

Bay Area Air Quality Management District Responses to Public Comments Received on Initial Draft Petroleum Refining Emissions Tracking Rule

The staff of the Bay Area Air Quality Management District (the “Air District”) has compiled draft responses to public comments received on the initial draft Petroleum Refining Emissions Tracking Rule (PRETR) issued by the Air District in March 2013. These draft responses are intended to facilitate a dialogue regarding the ongoing development of the PRETR. Both the rule itself and the Air District’s rationale, including responses to comments, may change before a rule is adopted. The final responses to comments will be included in the Staff Report prepared for the proposed PRETR prior to consideration of adoption by the Air District’s Board of Directors.

Areas where Air District staff is actively considering revisions to the initial draft PRETR are noted in bold italic typeface in this document.

In some cases, the comments listed in the document have been summarized by Air District staff, and are not copied verbatim. Copies of all comments received are available on the Air District website (www.BAAQMD.gov). A list of commenters is included in the following table in the order of the receipt of comments.

Commenter	Comment Date	Comment Number(s)
Richard Freeman	April 25, 2013	1 - 3
Guy Bjerke, Manager Bay Area Region and State Safety Issues, Western States Petroleum Association (WSPA)	May 31, 2013	4 - 32
David R. Farabee, Pillsbury Winthrop Shaw Pittman LLP, on behalf of WSPA	May 31, 2013	33 - 40
Patrick Covert, Executive Director Regional Environmental & Regulatory Affairs, Valero Companies	May 31, 2013	41 – 59
William B. Walker, M.D., Contra Costa County Health Services	June 10, 2013	60 - 62
Floyd Smith	June 12, 2013	63 - 66
Environmental / Labor Collaborative consisting of Asian Pacific Environmental Network; BlueGreen Alliance; Communities for a Better Environment; Labor Occupational Health Program, UC Berkeley; Natural Resources Defense Council; United Steelworkers International and Local 5	June 13, 2013	67 - 74
(Cont.)		

Commenter	Comment Date	Comment Number(s)
Mario Delgado, MD Environmental	June 14, 2013	75
Environmental Collaborative consisting of Jenny Bard, Regional Director, Programs and Advocacy, American Lung Association in California; Joel Ervice, Associate Director, Regional Asthma Management & Prevention (RAMP); Michelle Meyers, Director of the San Francisco Bay Chapter Sierra Club; Denny Larson, Executive Director, Global Community Monitor; Pierre Delforge, Steering Committee Member, 350 Silicon Valley; David Schonbrunn, President Transportation Solutions Defense and Education Fund (TRANSDEF); Margaret Gordon and Frank Gallo, Steering Committee Members, Ditching Dirty Diesel Collaborative; Jill Ratner, President, Rose Foundation for Communities and the Environment; Myesha Williams, Co-Director, New Voices Are Rising; Andy Katz, Director of Air Quality Advocacy, Breathe California	June 26, 2013	76 - 78
Matthew Buell, Manager Environmental, Tesoro Refining and Marketing Company LLC, Golden Eagle Refinery	July 11, 2013	79 - 96

Comments from Richard Freeman

1. Comment: I am grateful for the Air District's work in developing this rule.

Response: Air District staff notes the comment, and is appreciative of the commenter's interest in this work.

2. Comment: Proposed California Senate Bill 691 would increase single-day violations of air quality regulations that affect entire communities, and I respectfully urge your organization to support it.

Response: The Air District co-sponsored SB 691, authored by State Senator Hancock. The Bill passed the Senate Floor, and the Assembly Natural Resources Committee, but was ordered to the inactive file on the Assembly Floor on September 12, 2013. It is possible that the Bill will be re-introduced at a later date.

3. Comment: There is no reason to assume that Chevron and the other Bay Area refineries will not process heavier, tar sands crude if the lighter crude is not available, which of course contains far more sulfides, which will greatly increase greenhouse gas emissions and place an ever greater burden on the refinery pipelines than already exist.

Response: The PRETR would track greenhouse gas (GHG) emissions from Bay Area refineries, and require that feasible measures be implemented to reduce GHGs should emissions increase from a given refinery over time due to the use of unconventional crudes or other factors. California refineries are also subject to the California Air Resources Board's Cap-and-Trade regulation, which requires that overall GHG emissions from sources subject to the regulation be reduced annually through 2020.

Corrosion is a common issue in many petroleum refining processes and may occur in pipelines, vessels, columns, heat exchangers, storage tanks, and other equipment. Sulfur compounds and naphthenic acids are examples of corrosive agents that are present in crude oils to one degree or another. Refineries that process crude oils with higher levels of corrosive agents should use appropriate corrosion resistant materials and implement modern corrosion management systems. Regulatory oversight of corrosion-related safety issues is covered by process safety management programs and accidental release prevention programs (implemented by Cal/OSHA and local Administering Agencies, respectively). The State has recently added additional refinery enforcement inspectors to increase the effectiveness of their process safety management program.

