

BAY AREA AIR QUALITY MANAGEMENT DISTRICT

Memorandum

To: Chairperson John J. Bauters and Members
of the Administration Committee

From: Chairperson Valerie J. Armento, Esq., and
Members of the Hearing Board

Date: January 18, 2023

Re: Hearing Board Quarterly Report: October– December 2022

RECOMMENDED ACTION

None; receive and file.

DISCUSSION

This report covers the fourth calendar quarter (October – December) of 2022.

- Held two hearings;
- Processed three orders: and
- Collected a total of \$18,920.00 in Hearing Board filing fees

Below is a detail of Hearing Board activity during the same period:

Docket: 3736 – Waste Connections: Potrero Hills Landfill, Inc. – Request for Interim and Regular Variances

Location: Solano County; City of Suisun City

Regulation(s): Regulation 2, Rule 1 (Permits, General Requirements), and Permit Condition (PC) co#27218.

Synopsis: Applicant is a municipal solid waste landfill (the “Facility”) located at 3675 Potrero Hills Lane, Suisun City, California, 94585. The Facility is considered an essential public service that serves as a critical public health function. The equipment that is the subject of the petition is two portable diesel tipper engines (S-38 and S-39) which are critical to the facility’s waste disposal operations. These engines are 174 brake-horsepower [bhp], Tier 4F certified engines. The tippers are mobile hydraulic platforms powered by a diesel engine and are used to tip cargo trailer truck containers vertically to empty the loads. On Friday, August 5, 2022, the Facility experienced a small, isolated fire in the active filling area, suspected to be caused by a hot load from a residential refuse hauling truck. The fire was centralized in the trash and caused damage to the two tippers, S-38 and S-39, rendering them inoperable. There was no damage caused to any other equipment or to the landfill gas system, nor were there any excess emissions as a result the event. The Tier

4F engines were not damaged by the fire. Applicant applied for an Emergency Variance for relief to temporarily operate two tippers that use a 174 bhp Tier 4 interim tipper engine and 156 bhp Tier 3 tipper engine.

Following the issuance of the Order Granting Emergency Variance on August 23, 2022, the Applicant contacted the Clerk of the Hearing Board on September 1, 2022, seeking relief beyond that stipulated within the granted Emergency Variance, in the form of an Application for Interim and Regular Variances. The Applicant’s plan for returning to compliance included repair, retrofitting, and replacement options, but all options were being impacted by either high workload demand or supply chain delays. Applicant represented that there were only two companies that made tippers appropriate for this facility; a repair quote and a replacement quote were obtained from Columbia Industries, but Columbia had not yet provided an estimated timeframe for implementation. The Applicant also represented that it had sought quotes from two companies for retrofitting the temporary tippers with the permitted Tier 4F engines. Some scenarios would have required an Air District permit application for Authority to Construct.

The Applicant promised to notify the Air District and provide a tentative schedule detailing the course of actions planned to return to compliance, once a decision has been made (whether to replace, retrofit, or repair the tippers.)

Requested Period of Variance: September 15, 2022, to September 15, 2023.

Estimated Excess Emissions: (See below, provided by applicant)

Air Pollutant	12-Month Net Emissions Increase		
	Existing Tippers S-38 & S-39	Temporary Tipper Engines	Net Emissions
	lbs - 12 months	lbs - 12 months	lbs - 12 months
VOCs	15.18	136.89	121.71
NOx	455.38	4,281.06	3,825.68
SOx	1,891.94	1,795.71	-96.23
CO	30.36	2,729.77	2,699.41
PM10	15.18	25	9.82
Total HAPs	24.49	23.24	-1.25

Fees collected this quarter: \$0.

Status: Application for Interim and Regular Variances filed by Applicant on September 1, 2022; Notice of Hearings filed/issued on September 7, 2022; Interim Variance hearing held on September 13, 2022; Order Granting Interim Variance, granting relief from 10:30 a.m. on September 13, 2022 through the date the Hearing Board makes a determination on the regular variance application (anticipated to be October 18, 2022), filed/issued on September 22, 2022;

Regular Variance hearing held on October 18, 2022; Order Granting Regular Variance, granting relief from October 18, 2022 to October 18, 2023, filed/issued on October 26, 2022.

