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VIA EMAIL & U.S. MAIL

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Re: Comments on the Proposed Authorities to Construct and Significant Modification for Tesoro Logistics Operations LLC Facility # N-845 (Project # N-1163274)

Dear Mr. Marjollet and Mr. Peirce:

We are writing on behalf of Safe Fuel and Energy Resources California ("SAFER California"), Raul Hernandez, Steve Stevenson and Jason Miranda to provide comments on the San Joaquin Valley Air Pollution Control District's ("Air District") proposed Authorities to Construct and Significant Modification to the Operating Permit ("Draft ATC") for Tesoro Logistics Operations LLC's ("Tesoro") Facility # N-845, located at 3003 Navy Drive in Stockton, California. Tesoro proposes to: (1) remove a 420,000 gallon gasoline storage tank (N-845-1) at its terminal at the Port of Stockton; (2) install a new 571,068 gallon ethanol storage tank (N-845-28-0) in the same location as the gasoline tank; (3) install a new

1,347,627 gallon gasoline tank (N-845-29-0) at a new location at the terminal; and (4) install an ethanol bulk offloading operation at 2650 West Washington Street in the Port of Stockton, which will feed ethanol to the new ethanol storage tank at the terminal via new piping ("Project").

The Air District proposes to exempt the Project from review under the California Environmental Quality Act[1] ("CEQA") as an existing facility pursuant to CEQA Guideline sections 15301 and under CEQA's "common sense exemption," CEQA Guidelines section 15061(b)(3). As described in detail below, the District cannot exempt the Project from review under CEQA because: (1) a petroleum distribution terminal is not a "facility" for purposes of a CEQA exemption pursuant to CEQA Guidelines section 10531; (2) even if a petroleum distribution terminal was a "facility," the Project involves more than a negligible expansion of the existing use; and (3) the Project would result in significant air quality, public health and traffic impacts. Thus, the Air District must withdraw the Draft ATC until it prepares an initial study and either a mitigated negative declaration or environmental impact report, as appropriate, pursuant to CEQA.

The Air District also must withdraw the Draft ATC because it does not comply with the federal or state Clean Air Acts. The Draft ATC fails to require best available control technology for all emissions units, underestimates tank fugitive emissions and fails to require enforceable permit conditions for storage tank volatile organic compound and hazardous air pollutant emissions.

We prepared these comments with the assistance of Petra Pless, D. Env. and Phyllis Fox, Ph.D., PE. Dr. Pless and Dr. Fox's comments and curriculum vitae are attached as **Attachment A.**

I. STATEMENT OF INTEREST

SAFER California advocates for safe processes at California refineries and fuel storage and distribution facilities to protect the health, safety, the standard of life and the economic interests of its members. For this reason, SAFER California has a strong interest in enforcing environmental laws which require the disclosure of potential environmental impacts of, and ensure safe operations and processes for, California oil refineries and fuel storage and distribution facilities. Failure to

[1] Pub. Resources Code § 21000 et seq.

adequately address the environmental impacts of crude oil and fuel products transport, refining, storage and distribution processes poses a substantial threat to the environment, worker health, surrounding communities, and the local economy.

Refineries and fuel storage and distribution facilities are uniquely dangerous and capable of generating significant fires and the emission of hazardous and toxic substances that adversely impact air quality, water quality, biological resources and public health and safety. These risks were recognized by the Legislature and Governor when enacting SB 54 (Hancock). Absent adequate disclosure and mitigation of hazardous materials and processes, refinery workers and surrounding communities may be subject to chronic health problems and the risk of bodily injury and death.

Poorly planned refinery and fuel products storage and distribution projects also adversely impact the economic wellbeing of people who perform construction and maintenance work in these facilities and the surrounding communities. Plant shutdowns in the event of accidental release and infrastructure breakdown have caused prolonged work stoppages. Such nuisance conditions and catastrophic events impact local communities and can jeopardize future jobs by making it more difficult and more expensive for businesses to locate and people to live in the area. The participants in SAFER California are also concerned about projects that carry serious environmental risks and public service infrastructure demands without providing countervailing employment and economic benefits to local workers and communities.

The members represented by the participants in SAFER California live, work, recreate and raise their families in the City of Stockton. Accordingly, these people would be directly affected by the Project's adverse environmental impacts. The members of SAFER California's participating unions may also work at the facility itself. They will, therefore, be first in line to be exposed to any hazardous materials, air contaminants, and other health and safety hazards, that exist onsite.

These comments are also submitted on behalf of individuals who reside and/or work in the Project area, including Raul Hernandez, Steve Stevenson and Jason Miranda, and would be directly affected by the Project's impacts.

II. THE PROJECT IS NOT EXEMPT FROM CEQA REVIEW

The District improperly determined that the Project is exempt from environmental review under CEQA. CEQA is "an integral part of any public agency's decision making process."[2] CEQA was enacted to require public agencies and decision makers to document and consider the environmental implications of their actions before formal decisions are made.[3] CEQA requires an agency to conduct adequate environmental review prior to taking any discretionary action that may significantly affect the environment unless an exemption applies.[4] Thus, CEQA's exemptions are to be construed narrowly and are not to be expanded beyond the scope of their plain language.[5] Here, the Air District cannot exempt the Project from CEQA as an existing facility or under the common sense exemption because: (1) a petroleum distribution terminal is not a "facility" for purposes of a CEQA exemption pursuant to CEQA Guidelines section 10531, (2) the Project involves more than a negligible expansion of the existing use, and (3) the Project will result in significant air quality, public health and traffic impacts.