While the prevention of corrosion-related incidents at refineries is not the primary focus of the PRETR, the new Air District rule should provide an additional incentive for refineries to avoid such incidents. The PRETR would require that emissions from incidents be explicitly identified in on-going emissions inventories. Additionally, the PRETR would require that a refinery with an increase in annual emissions above trigger-levels: (1) identify an incident's initiating event and any contributing factors, including the degree to which changes in crude slate at the refinery caused or contributed to the incident, and (2) prepare and

implement an Emission Reduction Plan that includes feasible air emission reduction measures that may include equipment upgrades and operational changes.

Comments from WSPA (Guy Bjerke letter)

Lack of Scientific Basis (Comments 4 - 6)

4. Comment: The rule is being developed to address something that may occur (e.g., potential increases in emissions due to the use of lower quality crudes). There are no clear benefits in terms of improved air quality, while there would be burdens on the Air District and the refineries to implement. It is the view of WSPA that the limited resources available would be better applied to addressing other identified air quality issues; i.e. see the Air District's limited progress in addressing the 55 control measures identified in the 2010 Clean Air Plan.

Response: Some regulatory requirements focus on tracking and monitoring emissions and air quality, rather than reducing emissions and improving air quality (e.g., Air District Regulation 12-11). The primary focus of the PRETR is on tracking and monitoring, but the rule also includes requirements for evaluating and implementing feasible measures to reduce emissions should the tracking indicate that emissions have increased above trigger-levels. Air District staff believes costs associated with the PRETR are appropriately proportional to the benefits derived from the rule, even if these benefits relate more to monitoring and tracking than to emission reductions. Air District staff is working separately on the control measures identified in the Air District's 2010 Clean Air Plan.

Air District staff does not believe that it is appropriate to wait to adopt a rule to address a potential air quality problem until after the problem has already impacted air quality and public health. The potential problem that the PRETR is addressing is increases in emissions at refineries that may result from the use of "lower quality" crude slates (or potentially from other factors). Although the extent to which Bay Area refineries will make use of lower quality crude oil in the future is difficult to predict, Air District staff believes it is reasonable to expect that Bay Area refineries will follow the general industry-wide trend towards increased processing of lower quality crudes. Moreover, it is well established that refining lower quality crude requires more energy and therefore tends to cause more emissions. (See for example, *Effects of Possible Changes in Crude Oil Slate on the U.S. Refining Sector's CO₂ Emissions*, Final Report prepared for International Council on Clean Transportation by MathPro Inc., March 29, 2013). Other potential pathways for increased emissions also exist from processing lower quality crude slates.

5. Comment: The Air District is seeking to create this new rule despite decreasing air emissions and ambient levels of ozone and particulate matter throughout the Bay Area. These same data show that petroleum refinery direct emissions have decreased over time and are a small percentage of the total inventory.

Response: Despite the improvements in air quality that the commenter notes, more is needed. The Bay Area still exceeds ambient air quality standards (AAQS) for ozone and particulate matter (PM), including the more stringent California AAQS, so additional

emission reductions (or further limits on emission increases that may occur) are needed for these non-attainment pollutants and their precursors. For toxic air contaminants (TACs) where AAQS have not been established, (and in particular for TACs like carcinogens which are believed to be “non-threshold” pollutants, and for non-carcinogenic TACs with exposure levels above a Reference Exposure Level), the Air District’s regulatory efforts continue to focus on reducing emissions and public exposures in a cost-effective manner. For GHGs, substantial reductions in emissions are needed to slow the significant climate change that is already underway. The Air District’s Board of Directors has recently established an aggressive long-term GHG reduction goal for this purpose. For almost all of the regulated air pollutants, refineries are by a wide margin the largest stationary emission sources in the Bay Area. Air District staff also notes that the relative contribution of refineries to local emissions inventories is much higher than their contribution to the overall emissions inventory of the entire region.

6. Comment: Air District data show that reductions from mobile source emissions are the biggest factor in improving air quality. Petroleum refineries play a key role in this improvement (the cleaner fuels produced by the refineries have enabled improvements in engine technology that have driven down mobile source emissions). In order to manufacture these cleaner fuels, refineries have added new and expanded existing process units. These additions and expansions have added new emission points, but the Air District data clearly shows decreasing emissions from refineries. This lack of relation between changing crude slates and process reconfiguration is discussed in greater detail later in Attachment C.

Response: Air District staff agrees that fuel quality regulations have required the refineries to produce cleaner fuels, and that the emissions of certain air pollutants from Bay Area refineries have decreased over time despite modifications needed to comply with the more stringent fuel standards. If this trend of declining emissions at refineries continues over time, the PRETR would serve a tracking function, and would do so at a very reasonable cost. If, however, refinery emissions were to increase due to various factors including compliance with future fuel quality standards (e.g., the Low Carbon Fuel Standard for GHGs), the PRETR would provide a regulatory mechanism for identifying and implementing additional feasible, cost-effective, refinery emission reduction measures. If there are no emission increases above trigger-levels observed at a refinery based on the PRETR’s tracking, no additional emission reduction measures would be required by this rule. See also the response to Comment 5.

