, the evidence in this review…does not establish a threshold blood lead level for neurocognitive effects in young children. Furthermore, based on information provided in the U.S. EPA's recent policy assessment document and proposed rule, an ambient lead concentration of 0.15 $\mu g/m^3$ correlates to a potential IQ decrement of approximately (2) points in young children exposed to elevated levels of lead.

Regulatory History

Lead-acid battery recyclers have been subject to environmental air quality regulations for more than two decades. Below is a chronology of regulatory activities:

- In November 1970, CARB set the state ambient air quality standard for lead at 1.5 microgram per cubic meter averaged over 30 days.
- In October 1978, the U.S. EPA adopted the National Ambient Air Quality Standards (NAAQS) for lead requiring attainment with a lead ambient concentration of 1.5 microgram per cubic meter averaged over a calendar quarter.
- In September 1992, the SCAQMD adopted Rule 1420 – Emissions Standard for Lead. The rule incorporated the state ambient air quality standard and required control devices on lead emission points, control efficiency requirements for lead control devices, housekeeping, and monitoring or modeling of ambient air quality.
- In October 1992, OEHHA classified lead as a carcinogenic toxic air contaminant and assigned to it a cancer potency factor and a cancer unit risk factor.

- June 1997, the U.S. EPA adopted the National Emissions Standards for Hazardous Air Pollutants (NESHAP) from Secondary Lead Smelting. The federal regulation required lead emission concentration limits of lead control devices, control of process fugitive emissions, monitoring, recordkeeping, and reporting.
- On July 16, 2007, EPA finalized a regulation that affects lead emissions from all lead-acid battery manufacturing facilities that are area sources. The federal regulation required lead emission concentration limits, testing, monitoring, recordkeeping, and reporting requirements.
- On October 15, 2008, the U.S. EPA signed into regulation an amended NAAQS for lead of 0.15 $\mu g/m^3$.
- November 5, 2010, the SCAQMD adopted Rule 1420.1 – Emissions Standard for Lead from Large Lead-acid Battery Recycling Facilities. The rule established requirements for total enclosures of areas used in the lead-acid battery recycling operation, ambient air lead concentration limits, ambient air monitoring, and housekeeping practices. Additional rule amendments followed the initial adoption in January of 2014, March of 2014, and March of 2015.
- December 14, 2010, the U.S. EPA made final revisions to the ambient monitoring requirements for measuring lead in the air. These amendments expand the nation's lead monitoring network to better assess compliance with the 2008 National Ambient Air Quality Standards for lead.
- January 2, 2015, the U.S. EPA proposed that the ambient lead concentration standard of 0.15 $\mu g/m^3$ averaged over a rolling 3-month period remain unchanged. The 90-day comment period for this proposal ended on April 6, 2015 and requires further action by the U.S. EPA.

The following provides additional background information about Rule 1420 and the 2008 NAAQS for lead.

Rule 1420

Rule 1420 was adopted in September 1992 and has not been amended since its adoption. Rule 1420 applies to facilities that process or use lead-containing materials that include, but is not limited to, primary or secondary lead smelters, foundries, lead-acid battery manufacturers or recyclers, and lead-oxide, brass and bronze producers. Rule 1420 is based on the current state ambient air quality standard of 1.5 $\mu g/m^3$ averaged over a 30-day period. The rule includes requirements for point source controls, monitoring, sampling, recordkeeping, and reporting. Rule 1420 requires facilities that process more than two tons of lead per year to submit a Compliance Plan that provides information on how the facility will conduct monitoring, air dispersion modeling, and implement requirements to install and implement point source controls.

2008 NAAQS for Lead

Since U.S. EPA established the initial standard of 1.5 $\mu g/m^3$ in 1978, scientific evidence about lead and health has expanded dramatically. More than 6,000 new studies on lead health effects, environmental effects, and lead in the air have been published since 1990. Evidence from health studies shows that adverse effects occur at much lower levels of lead in the blood than previously thought. As a result, U.S. EPA amended the NAAQS for lead that now reduces the ambient air quality standard from 1.5 $\mu g/m^3$ to 0.15 $\mu g/m^3$. The 2008 lead NAAQS requires full attainment by each state no later than five years after final designations for attainment status are made. Demonstration of attainment is based on measurements using a rolling 3-month averaging form to

be evaluated over a 3-year period. Measurements are to be determined by U.S. EPA-required monitoring networks within each state which consist of both source-oriented and non-source-oriented monitors. The SCAQMD has already established the required monitoring network for both source and non-source-oriented lead monitors.

Further, in May of 2014, the U.S. EPA released its "Policy Assessment for the Review of the Lead National Ambient Air Quality Standards," reaffirming the primary (health-based) and secondary (welfare-based) staff conclusions regarding whether to retain or revise the current standards. As a result, in January of 2015 the U.S. EPA proposed that the ambient lead concentration standard of 0.15 $\mu g/m^3$ averaged over a rolling 3-month period remain unchanged. The 90-day comment period for this proposal ended on April 6, 2015 and requires further action by the U.S. EPA.

The SCAQMD Governing Board has authority to adopt PAR 1420.1 pursuant to the California Health and Safety Code Sections 39002, 39650 et. seq., 40000, 40001, 40440, 40441, 40702, 40725 through 40728, 41508, 41700 and 41706.

Compliance Determination-Monitoring

The demonstration of attainment of the lead standard is to be based on measurements using a rolling 90 day averaging form to be evaluated over a three-year period. Measurements are to be determined by EPA-required monitoring networks within each state which consist of both source-oriented and non-source-oriented monitors. The SCAQMD has already established the required monitoring network for both source and non-source-oriented lead monitors. Since 2012, the District has not exceeded the federal lead standard.

Ambient air lead concentrations are determined through use of high-volume total suspended particulate samplers placed throughout the South Coast Air Basin and at both upwind and downwind locations of the facilities where maximum ambient concentrations are expected. They measure lead and arsenic concentrations in the ambient air over a midnight-to-midnight, 24 hour period.

Point source emission rates are determined by source tests to demonstrate compliance with the mass emission standards specified in the rule. They are "snapshots" of the efficiency of the control equipment and are conducted when the equipment is installed and annually or biannually thereafter. The tests are conducted in accordance with SCAQMD, CARB or EPA test methods.

Affected Facilities

PAR 1420.1 applies to large lead-acid battery recycling facilities that process more than 50,000 tons of lead annually. Currently there are only two facilities subject to Rule 1420.1 in the SCAQMD: Exide Technologies and Quemetco Inc. Exide Technologies is located in Vernon (Los Angeles County) and Quemetco, Inc. is located in the City of Industry (Los Angeles County).

As discussed further below, Exide is in the process of permanently closing their facility. As a result, the point source limit of PAR 1420.1 will only be applicable to Quemetco because Exide is no longer in operation. In addition, although the closure provisions will be applicable to both facilities, they are immediately applicable to Exide and will be analyzed in that context. It is assumed that the closure analysis for Quemetco would be similar.

Closure of Exide Technologies In Vernon, CA

On April 7, 2015 Exide Technologies withdrew their California Department of Toxic Substance Control (DTSC) permit application and provided notification of its intent to permanently close. On May 15, 2015, Exide Technologies submitted a revised Closure Plan to DTSC. The Closure Plan provides a detailed status of the facility and contains decontamination and demolition plans. The Closure Plan also includes groundwater monitoring information, engineering controls, waste characterization, and air monitoring plans. The Closure Plan is separate from, but is occurring simultaneously with, the DTSC Corrective Action imposed on Exide. The Corrective Action requires off-site cleanup of nearby residential and industrial areas, as well as cleanup of on-site contaminated groundwater.

Based on the Closure Plan submitted to DTSC, Exide's closure is expected to occur in three phases. The first phase will involve the removal of inventory, equipment decontamination and removal, decontamination and deconstruction of buildings, and soil sampling. Exide expects to implement dust mitigation measures and will retain a third-party environmental consultant to monitor and document implementation of those measures and to conduct real-time air monitoring. Exide plans to continue operating emission air pollution control equipment to maintain negative pressure on associated buildings while the inventory is removed and gross cleaning of duct work is complete. Once the duct work has been removed up to the emission control equipment, the ducts shall be blinded and the interior of the equipment cleaned following manufacturer's operating procedures. For internal, decontamination of structures, it will be done under negative pressure by vacuum cleaning vented to HEPA filters and then pressure washing. The Closure Plan requires that any decontamination of the exteriors of structures must occur within a temporary enclosure (e.g., scaffolding enclosed with plastic) with negative pressure. The most recent revision of the Closure Plan does not require that roofs have temporary enclosures while they are decontaminated and deconstructed. SCAQMD staff commented on this Closure Plan requesting that this provision be included in the Final Closure Plan. This ~~Draft~~ Final SEA evaluates the construction of a temporary enclosure above the facility roofs during external decontamination as part of this project in the event that the Final Closure Plan does not include this requested provision.

Phase 2 will address potential below-grade decontamination. These additional activities may require the removal of contaminated soil beneath the concrete floor at the closure areas; capping and installation of boundary markers where contaminated soils are left in place; and development of a deed notice/land use covenant. The scope of Phase 2 will be determined using data generated during Phase 1 and may be influenced by data generated during the Corrective Action. Generally areas will be excavated to a depth of five feet in and around structures. Dust control measures such as temporary enclosures and water will be used during floor removal and excavation activities. The temporary enclosure will remain in-place and/or the area will be covered until the excavation is complete.

When Phase 1 and Phase 2 are completed, the facility will submit certification by both the facility and an independent, qualified engineer registered in the State of California within 60 days of the completion of final closure, to DTSC, SCAQMD and the City of Vernon. This certification will state that the facility has been closed in accordance with the approved closure plan. Phase I of the closure is expected to commence March 2016 and be completed by May 2018. Phase II is scheduled for completion by June 2020.

Phase III (ongoing) would include post-closure and contingent post-closure work to implement long-term inspections, monitoring, and maintenance. Phase III is scheduled to last until 2049.

Ambient Air Monitoring

The affected facilities have several air monitors throughout their sites. These monitors are used to determine compliance with the ambient concentration limits. They measure lead and arsenic concentrations in the ambient air over a midnight-to-midnight, 24 hour period. See Figure 1-2 and for Figure 1-3 Exide and Quemetco's Ambient Monitoring Locations, respectively.