A. The Project is Not Categorically Exempt as an Existing Facility

Under CEQA, the Secretary of California's Natural Resources Agency designated categories of projects that are accepted as having no potential to cause environmental harm.[6] Because such projects are presumed to pose no danger to the environment, a public agency need not examine them under CEQA. The CEQA Guidelines enumerate 32 classes of categorical exemptions.[7] Class 1, the exemption invoked by District, applies to minor alternations of existing facilities.[8]

> Class I consists of the operation, repair, maintenance, permitting, leasing, licensing or minor alteration of existing public or private structures, facilities, mechanical equipment, or topographical features,

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[2] *Id.*, § 21006.
[3] *Id.*, §§ 21000, 21001.
[4] *Id.*, § 21100(a); *see also* CEQA Guidelines § 15004(a).
[5] *Castaic Lake Water Agency v. City of Santa Clarita*, 41 Cal. App. 4th 1257 (1995).
[6] Pub. Resources Code § 21084(a).
[7] CEQA Guidelines, §§ 15300-15332.
[8] *Id.*, § 15301.

> involving negligible or no expansion of use beyond that existing at the time of the leady agency's determination.[9]

The Air District's *Environmental Review Guidelines/Procedures for Implementing the California Environmental Quality Act* adds that the existing facilities exemption applies to Air District permit actions for projects "involving negligible or no expansion of use or emissions beyond that existing at the time of the lead agency's determination," including permit actions for:

> ATC applications to install air pollution control or abatement equipment and there are no possible significant environmental effects and ATC applications to alter permitted equipment or to change processes that will involve only negligible increases or decreases in pollutant emissions and no other possible significant environmental effects.[10]

The Project does not qualify for an exemption as an existing facility because (1) a petroleum distribution terminal is not a "facility" for purposes of a CEQA exemption pursuant to CEQA Guidelines section 15301, and (2) even if a petroleum distribution terminal was a "facility," the Project involves more than a negligible expansion of use.

1. A Petroleum Distribution Terminal is Not a "Facility" Under CEQA Guidelines Section 15301

CEQA Guidelines section 15301 provides examples of "existing facilities" which might fall under the exemption, but section 15301 does not specifically speak to petroleum distribution terminals. Therefore, in determining whether a petroleum distribution terminal qualifies as an "existing facility," a court would look to other terms and provisions in the CEQA Guidelines, the environmental and public health impacts and risks associated with the terminal, and CEQA policy.[11]

> Categorical exemptions may be provided for 'classes of projects which have been determined *not* to have a significant effect on the environment.' (Pub.

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[9] *Id.*
[10] SJVAPCD, Environmental Review Guidelines/Procedures for Implementing the California Environmental Quality Act, August 2000, p. 4-2.
[11] *Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster* (1997) 52 Cal.App.4th 1165, 1192.

> Resources Code, § 21084, subd. (a).) These exemptions should be construed in the light of that authorization. Hence, a term that does not have a clearly established meaning, such as the exemption for existing 'facilities,' should not be so broadly interpreted so to include a class of businesses that will not normally satisfy the statutory requirements for a categorical exemption, even if the premises on which such businesses are conducted might otherwise come within the vague concept of a 'facility."[12]

Indeed, the CEQA Guidelines state that CEQA should be interpreted to "afford the fullest possible protection to the environment within the reasonable scope of the statutory language."[13]

The Project cannot be characterized as a "facility" for purposes of a CEQA existing facility exemption because petroleum terminals are *not* a class of projects which have been determined not to have a significant environmental impact and petroleum terminals inherently have potentially significant environmental impacts. Thus, CEQA does not allow the Air District to apply the existing facility exemption to the Project.[14]

2. The Project Involves More than a Negligible Expansion of Use

The key consideration in determining the applicability of the existing facility exemption is whether the project involves negligible or no expansion of use. For a project to qualify for the existing facilities exemption, the agency's record must support the conclusion that the alteration is, in fact, minor.[15] "[A] 'minor' alteration cannot be an activity that creates a reasonably possibility of a significant environmental effect."[16]

Here, the Project does not involve repair, maintenance or minor alteration of an existing structure. Indeed, according to the Air District, the Project is a Significant Modification to the Title V permit and a Federal Major Modification

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[12] *Id.*, pp. 1192-1193.
[13] CEQA Guidelines, § 15003(f).
[14] *Azusa Land Reclamation Co. v. Main San Gabriel Basin Watermaster*, 52 Cal.App.4th at 1192-1193.
[15] *Id.* at 1194.
[16] *Id.*

under Air District Rule 2201. The Project includes the installation of ***new*** equipment (which does not constitute air pollution control or abatement equipment), including a 571,068 gallon ethanol storage tank, a 1,347,627 gallon gasoline tank, an ethanol bulk offloading operation at 2650 West Washington Street (with a throughput capacity of up to 180,000 gallons per day delivered by 21 heavy-duty tanker trucks per day with a capacity of 8,800 gallons each and denatured ethanol via rail with a capacity of up to six railcars per day/780 rail cars per year), and a new 1,000-foot pipeline for transferring denatured ethanol from the new off-site offloading operation to the new ethanol storage tank. The installation of new equipment disqualifies a project from a Class 1 exemption.[17] Also, the Project's new offloading operation would exist at an entirely different location from Tesoro's existing facility. The Project would increase volatile organic compounds ("VOC") emissions from the storage tanks and loading racks by 2,394 lb/year (or 1.2 tons/year). The Project requires the Applicant to provide 3,591 lb/year of offsets for the increase in VOC emissions. The Project would also increase hazardous air pollutant emissions, requiring the installation of best available control technology.