7. Comment: *Emissions Inventory Data Already Exists.* The Air District has stated that it is seeking a single repository for an air emissions inventory to include criteria pollutants, toxic air contaminants and greenhouse gases. Existing publicly available inventories prepared for local, state and Federal agencies thoroughly document these emissions with friendly search tools to retrieve data by region, specific industry, specific permit holder, and specific chemical compound. WSPA asserts that if the Air District is seeking to consolidate these tools into a single website, that outcome can be achieved without a new regulation. Public awareness may be better served by demonstrating how to evaluate existing data and put such emissions in context.

Response: The PRETR would provide the public with a simple method of determining if emissions of various regulated air pollutants from Bay Area refineries increase from existing baseline levels over time. Existing emissions inventory systems cannot directly provide this information because there are no requirements for past inventories to be adjusted if methodological improvements are made to current inventories. The PRETR would require that a consistent methodology be used in comparing baseline and on-going inventories so that differences in these inventories represent only changes in actual emissions. The PRETR should also serve to improve consistency in emissions inventory methodologies between facilities.

Concerns about Baselines (Comments 8 - 9)

8. Comment: The proposed rule contains provisions for establishing a facility-wide emissions baseline that effectively overrules and replaces existing Title V Major Facility Review Permits and Permits to Operate (PTOs). The Title V permits and PTOs contain operating limits that are based on thorough New Source Review (NSR) and Prevention of Significant Deterioration (PSD) permitting practices as delegated by Environmental Protection Agency (EPA) to the Air District. The baseline approach to capping emissions essentially de-rates the refineries by establishing an arbitrary site-wide limit well below currently permitted levels.

Response: The PRETR will be complementary to, and will not “overrule or replace,” existing Air District permitting programs. Tracking of actual emissions for the entire refinery, as measured from a specific baseline, with provision for considering corrective action if that baseline is exceeded, is a regulatory goal not achieved or achievable by any current Air District program. Title V permits are, in a sense, refinery-wide in scope, but Title V does not provide a mechanism for tracking total refinery emissions. By contrast, the Air District’s New Source Review (“NSR”) and Permit to Operate (“PTO”) programs do address increases in emissions, but generally do so on a source-specific basis. The PRETR will provide information about refinery emissions, and in some cases may function to reduce those emissions, in a manner that Title V and other pre-existing permitting programs cannot.

The primary purpose of Title V permitting is to gather all air quality requirements in one document. Although the need to obtain a Title V permit is based on facility-wide emission levels, there is no independent requirement in Title V to track emissions or to address emission increases. Functionally, there is little if any resemblance between Title V and the PRETR.

In this regard, it is important to note that the Air District NSR and PTO programs are based primarily on assessments of potential to emit (“PTE”). The nature of these programs, which are designed to evaluate projects before they are built or modified, necessitates a reliance on PTE. However, the Air District believes the purpose of protecting the public from increases in refinery-wide emissions over time is better served by focusing on actual emissions. Moreover, as a broad generality, sources are subject to emission reduction measures only when they are constructed or modified. The fact that a large percentage of refinery sources have never been modified (these are also known as “grandfathered”

sources) entails a disparate level of review of and information about these sources relative to modified sources. The PTE versus actual emissions consideration and the prevalence of grandfathered sources are two important contributing reasons for why the current NSR and PTO programs are not effective tools for tracking and addressing refinery-wide emissions from a baseline actual emission level.

The baseline emissions in the PRETR would be based on a refinery's actual emissions with certain adjustments. The baseline is not rendered "arbitrary" merely because it selects emissions as they existed at a particular point in time, and in fact the rule allows for some discretion to choose the most representative emission level within a 10-year period (as an aside, this is considerably more discretion than is allowed when, for instance, determining the existing environmental setting for evaluating environmental impacts of a proposed project under CEQA).

The Air District believes it is a mischaracterization to say the PRETR "caps" emissions to baseline levels. If emissions rise above baseline levels by more than a certain amount (i.e., more than PRETR's "trigger levels") there would follow a review and implementation of emission reduction measures that are "feasible" within the definition of the rule. Whether emissions can substantially increase above baseline levels therefore depends on whether a refinery is already implementing all feasible measure. The PRETR may require implementation of feasible measure, but in no scenario does the PRETR function to absolutely prohibit (i.e., "cap") emissions increases.

