PUBLIC VERSION
- WITHOUT
TRADE SECRETS

	FILED
1	JAN 2 4 2022
L	HEARING BOARD

BEFORE THE HEARING BOARD OF THE BAY AREA AIR QUALITY MANAGEMENT DISTRICT

BAY AREA AIR QUALITY
MANAGEMENT DISTRICT

AIR POLLUTION CONTROL OFFICER of the BAY AREA AIR QUALITY MANAGEMENT DISTRICT, Complainant,	DOCKET NO
VALERO REFINING COMPANY - CALIFORNIA,	}
Respondent.	

The above-captioned matter is an "Accusation and Stipulation For Entry of [Proposed] Stipulated Conditional Order For Abatement" (the "Stipulated Order" or "SOA") filed by Complainant, the Air Pollution Control Officer ("APCO") of the Bay Area Air Quality Management District ("District", "Air District" or "BAAQMD") against Valero Refining Company - California ("Valero" or "Respondent"). The District is the regional agency with primary responsibility for the control of air pollution from stationary sources in the San Francisco Bay Area Air Basin. Respondent operates the Valero Benicia Refinery at 3400 East Second Street, Benicia, California 94510, Facility No. B2626 (the "Refinery" or "Facility"). The Facility's two Hydrogen Plants (H2U-A and H2U-B; Source (S-1010), and the Naphtha Reformulation Unit (NRU; S-1004)), collectively referenced as the "Hydrogen System," are process units which were part of original construction of the Refinery. Each process unit in the Hydrogen System was designed to vent excess hydrogen to atmosphere through process vent ST-302.

The Accusation and Stipulation requests that this Hearing Board enter a Conditional Order for Abatement against Respondent that would require Respondent, prior to termination of this Conditional Order of Abatement, to cease venting of regulated air contaminants through the Refinery's process vent ST-302 in a manner exceeding standards set forth in District Regulation 8-2. Because a capital project to abate emissions from ST-302 ("the Vent Project") will require time to design, engineer, permit, and construct, the Parties request entry of this Conditional Order for Abatement to establish the requirements and schedule for the Vent Project and to provide conditions to minimize emissions from ST-302 during normal operations pending completion of the Vent Project. Valero's Vent Project may install piping to direct flow of process gases that contain pollutants subject to Regulation 8-2 to an existing flare, the North South flare, or may be a different control or abatement fix, in accordance with the requirements set forth in detail in this Stipulation and its Appendix 1.

WRITTEN EXPLANATION OF ACTION

Because the District and Valero (collectively, the "Parties") have stipulated to the entry of this Conditional Order, the Hearing Board must include a written explanation of its action in this Conditional Order, but it is not required to make a finding of violation to support the Conditional Order under Health and Safety Code Section 42451(b). To that end, the Hearing Board explains its action as follows.

The Parties have agreed to address the allegations identified in a Notice of Violation issued by the District (NOV A58465) and to provide the relief sought. The Parties expect to enter into a separate Enforcement Penalty Agreement to address penalties for NOV A58465. The Parties recognize the District's reservation of rights to enforce penalties or another abatement action for any violations by Valero, either through the Parties' separate Enforcement Penalty Agreement or otherwise. The Parties have agreed that Respondent owns and operates the Facility as specified in the Stipulation.

Respondent also agrees that notwithstanding interim measures taken since issuance of the Notice of Violation (NOV A58465) to minimize emissions of regulated pollutants from process vent ST-302, such emissions are continuing intermittently, and at times may exceed 15 lbs./day and contain more than 300 parts per million ("ppm") total carbon on a dry basis, which the District alleges is in violation of Regulation 8, Rule 2, Section 301. Subject to a temporary permit authorization issued by the District

in 2019, Valero undertook an interim project to minimize emissions of pollutants from ST-302 by installing internal piping to maintain streams containing pollutants regulated under Reg. 8-2 in a lower-pressure area of the hydrogen grid. Although Valero believes this measure has been very effective in substantially minimizing atmospheric emissions of regulated pollutants, the Parties stipulate that a more complex capital project is needed for compliance of ST-302 with Regulation 8-2-301. This will require time to design, engineer, permit, construct, and start up. As such, the Parties have agreed that Respondent will complete a capital project to abate potential excess non-methane hydrocarbon emissions from ST-302 in the manner and on the schedule set forth in Appendix 1 to this stipulation, which provides for completion of this Vent Project as soon as feasible but no later than the soonest scheduled refinery-wide maintenance outage ("Turnaround") at the Refinery. The Parties have further agreed that meanwhile, Valero shall continue implementing interim measures to minimize emissions, and shall report progress to the District as detailed in Appendix 1.