Clearly, the Project does not constitute a minor alteration of an existing facility and is much more than a negligible expansion of use. Thus, the District's reliance on the Class 1 exemption is improper and violates CEQA. The District must prepare an initial study and either a mitigated negative declaration or an environmental impact report, as appropriate, before approving any permits for the Project.

B. The Project Is Not Exempt From CEQA Under The Common Sense Exemption Because It Would Result In Significant Public Health, Air Quality And Traffic Impacts

CEQA Guidelines section 15061(b)(3) provides that a project is exempt from CEQA if "it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment." This exemption can be used "only in those situations where its absolute and precise language clearly applies."[18] When invoking the common sense exemption, the agency "must be *certain* that there is *no possibility* the project may cause significant environmental

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[17] *Communities for a Better Environment v. South Coast Air Quality Management District* (2010) 48 Cal.4th 310, 326.

[18] *Myers v. Board of Supervisors* (1976) 58 Cal.App.3d 413, 425.

impacts."[19] "If legitimate questions can be raised about whether the project might have a significant impact and there is any dispute about the possibility of such an impact, the agency cannot find with certainty that a project is exempt."[20] In this case, the Air District does not have substantial evidence to conclude that the Project will not result in a significant effect. On the contrary, as explained below, the Air District's own records show that the Project will result in significant air quality, public health and traffic impacts, and the Air District failed to perform a legally adequate analysis that shows otherwise. Therefore, the District could not conclude with certainty that there is no possibility the Project may cause a significant impact.

III. THE PROJECT WOULD RESULT IN SIGNIFICANT AIR QUALITY, PUBLIC HEALTH AND TRAFFIC IMPACTS

Substantial evidence shows that the Project would result in significant air quality, public health and traffic impacts. Thus, the Air District must withdraw the Draft Permit until it prepares an initial study and either a mitigated negative declaration or environmental impact report, as appropriate, pursuant to CEQA.

A. The Project Would Result In Significant Impacts From Truck Offloading

The Air District's Supplemental Application Form for CEQA Information requires project applicants to disclose whether a project would result in more than 47 heavy-duty truck one-way trips (or 23 round trips) per day. This information assists "the District in clarifying whether or not the project has the potential to generate significant adverse environmental impacts that might require preparation of a CEQA document (CEQA Guidelines §15060(a))."[21] The Applicant claims that the Project would not result in more than 47 heavy-duty one-way (23 round) truck trips per day. The Applicant's claim is unsupported. Substantial evidence shows that the Project would result in 92 heavy-duty one-way truck trips per day (47 round trips), which far exceeds the Air District's CEQA trigger threshold.

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[19] *Davidon Homes v. City of San Jose* (1997) 54 Cal.App.4th 106, 117 (emphasis in original).
[20] *Id.*
[21] San Joaquin Valley Air Pollution Control District Supplemental Application Form for CEQA Information, p. 2.

The Draft ATC proposes a permit limit of 105 disconnects per day at the new ethanol loading rack. Dr. Fox and Dr. Pless explain that a "disconnect occurs when the flexible hoses connecting the tanker truck or railcar to the off-loading racks are uncoupled after the ethanol transfer is complete." According to the Engineering Evaluation, a tanker truck in ethanol service has five disconnects per delivery.[22] Therefore, the Project would result in a total of 21 roundtrips, or 42 one-way trips, for trucks in ethanol service at the new denatured ethanol off-loading rack. The Engineering Evaluation, however, states that there would be an increase of only 21 one-way truck trips per day associated with the new ethanol off-loading rack. Thus, the Engineering Evaluation underestimates the number one-way truck trips by a factor of two.

Further, the Project would increase the truck trips at the existing gasoline bulk loading rack by 25 round trips per day / 50 one-way trips per day. This is because the Project includes installation of a new gasoline storage tank that is three times larger than the existing tank. This new, larger tank substantially increases storage capacity at the facility and debottlenecks the existing operational situation at the facility by allowing for an increase in product loadout at the existing bulk loading rack.

In Dr. Fox's and Dr. Pless' opinion, the Project's substantial increase in heavy-duty truck trips would result in potentially significant air quality and traffic impacts. Indeed, the Port of Stockton admits that the new ethanol truck offloading rack will result in increased traffic in an area already impacted by traffic. The Port's lease with Tesoro for the 2650 West Washington Street property states:

> As a condition of this Lease, Tenant will route all inbound and outbound truck traffic affiliated with its use and operation on Port property (and within Tenant's control) to Navy Drive and/or the Port of Stockton Expressway in order to alleviate the traffic impacts on the residential area (Boggs Tract) to the east.[23]

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[22] 2/21/17 Engineering Evaluation, p. 11.
[23] Port of Stockton, Lease Agreement, p. 12.

