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12	BEFORE THE HEARING BOARD OF THE		
13	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT		
14			
15	In the Matter of	Case No. 6060-5	5
	_		ED ORDER FOR
16	SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT,	ABATEMEN	T AND FINDINGS AND
17	Petitioner,	DECISION (OF THE HEARING BOARD
18	v.		
19	TORRANCE REFINING COMPANY LLC	Rule 402 and Ca Section 41700	alifornia Health and Safety Code
20	[Facility ID No. 181667],		
21	Respondent.	Hearing Dates:	February 15 & 16, 2017 9:00 a.m.
22		Time: Place:	SCAQMD
23			21865 Copley Drive Diamond Bar, CA 91765
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FINDINGS AND DECISION OF THE HEARING BOARD

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This petition for an Order for Abatement was heard on February 15 & 16, 2017, pursuant to notice and in accordance with the provisions of California Health and Safety Code Section 40823 and District Rule 812. The following members of the Hearing Board were present: Edward Camarena, Chair; Julie Prussack, Vice Chair; Patricia Byrd; Hon. Nate Holden; and Roger L. Lerner, M.D. Petitioner, Executive Officer of the South Coast Air Quality Management District, (hereinafter referred to as "District" or "Petitioner"), was represented by Daphne Hsu, Senior Deputy District Counsel, and Karin Manwaring, Senior Deputy District Counsel. Respondent Torrance Refining Company LLC, a Delaware limited liability company, (hereinafter referred to as "Respondent" or "TORC"), was represented by Michael McDonough of Pillsbury Winthrop Shaw Pittman LLP. The public was given the opportunity to testify. The matter was submitted and evidence received. The Hearing Board finds and decides as follows:

FINDINGS OF FACT

- Petitioner is a body corporate and politic established and existing pursuant to Health 1. and Safety Code sections 40000, et seq. and sections 40400, et seq., and is the sole and exclusive local agency with the responsibility for comprehensive air pollution control in the South Coast Basin.
- Respondent is in the business of petroleum refining and owns and operates the 2. refinery located at 3700 W. 190th Street, Torrance, California 90504 (the "Facility" or "Refinery"), with Facility ID no. 181667. The Respondent's Facility is within the District's jurisdiction and subject to the District's regulations. Respondent acquired the Refinery from ExxonMobil Oil Corporation on July 1, 2016. The Refinery is a large industrial complex, sitting on approximately 750 acres. It is bordered by a residential community to the north and a residential street to the south; otherwise, the Refinery is surrounded by commercial and industrial areas.
- Respondent operates multiple process units within the Refinery including: crude 3. distillation, fluid catalytic cracking, alkylation, gas production, and steam production. The Facility is equipped with a flaring system that is used to depressurize process units in the event of an

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4. The Refinery receives power from Southern California Edison ("SCE"). SCE owns and operates much of the electrical infrastructure that delivers power to Refinery units, including two 66 kV substations (i.e., "Compress" and "MobilOil"), and 12 kV and 16 kV electrical system within the Refinery. SCE's La Fresa Substation serves the Refinery and local community of approximately 160,000 customers in five cities. The La Fresa Substation's incoming power is 220 kilovolts ("kV") and outgoing power to the Refinery is at 66 kV and to other customers at lower voltages. There are two substations (Compress and MobilOil) serving the Refinery from the La Fresa Substation. At the La Fresa Substation, the Refinery is on the A-Bus, which also serves approximately 60,000-70,000 customers.

- 5. Health & Safety Code Section 41700 and District Rule 402 state, "a person shall not discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property."
- District Rule 1118, last amended November 4, 2005, applies to all flares used at 6. petroleum refineries, sulfur recovery plants and hydrogen production plants. It is intended to monitor and record data on refinery and related flaring operations, and to control and minimize flaring and flare related emissions. It expressly states that "provisions of this rule are not intended to preempt any petroleum refinery, sulfur recovery plant and hydrogen production plant operations and practices with regard to safety." Flaring is a safety feature at refineries and the District, by this petition, is not alleging that TORC violated District Rule 1118.
- Flaring events followed power disruptions on SCE's electrical system outside the 7. Refinery on at least three occasions in 2016: in March, September, and October. TORC was the operator of the Refinery during only the September and October events. No flaring events following power disruptions have been reported at the Refinery thus far in 2017.