9. Comment: As part of the NSR/PSD permitting process, facilities have surrendered Emissions Reduction Credits (ERCs) to obtain necessary operating flexibility in terms of throughput and fired duty. ERCs have significant economic value, and surrendering them is an investment in the facilities' permitted operating scenarios. This investment is nullified by overlaying the proposed rule's baseline. Furthermore, as drafted, the proposed rule would prohibit the use of off-site generated and on-site non-contemporaneously generated ERCs for future permitting as currently allowed by recently revised Air District Regulation 2 Rule 2 and 4. Depending on the source and age of the ERCs held by a refinery, this could render the refinery ERC banks essentially worthless.

Response: Air District staff disagrees with the commenter's statements that the economic value of ERCs would be nullified by the PRETR, or that the PRETR would prohibit or otherwise limit the use of ERCs. Nothing in the PRETR would disallow or prohibit the use of ERCs for NSR purposes. There would therefore still be a value to these ERCs. The PRETR does not cap emissions, but rather requires that feasible emission reduction measures be implemented should an increase in emissions occur above trigger-levels.

Air District staff agrees that it may be appropriate to consider the use of certain ERCs in the PRETR as mitigation for emission increases at a refinery, but only to the extent that: (1) onsite mitigation measures are first considered and implemented, if feasible, and (2) refinery emission increases would not have significant health impacts on local communities. In this manner, valid ERCs could potentially be used to mitigate increases of GHGs and regionally-based pollutants such as ozone precursors and PM precursors (provided that significant localized

increases in TACs, NO₂, and SO₂ did not occur). Air District staff will consider how this concept might be incorporated into the PRETR.

10. Comment: *Permitting Uncertainty.* The proposed rule introduces significant uncertainty in the permitting process on top of the recent Regulation 2 modifications. To the extent that the BAAQMD continues to increase uncertainty for permitting new projects, corporations will be incentivized to invest elsewhere. When the permitting process cannot be relied upon to produce permit limits that are reliable, the unintended consequences include less modernization of existing facilities within the Air District's jurisdiction which may actually slow the trend of air quality improvement noted above.

Response: The emission reduction requirements of the PRETR are triggered based on increases in actual emissions, and do not apply at the time of permitting of new/modified sources. Once baseline emissions inventories are established, a facility should be able to reasonably predict whether the emissions from proposed projects would trigger the PRETR's emission reduction requirements. In many cases, mitigation required for proposed projects under NSR and CEQA would be expected to keep emissions at a refinery from increasing above trigger-levels, or to satisfy the PRETR's requirement for implementation of feasible emission reduction measures. A refinery could reduce uncertainty by doing an emission reduction audit up-front before an emissions increase occurs, and/or by making sure that all feasible, cost-effective, emission reduction measures are already being implemented.

Differences between Proposed Rule and Reg. 12-12 (Comments 11 – 14)

11. Comment: The Air District actually followed its long established rule making process when it developed Reg. 12-12. The first step, published on the BAAQMD website, was to have an internal scoping meeting which is to discuss an identified (emphasis added) air pollution problem. As is discussed above the proposed PRETR is not addressing a known validated issue; it is addressing a potential concern and may actually slow progress.

Response: The Air District held internal scoping meetings for the PRETR. The air pollution problem discussed was potential increases in emissions at refineries that could occur in the future.

12. Comment: The second step was to develop a Technical Assessment Memo which should include an assessment of whether a rule is needed. At the Martinez public workshop, BAAQMD staff acknowledged that the inventory portion of the proposed rule could be accomplished without a new burdensome regulation.

Response: The Air District prepared a Regulatory Concept Paper for the PRETR, which served a similar purpose as a Technical Assessment Memo. Air District staff does not believe that the emissions inventory provisions in the PRETR will be overly burdensome. The PRETR's on-going emissions inventory reports are to replace existing annual update questionnaires, although it is acknowledged that some additional resources will be required (particularly for the baseline emissions inventory report due by Dec. 31, 2014, and the first on-going emissions inventory report due by July 1, 2015). The on-going emissions

inventory reporting provision needs to be in the PRETR because it is used for determining if further emissions controls are triggered under the PRETR.

13. Comment: The third step was Stakeholders meetings. In this step the Air District should conduct meetings with affected businesses, affected communities and other interested parties. The Air District managed to meet with affected communities and interested parties prior to developing an initial draft of the proposed rule. BAAQMD staff did not meet with the refineries and in fact did not respond to repeated requests to meet and discuss this rule. No meeting with the refineries has been scheduled or occurred to date. The flare minimization rule had numerous meetings including all stakeholders (estimated at around 20) and the Air District to finalize the minimization rule and agree to a template for the flare minimization plans.

Response: Air District staff, including the Air District's Air Pollution Control Officer (APCO), met with refinery stakeholders on August 8, 2012, to discuss development of the PRETR (a draft version of the PRETR's Regulatory Concept Paper had previously been provided to WSPA). The APCO also subsequently met with refinery representatives to discuss the PRETR. The commenter will need to provide additional information about their "repeated requests" to meet and discuss the PRETR, as Air District staff can find no records of any such requests. Industry representatives are participating in the Technical Work Group for the PRETR, and may also at any time request separate meetings to discuss the proposed rule with Air District staff.