The Air District must disclose, analyze and mitigate, in a CEQA document, the Project's potentially significant traffic and air quality impacts from increased truck traffic.

B. The Project Would Result In a Significant Air Quality Impacts from Locomotive Exhaust Emissions at the New Ethanol Off-loading Rack

The Project would allow delivery of ethanol via truck and rail. The Draft ATC for the new ethanol off-loading rack does not specify separate throughput limits for trucks and rail. The Draft ATC only provides combined throughput limits for both modes of delivery. The Engineering Evaluation states that rail cars carrying denatured ethanol received at the off-loading rack would be moved on site by a locomotive at the Port of Stockton. The Engineering Evaluation provides estimates for exhaust emissions from the rail cars. Dr. Fox and Dr. Pless reviewed these estimates and found that they are incorrect and substantially underestimate emissions from locomotive movements. Specifically, as explained in detail in Dr. Fox's and Dr. Pless' comments, the emissions calculations: (1) incorrectly calculate annual emissions in pounds per year; (2) incorrectly assume that the locomotive would comply with emissions standards for Tier 2 switch locomotives; (3) incorrectly assumes that the switch locomotive would access the site only once per day; (4) incorrectly assumes that the switch locomotive would operate one hour on site; and (5) fails to calculate locomotive exhaust emissions while traveling off-site. When the emissions calculations are corrected, Dr. Fox and Dr. Pless found that the combined on-site and off-site locomotive exhaust NOx emissions from the new ethanol off-loading rack would be 11.03 tons per year, which exceeds the Air District's significance threshold of 10 tons per year. This is a significant impact that must analyzed and mitigated in a CEQA document.

C. The Project Would Result In Significant Cancer Risks from On-site Locomotive Exhaust Emissions at the Ethanol Loading Rack

The Engineering Evaluation briefly discusses potential health risks from Project emissions of toxic air contaminants based on the results from the Air District's Risk Management Review ("RMR"). The Engineering Evaluation concludes that health risks posed by the Project are less than significant. Dr. Fox and Dr. Pless reviewed the RMR and Engineering Evaluation. They found that the

Air District failed to address operational emissions from mobile sources such as truck or locomotive exhaust emissions associated with the new ethanol off-loading rack or exhaust emissions associated with the increase in truck traffic at the existing loading rack.

Ms. Camille Sears conducted a health risk assessment for locomotive exhaust diesel particulate ("DPM") emissions associated with the new denatured ethanol off-loading rack. Based on Ms. Sears' modeling, Dr. Fox and Dr. Pless found that the Project's locomotive emissions at the new ethanol off-loading rack would individually and cumulatively exceed the Air District's CEQA threshold of 20 in one million (for a release height of five meters, 47.7 to 51.8 per million excess risk; for a release height of 10, 22.5 to 23.5 per million excess risk). This is a significant impact that the Air District must analyze and mitigate in a CEQA document.

D. The Project Would Result in Significant Cumulative Air Quality and Public Health Impacts from Successive Modifications at the Facility

Under CEQA, while a project's incremental impacts may be individually limited, they may be cumulatively considerable when viewed together with past, present and reasonably foreseeable future projects. Categorical exemptions cannot apply when the cumulative impacts of successive projects of the same type in the same place, over time are significant.[24] Here, the Project is just one of several major modifications of the facility in the past. Importantly, the Air District did not conduct CEQA review for any of these projects. Cumulatively, these modifications result in substantial increases of emissions and associated significant adverse impacts on air quality as well as significant impact in health risks, as discussed below. The Engineering Evaluation completely fails to address cumulative impacts.

Since 1995, the Air District permitted numerous substantial modifications at the facility without any of these permit modifications ever being subjected to public review under CEQA. Dr. Fox and Dr. Pless provide a list of these modifications in their comments. For example, in August 2001, the Air District permitted the removal of existing throughput limits of 50,000 gal/day at two existing gasoline storage tanks (N-845-1 and N-845-5) and an increase at the existing bulk loading

[24] CEQA Guidelines, § 15300.2(b).

rack (N-845-6) from 250,000 gal/day to 45,000 gal/day with Project ID N-1112963. Information obtained from the Air District indicates that no CEQA evaluation was performed.

Most recently, in 2012, the Air District issued authorities to construct to Tesoro authorizing, among other modifications, an increase at the organic liquids loading rack (N-845-6-3) from 450,000 gal/day to 771,120 gal/day and the installation of a new 2,231,508-gallon internal floating roof gasoline storage tank (N-845-24-0) with Project ID N-1112963.[25] The engineering evaluation estimated the increase in VOC emissions resulting from that project at 4.7 tons/year,[26] almost 50 percent of the Air District's significance threshold for this pollutant of 10 tons per year.[27] The Air District exempted that project from CEQA review.[28]

As shown in Table 3, over the course of the past 22 years, the District permitted substantial modifications at the Facility without any of these permit modifications ever undergoing public review under CEQA. Below, we discuss permitted increase in throughput at the Facility's bulk loading rack (N-845-6) and total permitted increase in the Facility's total organic liquid storage capacity.