The Hearing Board therefore believes that the Parties' agreed course of action is in the public interest and that entry of this Conditional Order is appropriate under the circumstances.

The Parties agree to enter this Stipulated Conditional Order of Abatement to provide for implementation of a capital project and other actions necessary to bring the Valero Benicia Refinery into compliance with current BAAQMD rules and regulations, and to provide interim measures for minimizing non-compliant atmospheric emissions in the meantime.

The Parties further agree as follows:

1. Injunctive Relief. Atmospheric Vent Control Project. Respondent shall cease operation of the the Refinery's process vent ST-302 in a manner exceeding standards set forth in District Regulation 8-2. Respondent shall comply with the terms of this Stipulated Order to design, engineer, permit, construct, and operate the Vent Project to control or abate atmospheric emissions from the hydrogen system at the Benicia Refinery that were vented through the Refinery's process vent ST-302 to a level not exceeding standards set forth in District Regulation 8-2.

2. Interim Mitigation Measures. During the term of this SOA, Valero shall continue to minimize the potential for pollutants to be emitted to atmosphere from ST-302 by continuing operation of internal piping installed to redirect hydrogen to a lower-pressure location less likely to result in atmospheric relief from ST-302.

Interim Milestones.

- a) Monitoring of ST-302. From the Effective Date until approval and implementation of the Sampling and Analysis Plan, Valero shall monitor ST-302 by continuously monitoring and recording flow based on valve position and an external flowmeter and by obtaining weekly representative stream composition samples, from which Valero will calculate total carbon, methane, non-methane organic compounds (NMOCs), BTEX, and any other TAC found by the current EPA analytical method 8260. Valero may request to use another BAAQMD approved alternative analytical method. Within 30 days from the Effective Date, Valero shall submit a Sampling and Analysis Plan, which receives BAAQMD review and approval and includes sample locations, sampling frequency, methodologies, and any other documents or materials needed for BAAQMD to assess the Plan. Within 30 days of approval of the Sampling and Analysis Plan, Valero shall monitor as approved by BAAQMD. Once the Vent Project is completed and commences operations, Valero shall monitor in accordance with the requirements of the applicable permit. Valero shall make all such monitoring records available to District upon request. Submission of Permit Application.
- b) Permit Applications. Valero shall submit a full, complete, and accurate permit application for the Vent Project that implements this Stipulated Order of Abatement within six (6) months of the Effective Date, based on the Parties' current understanding that the Vent Project is unlikely to require review under the California Environmental Quality Act (CEQA); provided, however, that if the detailed design engineering for the Vent Project indicates a need to develop new equipment or facilities or significant modifications to existing facilities such that it would be considered a "project" under CEQA, all required applications for the Vent Project shall be submitted within 24 months of the Effective Date. The District agrees to review Valero's BAAQMD application in due course in accordance with Regulation 2, Rules 1 and 6.
- c) <u>CEQA</u>. If the proposed Vent Project is determined to be a "project" for purposes of CEQA,

Valero shall promptly initiate the appropriate CEQA evaluation process with the City of Benicia as the lead agency, which process is anticipated to take 18 months from the Effective Date. The District further agrees to work cooperatively with Valero to provide information to the City of Benicia as appropriate to secure issuance of the necessary CEQA approvals, Use Permit modifications, and any other required external (i.e. outside of Valero) approvals, which Valero shall expeditiously obtain and submit applications therefor within 4 months of the effective date of this Agreement.

- Deadline; Construction and Commencement of Operations. Within 30 days of issuance of the Authority to Construct, Valero shall undertake the process of commencing the Vent Project. Commencement for purposes of this SOA shall include actual construction on-site, construction off-site of project components, entering into contracts for long-lead items or contracts for project labor, or formal approval of capital spending. The 30 day period in this section may be extended upon approval of the District or Hearing Board. Periodic monthly updates of the status of the Vent Project may be requested by the District. Valero shall complete construction in accordance with the Authority to Construct as soon as feasible but no later than by the end of the soonest scheduled refinery-wide Turnaround, the date of which is in Appendix 2, unless the completion of construction is delayed through no fault of Valero.
- 3. Confirmation of Successful Operation. For 24 months following completion of the Vent Project, Valero shall monitor any emissions from ST-302, including as provided in Sections 6.1 and 6.2, to confirm that the Vent Project has attained its objective of preventing discharges exceeding the limits of Regulation 8-2 and shall promptly make any operational or design adjustments necessary to ensure successful operation of the Vent Project that do not require permit modifications. If any emissions from ST-302 following or preceding completion of the Vent Project exceed the limits of Regulation 8-2, such exceedances may be enforced by the District against Valero pursuant to the Parties' separate Enforcement Penalty Agreement or otherwise. If necessary operational or design adjustments are identified that would require permit modifications, Valero shall submit a permit application and shall continue to operate, monitor, and report subject to the terms of this SOA pending successful completion of the modifications and demonstration of compliance based on twenty-four months of operating in compliance with the requirements of Regulation 8-2. The Vent Project shall abate the emissions from