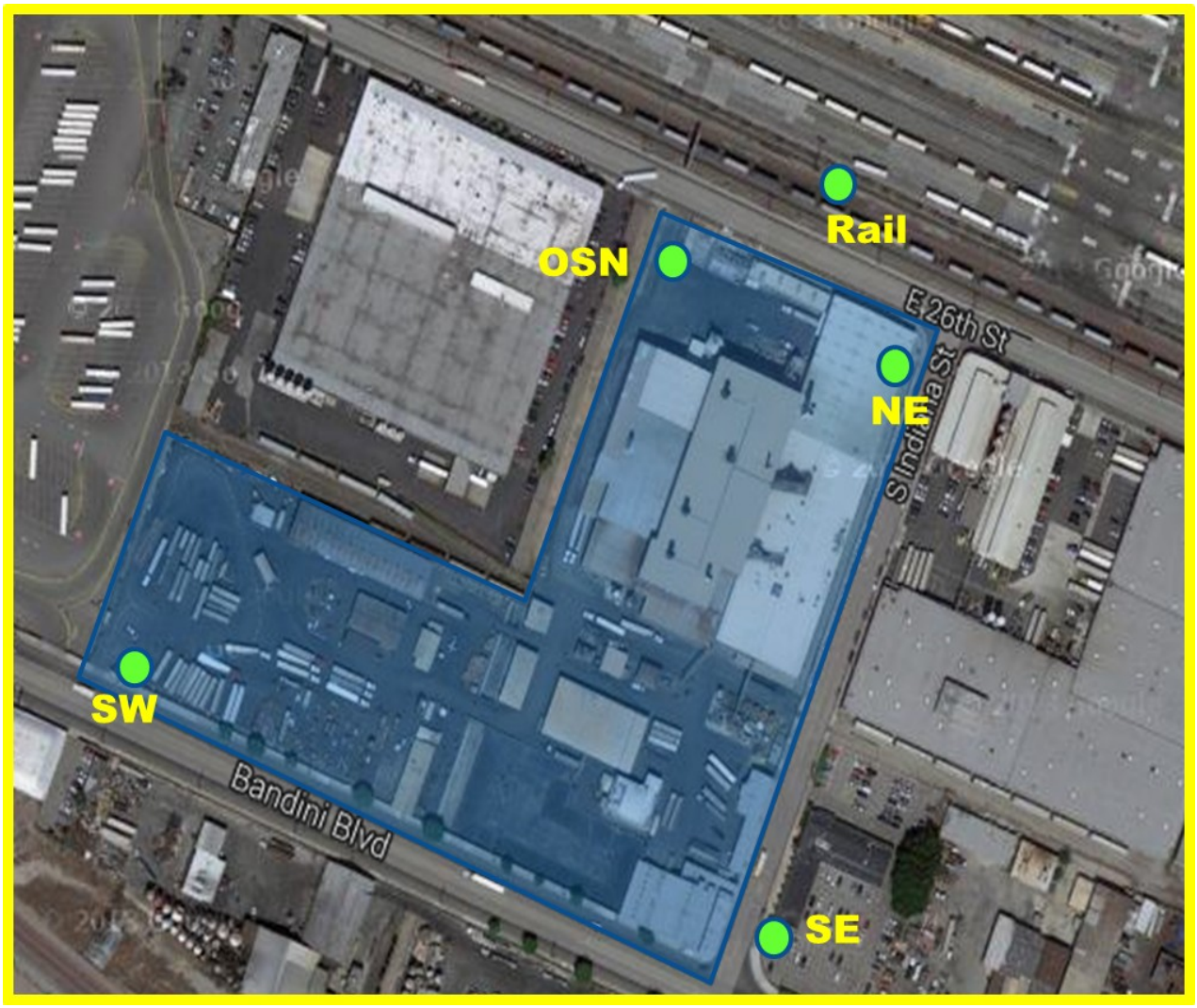

Figure 1-2 Exide's Ambient Monitoring Stations

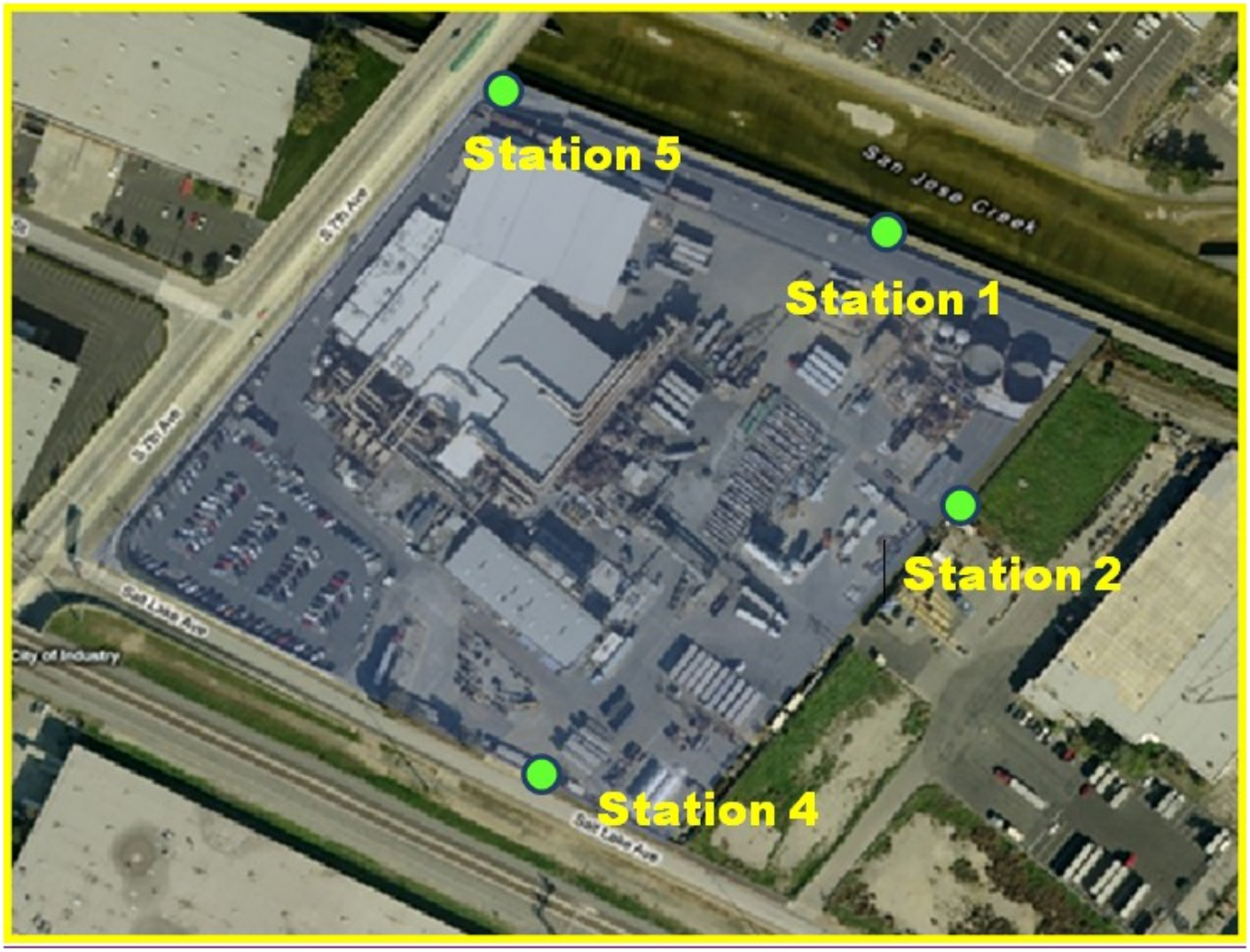

Figure 1-3 Quemetco's Ambient Monitoring Stations

Overview of Existing Operations

Lead-acid battery recycling facilities are secondary lead smelting operations where spent lead-acid batteries, mostly automotive, and other lead-bearing materials are received from various sources and processed to recover lead, plastics, and acids. The process mainly involves the sorting, melting, and refining of lead-acid batteries, which ultimately produces lead ingots that are then made into new batteries or sold to other entities. Figure 1-4 is a Simplified Flow Diagram of the Process. Below is a general description of the lead recycling process at the affected facilities including potential lead emission points:

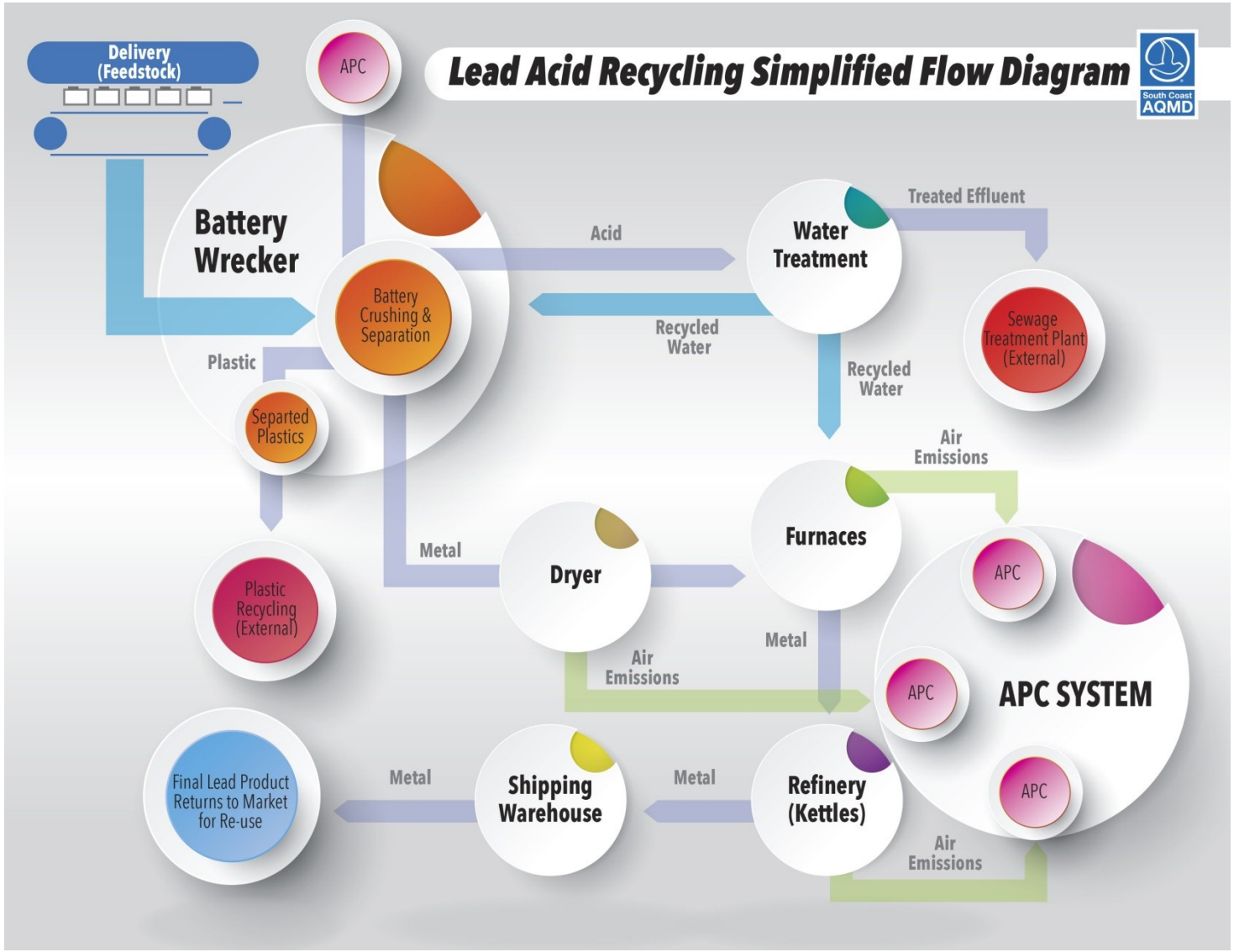

Figure 1-4-Lead Acid Recycling Simplified Flow Diagram

Phase I – Raw Materials Processing: Lead-bearing materials recovered from lead-acid batteries are prepared and processed prior to being charged (loaded) to a smelting furnace. The feedstock for lead-acid battery recycling facilities can fluctuate. Although the majority of the feedstock is plastic-cased car batteries, other lead-bearing items are also sometimes processed (e.g., steel-cased batteries).

Receiving and Storage: Spent lead-acid batteries are usually received on pallets that are either stored or sent directly to conveyors for immediate crushing.

Battery Breaking/Crushing: The spent lead-acid batteries are unloaded from conveyors and loaded into a hammer mill system where they are crushed whole. Both Quemetco and Exide's battery breaking areas are located in a total enclosure that is vented to an emission collection system pursuant to Rule 1420.1. The crushed material is then placed into a series of tanks filled with water in order to filter out any plastic and rubber components of the battery casing and to clean materials of the acids. Through buoyancy effects, the crushed metal material sinks to the bottom of the tanks and goes through a series of screens to further isolate lead-bearing materials. Arsenic and other metals can be found in the lead-bearing materials due to battery parts such as the posts and grids containing alloys of arsenic and lead. The materials are then typically stored in open or partially covered piles if not required for immediate charge preparation.

Charge Preparation/Rotary Drying/Sweating: Recovered lead-bearing materials are prepared by blending it with stored lead scrap and reagents prior to being charged to a furnace. The metallic scrap materials are placed in dryers to remove moisture prior to charging to a furnace in order to reduce furnace upsets (puffs and explosions). Some unfiltered plastic and rubber components of the battery casing may be inadvertently introduced into the dryer during this process. The materials are then sweated (subjected to temperatures above the melting temperature of lead, but below that of the other metals) to separate lead from other metals with higher melting points. The process of melting of plastic and rubber parts from the partial combustion of carbon coke (mainly in the dryers) generates toxic organic emissions.

Phase II – Smelting: Smelting is the production of crude lead by melting and separating the lead from metallic and non-metallic contaminants and by reducing lead compounds to elemental lead. Smelting is carried out in the blast, electric resistance, reverberatory, and rotary kiln furnaces. These furnaces emit high levels of metal particulates during the charging and tapping processes in addition to toxic organic emissions.

Cupola (Blast) furnaces: Typically, "hard" lead, or antimonial lead (containing approximately 10 percent antimony) is produced in blast furnaces. Scrap metal, re-run slag, scrap iron, coke, recycled dross, flue dust (which contain lead and arsenic), and limestone are used as charge materials to the furnace. Process heat is produced by the reaction of the charged coke with blast air that is blown into the furnace. Currently, Exide utilizes a blast furnace, which generates benzene and 1,3-butadiene emissions.

Electric resistance furnaces: Electric resistance furnaces generate heat from molten slag that offers resistance to the passage of a current through it. Electric energy is converted into heat when a current flows through electrodes directly into the furnace charge (i.e., the material to be heated). Electric resistance furnaces typically generate less airborne emissions (lead and arsenic) compared to blast or reverberatory furnaces, which utilize combustion processes to generate the

heat necessary to melt the furnace charge materials. Currently, Quemetco is the only lead-acid battery recycler in the SCAQMD utilizing an electric resistance furnace. Quemetco's electric resistance furnace is typically used to further separate lead-containing materials from non lead-containing materials contained in the lead slag produced from the reverberatory furnace.

Reverberatory furnaces: Semi-soft lead (containing approximately three to four percent antimony) is produced in reverberatory furnaces, which generate lead and arsenic emissions. Lead scrap, metallic battery parts, oxides, dross, and other residues are used as charge materials to the furnace. The charge materials are heated directly using natural gas, which generate benzene and 1,3-butadiene emissions. Reverberatory furnaces are used by both Exide and Quemetco.

Phase III – Refining and Casting: Refining and casting the crude lead from the smelting process can consist of softening, alloying, and oxidation, depending on the degree of purity or alloy type desired. Crude lead produced during smelting operations is remelted and refined by the addition of reagents, such as sulfur and caustic soda. The purified lead is then cast into molds or ingots. Refining furnaces and kettles are typically gas or oil-fired and maintained at operating temperatures between 600 to 1,300 degrees Fahrenheit. Arsenic fumes may be emitted when molten lead is transferred to refining kettles and lead particulates may become airborne off refining kettle contents due to thermal rise processes.

Alloying furnaces: Alloying furnaces are kettle furnaces used to simply melt and mix ingots of lead and alloy materials, such as antimony, tin, arsenic, copper, and nickel. Other reagents used include sodium hydroxide, sodium nitrate, carbon coke, calcium metal, sodium metal, and phosphates.

Refining furnaces: Refining furnaces are used to either remove copper and antimony for soft lead production, or to remove arsenic, copper, and nickel for hard lead production. Sulfur may be added to the molten lead to remove copper. The resultant copper sulfide is skimmed off as dross and may be processed in a blast furnace to recover residual lead. Aluminum chloride is used to remove copper, antimony, and nickel.

Oxidizing furnaces: Either kettle or reverberatory units are used to oxidize lead and to entrain the product lead oxides in the combustion air stream for subsequent recovery in high-efficiency baghouses.

PROJECT DESCRIPTION

The following is a summary of the proposed amendments to PAR 1420.1 – Emission Standards for Lead and Other Toxic Air Contaminants from Lead-Acid Battery Recycling Facilities. A copy of PAR 1420.1 with the specific details of the amendments can be found in Appendix A. Both the following and Appendix A constitute a project description.

Subdivision (a) – Purpose
No change.

Subdivision (b) – Applicability
The proposed rule will clarify that applicability covers lead-acid battery recycling facilities during closure activities. PAR1420.1 applies until the proposed closure requirements in paragraph (p)(4) are satisfied. Continued compliance with the rule is necessary to ensure that attainment with the lead NAAQS will be maintained and that surrounding communities suffer no degradation in air quality during closure, including demolition, cleanup and decontamination activities.

Subdivision (c) – Definitions
No change.

Subdivision (d) – General Requirements
No change.

Subdivision (e) – Total Enclosures
No change.

Subdivision (f) –Point Source Emissions Controls
Effective September 4, 2015, the total facility mass lead emissions from all sources will be reduced from 0.023 pounds per hour to 0.003 pounds per hour.

Subdivision (g) – Compliance Plan
No change.

Subdivision (h) – Housekeeping Requirements
No change.

Subdivision (i) – Maintenance Activity
No change.

Subdivision (j) –Ambient Air Monitoring Sampling Requirements
No change.

Subdivision (k) – Source Tests
PAR 1420.1 will eliminate the biennial source test option for facilities that demonstrate a lead point source emission rate of 0.0012 lb/hr or less. The proposed rule will require annual source testing for point sources that emit lead.

Subdivision (l) – New Facilities
No change.

Subdivision (m) – Recordkeeping
No change.

Subdivision (n) – Reporting
No change.

Subdivision (o) – Curtailment Requirements
Effective upon adoption of PAR 1420.1, the first tier of the total facility mass emission rate for process curtailments in Table 2 of subparagraph (o)(2) will be reduced to coincide with the proposed reduction of total facility lead point sources emission rate under subparagraph (f)(1)(A) from 0.023 lb/hour to 0.003 lb/hour.