THE HEARING BOARD ORDERED:

Applicant is granted a Variance from Regulation 2, Rule 2 & PC #27218 for S-38 and S-39; and this variance only concerns and covers the period from October 18, 2022 through October 18, 2023.

The Variance granted herein is subject to the following reporting deadlines. These deadlines represent estimated milestones for achieving compliance, which are subject to change depending on supply chain issues and vendor availability, among other possible issues. At each of the following milestones, Applicant will update BAAQMD (attn: Salvador Rueda, srueda@baaqmd.gov) within 2 business days of each estimated completion date (where available) with whether the milestone has been completed, or, if not completed, with an estimate of when the milestone will be completed. Applicant will also update BAAQMD promptly after receipt of any information that may impact its ability or timeline to achieve compliance.

- a) Receipt of new tipper with permitted engine (estimated to be either November 8, or November 22, 2022).*
- b) Contractor begins work on retrofitting tipper that is on-site (estimated to be November 11, 2022).*
- a) Following testing, regular operation of either tipper with retrofitted permitted engine begins.*

Docket: 3737 – Schnitzer Steel Industries, Inc. – Request for Interim and Short-Term Variances

Location: Alameda County; City of Oakland

Regulation(s): PC 27410(8) of Authority to Construct (Application #30009); PC 27410(8) of Permit to Operate (Application #A0208); Regulation 2, Rule 1, Section 302 (Permits, General Requirements, Permit to Operate); and Regulation 2, Rule 1, Section 307 (Permits, General Requirements, Failure to Meet Permit Conditions)

Synopsis: Applicant owns and operates a large metal shredding and recycling facility located in West Oakland, an Assembly Bill (AB) 617 community. Applicant sought interim and short-term variances for the period of October 7, 2022 through December 31, 2022 (i.e., 86 days) from PC 27410(8) of its Authority to Construct, (Application No. 30009) and Permit to Operate No. A0208, Regulation 2, Rule 1, Section 302, and Regulation 2, Rule 1, Section 307 to allow it to increase the number of ships that may call at Applicant’s facility on an annual basis (January 1st - December 31st) from 26 to 32.

The 6 ships above the Applicant’s permit limit that were requested in the application were estimated to result in additional emissions of NOx, POC, CO, SO2, and PM, in the form of diesel exhaust particulate matter in the overburdened community of West Oakland. Applicant submitted a permit application to increase its ship call limit from 26 to 32 – the same increase requested in

this variance application. Applicant asserted in its variance application that the increase was needed because its customers had started using smaller ships to accommodate shallow draft conditions in foreign ports where the material is delivered and because of a change in shipping practices whereby some ships could no longer be fully loaded because they came into port carrying product from other facilities.

As of the beginning of November 2022, the Applicant's application was still under review, pending the District's completion of the required California Environmental Quality Act ("CEQA") analysis.

The District and Applicant had entered into agreements (termed "Compliance and Settlement Agreements" or, hereinafter "CSA") in 2018, 2020, and 2021, to allow 4 additional ships in 2018 and 6 additional ship in 2020 and 2021. Due to market conditions, no CSA was required in 2019. The District had presumed that its decision not to enter a similar CSA in 2022 prompted the Applicant to submit this variance application.

Applicant asserted that it would suffer economic losses and be forced to lay off employees if its variance request was denied. The application also discussed the possibility that, absent variance relief, it would transport its finished product to a more distant port (e.g., Port of Stockton or West Sacramento) by truck, and estimated an additional 12,000 trucks would be required to transport the same amount of finished product that the 6 additional ships could accommodate, resulting in greater emissions than those associated with the increased ship calls. Applicant further asserted that ship emissions would still occur as the ships entered the San Francisco Bay and traveled to the more distant port, impacting numerous other communities, some of which are also AB 617 communities (e.g., Richmond/North Richmond/San Pablo) along its route.