Now, for the Project, the District intends to permit another increase in total organic liquid storage capacity from 4,319,508 gal to 6,238,196 gal, a 44 percent increase. Once again, the Air District proposes to exempt the Project from CEQA review. In other words, over the course of less than five years, the permitted

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[25] SJVAPCD, Tesoro, Notice of Final Action – Authority to Construct, Project Number: N-1112963, March 27, 2012 (Exhibit C-40); available at: https://www.valleyair.org/notices/Docs/2012/03-27-12%20(N-1112963)/Public%20Notice%20Package.pdf, accessed March 24, 2017 and SJVAPCD, Tesoro, Notice of Preliminary Decision – Authorities to Construct, Project Number: N-1112963, February 16, 2012 (Exhibit C-41); available at: https://www.valleyair.org/notices/Docs/2012/02-16-12%20(N-1112963)/Public%20Notice%20Package.pdf, accessed March 24, 2017.

[26] SJVAPCD, Notice of Preliminary Decision, Project Number: N-1112963, *op. cit.*, p.12. (9,337 lb/year) / (2,000 lb/ton) = 4.67 tons/year.

[27] *See* 2/21/17 Engineering Evaluation, p. 50.

[28] *Id.*, p. 61 ("The District performed an Engineering Evaluation (this document) for the proposed project and determined that the activity will occur at an existing facility and the project involves negligible expansion of the existing use. Furthermore, the District determined that the activity will not have a significant effect on the environment. The District finds that the activity is categorically exempt from the provisions of CEQA pursuant to CEQA Guideline § 15031 (Existing Facilities), and finds that the project is exempt per the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment (CEQA Guidelines §15061 (b)(3)).")

throughput at the bulk loading rack (N-845-6) would increase by a total of 213 percent over 1995 permitted levels without any of these permit modifications ever undergoing CEQA review.

Further, the facility existed before CEQA was enacted in 1970 and, thus, units that existed before 1970 never underwent CEQA review unless they were modified and the Air District required CEQA review. Notably, as discussed above, the Air District did not require CEQA review for any of the substantial modifications that occurred between 1995 and present. It is therefore likely that any projects that were permitted between 1970 and 1995 also did not undergo CEQA review.

Dr. Fox and Dr. Pless provide evidence that the Project would result in significant cumulative health risks from the various emission units and non-permitted operational activities at the facility before and after implementation of the Project. Specifically, even when accounting for only eight major emissions units at the 3003 Navy Drive site — five existing emissions units (gasoline storage tanks N845-5, and N-845-24, organic liquid storage tank N845-4, bulk loading rack N-845-6 and associated vapor recovery unit N-845-22) and three new emissions units (denatured ethanol storage tank N845-28, gasoline storage tank N-845-29, and ethanol bulk offloading rack (N-845-30) — the cumulative acute hazard index for the facility (≥1.61) exceeds the Air District's significance threshold of 1.0. Thus, the Project's cumulative acute health risks are significant and must be analyzed in a CEQA document.

IV. THE DRAFT PERMIT DOES NOT COMPLY WITH THE FEDERAL OR STATE CLEAN AIR ACTS

The Draft ATC does not comply with the federal or state Clean Air Acts because it: (1) substantially underestimates emissions of volatile organic compounds ("VOCs"); (2) fails to identify the best available control technology ("BACT") for all five emissions units; and (4) fails to include enforceable conditions to limit VOC emissions.

A. The Draft ATC Is Based On Underestimated VOC Emissions

The Engineering Evaluation substantially underestimates emissions of VOCs from the new denatured ethanol and gasoline storage tanks by omitting emissions from roof landing, degassing and cleaning.

The Project involves two new internal floating roof storage tanks. These tanks function so that, when the tank contains liquid, the roof floats on the liquid, and when the tank is emptied, the roof sits on deck legs at the bottom of the tank. When the roof lands on the deck legs, evaporative losses occur. These emissions continue until the tank is refilled to a sufficient level to float the roof. These are called roof landing losses. According to Dr. Fox and Dr. Pless, tank roof landing losses are large and typically comprise 25 to 60 percent of total tank emissions. The Air District's emissions calculations for the Project completely fail to account for VOC emissions from roof landing losses.

The Air District's emissions calculations also fail to account for degassing and cleaning losses. These emissions occur when tanks are drained and degassed, and continue until the tank is refilled to a sufficient level to float the tank roof. The U.S. Environmental Protection Agency ("EPA") recommends methods to estimate emissions from degassing and cleaning losses. Further, these emissions are routinely included in emission inventories. Yet, the Air District failed to include them in its emission calculations for the Project and failed to limit these emissions through permit conditions. As a result, the Air District underestimated the Project's VOC emissions.

In short, the Draft ATC does not comply with the federal or state Clean Air Acts because it is based on underestimated VOC emissions. The Air District must withdraw the Draft ATC and prepare a revised Draft ATC that accounts for all of the Project's VOC emissions.

B. The Air District Failed To Require BACT For All Project Emission Units

The Project is a Federal Major Modification and, therefore, requires BACT for all Project emission units for which there is an emissions increase, including the existing loading rack, the new ethanol storage tank, the new gasoline storage tank and the new ethanol bulk offloading operation. Debottlenecking the existing loading terminal will increase its throughput, triggering VOC BACT.