Subdivision (p) – Large Lead-Acid Battery Facility Closure Requirements
PAR 1420.1 includes provisions for lead-acid battery recycling facility owner and operators to ensure no degradation to air quality occurs during facility closure activities such as demolition, decontamination, and cleanup. Facility closure entails permanently stopping production and notifying the Execution Officer in writing that the facility will no longer be in operation.

In the proposal, facilities that are closing will be required to submit a Compliance Plan for Closure Activities and continue conducting daily lead and arsenic ambient monitoring (paragraphs (d)(1), (d)(5) and (d)(6)). The Compliance Plan for Closure Activities would be submitted in advance of decontamination and demolition actions taking place. It would specify the housekeeping and maintenance measures to be taken to prevent lead or arsenic ambient exceedances. The facility can tailor the plan to address specific decontamination or demolition procedures. For example, the plan could include building washing provisions while the building remains intact but discontinuing building washing provisions once the buildings have been demolished. The plan is expected to be updated as closing activities proceed to provide added flexibility. The plan would also require that contingency provisions be included that can be implemented in the event there is an exceedance of the lead or arsenic ambient concentrations. These contingency plans would likely be additional housekeeping and maintenance measures such as increased frequency of washing, sweeping and vacuuming as well as specific measures for demolition-related emissions.

If the lead or arsenic ambient concentrations exceed rule requirements, all closure related activities that contributed to the exceedance shall be suspended until contingency measures in the Approved Compliance Plan for Closure Activities can be implemented. If the exceedance is due to a previously unidentified activity for which the contingency measures do not address, then a revised Compliance Plan for Closure Activities will be required to be submitted and approved by the Executive Officer before closure related activities that contributed to the exceedances resume. While the revised plan is not intended to be as comprehensive as Compliance Plan for Closure Activities, it is necessary to address the cause of the exceedances prior to resuming to ensure that attainment with the lead NAAQS will be maintained and that surrounding communities suffer no degradation in air quality.

Facilities will be required to continue monitoring and abiding by the Compliance Plan for Closure Activities until the lead-acid battery recycling facility has surrendered all air permits to the Executive Officer, submitted DTSC-approved certification of final closure to SCAQMD, receives written confirmation from the Executive Officer that final closure has been verified and there are no exceedances of ambient lead or arsenic concentrations for 12 consecutive months, with at least one month occurring on or after the date of submittal of certification of final closure.

Subdivision (q) – Exemption

An exemption has been included in PAR 1420.1 to specify which provisions of the rule do not apply to a facility that has permanently ceased production and notified the Executive Officer in writing that the facility is permanently closing. If the facility has ceased production, point source emission rate limits, operational Compliance Plans, source testing and curtailment requirements are no longer necessary.

Subdivision (r) – Severability

No change.

Appendix 1 – Content of Initial Facility Status Reports

No change.

Appendix 2 – Content of Ongoing Facility Status Reports

No change.

Appendix 3 – Continuous Furnace Pressure Monitoring (CFPM) Plan

No change.

EMISSIONS CONTROL TECHNOLOGIES

Existing Controls

The impacted facilities are secondary lead smelting operations where spent automotive and other lead-bearing materials are processed to recover lead, plastics and acids. The process generally involves the sorting, smelting and refining of raw materials for the purpose of producing lead ingots. Lead, arsenic and other toxic or criteria pollutant emissions are vented directly to air pollution control equipment, captured in building enclosures and then vented to air pollution control equipment or are fugitive emissions that do not get captured by air pollution control equipment and come into contact with ambient air.

Quemetco uses baghouses or filter systems to control arsenic and lead emissions from process operations and building enclosures. Quemetco vents all the exhaust from particulate control to a centralized wet electrostatic precipitator (WESP). In addition, Quemetco has a regenerative thermal oxidizer (RTO) and scrubber. It is anticipated that the proposed rule will not result in any additional control devices or physical changes at Quemetco.

Exide vents particulate emissions to a variety of secondary, tertiary and even quaternary control devices. These devices include high efficiency particulate arrestors, cyclones, scrubber and thermal oxidizers. During facility closure, it is anticipated that Exide will continue to operate the negative air pressure enclosures to reduce the fugitive dust emissions from closure activities for as long as possible, at least until after all internal and external surfaces have been decontaminated and the structures themselves need to be demolished.

Compliance with PAR 1420.1

With respect to the facility point source limit in PAR 1420.1, existing lead point source tests demonstrate that Quemetco is already complying with the new proposed limit (0.003 lb/hr) for lead. Exide is in the process of closing their facility and the limit will not have an impact on its operations. Therefore, no additional point source emission control strategies are anticipated at either affected facilities.

With respect to the proposed closure requirements of PAR 1420.1, fugitive emissions can accumulate in and around process areas, from point sources, raw material storage areas, on roof tops, and during maintenance operations to name a few. Both facilities currently employ a variety of housekeeping and containment strategies to minimize fugitive emissions. Based on existing Rule 1420.1 requirements and strategies used by the facilities, fugitive emissions are controlled through use of total enclosures with negative air pressure that are vented to pollution control devices, procedures for containment during maintenance activities, and a number of housekeeping provisions. During facility closure, PAR 1420.1 will require continued compliance with these housekeeping and monitoring requirements. A Compliance Plan for Facility Closure would additionally require identification of more specific measures (include housekeeping, maintenance, continued use of total enclosures and possibly other measures to minimize fugitive dust emissions) directed at specific closure activities anticipated by the facility.

Ambient Source Control Strategies for Lead

Fugitive Lead-Dust Control

Fugitive lead-dust at lead-acid battery recycling facilities can be a major source of lead emissions. Fugitive lead-dust accumulates in and around process areas, from lead point sources,

on roof tops, in and around facility, and during maintenance operations to name a few. There are a variety of housekeeping and containment strategies that can be implemented to minimize fugitive lead dust. Housekeeping activities must be implemented frequently and properly to ensure they are effective. The concept behind many of these strategies is to either contain or remove lead dust so it cannot become airborne. Housekeeping practices specifying adequate frequencies and locations for all cleanings to be performed are also critical in the effectiveness to control fugitive lead-dust emissions. The following summarizes some potential fugitive lead dust control strategies:

- Paving or using chemical stabilizers or water on unpaved areas subject to vehicular and foot traffic;
- Cleaning of paved areas through vacuuming, vacuum sweepers, and use of wet suppression;
- Wet washing or vacuuming of areas such as roof tops and lead storage and disposal areas where lead particulate can accumulate;
- Cleaning (i.e. sweeping, vacuuming, dusting) areas where lead dust may accumulate due to accidents, process upsets or equipment malfunctions;
- Using enclosures or containment areas during maintenance activities or storage of lead-containing materials; and equipment;
- Using total enclosures under negative air pressure vented to point lead point source controls to ensure that lead dust that accumulates in and around process areas does not become fugitive;Using a vehicle wet washing station that removes dust and other accumulated material from the wheels, body, and vehicle underside and prevents the inadvertent transfer of lead contaminated material to public roadways. The stations are used by all vehicles traversing facility areas associated with the lead-acid battery recycling process prior to exiting the facility and onsite mobile sweepers after operation. Ground surfaces where vehicles are washed could be required to be wet washed prior to the vehicle wet washed areas becoming dry to prevent any fugitive lead-dust or residue from becoming airborne. Practices that minimize the potential for further releases of lead emission when collecting and disposing of lead contaminated water accumulated during washing processes would be required. Practices would include the minimization of the amount of water which is allowed to dry exposed to the atmosphere prior to collection for treatment.

CHAPTER 2

Introduction

General Information

Environmental Factors Potentially Affected

Determination

Discussion and Evaluation of Environmental Checklist

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 the proposed project.

GENERAL INFORMATION

Project Title:	Proposed Amended Rule 1420.1
Lead Agency Name:	South Coast Air Quality Management District
Lead Agency Address:	21865 Copley Drive, Diamond Bar, CA 91765
Rule Contact Person:	Michael Morris, (909) 396-3282
CEQA Contact Person:	Cynthia Carter, (909) 396-2431
Project Sponsor's Name:	South Coast Air Quality Management District
Project Sponsor's Address:	21865 Copley Drive, Diamond Bar, CA 91765
General Plan Designation:	Not applicable
Zoning:	Not applicable
Description of Project:	PAR 1420.1 would further protect public health by reducing lead emissions produced by large lead-acid battery recycling facilities. PAR 1420.1 would accomplish this by lowering the total facility lead point source limit to 0.003 pounds per hour, ,clarify that the rule applies during closure, and include new provisions to ensure lead and arsenic emissions are appropriately controlled during closure and clean-up activities, and thereafter. The environmental analysis in the ~~Draft~~ Final SEA concluded that PAR 1420.1 would not generate any significant adverse environmental impacts. PAR 1420.1 would affect two facilities that are on lists of California Department of Toxics Substances Control hazardous waste facilities per Government Code §65962.5 (http://www.envirostor.dtsc.ca.gov/public; accessed on June 17, 2015).
Surrounding Land Uses and Setting:	Large industrial/commercial facilities recycling lead-acid batteries
Other Public Agencies Whose Approval is Required:	None

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The following environmental impact issues have been assessed to determine their potential to be affected by the proposed project. As indicated by the checklist on the following pages, environmental topics marked with an "✓" may be adversely affected by the proposed project. An explanation relative to the determination of the significance of the impacts can be found following the checklist for each area.

☑	Aesthetics	☐	Geology and Soils	☐	Population and Housing
☐	Agricultural Resources	☑	Hazards and Hazardous Materials	☐	Public Services
☑	Air Quality	☑	Hydrology and Water Quality	☐	Recreation
☐	Biological Resources	☐	Land Use and Planning	☑	Solid/Hazardous Waste
☐	Cultural Resources	☐	Mineral Resources	☐	Transportation/Traffic
☑	Energy	☑	Noise	☐	Mandatory Findings

DETERMINATION

On the basis of this initial evaluation:

☑ I find the proposed project, in accordance with those findings made pursuant to CEQA Guideline §15252, COULD NOT have a significant effect on the environment, and that a SUBSEQUENT ENVIRONMENTAL ASSESSMENT with no significant impacts has been 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 SUBSEQUENT ENVIRONMENTAL ASSESSMENT with no significant impacts will be prepared.

☐ I find that the proposed project MAY have a significant effect(s) on the environment, and a SUBSEQUENT ENVIRONMENTAL ASSESSMENT will be prepared.

☐ 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. A SUBSEUQUENT ENVIRONMENTAL ASSESSMENT 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 ENVIRONMENTAL ASSESSMENT pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier ENVIRONMENTAL ASSESSMENT, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

Date: July 21, 2015 **Signature:** Jillian Wong

Jillian Wong, Ph.D.
Program Supervisor, CEQA Section
Planning, Rules, and Area Sources

DISCUSSION AND EVALUATION OF ENVIRONMENTAL IMPACTS

The environmental impacts associated with the current requirements in Rule 1420.1 have already been analyzed in previous CEQA documents prepared for the rule. The ~~Draft~~ Final SEA analyzes all closure (and post-closure) impacts from the proposed amendments, however this is a conservative approach as some closure provisions in this rule amendment are just a clarification that current provisions apply through closure. The analysis contained herein only focuses on the environmental impacts which would result from the proposed amendments to the rule (such as the lower total facility point source limit for lead, and facility closure requirements). The objective of PAR 1420.1 is to further reduce the public's exposure to lead that is associated with lead emissions from large lead-acid recycling facilities. PAR 1420.1 is establishing more stringent requirements for these facilities. One of the key components of PAR 1420.1 is reducing the total facility lead point source limit and incorporating closure requirements (see Chapter 1- Project Description for a thorough discussion on the proposed rule requirements). Based on existing lead point source tests, Quemetco is already complying with the proposed rule's total facility point source limit (0.003 lb/hr) for lead and no further actions are necessary. Additionally, Exide is in the process of closing their facility. See Table 2-1 for details that the lower point source limit is already being met by both facilities.

Table 2-1 Lead Point Source Test Results

	Facility	
	Quemetco[1]	Exide
Lead Point Source Emission Rate (lb/hr)	0.000341	N/A[2]
PAR 1420.1 New Point Source Limit (lb/hr)	0.003	0.003
Compliance with New Limit?	Yes	N/A

There will be no physical changes at Quemetco. Exide will be in the process of demolishing their facility for the next few years. In order for Exide to comply with PAR 1420.1 during closure, Exide will continue their current monitoring and some housekeeping and maintenance activities, as well as maintain the total enclosures or construct temporary total enclosures on-site.

For the purpose of the CEQA analysis, reasonable worst-case assumptions have been made. With respect to the lower facility lead point source limit, Quemetco is already complying with the proposed lower total facility lead point source limit and Exide is no longer operational and is starting the closure process. Thus, no impacts are expected for either affected facilities from this provision in PAR 1420.1.

With respect to the additional closure requirements in PAR 1420.1, they will apply to both facilities. Currently, Quemetco continues to operate while Exide is in the process of facility closure. Therefore, this analysis considers the impacts from closure of one facility at a time since concurrent closure of both facilities is not expected. It is anticipated that each facility will have to submit a closure plan to DTSC at which time, the environmental impacts associated with the closure plan will be addressed through a separate CEQA document. Therefore, this CEQA document only focuses on the environmental impacts associated with the closure requirements in PAR 1420.1. During closure, PAR 1420.1 will require the affected facilities to continue the

[1] Quemetco Source Test Results, 2/2014
[2] Exide is in the middle of closing their facility.

ambient air monitoring and total enclosure provisions until the closure is completed and submit a Compliance Plan for Closure Activities. The plan is expected to include continued use of total enclosures for as long as possible, at least until after all internal and external surfaces have been decontaminated and the structures themselves need to be demolished, then temporary enclosures would be built, as well as housekeeping and maintenance requirement similar to those currently in the rule but allowing flexibility to accommodate decontamination and demolition activities. The Closure Plan requires that any decontamination of the exteriors of structures must occur within a temporary enclosure (e.g., scaffolding enclosed with plastic) with negative pressure. The environmental analysis below conservatively includes the potential impacts from constructing these temporary enclosures even though they are part of another project subject to CEQA (i.e. DTSC's Closure Plan). The analysis below also includes an analysis of construction of temporary enclosures on the roof of the facility as a reasonably foreseeable component of this Rule amendment as it is not clear if the Closure Plan will include this provision.