14. Comment: To determine if a flare minimization rule was necessary and if so, to determine reporting triggers based on sound science, there was a rule that preceded the flare minimization rule. That rule, Reg. 12-11 (flare monitoring at petroleum refineries), resulted in refineries gathering detailed data on the amount and composition of gases directed to flares. These data showed that there were emission reductions which would be achieved by the implementation of the flare minimization rule. Since the adoption of Reg. 12-12 Air District staff have monitored and reported on flare minimization efforts which have shown emission reductions from flares. Reg. 12-12 now effectively regulates flare emissions from extraordinary events at refineries while the proposed rule intends to regulate emissions from the normal, already permitted operations at refineries – two very different concepts.

Response: The Air District could have created separate new rules for tracking refinery-related emissions and refinery-related air quality, and for control of any observed refinery emissions increases not adequately addressed by existing rules. A single, consolidated, rule was proposed by Air District staff for the PRETR because this appears to be a more efficient and timely approach. Regarding differences in rule concepts, Reg. 12-12 requires Flare Minimization Plans (FMPs), which involve implementation of feasible measures to reduce flaring emissions, including flaring during scheduled maintenance. The PRETR requires Emission Reduction Plans (ERPs), which involve implementation of feasible measures at refineries to reduce emissions of air pollutants that have increased above trigger-levels. The source coverage of the PRETR is broader than that of Reg. 12-12, but the regulatory concept is similar.

15. Comment: *Meaningful Air Monitoring.* Ambient air monitoring, proposed as fence-line and community monitoring in the proposed rule, cannot determine the source of the emissions. For example, freeway particulates may be detected, but a refinery is not the source of these emissions. Atmospheric conditions play a controlling role in how emissions from stationary sources travel. There is no certainty that routine emissions or those from emergency events will be measured by fence-line or community monitors in a meaningful way, if at all. Specifically, how do the air monitoring provisions relate to the proposed rule's other components?

Response: Air District staff acknowledges that fence-line and community air monitoring systems measure air concentrations of pollutants emitted from a variety of sources and not just the refineries. It is for this reason that the PRETR does not establish enforceable standards for refineries based on the data collected from these systems. In some instances, air monitoring data may be used to identify or help quantify refinery emissions sources (e.g., leaks that are not detected by other monitoring programs). Moreover, these data will provide a much better indication of local community exposures to air pollutants emitted from refinery sources, other nearby sources, and more distant sources from which emissions are transported. The Air District is pursuing additional incident-based air monitoring capabilities to supplement that provided in the PRETR to address incident-based emissions.

16. Comment: Refineries already provide sufficient data to address this (inventory tracking) concern. Refineries currently prepare and submit annual emissions inventories that address criteria pollutants, toxic air contaminants, and greenhouse gases emitted by processes associated with our operations. Additionally, baseline emissions are continuously documented for permitting purposes. Permit holders routinely track emissions and increases due to process changes and projects that increase throughput to ensure that all emissions are authorized. Emissions of these regulated air pollutants are tracked on an actual basis and are required to be compared to potential emissions from projects and throughput increases to determine the type of permit review process that will be required to authorize the emissions. Emissions increases associated with new refinery projects are included in this tracking process.

Response: The PRETR would provide emissions inventory tracking information in addition to what is already provided by refineries. As the commenter indicates, emissions increases are tracked for refinery projects that involve new/modified sources. The PRETR would involve emissions tracking for the entire refinery including grandfathered sources that are not new or modified. The PRETR would require that a consistent methodology be used in comparing baseline and on-going inventories, so that differences in these inventories represent changes in actual emissions. The PRETR should also serve to improve consistency in emissions inventory methodologies between facilities.

17. Comment: The trigger-levels in the proposed rule are consistent with the levels established by EPA for NSR/PSD and require the most stringent permitting requirements. Proposed emission increases at or above these levels are already required to go through the permitting process, making this proposed rule redundant and unnecessary. Further, agencies and the public have access to the permit applications and emissions inventories.

Response: Some, but not all, of the trigger-levels in the PRETR are consistent with NSR/PSD significance thresholds. NSR/PSD applies to emission increases resulting from new/modified sources, while the PRETR applies to emission increases from existing sources as well. The PRETR would make it considerably easier for a member of the public to determine whether emission increases from the entire refinery have occurred, relative to using existing information and methods.

18. Comment: There is no de minimus trigger-levels proposed for toxics. Any increase over baseline will require a health risk calculation using an air dispersion model and a cumulative impacts analysis including emissions from sources outside the refinery (Reg. 12-15-228.2). Small increases in calculated toxic emissions could occur due to the accuracy of current measurement techniques and would trigger these extensive and burdensome analyses.