9

7

13

18

23

ST-302 to levels below those in Regulation 8-2-301, and shall not just re-route the emissions from ST-302 to other emission points unless the other emission points are in compliance with Regulation 8-2-301 and other applicable limits. If the Vent Project takes ST-302 completely out of service so that it does not vent, then the requirements of this Section 3 shall not apply.

- Timely Responses. Valero shall provide data to the District within 10 business days of BAAQMD 4. requests for information for the proposed Vent Project. If multiple information requests are made in a short period of time or the data requested is voluminous or difficult to obtain, the Parties shall work together cooperatively to determine a reasonable time frame or approach for response.
- 5. **Recordkeeping and Reporting.** Valero shall maintain the records described in this SOA. Valero shall retain these records for (a) at least five (5) years after the termination of this SOA, or (b) such period of time as is otherwise required under applicable law, whichever is longer. All reports, records, and other data submitted by Valero to the District shall be signed and certified by the Valero responsible official or his designated representative. Valero shall send the records and reports to:
- Bay Area Air Quality Management District **Engineering Division**
- Pamela Leong, Director of Engineering
- 375 Beale Street, Suite 600
- San Francisco, CA 94105 pleong@baaqmd.gov
- Ongoing Sampling, Monitoring, and Monthly Progress Reports. 6.
- **6.1 Ongoing Sampling.** During Normal Operations, and also during Startup and Shutdown, Valero shall obtain weekly representative samples of the hydrogen stream that has the potential to be vented from process vent ST-302 (the "Stream") and shall quantitatively measure, record, and report to BAAQMD the Stream quantities, concentrations, and mass emissions of pollutants subject to regulation under Regulation 8-2, methane, NMOCs, POCs, BTEX, and any other TAC found by the current EPA analytical method 8260 (the "Stream Sampling Data"), or other BAAQMD approved alternative analytical method, starting within 30 days of approval of Valero's Sampling and Analysis Plan by BAAQMD. Samples shall be collected at locations and using methodologies stated in Valero's Sampling and Analysis Plan approved by the BAAQMD. Valero shall include the Stream Sampling Data, sampling locations, process and instrumentation diagrams (P&IDs), location descriptions, locations shown on a map, and any relevant

23

contextual information in Valero's bi-monthly progress reports to BAAQMD for the duration of this SOA. Any time Valero samples from a new location in a non-emergency situation, Valero shall obtain prior written approval from the District. This is intended to ensure that the sample obtained from the location is representative of the emissions at the hydrogen plant. If a change in sampling location is done due to an emergency, then Valero shall notify the District within 24 hours of the decision to change sample locations, and shall describe in the next report to the District any variations in sampling locations, the reason for changing sampling locations, and why Valero believes the sampling is representative, and

6.2 Upset Sampling. Valero shall take a representative upset sample of the Stream within 30 minutes of the process vent ST-302 Stream emissions beginning when operational data indicates that an operational upset is occurring, if safe to do so. Whenever and every time an upset occurs, Valero shall continue to take Stream samples every three hours thereafter, provided the sampling can be done safely until valve P017 closes. If any sampling is not done due to safety concerns, then such concerns shall be fully documented in detail and that description included in Valero's bi-monthly progress report to the District. Valero shall report all such upset Stream Sampling Data, and any relevant contextual information relating to this upset Stream Sampling Data and/or this upset Stream sampling program, in Valero's bi-monthly progress reports to BAAQMD for the duration of this SOA. Valero shall give consideration to implementing alternative sampling methods, such as an automatic sampling system. If a year after the Effective Date of this SOA, the upset sampling shows substantially identical results, then Valero may request District approval of an end to the upset sampling requirements in this section.