Although the facilities are already complying with the provisions in the rule and those emissions are considered present in the CEQA baseline, these activities would extend until the facility completes the closure requirements. Therefore, operational impacts associated with continuing the applicable monitoring, housekeeping, and maintenance provisions, and total enclosure requirements during the closure process are analyzed here. In the event that ambient air concentrations during facility closure exceed the rule thresholds and triggers contingency measures, it is anticipated that in order to reduce emissions, the facility will enhance the housekeeping provisions by adding more workers to increase the frequency of washing and vacuuming performed on-site. For the purpose of analyzing potential environmental impacts, as a reasonable worst case assumption, it is assumed that the facility will add 8 construction workers per day, if a compliance plan is triggered.

Table 2-2 CEQA Summary of Fugitive Emissions Control Options During Facility Closure

Key Requirements	Potential Environmental Impacts	Environmental Topics to be Analyzed:
Ambient Air Monitoring*	Construction: None Operation: Collect Filters, Analyze Samples	Air Quality, Energy
Total Enclosure Under Negative Air Pressure	Construction: Temporary Enclosures Operation: None	Air Quality, Energy, Hazardous Material, Solid Waste, Transportation
Housekeeping Requirements	Construction: None Operation: Mobile Sweepers, Area washing, Haul waste, Wastewater, Roof washing, Water Tank Truck, Wheel Washing Station	Air Quality, Energy, Hazardous Material, Hydrology, Solid Waste, Transportation
Maintenance Requirements	Construction: None Operation: Water use	Air Quality, Hydrology &Water Quality
Contingency Measures	Construction: None Operation: Enhanced housekeeping measures will require additional workers; Additional water usage	Air Quality, Energy, Hydrology &Water Quality, Population & Housing, Transportation

**Air monitoring is required under the existing 1420.1 but has been included here as the proposed Rule amendment clarifies how monitoring will occur during closure activities.*

The stop work provisions of the rule are also not expected to have any significant impacts. These provisions are specifically designed to minimize the release of fugitive emissions. Although the provisions may have an impact on the schedule set forth in the DTSC/Exide Closure Plan, DTSC has advised that modifications to the closure plan are anticipated, but the environmental impacts from those modifications would be less than what is analyzed within this ~~Draft~~ Final SEA and/or DTSC's CEQA document; and DTSC expects and supports a stopping of closure activities if ambient exceedances are occurring. These facts further support a finding of less than significant impacts.

There are other housekeeping and maintenance provisions that do not have a quantifiable environmental impact; such as 5 mph speed limit, covered trash containers, storage of fugitive lead dust waste, inspection of enclosures, cleaning and storage of maintenance equipment, and transport in closed conveyor systems. Other rule language changes are administrative in nature and no environmental impacts would be expected.

ENVIRONMENTAL CHECKLIST AND DISCUSSION

I. AESTHETICS.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☐	☑
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☐	☑
c) Substantially degrade the existing visual character or quality of the site and its surroundings?	☐	☐	☑	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☑	☐

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

I. a) & b) Both facilities are located in industrial areas. Quemetco already meets the new total facility point source emission limit of 0.003 lb/hr and no further air pollution controls will be needed. Exide is no longer operational and is in the process of facility closure. Therefore, no construction of permanent structures is expected at Quemetco or Exide for PAR 1420.1 compliance. Temporary covering of building surfaces would occur during some closure activities; however they would not be inconsistent with the general industrial nature of the surroundings. During facility closure, the ambient monitoring, housekeeping and maintenance requirements, including the continued operation of negative air pressure enclosures, will continue to be maintained. If contingency measures are triggered during closure activities, the facility will likely increase the frequency of housekeeping measures, which will result in the need for additional workers. No aesthetics will be affected from these activities.

These facilities are not located near scenic vistas, rock outcroppings, historical buildings or state scenic highways[3].

The additional workers may require the use of vehicles and would be temporary (i.e., taken offsite after construction is finished), and therefore, are not expected to permanently alter the visual character or quality of the site and its surroundings. Therefore, the proposed project would not affect views of the trees from outside of the affected facility and would not significantly affect scenic vistas or damage scenic resources.

I. c) No construction of permanent structures is expected at Quemetco or Exide for PAR 1420.1 compliance. Temporary covering of building surfaces would occur during some closure activities; however they would not be inconsistent with the general industrial nature of the surroundings. During facility closure, the ambient monitoring, housekeeping and maintenance requirements, including the continued operation of negative air pressure enclosures, will continue to be maintained. If contingency measures are triggered during closure activities, the facility will likely increase the frequency of housekeeping measures, which will result in the need for additional workers. While the additional workers and their vehicles may be visible from outside of the affected property, it would be temporary and not degrade the views seen at adjacent facilities.

Therefore, PAR 1420.1 would not add significant degradation to the existing visual character or quality of the site and its surroundings.

I. d) Both affected facilities are twenty-four hour operations. The facilities are also located in industrial areas that are zoned for continuous operation. No construction of permanent structures is expected at Quemetco or Exide for PAR 1420.1 compliance. During facility closure, the ambient monitoring, housekeeping and maintenance requirements, including the continued operation of negative air pressure enclosures, will continue to be maintained. If contingency measures are triggered during closure activities, the facility will likely increase the frequency of housekeeping measures, which will result in the need for additional workers. Any additional lighting is expected to be similar to the existing onsite lighting and the surrounding facilities. Therefore, PAR 1420.1 is not expected to create a new source of substantial light or glare which would significantly adversely affect day or nighttime views in the area beyond current conditions.

Based upon these considerations, significant adverse aesthetics impacts are not anticipated and will not be further analyzed in this ~~Draft~~ Final SEA. Since no significant aesthetics impacts were identified, no mitigation measures are necessary or required.

[3] DTSC, Exide Corporation hazardous Waste Facility Permit Draft Environmental Impact Report, SCH No. 93051013, June 2006

II. AGRICULTURE AND FOREST RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑
b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	☐	☐	☐	☑
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))?	☐	☐	☐	☑
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☐	☑

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) In general, the affected facilities and surrounding industrial areas are not located on or near areas zoned for agricultural use, 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. Therefore, the proposed project would not result in any construction of new buildings or other structures that would require converting farmland to non-agricultural use or conflict with zoning for agricultural use or a Williamson Act contract. Since the proposed project would not substantially change the facility or process at the facilities, there are no provisions in PAR 1420.1 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments and no land use or planning requirements relative to agricultural resources would be altered by the proposed project.

IV. c) & d) The affected facilities are located in an industrial area in the urban portion of Los Angeles County that is not near forest land. Therefore, the proposed project is not expected to 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)) or result in the loss of forest land or conversion of forest land to non-forest use.

Since PAR 1420.1 would not affect the placement of affected equipment near farmland, the proposed project is not expected to result in converting farmland to non-agricultural use; or conflict with existing zoning for agricultural use, or a Williamson Act contract. Similarly, it is not expected that PAR 1420.1 would conflict with existing zoning for, or cause rezoning of, forest land; or result in the loss of forest land or conversion of forest land to non-forest use. Consequently, the proposed project would not create any significant adverse agriculture or forestry impacts. Since no significant agriculture or forestry resources impacts were identified, this topic need not be evaluated further and no mitigation measures are necessary or required.

III. AIR QUALITY AND GREENHOUSE GAS EMISSIONS

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☑	☐
b) Violate any air quality standard or contribute to an existing or projected air quality violation?	☐	☐	☑	☐
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)?				
d) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☑	☐
e) Create objectionable odors affecting a substantial number of people?	☐	☐	☑	☐
f) Diminish an existing air quality rule or future compliance requirement resulting in a significant increase in air pollutant(s)?	☐	☐	☑	☐
g) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☑	☐
h) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☑	☐

Significance Criteria

To determine whether or not air quality impacts from adopting and implementing the proposed project are significant, impacts will be evaluated and compared to the criteria in Table 2-3. The project will be considered to have significant adverse air quality impacts if any one of the thresholds in Table 2-3 are equaled or exceeded.

To determine whether or not greenhouse gas emissions from the proposed project may be significant, impacts will be evaluated and compared to the 10,000 MT CO2/year threshold for industrial sources for SCAQMD lead agency projects.

To determine whether or not air quality impacts from the proposed project may be significant, impacts will be evaluated and compared to the criteria in Table 2-3.

Table 2-3 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 ≥ 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 SCAQMD Rule 402	
GHG	10,000 MT/yr CO2eq 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 μg/m^3 (construction)[e] & 2.5 μg/m^3 (operation) 1.0 μg/m^3	
PM2.5 24-hour average	10.4 μg/m^3 (construction)[e] & 2.5 μg/m^3 (operation)	
SO2 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	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 μg/m^3 (state) 0.15 μg/m^3 (federal)	

[a] Source: SCAQMD CEQA Handbook (SCAQMD, 1993)
[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 μg/m^3 = microgram per cubic meter ≥ = greater than or equal to
MT/yr CO2eq = metric tons per year of CO2 equivalents > = greater than

Discussion

III. a) The SCAQMD is required by law to prepare a comprehensive district-wide Air Quality Management Plan (AQMP) which includes strategies (e.g., control measures) to reduce emission levels to achieve and maintain state and federal ambient air quality standards, and to ensure that new sources of emissions are planned and operated to be consistent with the SCAQMD's air quality goals. The AQMP's air pollution reduction strategies include control measures which target stationary, area, mobile and indirect sources. These control measures are based on feasible methods of attaining ambient air quality standards. Pursuant to the provisions of both the state and federal Clean Air Acts (CAA)s, the SCAQMD is required to attain the state and federal ambient air quality standards for all criteria pollutants, including lead. PAR 1420.1 would not obstruct or conflict with the implementation of the AQMP because lead emission reductions are in addition to emission reductions in the AQMP. The SCAQMD adopted the 2012 Lead State Implementation Plan (SIP) for Los Angeles County on May 4, 2012, which relies upon Rule 1420.1 for lead emission reductions. Further, on November 5, 2010, the Governing Board approved the 2010 Clean Communities Plan (CCP). The CCP is an update to the 2000 Air Toxics Control Plan (ATCP)[4] and its 2004 Addendum. The objective of the 2010 CCP is to reduce the exposure to air toxics and air-related nuisances throughout the district, with emphasis on cumulative impacts. The elements of the 2010 CCP are community exposure reduction, community participation, communication and outreach, agency coordination, monitoring and compliance, source-specific programs, and nuisance.

PAR 1420.1 would reduce lead emissions and therefore, be consistent with the goals of the AQMP, 2012 Lead SIP for Los Angeles County, and the 2010 CCP. Therefore, implementing PAR 1420.1 that further reduces lead emissions would not conflict or obstruct implementation of the 2012 Lead SIP for Los Angeles County, AQMP or 2010 CCP.

III. b) and f) ***Criteria Pollutants***

Construction Impacts

New Affected Facilities

SCAQMD staff is not aware of any new large lead recycling facilities planned to be constructed in the future. So the focus of the analysis will be on the two known affected facilities. At this time, construction of new large lead recycling facilities is considered speculative according to CEQA Guidelines §15145 and will not be evaluated further in this analysis.

Existing Affected Facilities

Quemetco already meets the new total facility point source emission limit of 0.003 lb/hr and no further air pollution controls will be constructed or needed.

Exide will need to construct temporary enclosures once their permanent enclosures have been demolished. See Table 2-4 for Construction Emissions and Appendix B for details on assumptions.

[4] SCAQMD Air Toxics Control Plan: http://www.aqmd.gov/home/library/clean-air-plans/clean-communities-plan/air-toxics-control-plan

Table 2-4 Construction Emissions

Pollutant	Temporary Enclosures Emissions	Construction Significance Thresholds	Exceed Significance?
NOx	47	100 lbs/day	No
VOC	5.8	75 lbs/day	No
PM10	2.4	150 lbs/day	No
PM2.5	2.2	55 lbs/day	No
SOx	0.05	150 lbs/day	No
CO	22	550 lbs/day	No

Operational Impacts

Based on existing lead point source tests, Quemetco is already complying with PAR 1420.1's total facility point source limit (0.003 lb/hr) for lead. There will be no physical changes at Quemetco. Additionally, Exide is in the process of closing their facility. In order for Exide to comply with PAR 1420.1 during closure, Exide will continue the current monitoring, and is expected to continue some housekeeping and maintenance activities, as well as maintain the total enclosures on-site until the building is demolished. Therefore, PAR 1420.1 will not result in construction activities at either of the affected facilities.

For the purpose of the CEQA analysis, reasonable worst-case assumptions have been made: Since Quemetco is already complying with the proposed lower total facility lead point source limit and Exide is no longer operational and is starting the closure process, no impacts are expected for either affected facilities from PAR 1420.1. The additional closure requirements in PAR 1420.1 will affect both facilities during the closure process. Currently, Quemetco continues to operate while Exide is in the process of facility closure. Therefore, this analysis considers the impacts from closure of one facility at a time since concurrent closure of both facilities is not expected. It is anticipated that each facility will have to submit a closure plan to DTSC at which time, the environmental impacts associated with the closure plan will be addressed through a separate CEQA document. Therefore, this CEQA document only focuses on the environmental impacts associated with the requirements in PAR 1420.1 associated with the requirements in PAR 1420.1 that go beyond the DTSC Closure Plan. During closure, PAR 1420.1 will require the affected facilities to continue monitoring, and are expected to continue some housekeeping and maintenance requirements, as well as maintain total enclosures until the closure is completed.

Table 2-5 CEQA Summary of Fugitive Emissions Control Options During Facility Closure

Key Requirements	Potential Environmental Impacts	Environmental Topics to be Analyzed:
Ambient Air Monitoring*	Construction: None Operation: Collect Filters, Analyze Samples	Air Quality, Energy
Total Enclosure Under Negative Air Pressure	Construction: Temporary Enclosures Operation: Blowers	Air Quality, Energy, Hazardous Material, Solid Waste, Transportation
Housekeeping Requirements	Construction: None Operation: Mobile Sweepers, Area washing, Haul waste, Wastewater, Roof washing, Wheel Washing Station	Air Quality, Energy, Hazardous Material, Hydrology, Solid Waste, Transportation
Maintenance Requirements	Construction: None Operation: Water use	Air Quality, Hydrology &Water Quality
Compliance Plan	Construction: None Operation: Enhanced housekeeping measures will require additional workers; Additional water usage	Air Quality, Energy, Hydrology &Water Quality, Population & Housing, Transportation

**Air monitoring is required under the existing 1420.1 but has been included here as the proposed Rule amendment clarifies how monitoring will occur during closure activities.*

Although the facilities are already complying with the provisions in the rule and those emissions are considered present in the CEQA baseline, these activities will continue until the facility completes the closure requirements. Therefore, operational impacts associated with continuing the operation of APCDs, applicable monitoring, housekeeping and maintenance provisions, and total enclosure requirements during the closure process are conservatively analyzed here even though these activities are part of the current rule and the CEQA baseline activity. In the event that ambient air concentrations during facility closure exceed the rule thresholds and triggers contingency measures, it is anticipated that in order to reduce emissions, it is assumed that the facility will enhance the housekeeping provisions by adding more workers to increase the frequency of washing and vacuuming performed on-site. Since the facility will be in the process of closure, the only construction impacts are from temporary enclosures. Installation of additional pollution control equipment is not anticipated. For the purpose of analyzing potential environmental impacts, it is assumed that the facility will add 8 construction workers per day, if a compliance plan is triggered. The continued operation of the air handling systems and APCDs are expected to be powered by electricity, so no new combustion emissions from these pieces of equipment are expected to be generated. The air quality impacts associated with compliance with PAR 1420.1 are summarized in Table 2-6 SCAQMD Operational Criteria Pollutant Emissions below and do not exceed the SCAQMD thresholds of significance; therefore, impacts are less than significant.