Requested Period of Variance: October 7, 2022 to December 31, 2022.

Estimated Excess Emissions: (See below, provided by both parties)

The Air District represents the excess emissions from the 6 additional ship calls to be as follows (per ship):

CO: 163 lbs
NOx: 1,321 lbs
SO2: 39 lbs
POC: 71lbs
DPM: 28 lbs
PM10: 28 lbs
PM2.5: 26 lbs

The Air District estimates the excess emission fees to be \$11,976 per ship, and Applicant does not dispute the Air District's estimates.

Fees collected this quarter: \$8,862.00.

Status: Application for Interim and Short-Term Variances filed by Applicant on October 7, 2022; Notice of Hearings filed/issued on October 13, 2022; Request from both parties to change the

hearing date filed on October 20, 2022; Revised Notice of Hearing filed/issued October 24, 2022; Interim and Short-Term Variance hearings both held on November 8, 2022; Order Granting Short-Term Variance, granting relief from November 8, 2022 through December 31, 2022, filed/issued on November 16 2022.

As of the date of the hearing, the Applicant no longer required interim relief, which is why the Order only granted a Short-Term Variance.

THE HEARING BOARD ORDERED:

The Applicant is granted a Variance from Regulation 2, Rule 1, Sections 302 and 307 and from PC #27410(8) of Authority to Construct Application #30009 and Permit to Operate No. A0208. The Variance shall cover the period from November 8, 2022 through December 31, 2022.

The Variance granted herein is subject to the following conditions:

The Applicant shall be allowed no more than six (6) additional ships during the period of the Variance (i.e., a maximum of 32 ships calls.)

The Applicant shall record all ship calls on a log and timely report all ship calls to the District, along with the excess ship emissions.

The Applicant shall pay all excess emission fees assessed by the District, pursuant to Regulation 3.

The Applicant's annual truck cap in PC #27410(8) of Authority to Construct Application #30009 and Permit to Operate No. A0208 shall be reduced by a total of 7,200 truck trips for Calendar Year 2022 only.

Note: In February 2023, the Applicant sent the Air District a check for the excess emissions fee, calculated by the Air District, during the granted variance period. That amount will be included in the Q12023 Hearing Board Quarterly Report.

Docket: 3738 – Chevron Products Company – Request for Emergency Variance

Location: Contra Costa County; City of Richmond

Regulation(s): Permit Condition #24136, Parts 14a and 16a.

Synopsis: Applicant is a Title V facility and a major producer of fuel. Processes include refining of crude oil and intermediates for gasoline and diesel fuel. Applicant requested a variance for its Hydrogen Train 2 SCR Blower ("Subject Equipment"). At the time that the application was submitted, the Subject Equipment had been experiencing high vibrations. In the past, the Applicant had transferred between blowers when needed, as the system has redundancy. When the Refinery attempted to shift from the Bravo Blower to the Alpha Blower, the Applicant discovered that the valve on the Alpha Blower was stuck in the closed position. This prevented the Applicant from shifting to the Alpha Blower. To maintain compliance, the Applicant planned to repair and restart

the Bravo Blower. The repair duration was estimated to be three hours. The Applicant claimed that the incident was sudden and unforeseen, and that the Subject Equipment had been maintained properly. The cause for the malfunction was unknown. If not for the issue with the valve on the Alpha Blower, a variance would have been unnecessary. The Applicant maintained that the Hydrogen Train 2 SCR Blower is essential for the operations of the facility.

Applicant evaluated repair option with lowest environmental emissions impact by reducing amount of downtime on SCR blower. Applicant attempted to repair the valve on the run but the repair was unsuccessful. Refinery Operations engaged Environmental to discuss repair options for the system to meet environmental PC requirements under PC 24136.