Response: It is true that the PRETR's trigger-levels for TACs are health risk-based rather than emissions-based. Air District staff believes, however, that refineries should have the capability to conduct health risk assessments (HRAs) to address refinery emissions (e.g., HRAs were completed by refineries for the Air Toxics Hot Spots Program). Once HRA models are initially set up, they are not difficult to maintain. ***Nonetheless, Air District staff agrees that it may be appropriate to add a preliminary screening step for evaluating TAC emission increases that does not require modeling (e.g., based on an increase in toxicity-weighted emissions of a combination of TACs). Air District staff will consider how this might be incorporated into the PRETR.***

19. Comment: As written, the rule could trigger emissions reductions at a refinery without any real emission increase at the refinery because a nearby hospital or grocery store installs a diesel generator resulting in a cumulative emissions increase.

Response: This is not true as emission reductions are only required under the PRETR if there is an increase in the refinery's emissions. The applicable rule provisions are as follows:

402.5 A table that shows, on a refinery-wide basis for each applicable air pollutant, the change in emissions that occurred between the baseline period and the period for which the on-going emissions inventory report was prepared under this Section.

402.6 For each air pollutant for which an increase in emissions has been identified under Section 12-15-402.5, identification of whether the increase exceeds applicable trigger-levels. Emission increases of PM_{2.5}, TACs, and CO (greater than 100 tons per year) shall be identified as exceeding trigger-levels unless the refinery owner/operator includes in the report a modeling demonstration completed in accordance with Section 12-15-407.

20. Comment: The proposed rule does not explain or clarify how permitted emissions increases that may go above the trigger-levels established in the rule would be compared against the baseline implying that these types of increases would never be acceptable. This would potentially prohibit expansions and production increases that may be necessary to meet product demands.

Response: The PRETR details how ongoing actual refinery-wide emissions would be compared to baseline emissions to determine if trigger-levels have been exceeded. There is no consideration of “permitted” increases in emissions. Since PRETR does not cap refinery emissions, it would not prohibit expansions or production increases, although it may trigger consideration of additional feasible measures to reduce emissions. Expansion projects that would significantly increase refinery emissions should consider feasible mitigation measures to reduce emissions during the permitting process. If this is done, the information can be incorporated into an ERP required under the PRTER if and when actual emissions increase and the ERP requirement is triggered (although there may be a need to update information on the feasibility of emission reduction measures based on improvements in emission control technology that may have occurred since the permitting process was completed).

21. Comment: Requiring refineries to choose one year in the past ten to represent “baseline” emissions for all pollutants assumes that there is one year with the highest emissions for each pollutant. Because of cyclical maintenance needs, most refineries shut down their process units during different years. Different process units emit different pollutants and this will make it impossible to choose one baseline year representing all pollutants at their highest *actual* emissions, much less to allow use up to permitted levels.

Response: Air District staff appreciates the comment regarding the potential for changes in cyclical maintenance needs over time at a refinery, and the effect that this may have on annual emissions of different pollutants. Staff did not intend for the Emission Reduction Plan requirements of the PRETR to be triggered based on variations in emissions of this nature. ***Staff is therefore considering allowing the selection of different baseline periods for different pollutants. This would also better harmonize the PRETR’s baseline provisions with the definition of “baseline actual emissions” used in federal NSR permitting. If this revision is made, Air District staff believes that the PRETR should also include the federal NSR requirement that baseline emissions be the average emission rate over a consecutive 24-month period.***

Track the quantity of air emission from each refinery in the future on an on-going basis (Comments 22 - 27)

22. Comment: Refinery emissions are tracked on an on-going basis and emissions of some parameters are monitored on a continuous basis. Each refinery is required to submit annual emissions inventories, Superfund Amendments and Reauthorization Act / Toxic Release Inventory reports, and greenhouse gas (GHG) emission reports along with numerous other reports that indicate routine and upset emissions. These existing reporting requirements encompass emissions to all media and provide a sufficient level of detail to ensure that all significant emissions of criteria pollutants, toxic air contaminants and greenhouse gases are presented.

Response: The fact that other emissions tracking and reporting programs exist should make it that much easier for refineries to meet similar requirements of the PRETR. The PRETR also would provide elements not provided by existing inventory reporting programs including: (1) direct comparisons of annual on-going emissions inventories with the

baseline inventory, (2) adjustments to the baseline inventory to maintain consistent methodologies needed to evaluate changes in actual emissions on an on-going basis, (3) objective evaluation of whether any observed on-going increases in refinery emissions exceed significance-based trigger-levels, (4) causal analysis of any observed increases in refinery emissions above trigger-levels, and (5) an Emission Reduction Plan that evaluates and identifies feasible measures that should be implemented to reduce emissions (back below baseline levels, if possible).