Table 2-6 SCAQMD Operational Criteria Pollutant Emissions

Description	CO, lb/day	NOx, lb/day	VOC, lb/day	SOX, lb/day	PM10, lb/day	PM2.5, lb/day
Heavy-Duty Sweeper[a]	0.89	2.69	0.46	0.44	0.49	0.39
Aerial Lift Delivery	0.96	3.06	0.24	0.00	0.15	0.13
Aerial Lift	1.26	2.16	0.40	0.00	0.15	0.14
Air Monitor Visit	0.66	0.07	0.07	0.00	0.01	0.00
Haul Disposal Trip	1.50	7.00	0.30	0.01	0.21	0.15
Water Tank Truck[b]	0.50	2.30	0.07	0.05	0.10	0.00
Compliance Plan – Vehicle trips from 8 additional workers	1.32	0.11	0.03	0.01	0.14	0.00
Total Operational Emissions	**7.09**	**17.39**	**1.57**	**0.52**	**1.25**	**0.82**
Significance Threshold	550	55	150	55	75	150
Exceed Significance?	No	No	No	No	No	No

[a] Emissions are from the 2010 and 2015 Final 1420.1 EAs
[b] Emissions are from the 2015 PAR 1420.1 Final EA-street sweeper, assumed same mileage and emission factors.

Indirect Criteria Pollutant Emissions from Electricity Consumption

Indirect criteria pollutant and GHG emissions are expected from the generation of electricity to operate new equipment that occurs off-site at electricity generating facilities (EGFs). Emissions from electricity generating facilities are already evaluated in the CEQA documents for those projects when they are built or modified. The analysis in the ~~Draft~~ Final SEA (Section VI. Energy b), c) and d)) demonstrates that there is sufficient capacity from power providers for the increased electricity consumption from PAR 1420.1. Under the RECLAIM program, EGFs were provided annual allocations of NOx and SOx emissions that decline annually. For this reason, emissions that may be created from EGFs providing electricity specifically for the proposed project would not increase regional NOx and SOx emissions, since the overall NOx and SOx emissions generated by EGFs would need to remain within the existing regional annual NOx and SOx allocations under the RECLAIM program. Lastly, because the NOx and SOx emissions are limited by the annual RECLAIM allocations, the other criteria pollutants that may be generated from combustion activities associated with electricity generation (e.g., CO, VOC, PM10, and PM2.5) are also limited by stoichiometry, and are already included in the existing setting of the CEQA baseline.

III. c) ***Cumulatively Considerable Impacts***

The thresholds for cumulative impacts are the same as project-specific thresholds. Based on the foregoing analysis, criteria pollutant project-specific air quality impacts from implementing PAR 1420.1 would not exceed air quality significance thresholds (Table 2-3) and cumulative impacts are not expected to be significant for air quality. Potential adverse impacts from implementing PAR 1420.1 would not be "cumulatively considerable" as defined by CEQA Guidelines §15064(h)(1) for air quality impacts. Per CEQA Guidelines §15064(h)(4), the mere existing of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulative considerable.

The SCAQMD guidance on addressing cumulative impacts for air quality is as follows: "As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR." "Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."[5]

This approach was upheld by the Court in *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal. App. 4th 327, 334. The Court determined that where it can be found that a project did not exceed the South Coast Air Quality Management District's established air quality significance thresholds, the City of Chula Vista properly concluded that the project would not cause a significant environmental effect, nor result in a cumulatively considerable increase in these pollutants. The court found this determination to be consistent with CEQA Guidelines §15064.7, stating, "The lead agency may rely on a threshold of significance standard to determine whether a project will cause a significant environmental effect." The court found that, "Although the project will contribute additional air pollutants to an existing nonattainment area, these increases are below the significance criteria…" "Thus, we conclude that no fair argument exists that the Project will cause a significant unavoidable cumulative contribution to an air quality impact." As in *Chula Vista*, here the District has demonstrated, when using accurate and appropriate data and assumptions, that the project will not exceed the established South Coast Air Quality Management District significance thresholds. See also, *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal. App. 4th 899. Here again the court upheld the South Coast Air Quality Management District's approach to utilizing the established air quality significance thresholds to determine whether the impacts of a project would be cumulatively considerable. Thus, it may be concluded that the Project will not cause a significant unavoidable cumulative contribution to an air quality impact.

Based on the foregoing analysis, project-specific air quality impacts from implementing the proposed project would not exceed air quality significance thresholds (Table 2-1); therefore, based on the above discussion, cumulative impacts are not expected to be significant for air quality. Therefore, potential adverse impacts from the proposed project would not be "cumulatively considerable" as defined by CEQA Guidelines §15064(h)(1) for air quality impacts. Per CEQA Guidelines §15064(h)(4), the mere existence of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulative considerable.

III. d) *Toxic Air Contaminants (TAC)*

Construction

Construction is only expected at Exide. As toxic emissions from construction of onsite temporary enclosures is expected to be minor and take less than two months, no health risk assessment was

[5] SCAQMD Cumulative Impacts Working Group White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution, August 2003, Appendix D, Cumulative Impact Analysis Requirements Pursuant to CEQA, at D-3, http://www.aqmd.gov/docs/default-source/Agendas/Environmental-Justice/cumulative-impacts-working-group/cumulative-impacts-white-paper-appendix.pdf?sfvrsn=4.

conducted pursuant to guidance from the Office of Environmental Health Hazard Assessment (2015)[6], and toxic impacts during construction are less than significant.

Operation

The goal of PAR 1420.1 is to ensure the continued reduction from lead and arsenic emissions from large lead-acid battery recycling facilities even as the facilities undergo closure. Therefore, PAR 1420.1 is expected to reduce toxic emissions and will not expose sensitive receptors to substantial concentrations.

Exide

TAC emissions may be generated from diesel exhaust emissions (i.e. heavy-duty trucks). Diesel exhaust particulate is considered a carcinogenic and chronic TAC. However, because their operations have ceased, no more trucks will bring lead-acid batteries for recycling during closure activities. Thus, TAC emissions impacts would be lower than their baseline and will have reduced impacts to nearby sensitive receptors.

Therefore, PAR 1420.1 is not expected to generate significant adverse TAC impacts from construction.

III. e) ***Odor Impacts***

No construction is expected to occur on-site at Quemetco. Exide is an industrial facility where heavy-duty diesel equipment (sweepers) and trucks already operate. Therefore, the continued operations of mobile sources are not expected to generate diesel exhaust odor greater than what is already present. In addition, because their operations have ceased, no more trucks will bring lead-acid batteries for recycling during closure activities. Thus, odor impacts would be lower than their baseline. PAR 1420.1 compliance is designed to reduce TAC emissions from large lead battery recycling facilities, which may potentially further reduce odors. Therefore, PAR 1420.1 is not expected to generate significant adverse odor impacts.

III. g) and h) ***Greenhouse Gas Impacts***

Global warming is the observed increase in average temperature of the earth's surface and atmosphere. The primary cause of global warming is an increase of greenhouse gas (GHG) emissions in the atmosphere. The six major types of GHG emissions are carbon dioxide (CO2), methane (CH4), nitrous oxide (N2O), sulfur hexafluoride (SF6), hydrofluorocarbons (HFCs), and perfluorocarbons (PFCs). The GHG emissions absorb longwave radiant energy emitted by the earth, which warms the atmosphere. The GHGs also emit longwave radiation both upward to space and back down toward the surface of the earth. The downward part of this longwave radiation emitted by the atmosphere is known as the "greenhouse effect."

The current scientific consensus is that the majority of the observed warming over the last 50 years can be attributable to increased concentration of GHG emissions in the atmosphere due to human activities. Events and activities, such as the industrial revolution and the increased consumption of fossil fuels (e.g., combustion of gasoline, diesel, coal, etc.), have heavily contributed to the increase in atmospheric levels of GHG emissions. As reported by the California Energy Commission (CEC), California contributes 1.4 percent of the global and 6.2

[6] Air Toxics Hot Spots Program Guidance Manual for Preparation of Health Risk Assessments, Office of Environmental Health Hazard Assessment, 2015.

percent of the national GHG emissions (CEC, 2004). Further, approximately 80 percent of GHG emissions in California are from fossil fuel combustion (e.g., gasoline, diesel, coal, etc.).

GHGs are typically reported as CO2 equivalent emissions (CO2e). CO2e is the amount of CO2 that would have the same global warming potential (relative measure of how much heat a greenhouse gas traps in the atmosphere) as a given mixture and amount of greenhouse gas. CO2e is estimated by the summation of mass of each GHG multiplied by its global warming potential (global warming potentials: CO2 = 1, CH4 = 21, N2O = 310, etc.).[7]

Construction

No construction is expected at Quemetco. Exide is expected to construct temporary enclosures. Based on the same assumptions made for the construction criteria pollutant estimates, approximately 4,820 metric tons of CO2e would be generated from all construction activity. Amortized over 30 years as prescribed by the SCAQMD Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans[8] adopted by the SCAQMD Governing Board in December 2008, approximately 1 metric tons of CO2e emissions per year (see Appendix B for calculations) would be generated from construction activities over the life of the project.

Operation

Quemetco

Quemetco is not expected to have any new GHG impacts for PAR 1420.1 compliance. Any emissions from Quemetco during closure (Quemetco currently has no foreseeable plan to close) would likely be no greater than those occurring at Exide and would also not occur in the same year as Exide's closure. Therefore, any GHG impact from Quemetco would be less than analyzed for Exide.

Exide

The operation of the negative air pressure systems, enhanced measures during maintenance activities and housekeeping, and wheel washer are not expected to generate greenhouse gases as the equipment control emissions has no secondary emissions impacts. However, the operation of the street sweeper, water tank truck, worker vehicles, and haul/delivery trucks may result in the generation of 2,672.5 metric tons of CO2e operational emissions per year. The addition of 2,673.5metric tons of CO2e emissions from construction and operation are less than the SCAQMD significance threshold of 10,000 metric tons per year for CO2e from industrial projects.

Therefore, PAR 1420.1 is not expected to generate GHG emission, either directly or indirectly, that may have a significant impact on the environment no conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHG gases.

Conclusion

Based upon these considerations, the proposed project would not generate significant adverse construction or operational air quality impacts and, therefore, no further analysis is required or necessary and no mitigation measures are necessary or required.

[7] California Air Resource Board Conversion Table: http://www.arb.ca.gov/cc/facts/conversiontable.pdf

[8] SCAQMD Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/ghg-significance-thresholds

IV. BIOLOGICAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☑
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?	☐	☐	☐	☑

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) & f) In general, the affected facilities and the surrounding industrial areas currently do not support riparian habitat, federally protected wetlands, or migratory corridors because they are long developed and established foundations used for industrial purposes. Additionally, special status plants, animals, or natural communities 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 are not expected to be found in close proximity to the affected facility. Therefore, the proposed project would have no direct or indirect impacts that could adversely affect plant or animal species or the habitats on which they rely in the SCAQMD's jurisdiction.

Compliance with PAR 1420.1 is expected to reduce lead emissions from operations at the affected facility, which would improve, not worsen, present conditions of plant and animal life, since these TAC emissions would be captured destroyed or disposed of properly before they impact plant and animal life. PAR 1420.1 does not require acquisition of additional land or further conversions of riparian habitats or sensitive natural communities where endangered or sensitive species may be found.

The proposed project is not envisioned to conflict with local policies or ordinances protecting biological resources or local, regional, or state conservation plans because it is only expected to affect existing large lead-acid battery recycling facilities located in an industrial area. PAR 1420.1 is designed to lead emissions which would also reduce emissions both inside and outside the boundaries of the affected facilities and, therefore, more closely in line with protecting biological resources. Land use and other planning considerations are determined by local governments and no land use or planning requirements would be altered by the proposed project. Additionally, the proposed project would not conflict with any adopted Habitat Conservation Plan, Natural Community Conservation Plan, or any other relevant habitat conservation plan, and would not create divisions in any existing communities because all activities associated with complying with PAR 1420.1 would occur at existing established industrial facilities.

The SCAQMD, as the Lead Agency for the proposed project, has found that, when considering the record as a whole, there is no evidence that the proposed project will have potential for any new adverse effects on wildlife resources or the habitat upon which wildlife depends because all activities needed to comply with PAR 1420.1 would take place at long developed and established facilities. Accordingly, based upon the preceding information, the SCAQMD has, on the basis of substantial evidence, rebutted the presumption of adverse effect contained in §753.5 (d), Title 14 of the California Code of Regulations. Further, in accordance with this conclusion, the SCAQMD believes that this proposed project qualifies for the no effect determination pursuant to Fish and Game Code §711.4 (c).

Based upon these considerations, significant adverse biological resources impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

V. CULTURAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5?	☐	☐	☐	☑
b) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	☐	☐	☐	☑
c) Directly or indirectly destroy a unique paleontological resource, site, or feature?	☐	☐	☐	☑
d) Disturb any human remains, including those interred outside formal cemeteries?	☐	☐	☐	☑
e) Cause a substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074?	☐	☐	☐	☑

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 or cultural significance to a community or ethnic or social group.
- Unique paleontological resources are present that could be disturbed by construction of the proposed project.
- The project would disturb human remains.

Discussion

V. a), b), c), & d) The existing large lead-acid battery recycling facilities are located in areas zoned as industrial, which have already been greatly disturbed. Quemetco already meets the new total facility point source emission limit of 0.003 lb/hr and no further air pollution controls will be needed. Exide is no longer operational and is in the process of facility closure. Therefore, no construction is expected at Quemetco for PAR 1420.1 compliance. Exide is expected to construct temporary enclosures. During facility closure, the ambient monitoring, housekeeping and maintenance requirements, including the continued operation of negative air pressure enclosures, will continue to be maintained. If contingency measures are triggered during closure activities, the facility will likely increase the frequency of housekeeping measures, which will result in the need for additional workers. Therefore, the proposed project has no potential to

cause a substantial adverse change to a historical or archaeological resource, directly or indirectly destroy a unique paleontological resource or site or unique geologic feature, or disturb any human remains, including those interred outside formal cemeteries.