The valve must to be repaired expeditiously in order to ensure that the SCR blower is operating with NH₃ injection for NO_x abatement. Applicant estimates that repairs will take three hours to complete. Operations will increase rates on Hydrogen Plant 1 in order to reduce firing rates and lower NO_x emissions to Hydrogen Train 2 during the variance period, and the Applicant will make efforts to expedite repairs to the valve.

Requested Period of Variance: November 2, 2022 (estimated three-hour duration.)

Estimated Excess Emissions: NO_x of 600 lbs/day.

Fees collected this quarter: \$2,009.00.

Status: Application for Emergency Variance filed by Applicant on November 2, 2022; Air District staff response filed on November 10, 2022; Hearing Board staff response filed on November 15, 2022; Order Granting Emergency Variance, granting relief on November 3, 2022, from 8:10 a.m. to 9:10 a.m., filed/issued on November 16, 2022.

Docket: 3739 – Tesla Inc. – Request for Regular Variance

Location: Alameda County; City of Fremont

Regulation(s): Regulation 2-6-307 (Permits, Non-Compliance, Major Facility Review); Regulation 2-1-307 (Permits, General Requirements, Failure to Meet Permit Conditions); PC #26027, Parts C.4, E.4, F.4, and G.4; and Authority to Construct Application #30204, PC #27161, Part 15.

Synopsis: Applicant is a factory that manufactures and assembles electric vehicles. Operations at the Fremont facility include several operations including but not limited to casting, painting, stamping of parts and general assembly of the car. Operations include casting with two stack melters, Stamping and Body in White Lines, plastics parts center, three paint shops/lines (North Paint Shop (NPS), South Paint Shop (SPS) Body line and Plastics Paint Line), three assembly lines to assemble the car models, and battery pack assembly.

The applicant maintains the following:

NPS and SPS are designed with an interlock between production and the air pollution control abatement systems for each of the two lines. To comply with Title V PC #26027 for NPS2 and Authority to Construct #30204, PC #27161 for SPS,3 any unplanned shutdown of an abatement device associated with one of the two lines (NPS or SPS) causes all operation for that line to stop (i.e., all active production is halted, “Production release” will not be achieved). All emissions during such a shutdown are strictly evaporative emissions from vehicles or parts that have already been coated, including those that remain in a booth and those that are being cured in the ovens at the time the shutdown occurs, and from purging ambient air in the booths and ovens.

During such unplanned shutdown events, emergency bypass dampers automatically open to allow the temporary residual evaporation from the drying process and ambient air from the booths and ovens to exit the system prior to the abatement device restarting. This is a necessary requirement to ensure worker and public safety and for equipment integrity (i.e., to prevent fires/explosive situations).

The quantity of Pollutants of Concern (POC) emissions from such unplanned shutdown events can be estimated conservatively; the format and estimation methodology of these emissions have been discussed and finalized with the Air District’s permitting division. Tesla has submitted permit applications to formalize these changes, which could be processed simultaneously with other pending permit applications for the NPS and SPS Body Line.

A variance from application of the certain current permit conditions during unplanned shutdowns is therefore necessary at this time.

Tesla cannot comply with the PC from which the variance is requested because continued operation of the control devices during these unplanned shutdowns presents concerns as to the integrity of the equipment. During such periods, it is necessary to investigate the cause of the fault/shutdown before allowing operation to resume. Because Tesla also shuts down coating operations in such cases, the emissions are minimal. Tesla believes that allowing shutdown of both the coating line and the control device in these situations is consistent with the objectives of the applicable permit conditions for NPS (Title V PC # 26027, Parts C.4, E.4, F.4, and G.4) and SPS (Authority to Construct #30204, PC #27161, Part 15), which are to ensure the control device operated when possible and that emission limits in the permit are met.