Section 3.10 of Air District Rule 2201 defines BACT as the most stringent emission limitation or control technique achieved in practice for such category and class of source, contained in any State Implementation Plan approved by the EPA, contained in an applicable New Source Performance Standard, or other emission limitation or control technique found by the Air Pollution Control Officer to be feasible. Here, the Air District failed to require BACT for all of the VOC emissions sources that trigger BACT. Further, the Engineering Evaluation determined that BACT for toxic emission control ("T-BACT") is required for the gasoline storage tank because emissions from this tank individually exceed the Air District's cancer risk threshold of 1 in one million. As Dr. Fox and Dr. Pless explain in their comments, the proposed BACT/T-BACT determinations for the Project's emissions sources are substantially flawed.

1. The Air District Failed to Require BACT for the Existing Organic Liquid Bulk Loading Rack and Vapor Recovery System

The Project will increase the amount of product loaded at the existing loading rack by increasing the throughput of the new gasoline tank. This, in turn, will increase VOC emissions. The Engineering Evaluation fails to include a BACT analysis for this loading rack and associated vapor recovery system.

The existing organic liquid bulk loading rack is a bottom loading rack equipped with dry break couplers. The captured loading vapors are vented to a carbon adsorption vapor recovery system with a minimum VOC destruction efficiency of 99 percent. The current operating permits for the existing organic liquid bulk loading rack and vapor recovery system specify an emission factor of 0.08 pounds per 1000 gallons organic liquid loaded ("lbs/1000 gal loaded"). Dr. Fox and Dr. Pless explain that this is not BACT, yet the Engineering Evaluation recommends no change in this existing emission factor.

The Bay Area Air Quality Management District ("BAAQMD"), for example, adopted a BACT VOC emission standard for truck and rail car bulk loading of 0.02 lbs/1000 gal loaded as achieved in practice, which is a factor of four less than the Engineering Evaluation's 0.08 lbs/1000 gal loaded. This standard is applicable for both gasoline and ethanol loading racks. According to Dr. Fox and Dr. Pless:

> [t]his emission level can be achieved by submerged loading with a vapor collection system vented to a thermal oxidizer or carbon absorber with vapor

tank. The facility is currently equipped with carbon adsorption vapor recovery. This system could be upgraded to meet a much lower VOC emission rate by adding additional carbon columns in series with the existing unit to achieve the emission limit of 0.02 lbs/1000 gal loaded adopted by the BAAQMD. Alternatively, a thermal oxidizer could be used. Either of these would also satisfy T-BACT.

The Air District failed to require BACT for the existing bulk loading rack and associated vapor recovery system.

2. The Air District Failed to Require BACT for the New Denatured Ethanol and Gasoline Storage Tanks

The Project includes two new internal floating roof tanks to store denatured ethanol and gasoline. According to the EPA, geodesic domes with a cable-supported internal floating roof are BACT for internal floating roof tanks. The Air District did not require BACT for the two new internal floating roof tanks.

The Air District misleadingly states that the tanks are covered and are, therefore, BACT. However, as Dr. Fox and Dr. Pless explain, internal floating roof tanks are open at the top and do not have a fixed roof. Internal floating roof tanks actually allow significant leakage. A geodesic dome, on the other hand, is a cover.

The Applicant argues that geodesic domes are not appropriate for the ethanol storage tank because "[a]luminum metal is known to corrode in the presence of liquids with a high ethanol content." Dr. Fox and Dr. Pless explain why the Applicant is wrong. First, corrosion is an issue for storing petroleum products in steel floating roofs, which are proposed by the Applicant and the District as BACT for these tanks. Aluminum floating roofs and cable-supported aluminum floating roofs have actually seen good service in ethanol storage. Further, a nitrogen blanket can be used to minimize corrosion concerns. Second, many similar facilities use geodesic dome roofs and internal floating roofs to store gasoline and ethanol.[29]

[29] Saunders International, Diesel, Petrol and Ethanol Storage Tanks; Available at: http://saundersint.com/project/diesel-petrol-and-ethanol-storage-tanks/; United Terminals PTY LTD, Notice of an Application for an Amendment to a Planning Permit, February 10, 2015 (Tank 102, 23.5 million gallon ethanol storage tank equipped with geodesic dome and internal floating roof); Available at: https://www.google.com/webhp?sourceid=chrome-instant&ion=1&espv=2&ie=UTF-8#q=geodesic+dome+tanks+ethanol&start=10&*; Aloha Petroleum, Ltd., Hilo East Terminal,

Corrosion-related failures have not been reported for these facilities. Third, the geodesic dome would not be in contact with the ethanol. Rather, the geodesic dome would be separated from the ethanol by a floating roof and substantial headspace. Further, aluminum geodesic domes can be coated with a protective layer. Finally, even assuming some corrosion could occur, the same is true for steel tank lids, which are proposed by the Applicant.

For the gasoline storage tank, the Applicant argues that geodesic domes proposed by Dr. Fox and Dr. Pless are inapplicable to the Project because they are permitted to store non-gasoline petroleum products or are significantly larger than the gasoline tank proposed. Dr. Fox and Dr. Pless explain why the Applicant is wrong. First, the Air District's own BACT Guideline 7.3.3 for tanks, covers "petroleum and petrochemical production – floating roof organic liquid storage or processing tank, equal to or greater than 471 bbl tank capacity, equal or greater than 0.5 psia." Second, many gasoline storage tanks that cover a wide range of tank sizes, including the Project's gasoline tank, are cited in the BACT Guideline, providing evidence that the subject tank controls are achieved in practice.