- **6.3 Ongoing Bi-Monthly Progress Reports.** Valero shall provide to the District within 10 business days of the end of the first full calendar month following the Effective Date and every other month thereafter, a bi-monthly progress report containing the following:
- a) All Stream Sampling Data collected during the reporting period;
- b) All relevant contextual information relating to the weekly, upset, and CM Stream Sampling Data and programs; 26
 - c) A description of Valero's interim measures under this SOA to minimize any atmospheric emissions from the Hydrogen System pending successful construction and operation of the Vent Project;

- d) An update on the status of progress in implementing the Vent Project and this Stipulated Order of Abatement, including the dates by which each action item was achieved and an explanation of why any dates in the schedule of compliance were not, or will not, be met, and any preventive or corrective measures adopted.
- e) An update on any modifications to the Vent Project, including a discussion of why the modification is necessary or appropriate and any efforts undertaken to minimize any delay in implementing the Vent Project.
- 7. **Termination; Term.** This SOA shall be terminated upon approval by the District that the Vent Project has been successfully completed and a District permit to operate for the Project has been issued. Based on the Parties' current expectations regarding CEQA applicability to the Vent Project, anticipated BAAQMD permit processing time, delivery of long-lead equipment, and other relevant information, it is anticipated that termination will occur approximately thirty-six months from the Effective Date. The Term of this SOA shall be the sooner of thirty-six (36) months, commencing on the Effective Date, which is the date of the Hearing Board Chair's signature below, or approval by the District of the Vent Project and the District's issuance of the permit to operate the Vent Project. The Term of this SOA may be extended by approval of the Hearing Board, which approval can be requested by either of the Parties. The Parties agree to the best of their knowledge that all the lettered paragraphs in Appendix 1 are true and correct and Appendix 1 is incorporated herein by this reference as if set forth in full.
- **8. Notice.** Any notice required or permitted hereunder shall be sent by email and also by one or more of the following methods: US mail, FedEx, UPS, hand delivery, or other delivery service to all the addresses shown below:

If to Valero: Valero Refining Company-California

Joshua Tulino

Vice President and General Manager

Kim Ronan Director of HSE

Valero Benicia Refinery 3400 East Second Street Benicia, CA 94510

<u>Joshua.Tulino@valero.com</u> <u>Kimberly.Ronan@valero.com</u>

28

27

And also: 1 The Valero Companies 2 Parker Wilson, Esq. Vice President of Environmental, Safety and 3 Regulatory Affairs Law The Valero Companies 4 One Valero Way 5 San Antonio, TX 78249 6 Parker.Wilson@valero.com 7 If to District: 8 Bay Area Air Quality Management District Pamela Leong, Director 9 **Engineering Division** 375 Beale Street, Suite 600 10 San Francisco, CA 94105 11 Pleong@baaqmd.gov 12 And also: 13 Bay Area Air Quality Management District 14 Jeff Gove, Director Compliance and Enforcement Division 15 375 Beale Street, Suite 600 16 San Francisco, CA 94105 17 Jgove@baaqmd.gov 18 Note there is a 10 MB limit on the District's receipt of emails. Records and notices may also be sent to the District on disks, thumb drives, and other appropriate electronic means approved by the District. 19 20 9. Effect of Shutdown. The permanent shutdown of, and surrender of all permits for, the hydrogen 21 plants, the naphtha reformer unit, and ST-302 and the surrender of all permits for those process units will 22 be deemed to satisfy the requirements of this SOA. 23 Default of Valero. If Valero fails to perform any of its material obligations, including without 10. 24 limitation its obligation to timely provide to the District records or other data under this SOA, the District 25 shall notify Valero in writing that Valero is or may be in breach of the SOA, identifying the specific 26 obligation under the SOA at issue and the factual basis for the District's concern. Valero may either cure 27 the alleged breach promptly or may request a meeting to discuss the basis for the District's concern and 28 the proposed resolution. If the parties cannot reach an acceptable resolution following within 30 days of

the District's original notice, the District may seek to terminate this SOA upon written notice to Valero and seek any remedies and penalties to which it is entitled by law, including but not limited to a motion to the Hearing Board to modify or terminate this SOA.

- 11. Survival of Expiration. Sections 3, 6, 6.1, 6.2, and 9 through 11 shall survive expiration of this SOA unless and until they are included in substance in Valero's Benicia Refinery authority to construct for the Vent Project, and/or permit to operate and Title V permit. Those Sections shall be included by the District in Valero's Benicia Refinery permit to operate and Title V permit, and Valero agrees not to contest inclusion of such requirements in the permits. The permits authorizing construction and operation of the Vent Project shall include all the obligations of Sections 2, 4, and 9 through 11.
- 12. Separate Statements. Each Party may file with the Hearing Board its own Separate Statement to explain why it entered into this SOA and to provide additional relevant factual background. Each Party may file a Rebuttal to the other Party's Separate Statement. Nothing in either Party's Separate Statement or Rebuttal alters this SOA.