Tesla's practice is to (1) minimize emissions when a control device shuts down; (2) immediately cease all emission-generating production activity (i.e., stop the progress of parts through the booth even if coating is not complete); and (3) do so consistent with safety and good air pollution control practices for minimizing emissions to the level of the standard. This means that the production line stops, the coating of any vehicles/parts then in a booth ceases, and the curing of any vehicles/parts in an oven is not completed. The only emissions during an unplanned shutdown like this result from the evaporation of volatile organic compounds in the coatings that have already been applied to the vehicles at the time a malfunction/breakdown occurs, the venting of recirculated air in the booths, and the release of ambient air from the ovens. As a result, emissions from an unplanned shutdown event are already the minimum achievable under such circumstances. Tesla is requesting that this foreseeable situation be addressed and allowed for by the variance. Note that Tesla is not requesting a variance from (or any change to) in its current numeric emission limits, but simply that these uncontrolled emissions be counted towards the emission limits, with no requirement to continue operating the control device during an unplanned shutdown of the

Regenerative Thermal Oxidizer (RTO/TO) equipment due to a malfunction or breakdown of the RTO/TO equipment or other coating line equipment. As indicated, the existing permit conditions, as interpreted by the Air District, require operation of the control devices at all times that POCs are being emitted, regardless of whether such emissions are below the applicable limits in the permit.

Compliance with such a requirement cannot be achieved when the control device malfunctions or requires shutdown due to safety considerations, as described earlier. Tesla implements measures to minimize emissions, even during an unplanned shutdown event. Specifically, Tesla is (1) abating emissions when the RTOs/TOs are working, (2) not completing the coating of vehicles or parts that have already begun the coating process (which means they must be pulled out and reprocessed at a later date or scrapped), and (3) stopping the introduction of any new vehicles or parts into the coating process (and thus is not generating new emissions). Tesla does not benefit from and has every incentive to prevent equipment breakdowns and malfunctions and the resulting RTO/TO shutdowns, which are very costly and reduce the facility’s production capacity.

Installing redundant control devices to serve as a backup for control of emissions during these unplanned events is not reasonable and would have adverse emission effects that outweigh the benefit of preventing the small amount of emissions that may occur during a shutdown. The backup RTO/TO equipment would need to be capable of becoming operational immediately upon an equipment breakdown or malfunction that leads to an RTO/TO shutdown. Tesla will not be able to predict when operation of a backup RTO/TO device would be necessary and there is not enough time when equipment breaks down or malfunctions to initiate a cold startup to ensure that there is an RTO/TO operating at all times that there are vehicles or parts in a booth or oven. Tesla would therefore need to operate the backup RTO/TOs at low levels 8760 hours per year, generating additional combustion emissions (NOX, CO, and CO2). Because Tesla will count the emissions that occur during a malfunction/shutdown incident when determining whether it complies with the applicable numeric emissions limits and because the emissions are de minimis, there will be no discernable benefit in terms of a POC emission reduction.

Tesla seeks this variance to provide interim relief for a period of one year from this permit requirement. If the permit revision applications are processed to establish permit conditions that account for these emissions under existing permit limits and do not make unplanned shutdowns of the control device as described above an automatic violation before expiration of the variance, the variance can expire or be rescinded at that time.

Requested Period of Variance: December 14, 2022, to December 14, 2023.

Estimated Excess Emissions: (See below, provided by applicant)

Worst Case Emissions Per Event for South Pain Shop			
CAS#	Parameter	Emissions (lb/event or lb/hr)	Net Emissions After Mitigation
	Estimated POC released during an event	101.3	No mitigation available or feasible

50-00-0	Formaldehyde	0	
91-20-3	Naphthalene	0	

Worst Case Emissions Per Event for North Pain Shop			
CAS#	Parameter	Emissions (lb/event or lb/hr)	Net Emissions After Mitigation
	Estimated POC released during an event	94.90	No mitigation available or feasible

Fees collected this quarter: \$8,049.00.

Status: Application for Regular Variance filed by Applicant on December 15, 2022; the hearing is tentatively scheduled for February 28, 2023.

Respectfully submitted,

/s/ Valerie J. Armento

Valerie J. Armento, Esq.
Chair, Hearing Board

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