- 8. On March 16, 2016, a Mylar balloon came in contact with a SCE subtransmission power line located outside the Refinery and caused a system disruption that resulted in a flaring event at the Refinery while the Refinery was owned and operated by ExxonMobil. The District did not allege a violation of Health & Safety Code section 41700 or District Rule 402 following this event.
- 9. On September 19, 2016, the Refinery again experienced a power supply interruption due to event on SCE's electrical system outside the Refinery. The power supply interruption resulted when SCE experienced an insulator arc-over on its 66kV system (called a "flashover") outside the Refinery during a heavy fog. The flashover directly impacted the Refinery's incoming 66kV power feed. The District did not allege a violation of Health & Safety Code section 41700 or District Rule 402 following this event.
- 10. On October 11, 2016, the Refinery again experienced a power supply interruption. The power supply interruption resulted when SCE experienced a sudden and unexpected power supply interruption outside the Refinery from SCE's La Fresa substation due to an SCE wiring error. The Refinery was without power from SCE for a total of 26 minutes.
- 11. A District compliance officer issued Notice of Violation P63409 on October 13, 2016, to TORC for alleged violations of District Rule 402 and Health & Safety Code section 41700, for the alleged public nuisance that resulted from the flaring event that occurred on October 11, 2016.
- 12. As a result of the October 11, 2016, power interruption, TORC's safety systems were activated and power to all major process units had been lost. To avoid atmospheric releases and potential process safety issues, TORC diverted process gases in Refinery process units and equipment to the Refinery's flares, 65F-3 and 65F-4.
- 13. On October 11, 2016, because of the impact of the SCE power interruption on the Refinery, the City of Torrance issued an emergency notification at about 6:45 a.m. directing people who live near the Refinery to shelter in place. "Stay inside buildings, shut all doors and windows, turn off air conditioners, and turn off all air handling systems," the alert stated. The order lasted

17,000 pounds, when using an alternative method of reporting.

- 19. Although flaring is considered a safety feature at refineries, the District seeks to minimize flaring when possible due to emissions and the potential for opacity concerns. Some flaring events at TORC's Refinery are caused by SCE power interruptions. The District alleges that such flaring events have the potential to recur, and that such flaring events may have the tendency to cause injury, detriment, nuisance, or annoyance to a considerable number of persons and to the public, and that such discharges further endanger the comfort, repose, health and safety of people and the public.
- 20. In response to the recent SCE power outages, TORC and SCE have been working together on a proposal to minimize the potential for future power supply interruptions from SCE's electrical system. SCE and TORC propose to work together to build a 220 kV service and a new SCE switching station located on TORC property and exclusively serving the Refinery. TORC also proposes to replace and upgrade its existing electrical distribution network within the Refinery (collectively, "220 kV Proposal").
- 21. TORC and Edison are providing the District with further information on the 220 kV Proposal to allow the District to further understand how the 220 kV Proposal will improve electrical reliability.
- 22. Consistent with the terms and conditions ordered of TORC below, TORC agrees to take steps within the Refinery to improve its ability to cope with electrical power interruptions from SCE and reduce flaring, including but not limited to, identifying and evaluating feasible and cost-effective enhancements, upgrades, or improvements to its critical utility systems, and ensuring its uninterruptible power supply ("UPS") systems are maintained and operable. TORC further agrees to conditions that address training related to response to loss of power and enhanced public outreach regarding its planning and progress of its 220 kV Proposal.
- 23. The parties have stipulated to the issuance of this Order for Abatement, pursuant to Health and Safety Code Section 42451(b).

CONCLUSIONS

- The parties have jointly agreed to enter into this Stipulated Order for Abatement out
 of a desire to improve the reliability of electricity at the Refinery and to reduce the consequences
 of any SCE power outages.
 - 2. This Stipulated Order for Abatement is not and does not act as a variance.
- 3. The issuance of this Stipulated Order for Abatement, upon a fully noticed hearing, will not constitute a taking of property without due process of law.
- The issuance of this Stipulated Order for Abatement is not expected to result in the closing or elimination of an otherwise lawful business.