Conditional Order for Abatement

Cause being found therefore, pursuant to Sections 42451(b) and 42452 of the California Health and Safety Code, THE HEARING BOARD of the BAY AREA AIR QUALITY MANAGEMENT DISTRICT hereby ORDERS:

1. That the APCO's and Respondent's Request for this Stipulated Conditional Order for Abatement shall be and hereby is GRANTED as follows: Respondent Valero and its agents, employees, successors and assigns are hereby ordered to cease operation of the Benicia Refinery's process vent ST-302, unless: As soon as feasible but no later than by the end of Valero's soonest refinery-wide Turnaround, or such later date as the Hearing Board may approve upon a showing of good cause, Valero shall design, receive a District authority to construct, construct, receive a District permit to operate, and operate a capital project ("the Vent Project") to control or abate atmospheric emissions from the Hydrogen System at the Valero Benicia Refinery through the Refinery's process vent ST-302 to a level not exceeding standards set forth in District Regulation 8-2 and in satisfaction of all the requirements set forth in detail in this Stipulated Order of Abatement and its Appendices 1 and 2.

1	2. That this Stipulated Order for Abatement shall become effective immediately.				
2	3. That the Hearing Board shall retain jurisdiction over this matter until Respondent comes				
3	into compliance with the requirements of Regulation 8, Rule 2, Section 301 in accordance with the				
4	requirements set forth in Paragraph 1 of this Stipulated Order for Abatement, during which period the				
5	parties may apply to alter or terminate this Order in accordance with the Rules of the Hearing Board.				
6	4. For such other and further relief that this Board deems just and proper.				
7					
8	SO AGREED, STIPULATED AND EXECUTED.				
9 10 11	ADAN SCHWARTZ ACTING DISTRICT COUNSEL BAY AREA AIR QUALITY MANAGEMENT DISTRICT 375 Beale Street, Suite 600 VALERO REFINING COMPANY – CALIFORNIA One Valero Way San Antonio, Texas 78249				
12	San Francisco, CA 94105				
13 14	By: Joel Freid JOEL FREID By: Joshua TULINO JOSHUA TULINO				
15 16	ASSISTANT COUNSEL II VICÉ-PRESIDENT & COUNSEL FOR THE AIR POLLUTION GENERAL MANAGER CONTROL OFFICER				
17 18	Date: 1/20/22 Date: 1/20/22				
19 20	Moved by:				
21	Seconded by:				
22	AYES:				
23					
24	NOES:				
25					
26					
2728	Valerie Armento, Chair Date				

emitted to atmosphere uncontrolled; therefore, the process vent's configuration is not acceptable.

BAAQMD issued to Valero Notice of Violation No. ("NOV") A58465 on 3/21/2019 for violation of BAAQMD Regulation 8-2-301 which resulted in Valero filing a Title V deviation #1073.

E. The harm caused by this alleged violation, which led to NOV A58465, was the intermittent excess release of POCs and TACs to the atmosphere. POCs are non-methane hydrocarbons that contribute to the formation of ground-level ozone. In addition, a portion of the POCs emitted to atmosphere with this violation contained benzene, toluene, ethylbenzene and xylene ("BTEX") compounds.

F. The Parties agree that any solution implemented to mitigate the alleged non-compliant Valero atmospheric vent ST-302 must meet all requirements of all existing BAAQMD rules and regulations, and State and Federal rules, laws, and regulations applicable to the facilities, systems or sources.

G. Although Valero has undertaken short-term measures to minimize emissions from ST-302, which Valero believes have been very effective, a capital project to ensure consistent compliance of ST-302 with Regulation 8-2-301 will require time to design, engineer, permit, construct, and start up to achieve the solution needed to ensure compliance with applicable Air District rules and regulations.

H. Within 30 days of the Effective Date of this SOA, Valero shall submit to the District for approval a new Vent Project plan and proposed schedule.

1	APPENDIX 2 TO THE [PROPOSED] STIPULATED ORDER OF ABATEMENT IN	
2		
3	AIR POLLUTION CONTROL OFFICER of the BAY AREA AIR QUALITY MANAGEMENT DISTRICT,	
4		
5	Complainant,	
6	v.	
7	VALERO REFINING COMPANY - CALIFORNIA,	
8		
	Respondent.	
9		
10	CONFIDENTIAL PROPRIETARY AND TRADE SECRET INFORMATION	
11		
12	The estimated date of the soonest upcoming refinery-wide Turnaround at Valero Benicia Refinery is	
13		
14	·	
15		
16	The estimated date of the next soonest refinery-wide Turnaround at Valero Benicia Refinery is	
17		
18		
19		
20		
21		
22		
23		
24		
25		
26		
27		
28		