23. Comment: The proposed rule also states that as pollutants are added to the California EPA list of Toxic Air Contaminants (TACs), then baseline numbers would need to be developed for these new compounds. The process would be never ending and retrospective to a point that determining these emissions would be potentially impossible.

Response: Air District staff believes that TAC emissions inventories should be updated on an on-going basis to include any new substances that are added to the Reg. 2-5 list of TACs, which is based on toxic substances for which cancer potency values and/or Reference Exposure Levels (RELs) have been adopted by Cal/EPA's Office of Environmental Health Hazard Assessment (OEHHA) for the Air Toxics Hot Spots (ATHS) program. There are existing regulatory requirements that TAC emissions inventory updates include these new substances. In addition, this should not be burdensome as new TACs are rarely added by OEHHA to this list (OEHHA much more commonly issues updated health effect values for substances that have been previously listed in the ATHS program). The California Air Resources Board (CARB) also rarely adds new TACs to the State TAC list. Since the federal Hazardous Air Pollutants (HAPs) were designated by CARB as State TACs pursuant to Health and Safety Code Section 39657 in 1994, only three new State TACs have been identified: (1) inorganic lead (effective date 05/14/98), which is a component of the previously-listed TAC "lead compounds", (2) particulate matter from diesel engines (effective date 08/20/99), and (3) environmental tobacco smoke (effective date 02/08/07).

Air District staff also believes that adequate information will generally be available to update baseline emissions inventories to include emissions of any newly listed TACs. ***In the event, however, that inadequate information exists for "retroactively" estimating emissions of a particular newly listed TAC for the baseline period, Air District staff believes that it is appropriate to include a provision in the PRETR to exclude the new TAC from also being added to the baseline inventory and from determination of whether on-going emissions of the new TAC have increased in excess of trigger-levels.*** Note, however, that consideration of the new TAC would still apply under the ATHS program and Reg. 2-5.

24. Comment: The rule proposes to track emissions from numerous compounds that are not associated with petroleum refining and will require unnecessary regulatory record keeping and potentially create a monitoring program burden.

Response: If certain compounds are not emitted from petroleum refineries, they would not need to be tracked and reported under the PRETR. These details can be clarified in the PRETR's emissions inventory guidelines.

25. Comment: The proposed rule requires quantification of pollutants from associated processes that are not owned or operated by the refinery. It would be difficult and inappropriate to certify to the accuracy of data provided by operations that are not under the control of the refinery.

Response: The initial draft PRETR specifies that the refinery owner/operator is responsible for submittal of inventory reports required by the rule that cover the entire petroleum refinery, including any refinery processes or auxiliary facilities that may be separately owned or operated. Air District staff recommends that the refinery owner/operator include appropriate contractual terms with any co-located third-party entities that are engaged in refinery processes that result in air emissions to ensure that accurate inventory data are collected and provided to the refinery owner/operator. ***Air District staff will consider adding language to the PRETR to clarify that emissions that are under common control of the refinery and that that are associated with refinery operations need to be included in refinery emissions inventories.***

In the first post-workshop revision to the initial draft PRETR, Air District staff has proposed to extend the source coverage of the PRETR to include cargo carriers (other than motor vehicles). Inclusion of cargo carrier emissions is consistent with the PRETR's function of tracking emission changes associated with changing crude oil supplies. Emissions of cargo carriers have also for many years been included in the source coverage in Air District Reg. 2-2 (for determining required emission offsets), and tracking of these inventory data therefore already exists in many cases.

26. Comment: The proposed rule discusses preparing the inventory following the Air District's published guidelines. These guidelines should be available for public comment along with the proposed rule to ensure that the methodology is consistent with accepted practices and standards. Additionally, is there or are there plans to establish methodologies for every parameter to be included in the emissions tracking process?

Response: Air District staff agrees that the initial version of the emission inventory guidelines should be available for public comment along with the proposed rule prior to adoption. Staff believes that the guidelines don't need to specify "every parameter" used in determining emissions, but should describe the more important factors the Air District will apply in reviewing the inventories. ***Air District staff will consider revisions to the administrative requirements in which the inventory guidelines are specified to clarify that the guidelines will describe the factors that the Air District will apply in reviewing emissions inventory reports submitted under the PRETR. Air District staff will also consider having the emissions inventory guideline document be adopted in the PRETR (by reference). If this is done, language could also be added to the PRETR to indicate that the APCO may make subsequent minor changes to update or improve the guidelines as appropriate, whereas substantive changes would require a rule amendment.***

27. Comment: The proposed rule requires the first submittal by December 31, 2014. Is there an expectation that annual emissions from 2013 would be included in this submittal?

Response: The December 31, 2014 deadline is for submittal of the baseline emissions inventory, which represents emissions during a baseline period from 2004 to 2013. The first on-going emissions inventory would be for calendar year 2014 emissions, and this would be due by July 1, 2015.