Based on the above discussion, the proposed project is not expected to create any significant adverse effect to a historical resource as defined in §15064.5; cause a new significance impact to an archaeological resource as defined in §15064.5; directly or indirectly destroy a unique paleontological resource, site, or feature; or disturb any human including those interred outside formal cemeteries.

V. e) PAR 1420.1 is not expected to require physical changes to a site, 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 any substantial adverse change in the significance of a tribal cultural resource as defined in Public Resources Code §21074.

It is important to note that 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). The NAHC notification list 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)].

Based upon these considerations, significant adverse cultural resources impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

VI. ENERGY.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Conflict with adopted energy conservation plans?	☐	☐	☐	☑
b) Result in the need for new or	☐	☐	☑	☐

	substantially altered power or natural gas utility systems?				
c)	Create any significant effects on local or regional energy supplies and on requirements for additional energy?	☐	☐	☑	☐
d)	Create any significant effects on peak and base period demands for electricity and other forms of energy?	☐	☐	☑	☐
e)	Comply with existing energy standards?	☐	☐	☐	☑

Significance Criteria

Impacts to energy and mineral 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) & e) PAR 1420.1 does not require any action which would result in any conflict with an adopted energy conservation plan or violation of any energy conservation standard. PAR 1420.1 is not expected to conflict with adopted energy conservation plans because existing facilities would be expected to continue implementing any existing energy conservation plans.

PAR 1420.1 is not expected to cause new development. The local jurisdiction or energy utility sets standards (including energy conservation) and zoning guidelines regarding new development and will approve or deny applications for building new equipment at the affected facility. During the local land use permit process, the project proponent may be required by the local jurisdiction or energy utility to undertake a site-specific CEQA analysis to determine the impacts, if any, associated with the siting and construction of new development.

As a result, PAR 1420.1 would not conflict with energy conservation plans, use non-renewable resources in a wasteful manner, or result in the need for new or substantially altered power or natural gas systems.

VI. b), c) & d.

Quemetco already meets the new total facility point source emission limit of 0.003 lb/hr and no further air pollution controls will be needed. Exide is no longer operational and is in the process of facility closure. Therefore, no construction is expected at Quemetco for PAR 1420.1 compliance. Exide is expected to construct temporary enclosures. During facility closure, the ambient monitoring, housekeeping and maintenance requirements, including the continued operation of negative air pressure enclosures, will continue to be maintained. If contingency measures are triggered during closure activities, the facility will likely increase the frequency of housekeeping measures, which will result in the need for additional workers.

Electricity Impacts

Quemetco

No new energy impacts are expected at Quemetco's facility during its normal operation. If Quemetco closes (it currently has no foreseeable plan to do so), its energy impacts are not anticipated to be any higher than analyzed for Exide below.

Exide

During facility closure, compliance with PAR 1420.1 may cause an increase in electricity consumption associated with the continued operation of existing ambient monitoring equipment, housekeeping and maintenance requirements, including the negative air pressure enclosures. Gasoline fuel would be consumed by the vehicles needed for ambient air monitoring sampling, the additional workers should a compliance plan be triggered and haul/delivery truck trips during closure. The following sections evaluate the various forms of energy sources affected by the proposed project.

The five existing air monitors are expected to be electric powered. Air monitors are expected to be powered by electricity service near where the air monitors are placed. An air monitor typically requires 16 amps of service (six amps for the monitor and 10 amps for vacuum pumps), for a total of 211.2 kW -h (5 monitors x 16 amps x 110 voltage x 24 hr)[9].

The California Energy Commission (CEC) latest report showed that Los Angeles Department of Water and Power (LADWP) consumed 25,921 gigawatts (GW) in 2008 with a peak consumption of 5,717 megawatts per hour (MWh) in 2008. The power required to run PAR 1420.1 energy needs at Exide would be 0.00007 % of the 2008 consumption and 3.6 % of the peak consumption. Therefore, SCAQMD staff concludes that the amount of electricity required to meet the incremental energy demand associated with PAR 1420.1 would be sufficient and would not result in a significant adverse electricity energy impact. (See Table 2-7 and Table 2-8 for details.)

Table 2-7: PAR 1420.1 Additional Electricity Consumption

Energy Use	Consumption (kW-h)
Blowers for APCD and negative air pressure (100 bhp) @ 1788 kW-h x 10	17,880
Air Monitors (5 monitors, 24 hrs/day)	211.2
Total	**18,091**

Table 2-8 Electricity Use from PAR 1420.1 Compliance

Area	Electricity Use, kW/hr	Electricity Use, MW/year	Area Consumption, GW-H	Area Consumption %	Area Peak Consumption MW-hr	Area Peak Consumption%
LADWP	18,091	158,477	25,921	7.0E-05	5,717	3.6

Natural Gas Impacts

No new natural gas impacts are expected.

[9] Power = (A x V)/1000= (16 amps x 110 voltage)/1000= 1.76 kW x 24 hr = 42.24 kW-hr per monitor.

Diesel Impacts

Construction Diesel Use
No construction is expected at Quemetco. Exide will need to construct temporary enclosures. See Table 2-9 and Appendix B for details.

Operational Diesel Use
No new diesel use is expected at Quemetco for PAR 1420.1 compliance.

Exide
Diesel Use
A maximum of two truck trips per day to deliver filters and dispose of additional hazardous material. These trucks would use 24 gallons (40+200 miles ÷ 10 mpg) per event. By assuming two truck trips per week, there will be 104 trucks/yr. The year's total of diesel use will be 1,248 gal/yr.

Sweeper Diesel Use
Exide is expected to continue their diesel vehicle sweeping. Diesel use was estimated for the three sweeping events at the affected facility. Diesel use was estimated assuming that sweepers would be nine feet wide, sweep over the entire outside area around the production site (i.e., not around administrative buildings) three times a day with two feet of overlap on the return path as the sweepers travel back and forth. Assuming a ten mile per gallon of diesel fuel efficiency approximately 0.84 gallons of diesel would be consumed on a peak day and 307 gal/yr.

Aerial Lift Diesel Use
PAR 1420.1 requires roof washings or vacuuming on either a quarterly or semi-annual basis. The facilities would need to use aerial lifts to reach the roofs. Therefore, only one additional aerial lift diesel-fueled use is expected on any given day. For this analysis, the aerial lifts would be used six hours per day. Diesel fuel use was estimated using a 1.4 gallon per hour fuel consumption from ARB's OFFROAD2007 database. The diesel fuel use from aerial lifts would be 8.4 gallons per day. On a yearly basis, worse-case would be quarterly cleanings facilities would consume 34 gal/yr (8.4 gal/day*4 day/yr).

Roof cleaning may be contracted out, so it is assumed that aerial lifts are delivered. A single heavy-duty diesel truck round trip of 40 miles per day is expected to be required on a peak day. Assuming a ten mile per gallon of diesel fuel efficiency approximately 8 gallons of diesel would be consumed on a peak day. On a yearly basis, worse-case for quarterly deliveries would consume 416 gal/yr (8 gal/day*4 day/yr*13 facilities).

Gasoline Use

Construction Gasoline Use
No construction is expected at Quemetco. Exide will need to construct temporary enclosures. See Table 2-9 and Appendix B for details.

Operational Gasoline Use
No new gasoline usage is expected at Quemetco for PAR 1420.1 compliance.

Exide

Air Monitoring

One trip per day to visit air monitors, based on average of 80 miles round trip and a 16 mile per gallon fuel efficiency, would consume approximately 5 gallons of gasoline on a peak day; annually would use 1,300 gal/yr (5 gal/day x 5 days/week x 52 weeks).

Worker Trips

Additional worker trips may be associated with additional enhanced maintenance activities and housekeeping provisions. It was assumed that 4 additional workers would be required to do the enhanced housekeeping measures (4 additional gasoline-fueled vehicle trips). Assuming a 20 mile round trip, and a 10 mile per gallon fuel efficiency, approximately 8 gallons of gasoline would be used by the additional workers' vehicle trips per day and 2,920 gal/yr .

The 2012 AQMP states that 524 million gallons of diesel and 5,589 million gallons gasoline are consumed per year in Los Angeles County. An additional 1,589 gallons of diesel consumed and 1,308 gallons of gasoline consumed per year of operation is not expected to have a significant adverse impact on fuel supplies. Table 2-9 provides a summary of all the fuel usage impacts.

Table 2-9 Annual Total Projected Fuel Usage for Operational Activities

Type of Equipment	Diesel	Gasoline
	(gal/yr)	(gal/yr)
Construction Phase	1,915.36	320
Delivery/Haul Trucks	1,248	N/A
Sweeper Vehicles	307	N/A
Aerial Lifts	34	N/A
Air Monitoring Vehicle	N/A	1,300
Worker Trips	N/A	2920
Total:	3,504	4,540
Year 2012 Projected Basin Fuel Demand (gal/yr) [a]	524,000,000	5,589,000,000
Total % Above Baseline	0.00066877	8.1231E-05
Exceed Significance?	**No**	**No**

[a] Figures taken from Table 3.3-3 of the 2012 AQMP Final EIR

Based upon these considerations, significant adverse energy impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

VII. GEOLOGY AND SOILS.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑
• Strong seismic ground shaking?	☐	☐	☐	☑
• Seismic–related ground failure, including liquefaction?	☐	☐	☐	☑
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

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

VII. a) Quemetco already meets the new total facility point source emission limit of 0.003 lb/hr and no further air pollution controls will be needed. Exide is no longer operational and is in the process of facility closure. Therefore, no construction is expected at Quemetco for PAR 1420.1 compliance. Exide is expected to construct temporary enclosures. During facility closure, the ambient monitoring, housekeeping and maintenance requirements, including the continued operation of negative air pressure enclosures, will continue to be maintained. If contingency measures are triggered during closure activities, the facility will likely increase the frequency of housekeeping measures, which will result in the need for additional workers.

Because Southern California is an area of known seismic activity, existing facilities are expected to conform to the Uniform Building Code and all other applicable state and local building codes. As part of the issuance of building permits, local jurisdictions are responsible for assuring that the Uniform Building Code is adhered to and can conduct inspections to ensure compliance. The Uniform Building Code is considered to be a standard safeguard against major structural failures and loss of life. The basic formulas used for the Uniform Building Code seismic design require determination of the seismic zone and site coefficient, which represents the foundation condition at the site.

During closure, it is expected that the existing total enclosures would be maintained and operational until the entire closure is ready to be demolished. The existing enclosures would have followed the Uniform Building Code's seismic requirements and PAR 1420.1 is not expected to increase exposure to existing earthquake risk.

VII. b) No construction is expected at Quemetco for PAR 1420.1 compliance. Exide is expected to construct temporary enclosures. Therefore, no significant soil erosion or significant loss of topsoil, significant unstable earth conditions or significant changes in geologic substructures are expected to occur at the affected facility as a result of implementing the proposed project.

VII. c) Since the proposed project would affect existing facilities whose soil has already been disturbed, it is expected that the soil types present at the affected facility would not be further susceptible to expansion or liquefaction other than is already existing. Furthermore, subsidence and liquefaction is not anticipated to be a problem since any excavation, grading, or filling activities are expected to follow the Uniform Building Code. Additionally, the affected areas are not envisioned to be prone to landslides, instability, or have unique geologic features since the affected existing facility is located in industrial areas in a flat area.

VII. d) & e) Since PAR 1420.1 would affect soils at an existing established facility located in a highly developed industrial zone, it is expected that people or property would not be exposed to expansive soils or soils incapable of supporting water disposal. Both affected facilities have existing wastewater treatment systems that would continue to be used even in facility closure, and these systems are expected to have the capacity to support the closure requirements of PAR 1420.1. Sewer systems are available to handle wastewater produced and treated by the affected facilities. Therefore, PAR 1420.1 would not require the installation of new septic tanks or alternative wastewater disposal systems at the affected facility. As a result, PAR 1420.1 would not require operators to utilize septic systems or alternative wastewater disposal systems. Thus, the proposed project would not adversely affect soils normally associated with a septic system or alternative wastewater disposal system.

Based upon these considerations, significant adverse geology and soil impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

VIII. HAZARDS AND HAZARDOUS MATERIALS.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Create a significant hazard to the public or the environment through the routine transport, use, and disposal of hazardous materials?	☐	☐	☑	☐
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?	☐	☐	☑	☐
c) Emit hazardous emissions, or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	☐	☐	☑	☐
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?	☐	☐	☑	☐
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?				
f)	Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☑	☐
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?	☐	☐	☐	☑
h)	Significantly increased fire hazard in areas with flammable materials?	☐	☐	☑	☐

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

VIII. a) & b) PAR 1420.1 is expected to reduce the amount of lead being emitted into the air. With respect to the closure provisions, PAR 1420.1 requires Exide to continue monitoring, housekeeping and maintenance activities. These requirements are expected to control and reduce fugitives such that the rule is not expected to create impacts in connection with the handling of hazardous wastes. In addition, PAR 1420.1 specifically requires that a facility cease all closure activities if there is an exceedance of an arsenic or lead ambient concentration limit.

The stop work provisions of the rule are also not expected to have any significant impacts. These provisions are specifically designed to reduce the release of fugitive emissions. Although the provisions may have an impact on the schedule set forth in the DTSC/Exide Closure Plan, DTSC has advised that modifications to the closure plan are anticipated, but the environmental impacts from those modifications would be less than what is analyzed within this ~~Draft~~ Final SEA and/or DTSC's CEQA document; and DTSC expects and supports a stopping of closure activities if ambient exceedances are occurring. These facts further support a finding of less than significant impacts.

Spent lead is already transported for treatment offsite and out of the Basin. Therefore, no new significant hazards are expected to the public or environment through its routine transport, use and disposal.

Lead in water is not considered volatile. The wastewater systems require secondary containment in the case of an upset to prevent the release of the lead containing water. Therefore, compliance with PAR 1420.1 is not expected to create a significant hazard to the public or environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment

Therefore, PAR 1420.1 is not expected to create a significant hazard to the public or environment through reasonably foreseeable upset conditions involving the release of hazardous materials into the environment.

VIII. c) No schools are located within a quarter mile of Quemetco and Exide. Therefore, PAR 1420.1 would not result in hazardous emissions, handling of hazardous or acutely hazardous materials, substances or wastes within one-quarter mile of an existing or proposed school.