In sum, the Air District failed to require BACT for the Project's gasoline and denatured ethanol storage tanks, which is a welded cable-suspended internal floating roof tank with a geodesic dome.

Covered Source Permit Review Summary (Renewal), July 29, 2011; Available at: https://yosemite.epa.gov/r9/air/epss.nsf/6924c72e5ea10d5e882561b100685e04/672443a8e8561be60a257a95007fc6cb/$FILE/030706review.PROPOSED.pdf; Iowa Department of Natural Resources, Draft Title V Operating Permit Fact Sheet, pdf 9 (geodesic domes added to two existing gasoline storage tanks); Available at: http://www.polkcountyiowa.gov/media/92763/Fact%20Sheet.pdf; Maryland Department of the Environment, Kinder Morgan Liquids Terminals LLC, Permit No. 24-003-0309, Part 70 Operating Permit Fact Sheet, March 11, 2016, pdf 5-6 (two 3,342,053 gallon gasoline storage tanks equipped with internal floating roof and geodesic domes), pdf 6 (1 3,111,005 gallon ethanol storage tank equipped with an internal floating roof and a geodesic dome), pdf 9; Available at: http://www.mde.state.md.us/programs/Permits/AirManagementPermits/TitleVProgramInformation/Documents/Issued_Part70_Permits/KinderMorganTitleV2016withFS; Michigan Department of Environmental Quality, Permit to Install 249-03A, Buckeye Terminals, LLC, Taylor, MI, December 2, 2015, pdf 6 (EUTANK3: internal floating roof with geodesic dome storing denatured ethanol; EUTANK5,6: internal floating roof with geodesic dome storing denatured ethanol or gasoline); Available at: http://www.deq.state.mi.us/aps/downloads/permits/finpticon/2003/249-03A.pdf.
3626-015acp

3. The Air District Failed to Require BACT for the New Denatured Ethanol Truck and Rail Offloading Rack

The Project includes a new denatured ethanol truck and rail off-loading rack. After unloading is complete, the couplings between the tanker truck or rail car and the loading rack are disconnected. Some liquid remains inside the lines/couplings connecting the tanker truck/rail car and the rack. Dr. Fox and Dr. Pless explains that some of this ethanol will spill to the ground and subsequently evaporate, resulting in VOC emissions. The amount of the "leak" depends on the type of coupler -- either a camlock or a dry break coupler -- used to connect the tanker truck and railcar to the loading rack. The leaks (and resulting VOC emissions) from camlocks are significantly higher than from dry break couplers. Despite this, the Applicant proposes camlocks and the Air District improperly concluded that they satisfy BACT.

Section 3.10 of Rule 2201 defines BACT as the most stringent emission limitation or control technique that has been achieved in practice or required by any SIP for the same class or category as the source. According to Dr. Fox and Dr. Pless, the use of camlock couplers with a leak rate of 8 mL per disconnect for the ethanol offloading rack does not satisfy BACT. Rather, BACT is the use of dry break couplers and leak rate of 2 mL per disconnect.

The Applicant claims that dry break and camlock couplers are "equivalent" under the Air District's BACT Guideline 7.1.14 for Light Crude Unloading Rack. Therefore, according to the Applicant, the proposed camlock fittings with an average disconnect loss no greater than 8 mL (0.014 lb/gal) is BACT.[30] However, the Applicant provides zero support for the 8 mL per disconnect leak rate. Further, the Applicants provides no evidence that dry breaks and camlocks are equivalent. Indeed, both of these unsupported statements are false.

Evidence shows that dry break couplers have much lower leak rates than camlock couplers. For example, the Bakersfield Crude Terminal holds a permit issued by the Air District that includes the use of dry break couplers limited to 3.2 mL per disconnect (0.0056 lb/gal).[31] Also, the Maryland Department of the

[30] 12/20/16 Application, pdf 20.
[31] SJVAPCD, Authority to Construct, Bakersfield Crude Terminal, LLC, Permit No. S-8165-3-0, Draft, Condition 5 ("Maximum liquid spillage for liquids from organic liquid transfer operation shall not exceed

Environment indicates that most denatured ethanol deliveries arrive in MC306/406 (DOT 406) tanker cars, which typically can be off-loaded with dry disconnect.[32] Dry break couplers are widely used for the transfer (loading and unloading) of ethanol and numerous other substances.[33] Thus, much lower VOC emissions have been achieved in practice for both loading and unloading of both ethanol and other similar substances and must be required here as BACT.

4. The Air District Failed to Require BACT for Fugitive Components

Dr. Fox and Dr. Pless explain that fugitive components, such as valves, connectors, pumps, compressors, drains and sampling ports present opportunities for contained vapors to leak into the atmosphere. The Project's proposed pipeline, new storage tanks and new offloading rack would contain new fugitive components. The Engineering Evaluation concludes that BACT is not required for fugitive components by improperly piecemealing the components from the equipment they support.

In evaluating the applicability of BACT, the Air District separated the fugitive components from the emission units and separately evaluated BACT for each. The Air District concluded that the fugitive components taken alone do not exceed the 0.5 lb/day threshold and thus do not trigger BACT. However, as Dr. Fox and Dr. Pless explain, these components are integral to the operation of the tanks and loading rack and thus must be subject to BACT. Alternatively, one could argue that all fugitive components should be considered as a single emission source and considered together. Under either of these scenarios, VOC emissions from fugitive components trigger BACT.