ORDER AND CONDITIONS

THEREFORE, subject to and based on the aforesaid Findings of Fact, Conclusions, and additional evidence and testimony, and good cause appearing, this Board orders Respondent to refrain from any operation of the Torrance Refinery that would result in violation of District Rule 402 and California Health and Safety Code Section 41700 as a result of an SCE power outage, or in the alternative, comply with the actions and conditions set forth below:

- 1. Respondent shall meet the following conditions:
 - a. Comply with all applicable California Electrical Code and industry reliability standards in designing its portions of the 220kV Proposal;
 - b. Within 180 days from the issuance of this Order, model for its portions of its 220 kV Proposal, using electrical modeling tools such as SKM Systems Analysis, Inc. ("SKM") or electrical transient analysis program ("ETAP") software, and provide the model results to the District within 30 days of completion;
 - between failure ("MTBF") and mean time to repair ("MTTR") by asset type (i.e.,

transformers, switchgears, cables, etc.), and provide its estimate to the District within 30 days of completion; and

- d. Design its portions of its 220 kV Proposal such that there are no single points of failure.
- 2. Respondent shall, within 60 days from the issuance of the Order, provide to the District a written communications protocol between itself and SCE that covers the following topics:
 - a. For the 220kV Proposal, Respondent shall take all reasonable steps to ensure weekly meetings and/or telephone conferences continue until the Respondent and SCE have agreed to the design, construction schedule, and received requisite regulatory approvals for SCE's portion of the project;
 - b. Respondent shall seek SCE's agreement to provide at least 24-hour advance notification to Respondent of any SCE electrical system work, including upgrades, maintenance, and/or new facilities that may have the potential to limit or impact Respondent's Torrance Refinery operations;
 - Respondent shall provide at least 24-hour advance notification to SCE of any
 maintenance at its Torrance Refinery that may have the potential to limit SCE's
 electrical system stability and operations;
 - d. Respondent shall provide the names, telephone numbers, and e-mail addresses of the
 SCE and Respondent contacts that should be notified; and
 - e. Respondent shall provide to the District Respondent's and SCE's contacts who shall manage and coordinate the dissemination of emergency notices, who is responsible for acting upon the information regarding an emergency, and what actions are required to be taken, in the event of an emergency.

- 3. Respondent shall, within 270 days from the issuance of this Order, conduct and complete an evaluation of the Torrance Refinery's safety critical devices to determine which safety critical devices rely solely on electrical power with no UPS backup.
 - Respondent shall, within 30 days of completing this evaluation, provide this
 evaluation to the District.
 - b. Respondent shall, within 365 days, from completing the evaluation in 3.a above, for UPS installation work that does not require a permit modification or permit, or turnaround, install the identified UPS on those safety critical devices without backup. Respondent shall commence construction within 45 days of receipt of all necessary equipment for each UPS installation.
 - c. Respondent shall, within 30 days from the installation of all UPS on safety critical devices without backup UPSs in 3.b above, provide documentation to the District of these UPS installations.
 - d. For those UPS installations identified in 3.a above that require a permit modification or permit, Respondent shall submit the appropriate applications for the identified UPSs within 90 days from the completion of the evaluation in 3.a. Within 365 days from the issuance of such permit modification or permit, if a turnaround is not required, Respondent shall complete the UPS installation work. Respondent shall commence construction within 45 days of receipt of all necessary equipment or issuance of a permit modification or permit, whichever is later.
 - e. Respondent shall, within 30 days from the installation of all UPS on safety critical devices without backup UPSs in 3.d above, provide documentation to the District of these UPS installations.

- f. For those UPS installations identified in 3.b above that require a turnaround, Respondent shall install these identified UPSs at the next scheduled turnaround for its associated equipment or process unit.
- g. Respondent shall, within 30 days from the installation of all UPS on safety critical devices without backup UPSs in 3.f above, provide documentation to the District of these UPS installations.
- h. Upon receipt of the permit modification or permit application from Respondent for 3.d and/or 3.f above, the District will endeavor to use its best efforts to review and issue any required permit modification or permit in an expedited manner.
- 4. Respondent shall, within the time periods provided below, conduct and complete an evaluation of the Torrance Refinery's critical utility systems to determine potential feasible and cost-effective enhancements, upgrades, or improvements to these systems that will enable these systems to remain operable as long as possible during an SCE electrical power outage to minimize flaring during such an SCE power outage, and provide the evaluation to the District within 30 days of completion.
 - a. In the evaluation, the Respondent shall evaluate the following Torrance Refinery critical utility systems within the time periods provided below:
 - i. Within 270 days from the issuance of this Order, evaluate:
 - Steam systems, including but not limited to boilers, critical steam turbines, and flare quenching systems;
 - Boiler feed water system;
 - Instrument air system; and
 - Flare knockout pots draining systems.
 - ii. Within 365 days from the issuance of this Order, evaluate:

- · Nitrogen supply and generation system; and
- Fire water monitor and Alkylation Unit deluge systems.
- b. Respondent shall, within 365 days of the completion of each evaluation in 4.a.i. and ii., above, respectively, for the identified enhancements, upgrades, or improvements to these critical utility systems that do not require a permit modification, permit, or turnaround, Respondent shall complete the identified feasible and cost-effective enhancements, upgrades, or improvements on the Torrance Refinery's critical utility systems. Respondent shall commence construction within 45 days of receipt of all necessary equipment.
- c. Respondent shall, within 30 days of the completion of the identified enhancements, upgrades, or improvements on the Torrance Refinery's critical utility systems in 4.b above, provide documentation to the District of completion of these enhancements, upgrades, or improvements.
- d. For enhancements, upgrades, or improvements on the Torrance Refinery's critical utility systems identified in 4.a above that require permit modifications or permits, Respondent shall submit the appropriate applications for the identified feasible and cost-effective enhancements, upgrades, or improvements within 90 days from the completion of the evaluation in 4.a. Within 365 days from the issuance of such permit modifications or permits, if a turnaround is not required, Respondent shall complete the identified enhancements, upgrades, or improvements. Respondent shall commence construction within 45 days of receipt of all necessary equipment or receipt of permit modification or permit, whichever is later.
- e. Respondent shall, within 30 days of the completion of the identified enhancements, upgrades, or improvements on the Torrance Refinery's critical utility systems in 4.d

above, provide documentation to the District of completion of these enhancements, upgrades, or improvements.

- f. For enhancements, upgrades, or improvements on the Torrance Refinery's critical utility systems identified in 4.a above that require a turnaround, and that are feasible and cost-effective, Respondent shall comply with 4.d above, and install the identified enhancements, upgrades, or improvements at the next scheduled turnaround for its associated equipment or process unit.
- g. Respondent shall, within 30 days from the completion of the identified enhancements, upgrades, or improvements on the Torrance Refinery's critical utility systems in 4.f above, provide documentation to the District of these enhancements, upgrades, or improvements on the Torrance Refinery's critical utility systems.
- h. Upon receipt of the permit modification or permit application from Respondent for 4.b and/or 4.f above, the District will endeavor to use its best efforts to review and issue any required permit modification or permit in an expedited manner.
- 5. Respondent shall immediately commence and use its best efforts to complete an evaluation within 180 days of the issuance of the Order to identify a feasible and cost-effective temporary supply of steam to the Refinery Flares 65F-3 and 65F-4 during an SCE power outage. Should Respondent be unable to complete its evaluation within this timeframe for any reason, it shall present such reasons, with credible evidence at the status and modification hearing on September 7, 2017. Within two weeks of completing this evaluation, Respondent shall provide the evaluation to the District for review.
- 6. For existing Torrance Refinery safety critical devices with UPS back up, within 190 days from the issuance of the Order, Respondent shall provide evidence covering a period of six months that documents that the Torrance Refinery's UPSs are maintained and operable at all times.

- b) Respondent shall log calls that the Torrance Refinery receives to its hotline and responses thereto regarding the 220 kV Proposal.
- c) Respondent shall provide quarterly reports of its updates and hotline calls and responses thereto regarding the dedicated 220kV Proposal to District Inspector Steve Tsumura (stsumura@aqmd.gov).
- Respondent shall permit site visits by the District to verify that Respondent is complying with the Order.
 - 10. Respondent shall pay to expedite all permit applications to the extent necessary.
- 11. Respondent shall, for all increments requiring reports, notices, or other submittals to the District, submit via email to Daphne Hsu at Dhsu@AQMD.gov, or via other methods to other persons agreed to in writing by the Parties, unless specified otherwise within this Order.
- 12. The District and TORC shall endeavor to informally resolve disagreements such as methods of evaluation or evaluations of specific proposals, if any. If the parties are unable to resolve such disagreements, either party may petition the Hearing Board for a modification of this order.
- 13. The Parties shall return to the Board for a status and modification hearing on September 7, 2017, or as soon thereafter as this matter may be heard. At the status hearing, the Parties (separately if no agreement can be reached) may propose further increments of progress for Respondent's portions of the 220 kV Proposal to be adopted as part of a modification to this Order.
- 14. The Hearing Board may modify this Order for Abatement without the stipulation of the parties upon a showing of good cause therefore, and upon making the findings required by the Health and Safety Code § 42451(a) and District Rule 806(a). Any modification of the Order shall be made only at a public hearing held upon 10 days published notice and appropriate written notice to the Respondent and the District.