VIII. d) Government Code §65962.5 refers to hazardous waste handling practices at facilities subject to the Resources Conservation and Recovery Act (RCRA). Both PAR 1420.1 affected facilities are on the Cortese List as presented in the ENVIROSTOR[10] database.

Since no earth moving or grading is expected at either Quemetco or Exide, no additional hazards from soil disturbances are expected.

During closure, PAR 1420.1 requires Exide to continue the ambient monitoring, housekeeping and maintenance provisions in the rule, which includes the operation of total enclosures under negative air pressure until the building is demolished. Compliance with PAR 1420.1 will reduce the emissions of potentially toxic fugitive dust from the facility during closure.

In addition, hazardous waste is expected to be disposed properly offsite so the proposed project would not increase a hazard at the affected site or the public and environment offsite. Hazardous wastes from Exide are required to be managed in accordance with applicable federal, state, and local rules and regulations. Accordingly, significant hazards impacts from the disposal/recycling of hazardous materials are not expected from the implementation of PAR 1420.1.

VIII. e) Exide is not near any airports or private airstrips. Quemetco is within six miles of the El Monte Airport. PAR 1420.1 would result in the reduction of lead emissions during operation and facility closure. Secondary TAC emissions from the proposed project were addressed in the Air Quality section of this ~~Draft~~ Final SEA and found to be less than significant. Therefore, no new hazards are expected to be introduced at the affected facility that could create safety hazards at local airports or private airstrips. Therefore, PAR 1420.1 is not expected to result in a safety hazard for people residing or working in the project area even within the vicinity of an airport.

VIII. f) Emergency response plans are typically prepared in coordination with the local city or county emergency plans to ensure the safety of the public (surrounding local communities), and the facility employees as well. The proposed project would not impair implementation of, or physically interfere with any adopted emergency response plan or emergency evacuation plan. The existing affected facility already has an emergency response plan in place. The addition of air pollution control equipment and possible replacement of the storm water retention pond with

[10] http://www.envirostor.dtsc.ca.gov

storage tanks is not expected to require modification of the existing emergency response plan at the affected facility. Thus, PAR 1420.1 is not expected to impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

VIII. g) The proposed project affects facilities located in highly developed areas and are not adjacent to wildland, so potential for a wildland fire from the proposed project does not exist.

VIII. h) The Uniform Fire Code and Uniform Building Code set standards intended to minimize risks from flammable or otherwise hazardous materials. Local jurisdictions are required to adopt the uniform codes or comparable regulations. Local fire agencies require permits for the use or storage of hazardous materials and permit modifications for proposed increases in their use. Permit conditions depend on the type and quantity of the hazardous materials at the facility. Permit conditions may include, but are not limited to, specifications for sprinkler systems, electrical systems, ventilation, and containment. The fire departments make annual business inspections to ensure compliance with permit conditions and other appropriate regulations. Further, businesses are required to report increases in the storage or use of flammable and otherwise hazardous materials to local fire departments. Local fire departments ensure that adequate permit conditions are in place to protect against potential risk of upset. The proposed project would not change the existing requirements and permit conditions.

The proposed project would also not increase the existing risk of fire hazards in areas with flammable brush, grass, or trees. No substantial or native vegetation typically exists on or near the affected facilities (specifically because such areas could allow the accumulation of fugitive lead dust), the existing rule requires the encapsulating (paving or asphalting) of all facility grounds. So the proposed project is not expected to expose people or structures to wild fires. Therefore, no significant increase in fire hazards is expected at the affected facilities associated with the proposed project.

Based upon these considerations, significant adverse hazards and hazardous materials impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

IX. HYDROLOGY AND WATER QUALITY.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☑	☐
b) Substantially deplete groundwater supplies or interfere substantially with	☐	☐	☑	☐

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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)?				
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?	☐	☐	☑	☐
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?	☐	☐	☑	☐
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
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	☐	☐	☐	☑

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
effects?				
h) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☑	☐
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?	☐	☐	☑	☐

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

The two existing affected facilities have on-site wastewater treatment operations. For Exide, during closure, they plan on using their existing wastewater treatment or have a portable wastewater treatment system to comply with the publicly owned treatment works (POTW) permits. Exide is also in the process of reevaluating their POTW permits. The wastewater systems at both facilities treat process water and storm water before it is discharged to the POTWs. The discharged water must comply with existing lead water quality standards.

No construction is foreseeable at Quemetco and Exide will require construction of temporary enclosures including scaffolding and plastic sheeting. However, Exide would have water impacts from PAR 1420.1's maintenance activities and housekeeping measures. The following sections discuss the water impacts in detail.

IX. a) PAR 1420.1 would not alter any existing wastewater treatment requirements of the Los Angeles County Sanitation District (LACSD) and Regional Water Quality Control Board or otherwise substantially degrade water quality that the requirements are meant to protect the environment. Although the amount of water used by Exide may increase, all of the storm water and wastewater from the facility would still be required to be treated by the onsite wastewater treatment.

Discharge concentrations are currently and would continue to be limited by the Industrial Wastewater Discharge Permit.[11] Exide's Hazardous Waste Facility Permit states that any wastewater that does not meet the discharge concentrations set by the LACSD would have to be cycled through the treatment plant until the discharge criteria is met or discharged as hazardous waste.[12] Since wastewater from the facility is treated in an on-site wastewater treatment facility, heavily regulated, and enforced, no change in the water quality of the discharge is expected.

IX. b) PAR 1420.1 would not require the use of groundwater. The facilities use potable water that is treated in their respective on-site wastewater treatment, reused, and then directed to the sanitary sewer. Therefore, it would not substantially deplete groundwater supplies or interfere substantially with groundwater recharge.

IX. c) & d) No physical changes are expected at either facility in order to comply with PAR 1420.1 which will alter the existing drainage pattern, storm water collection or wastewater treatment of either facility.

Therefore, PAR 1420.1 is a project that is not expected to have significant adverse effects on any existing drainage patterns, or cause an increase rate or amount of surface runoff water that would exceed the capacity of the facilities' existing or planned storm water drainage systems.

IX. e) & f) PAR 1420.1 does not include or require any new or additional construction activities to build additional housing that could be located in 100-year flood hazard areas. Hence, PAR 1420.1 is not expected to result in placing housing in 100-year flood hazard areas that could create new flood hazards. Therefore, PAR 1420.1 is not expected to generate significant impacts regarding placing housing in a 100-year flood zone.

For the same reasons as those identified in the preceding paragraph, PAR 1420.1 is not expected to create significant adverse impacts from flooding as a result of failure of a levee or dam or inundation by seiches, tsunamis, or mudflows because the proposed project does not require levee or dam construction, and the affected facilities are located on flat land far from the ocean.

IX. g) The proposed project is not expected to generate significant water use or wastewater generation (see IX. h). PAR 1420.1 will not significantly affect the facilities' water and

[11] According to Los Angeles County Sanitation District- (June 28, 2013).

[12] Exide Technologies, Hazardous Waste Facility Permit, Attachment "A", 2006, www.dtsc.ca.gov/HazardousWaste/Projects/upload/Exide_dPermit.pdf

wastewater generation. Therefore, no additional water or waste water treatment facilities are expected nor any planned expansion of the facilities' existing on-site wastewater treatment system.

Exide

During closure, Exide is expected to continue operation of the on-site WWTP until such time that the WWTP is not needed. Furthermore, as part of the closure process, Exide will be applying for a NPDES general construction permit. Therefore, based on the analysis in this environmental checklist, PAR 1420.1 is not expected to result in the construction of new water or waste water treatment facilities, new storm water drainage facilities, expansion of existing facilities, or construction of which could cause significant environmental effects. Therefore, no further analysis or mitigation measures are required or necessary.

IX. h)

Construction Impacts

No construction is expected at Quemetco. Exide will need to construct temporary enclosures. See Table 2-9 and Appendix B for details.

Operational Impacts

No new operational impacts are expected for Quemetco.

Exide is also expected to use additional water for the wheel washer station and housekeeping related activities. The wheel washer is expected to use 24 gallons of water per vehicle and a maximum of 30 vehicles per day. The total daily water consumption from the wheel washer station would be 720 gal/day. Currently, Exide fills their one water tank truck approximately 15 times per day, which has a capacity of 3,000 gallons. This equates to 45,000 gal/day of water per day during housekeeping operations[13]. Staff estimates that the housekeeping water usages for PAR 1420.1 compliance will continue. This activity is conservatively added to the project's total water use, however it is already part of the existing setting.

Exide may need a maintenance team to minimize their fugitive dust for the enhanced housekeeping and maintenance requirements. The maintenance team will use water hoses to water down the dust from these activities. SCAQMD staff estimates these activities will result in 200 gal/day.

Table 2-10: PAR 1420.1 Additional Water Consumption

Water Application	Additional Water Usage (gal/day)
Enhanced Maintenance Activities	200
Wheel Washer Station	720
Enhanced Housekeeping Measures	45,000
Total	**45,920**
Significance Threshold	262,820
Exceed Significance Threshold?	**No**

[13] Housekeeping operations include street sweeping, watering, and washing the facility.

Therefore, the total additional use would be 45,920 gal/day of water, which is less than the significance threshold of 262,820 gal/day of potable water and total water demand of more than five million gallons per day (see Table 2-10: PAR 1420.1 Additional Water). Therefore, sufficient water supplies are expected to be available to serve the project from existing entitlements and resources without the need for new or expanded entitlements. Therefore, PAR 1420.1 is not expected to be significant for operational water demand.

Thus, the impacts to water are based on a worst case daily water demand from the operational phase of the project.

IX. i)

Quemetco
No impacts are expected for Quemetco's sewer system.

Exide
No significant impacts are expected for Exide's sewer system.

Exide will continue to operate their WWT system during closure. Once the WWT system has been dismantled, Exide plans on having a temporary portable WWT system to comply with their wastewater discharge permits.

Exide has an Industrial Wastewater Discharge Permit with a maximum 310,000 gal/day limit. The daily wastewater peak discharge rate for the fiscal year 2011/2012 was 132,630 gal/day based on the annual surcharge statement submitted by the company. Their permitted maximum peak discharge limit is 300 gpm. They had a peak discharge rate[14] of 236 gpm.

An increase of 32 gpm of discharged wastewater would increase their total peak discharge rate to 268 gpm of wastewater (32 gpm + 236 gpm), which would be less than the maximum permitted wastewater discharge rate of 300 gpm for the existing wastewater system. The additional 43,200 gal/day of discharged wastewater would result in an average facility wastewater discharge rate of 175,830 gal/day, which would be less than the permit maximum wastewater discharge rate of 310,000 gal/day, so no change to current permit is required.

If the proposed project does trigger a wastewater discharge rate that exceeds the 310,000 gal/day limit, the LACSD deems that a secondary peak permit could be required to allow the discharge during non-peak hours. Significance thresholds for industrial wastewater discharge is determined by its impact to the affected sewer system. The LACSD provided that there is not any hydraulic overloading of the sewer system downstream of the Exide facility. However, wastewater flow can also affect relief or repair work, but no relief or repair work in the near future was identified by the LACSD. Based on the existing sewer system used by Exide, the LACSD believes that an additional 30 gpm can be accommodated by the existing sewer system.

Therefore, based on the above analysis, there would be adequate capacity to serve the proposed project's projected demand addition to the provider's existing commitments.

[14] A peak discharge rate is based on the average of the ten highest 30-minute peak flow periods.

Based upon these considerations, significant adverse hydrology and water quality impacts are not anticipated and, therefore, no further analysis is required or necessary.

X. LAND USE AND PLANNING.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a) Physically divide an established community?	☐	☐	☐	☑
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?	☐	☐	☐	☑

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) Quemetco already meets the new total facility point source emission limit of 0.003 lb/hr and no further air pollution controls will be needed. Exide is no longer operational and is in the process of facility closure. Therefore, no construction is expected at Quemetco for PAR 1420.1 compliance. Exide is expected to construct temporary enclosures.

During facility closure, the ambient monitoring, housekeeping and maintenance requirements, including the continued operation of negative air pressure enclosures, will continue to be maintained. If contingency measures are triggered during closure activities, the facility will likely increase the frequency of housekeeping measures, which will result in the need for additional workers. Therefore, the proposed project would not create divisions in any existing communities.

X. b) Land use and other planning considerations are determined by local governments. Construction and operation of a new temporary enclosure during closure of the Exide facility would occur within the boundaries of an existing large lead recycling facility, which is in an area that is zoned for industrial use. The new PAR 1420.1 requirements are not designed to impede or conflict with existing land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect, but to assist in avoiding or mitigating lead emissions impacts from large lead recycling facilities. Operations at both affected facilities would still be expected to comply, and not interfere, with any applicable land use plans, zoning ordinances.

Based upon these considerations, significant adverse land use and planning impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

XI. MINERAL RESOURCES.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑

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) & b) There are no provisions in PAR 1420.1 that would result in the loss of availability of a known mineral resource 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.

Based upon these considerations, significant adverse mineral resources are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

XII. NOISE.

Would the project result in:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?				
b)	Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☑	☐
c)	A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☐	☑	☐
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?	☐	☐	☐	☑

Significance Criteria

Impacts on noise 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 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

XI. a), b) & c) Noise is usually defined as sound that is undesirable because it interferes with speech communication and hearing, is intense enough to damage hearing, or is otherwise annoying (unwanted noise). Sound levels are measured on a logarithmic scale in decibels (dB). The universal measure for environmental sound is the "A" weighted sound level (dBA), which is the sound pressure level in decibels as measured on a sound level meter using the A-weighted filter network. "A" scale weighting is a set of mathematical factors applied by the measuring instrument to shape the frequency content of the sound in a manner similar to the way the human ear responds to sounds.

Federal, state and local agencies regulate environmental and occupational, as well as, other aspects of noise. Federal and state agencies generally set noise standards for mobile sources, while regulation of stationary sources is left to local agencies. Local regulation of noise involves implementation of General Plan policies and Noise Ordinance standards, which are general principles, intended to guide and influence development plans. Noise Ordinances set forth specific standards and procedures for addressing particular noise sources and activities. The Occupational Safety and Health Administration (OSHA) sets and enforces noise standards for worker safety.

Groundborne vibration is quantified in terms of decibels, since that scale compresses the range of numbers required to describe the oscillations. The Federal Transit Administration uses vibration decibels (abbreviated as VdB) to measure and assess vibration amplitude. Vibration is referenced to one micro-inch/sec (converted to 25.4 micro-mm/sec in the metric system) and presented in units of VdB.