Dr. Fox and Dr. Pless explain that BACT for fugitive components is leakless components where feasible and, otherwise, a leak detection and repair ("LDAR")

3.2 milliliters/disconnect based on an average from 3 consecutive disconnects. [District Rules 2201 and 4624]").

[32] MDE, Technical Support Document, Amendments to COMAR 26.11.13.04 and .05, Control of Gasoline and Volatile Organic Compound Storage and Handling, March 5, 2014 (Exhibit 27), *emphasis* added; available at: http://www.mde.state.md.us/programs/regulations/air/Documents/TSD_Transflo_03-05-14.pdf.

[33] Typical Dry Link Installations; Available at: http://www.drylink.com/installations.html. See also: http://www.drylink.com/videos.html.

monitoring program coupled with a leak rate of 100 ppm achieved using the technologies identified in the BACT guidelines established by the Bay Area Air Quality Management District ("BAAQMD"). The 100 ppm leak rate is achieved in practice at many similar facilities in the BAAQMD and, thus, satisfies BACT and T-BACT for fugitive equipment leaks for the Project. The Engineering Evaluation fails to evaluate or even mention either of these BACT options, let alone require either as permit conditions.

Tesoro is well aware of BACT for fugitive components. Tesoro proposes to use low-leak fugitive components at the Tesoro Savage Vancouver Energy Distribution Terminal. Tesoro's Senior Project Manager for Design and Engineering of this Terminal testified in July 2016 that the Terminal will use all low-emission valves, capable of meeting a leak rate of less than 100 ppm. He reported manufacturer data which measured VOC levels of less than 15 ppm for these valves when tested at 650 pounds per square inch ("psi") at a temperature of 350 F for over 5,000 cycles. He also testified that the terminal will use all low-emission, spiral-wound, flex-metallic gaskets.

The Draft ATCs for the two new tanks include a VOC concentration limit for gas leaks of 10,000 ppm measured using EPA Method 21. The Draft ATCs do not state which sources this leak limit apply to, (i.e. tanks or its fugitive components). However, assuming fugitive components, this trigger level for leak repair is a factor of 100 higher than the achieved-in-practice BACT level of 100 ppm.

C. The Draft ATC Permit Conditions Are Unenforceable and Fail to Incorporate All Assumptions Supporting The Emission Estimates

Permit conditions must be federally enforceable and practically enforceable by a state or local air pollution control agency. Here, the proposed conditions for storage tank VOC and HAP emissions are not practically enforceable.

The Draft ATC contains various conditions to limit the VOC emissions. However, according to Dr. Fox and Dr. Pless, the conditions are insufficient and fail to limit VOC and HAP emissions to the levels assumed in the Engineering Evaluation and HRA prepared for the Project. In fact, many of the errors and omissions in the Draft ATC are the same issues that served as the basis of a recent Notice of Violation issued by the EPA to the Bakersfield Crude Terminal, which is

also permitted by the Air District. Thus, the Air District is well aware of the Draft ATC's shortfalls. The Draft ATC must be revised to require enforceable conditions to limit VOC emissions to those assumed in the HRA and Engineering Evaluation.

The Engineering Evaluation estimated the increase in VOC emissions from the storage tanks using the TANKS 4.09d model. However, the Draft ATC does not require the Applicant to use this model, or any other method, to actually estimate daily and annual VOC emissions. Further, the Draft ATC does not require any testing of the key input parameters used in the TANKS 4.09d model, the true vapor pressure ("TVP"), temperature and vapor molecular weight. Rather, the Air District argues that the permit limit of 11 pounds per square inch ("psia") is sufficient to limit VOC emissions. Dr. Fox and Dr. Pless explain that the Air District is wrong. The daily and annual VOC emission limits are not practically enforceable because the Draft ATC does not specify any method to determine VOC emissions nor does it require any testing to determine the key input parameters necessary to estimate VOC emissions (e.g., vapor molecular weight, temperature and TVP). Thus, there is no way to confirm that daily and annual VOC and HAP emissions are met, and the limits are not practically enforceable.

VI. CONCLUSION

The Project does not qualify for a CEQA exemption because a petroleum distribution terminal is not a "facility" for purposes of a CEQA exemption pursuant to CEQA Guidelines section 10531. Even if a petroleum distribution terminal was a "facility," the Project involves more than a negligible expansion of the existing use, and the Project would result in significant air quality, public health and traffic impacts. In addition, the Draft ATC does not comply with the federal or state Clean Air Acts. The Draft ATC fails to require best available control technology for all emissions units, underestimates tank fugitive emissions and fails to require enforceable permit conditions for storage tank volatile organic compound and hazardous air pollutant emissions. We urge the Air District to withdraw the Draft

ATC until it prepares an initial study and a mitigated negative declaration or environmental impact report, as required by CEQA, and prepares a Draft ATC that complies with the federal and state Clean Air Acts.

Sincerely,

Rachael E. Koss

Rachael Koss

REK:acp

cc: EPA, Region IX (via U.S. Mail)
Deborah Jordan, Director, Air Division
Sylvia Quest, Office of Regional Counsel

Attachment

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