Based on existing lead point source tests, Quemetco is already complying with PAR 1420.1's total facility point source limit (0.003 lb/hr) for lead. There will be no physical changes at Quemetco. Additionally, Exide is in the process of closing their facility. In order for Exide to comply with PAR 1420.1 during closure, Exide will likely continue the current monitoring, housekeeping and maintenance activities, as well as maintain the existing total enclosures on-site and construct temporary enclosures made of scaffolding and plastic sheeting during decontamination and deconstruction. No significant noise or vibration generating activities are anticipated during this relatively minor construction activity that would be any greater than occurs in the baseline activity onsite. Therefore, PAR 1420.1 will not result in significant noise or vibration impacts from construction.

Both facilities are located in areas which are industrial in nature. During closure, the noise generated by continuing the ambient monitoring, housekeeping and maintenance requirements, and operating the total enclosure under negative air pressure is negligible when compared to the noise generated by the demolition activities. Therefore, noise and vibration impacts are considered less than significant.

XI. d) The affected facility is not near any airports or private airstrips. The closest airport or airstrip is the Hawthorne Municipal Airport, which is 9.6 miles from the affected facility. Therefore, the proposed project would not expose people residing or working in the project area to excessive noise levels within two miles of a public use airport or private airstrip.

Based upon these considerations, significant adverse noise impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

XIII. POPULATION AND HOUSING.

Would the project:	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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)?	☐	☐	☐	☑
b) Displace substantial numbers of people or existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☑

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) Quemetco already meets the new total facility point source emission limit of 0.003 lb/hr and no further air pollution controls will be needed. Exide is no longer operational and is in the process of facility closure. Therefore, no construction is expected at Quemetco for PAR 1420.1 compliance. Exide is expected to construct temporary enclosures. During facility closure, the ambient monitoring, housekeeping and maintenance requirements, including the continued operation of negative air pressure enclosures, will likely continue to be maintained. If contingency measures are triggered during closure activities, the facility will likely increase the frequency of housekeeping measures, which will result in the need for an additional 8 workers. The proposed project is not anticipated to generate any significant effects, either direct or indirect, on the district's population or population distribution. Human population within the jurisdiction of the SCAQMD is anticipated to grow regardless of implementing PAR 1420.1. It is expected that the additional 8 workers needed for the compliance plan would be from the local labor pool in Southern California. As such, PAR 1420.1 would not result in changes in population densities or induce significant growth in population.

XIII. b) Since PAR 1420.1 affects two existing facilities, it is not expected to result in the creation of any industry that would affect population growth, directly or indirectly, induce the construction of single- or multiple-family units, or require the displacement of people elsewhere.

Based upon these considerations, significant adverse population and housing impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

XIV. PUBLIC SERVICES.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑

b) Police protection?	☐	☐	☐	☑
c) Schools?	☐	☐	☐	☑
d) Other public facilities?	☐	☐	☐	☑

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 construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response time or other performance objectives.

Discussion
XIV. a) & b) PAR 1420.1 would not involve the use of new flammable or combustible materials. As a result, no new fire hazards or increased use of hazardous materials would be introduced at the affected facilities that would require additional emergency responders such as police or fire departments or additional demand from these resources. Thus, no new demands for fire or police protection are expected from PAR 1420.1.

XIV. c) As noted in the "Population and Housing" discussion, implementation of the proposed project would not have a significant impact on inducing growth. The additional workers needed for the compliance plan would come from the local labor pool in southern California. As a result, PAR 1420.1 would have no direct or indirect effects on population growth in the district. Therefore, there would be no increase in local population and thus no impacts are expected to local schools as a result of PAR 1420.1.

XIV. d) Because the proposed project involves requirements that are similar to existing operations already in place at an existing facility and the facilities are already heavily regulated, PAR 1420.1 is not expected to require the need for additional government services. Enforcement of PAR 1420.1 is expected to be performed by the existing SCAQMD inspectors for these facilities. Further, the proposed project would not result in the need for new or physically altered government facilities in order to maintain acceptable service ratios, response times, or other performance objectives. There will be no increase in population and, therefore, no need for physically altered government facilities.

Based upon these considerations, significant adverse public services impacts are not anticipated and, therefore, no further analysis is required or necessary.

XV. RECREATION.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?				
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?	☐	☐	☐	☑

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) & b) As previously discussed under "Land Use," there are no provisions in PAR 1420.1 that would affect land use plans, policies, or regulations. Land use and other planning considerations are determined by local governments; no land use or planning requirements would be altered by the proposed project. Further, implementation of PAR 1420.1 would not increase the use of existing neighborhood and regional parks or other recreational facilities or include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment because the proposed project is not expected to induce population growth.

Based upon the above considerations, significant adverse recreation impacts are not anticipated and, therefore, no further analysis is required or necessary.

XVI. SOLID/HAZARDOUS WASTE.

Would the project:		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
a)	Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	☐	☐	☑	☐
b)	Comply with federal, state, and local statutes and regulations related to solid and hazardous waste?	☐	☐	☑	☐

Significance Criteria

The proposed project impacts on solid/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) Landfills are permitted by the local enforcement agencies with concurrence from the California Department of Resources Recycling and Recovery (CalRecycle). Local agencies establish the maximum amount of solid waste which can be received by a landfill each day and the operational life of a landfill.

Construction

No construction is expected at Quemetco. Exide is expected to construct temporary enclosures to comply with PAR 1420.1. The plastic sheeting of 1,234 cubic yards would generate 41 disposal trucks during construction. (See Table 2-11 and Appendix B for details.

Operation

Exide

Exide will be operating their APCDs during much of their closure process. Therefore, operation of control equipment such as filters could have solid waste impacts.

This analysis of solid waste impacts assumes that safety and disposal procedures required by various agencies in the state of California will provide reasonable precautions against the improper disposal of hazardous wastes in a municipal waste landfill. Because of state and federal requirements, some facilities are attempting to reduce or minimize the generation of solid and hazardous wastes by incorporating source reduction technologies to reduce the volume or toxicity of wastes generated, including improving operating procedures, using less hazardous or nonhazardous substitute materials, and upgrading or replacing inefficient processes.

Filtration

Filtration includes usage of baghouse, HEPA filters. All mixed metal compounds could be generated with the use of filtration controls at a 99.9 percent control rate.

Currently, the facilities properly send their hazardous materials to their local smelter or to Resource Conservation and Recovery Act (RCRA) landfill. To comply with the proposed rule's requirements, it is conservatively estimated that the operation of the APCDs' filters may generate 3200 cubic yards/yr (4480 tons/yr) of hazardous waste.

The nearest RCRA landfills are the Republic Services and US Ecology. The Republic Services La Paz County Landfill has approximately 20,000,000 cubic yards of capacity remaining for the 50 year life expectancy (400,000 cubic yards per year). The US Ecology, Inc., facility in Beatty, Nevada has approximately 638,858 cubic yards of capacity remaining for the three year life expectancy (212,952 cubic yards per year. US Ecology, Inc., receives approximately 18,000 cubic yards per year of waste, so 194,952 cubic yards per year (212,952 cubic yard/year – 18,000 cubic yard/year) would be available.

With an annual disposal of 4,434 cubic yards of filters, spent lead, metals and plastic sheeting, the total solid/hazardous waste impact from the proposed amended rule are 1.1 percent and 2.27 percent of the available Republic Services and US Ecology landfill capacity, respectively.

The amount of hazardous waste generated by the proposed project will not require new RCRA landfills and is not considered to be a substantial impact to existing landfill capacity. Therefore, potential hazardous waste impacts are not considered significant.

Table 2-11 Total Solid Waste Generation

Waste Type	Potential # APC Devices	Annual Waste per Control Device (cubic yards)	Total Waste Generated (cubic yards/year)
Filtration	5	640	3,200
Plastic Sheeting	--	--	1,234
TOTAL WASTE GENERATED FROM PROPOSED PROJECT			**4,434 cubic yards/yr or 12.1 cubic yards/day**

Therefore, the increase in hazardous waste disposal from PAR 1420.1 is expected to be less than significant for operational hazardous waste disposal.

XVI.b) The rule amendments are not inconsistent with federal, state and local statutes and regulations related to soil and hazardous waste. It is assumed that facility operators at the affected facilities will comply with all applicable local, state, or federal waste disposal regulations.

Implementing PAR 1420.1 is not expected to interfere with any affected facility's ability to comply with applicable local, state, or federal waste disposal regulations.

Based upon these considerations, significant adverse solid/hazardous waste impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

XVII. TRANSPORTATION/TRAFFIC.

	Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?				
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?	☐	☐	☐	☑
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?	☐	☐	☐	☑
d)	Substantially increase hazards due to a design feature (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☐	☑
e)	Result in inadequate emergency access?	☐	☐	☐	☑
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?	☐	☐	☐	☑

Significance Criteria

Impacts on transportation/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

Existing Affected Facilities

Quemetco already meets the new total facility point source emission limit of 0.003 lb/hr and no further air pollution controls will be needed. Exide is no longer operational and is in the process of facility closure. No construction is expected at Quemetco. Exide will construct temporary enclosures. It is estimated that an additional 8 worker trips per day and 2 truck trips per day would occur. or Exide for PAR 1420.1 compliance. These trips are below the significance threshold.

Operation Impacts

Based on existing lead point source tests, Quemetco is already complying with PAR 1420.1's total facility point source limit (0.003 lb/hr) for lead. There will be no physical changes at Quemetco. Additionally, Exide is in the process of closing their facility. In order for Exide to comply with PAR 1420.1 during closure, Exide will continue the current monitoring, housekeeping and maintenance activities, as well as maintain the total enclosures on-site. Therefore, PAR 1420.1 will not result in construction activities at Quemetco, while Exide is expected to construct temporary enclosures. .

XVII. a) & b)

Exide is expected to continue their housekeeping and maintenance activities (i.e. vehicle sweeping, water tank usage, worker trips, air monitoring visits and haul/delivery truck trips). Vehicle sweeping and water tank usage occurs on-site and does not affect public roadways. SCAQMD staff assumed that at any given day would, Exide would generate an additional 2 truck trips per day in the entire district additional for delivery and disposal of hazardous waste. Overall, there would be 1 worker trip for collecting samples and 8 worker trips for housekeeping and maintenance activities. These potential trips are not expected to significantly adversely affect circulation patterns on local roadways or the level of service at intersections near affected facilities. In addition, this volume of additional daily truck traffic is negligible over the entire area of the district.

Table 2-12 Estimation of Vehicle Trips

Phase	Worker Vehicles	Delivery/Disposal Trucks
Operation	9 per day	2 per day[a]

[a] A maximum of 1 worker trip for collecting samples and8 worker trips. A maximum of 2 delivery/disposal trucks may travel in the District

XVII. c) The affected facility is not near any airports or private airstrips. The closest airport or airstrip is the Hawthorne Municipal Airport, which is 9.6 miles from the affected facility. Any actions that would be taken to comply with the proposed project are not expected to influence or affect air traffic patterns or navigable air space, since no new structures or equipment are expected to enter air space used by aircraft. Thus, PAR 1420.1 would not result in a change in air traffic patterns including an increase in traffic levels or a change in location that results in substantial safety risks.

XVII. d) & e) The proposed project does not involve construction of any roadways or other transportation design features, so there would be no change to current roadway designs that could increase traffic hazards. The siting of the affected facility is consistent with surrounding land uses and traffic/circulation in the surrounding areas of the affected facility. Thus, the proposed project is not expected to substantially increase traffic hazards or create incompatible uses at or adjacent to the affected facility. Emergency access at the affected facility is not expected to be impacted by the proposed project. Further, each affected facility is expected to continue to maintain their existing emergency access during closure. Therefore, PAR 1420.1 is not expected to alter the existing long-term circulation patternsand is not expected to require a modification to circulation, thus, no long-term impacts on the traffic circulation system are expected to occur.

XVII. f) The affected facilities would still be expected to comply with, and not interfere with adopted policies, plans, or programs supporting alternative transportation (e.g. bicycles or buses). Since all PAR 1420.1 compliance activities would occur on-site, PAR 1420.1 would not hinder compliance with any applicable alternative transportation plans or policies.

Based upon these considerations, significant adverse transportation/traffic impacts are not anticipated. Therefore, no further analysis or mitigation measures are required or necessary.

XVIII. MANDATORY FINDINGS OF SIGNIFICANCE.

		Potentially Significant Impact	Less Than Significant With Mitigation	Less Than Significant Impact	No Impact
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?	☐	☐	☐	☑
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)				
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☐	☑

Discussion

XVIII. a) As discussed in the "Biological Resources" section, PAR 1420.1 is not expected to significantly adversely affect plant or animal species or the habitat on which they rely because any construction and operational activities associated with affected sources are expected to occur entirely within the boundaries of existing developed facilities in areas that have been greatly disturbed and that currently do not support any species of concern or the habitat on which they rely. PAR 1420.1 is not expected to reduce or eliminate any plant or animal species or destroy prehistoric records of the past.

XVIII. b) Based on the foregoing analyses, PAR 1420.1 would not result in significant adverse project-specific environmental impacts. Potential adverse impacts from implementing PAR 1420.1 would not be "cumulatively considerable" as defined by CEQA Guidelines §15064(h)(1) for any environmental topic because there are no, or only minor incremental project-specific impacts that were concluded to be less than significant. Per CEQA Guidelines §15064(h)(4), the mere existing of significant cumulative impacts caused by other projects alone shall not constitute substantial evidence that the proposed project's incremental effects are cumulative considerable. SCAQMD cumulative significant thresholds are the same as project-specific significance thresholds. Therefore, there is no potential for significant adverse cumulative or cumulatively considerable impacts to be generated by the proposed project for any environmental topic.

XVIII. c) Based on the foregoing analyses, PAR 1420.1 are not expected to cause adverse effects on human beings for any environmental topic. As previously discussed in environmental topics I through XVIII, the proposed project has no potential to cause significant adverse environmental effects. Therefore, no further analysis or mitigation measures are required or necessary.

APPENDICES

APPENDIX A

PROPOSED AMENDED RULE 1420.1

In order to save space and avoid repetition, please refer to the latest version of Proposed Amended Rule 1420.1 located elsewhere in the September 2015 Governing Board Package. The version of Proposed Amended Rule 1420.1 that was circulated with the Draft SEA and released on July 22, 2015 for a 30-day public review and comment period which ended on August 20, 2015 was identified as PAR 1420.1r July 2015. Original hard copies of the Draft SEA, which include the draft version of the proposed amended rule listed above, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by calling (909) 396-2039.

APPENDIX B

ASSUMPTIONS AND CALCULATIONS

In order to save space and avoid repetition, please refer to the Draft SEA that was circulated with and released on July 22, 2015 for a 30-day public review and comment period which ended on August 20, 2015 for all of the assumptions and calculations. Original hard copies of the Draft SEA, can be obtained through the SCAQMD Public Information Center at the Diamond Bar headquarters or by calling (909) 396-2039.