28. Comment: *Should air emissions from a refinery increase above baseline levels (in an amount that exceeds specified trigger-levels), require that the cause of the emission increase be identified and a plan prepared and implemented to reduce emissions.* Refineries are currently subject to numerous reporting rules under state, local and federal programs in the event of a release of a toxic or potentially toxic substance above federal and state reporting levels. Investigations of these events are required by numerous rules, including the EPA's Risk Management Plans, California Emergency Management Agency's Accidental Release Prevention Program and Occupational Safety and Health Administration's process safety management (PSM), as well as each refinery's own corporate policies aimed at continuous improvement. Sites must implement measures to prevent reoccurrences or be subject to enforcement action.

Response: The fact that incidents are already subject to tracking, reporting, and prevention measures in other programs should make it that much easier to comply with similar requirements in the PRETR. Any duplication of effort that may result is not considered excessive given the PRETR's goal of providing the Air District and the public with a comprehensive inventory of refinery air emissions. The PRETR's required causal analysis of any observed significant increases in annual inventories is broad-based, and covers any contributing factors and not just incidents.

Establish fence-line and community air monitoring systems (Comments 29 – 30)

29. Comment: The workshop report expresses concern with ensuring that levels of toxic pollutants do not exceed published health effect criteria. The Air District's existing permitting process includes requirements for modeling to ensure that permitted levels of pollutants do not exceed levels that adversely impact public health.

Response: The permitting requirements for TACs in Air District Reg. 2-5 address emission increases from new/modified sources. The PRETR would address increases in TAC emissions that may occur from all sources at the refinery including grandfathered sources not subject to Reg. 2-5. The PRETR's modeling for TACs would act as a mechanism to update refinery HRAs under the AHS program.

30. Comment: Fence-line monitoring requirements in the proposed rule are not clear as to the compounds expected to be monitored. Does the rule anticipate that monitoring for greenhouse gases would be included? The methodology for monitoring fence-line greenhouse gas emissions is not currently technically feasible.

Response: The PRETR's required pollutant coverage for fence-line and community air monitoring systems will be addressed in the air monitoring guidelines which are being concurrently developed by Air District staff. Draft air monitoring guidelines will be available

for public review and comment well before the rule is considered for adoption. ***Air District staff will consider revisions to the administrative requirements in which the air monitoring guidelines are specified to clarify that the guidelines will describe the factors that the Air District will apply in reviewing air monitoring plans submitted under the PRETR.*** While there are technically feasible methods for monitoring the primary GHG emitted from refineries (i.e., CO₂) in the ambient air, Air District staff does not expect that the required air monitoring will cover CO₂, since this pollutant does not have direct health impacts at ambient levels and CO₂ emissions can be accurately calculated based on fuel combustion data.

31. Comment: The Workshop Report states that the rule is needed for four reasons: (1) establish existing baseline air emissions from each refinery (i.e., the quantities of various air pollutants that are emitted), (2) track the quantity of air emission from each refinery in the future on an on-going basis, (3) should air emissions from a refinery increase above baseline levels (in an amount that exceeds specified trigger-levels), require that the cause of the emission increase be identified and a plan prepared and implemented to reduce emissions, and (4) establish fence-line and community air monitoring systems. The proposed rule is unnecessary since existing regulations address each of the basic elements described by the Air District as being the reason for the proposed rule's development.

Response: The elements of the rule are not the reasons for it – these are described elsewhere in the Workshop Report (see, for example, the Regulatory Concept Paper, in Appendix B). The PRETR is needed because it would expand and improve existing emissions and air quality tracking requirements at refineries, and add requirements for the evaluation and implementation of additional feasible emission reduction measures should refinery emissions increase above trigger-levels.

32. Comment: The Air District has chosen to pursue this rulemaking in an orchestrated fashion rather than work collaboratively with the petroleum industry and other stakeholders to streamline emissions inventories and improve meaningful air monitoring within the Air District's existing regulations – which are already demonstrably improving the Bay Area's air quality.

Response: Air District staff has begun the process of working with the petroleum industry and other stakeholders to improve emissions inventories and air quality monitoring systems through the PRETR. The PRETR would also add a new regulatory requirement to mitigate increases in refinery emissions above trigger-levels through an Emissions Reduction Plan.

Comments from WSPA (David Farabee letter)

33. Comment: Nothing in state law gives a district the authority to specify the raw materials that are used by a refinery or other industrial facility when the facility otherwise complies with all applicable emission control requirements. Hence, any aspect of the proposed rule that would purport to restrict the crude slate used by a refinery would exceed the Air District's authority.

Response: The PRETR does not directly restrict crude slate used by a refinery, but rather focuses on air emissions. If emissions from a refinery increase above trigger-levels, the PRETR would require analysis of causal factors, which could include a change in crude slates. The PRETR's definition of "Air Emission Reduction Measures" includes "feedstock modifications" in the list of potential feasible measures that needs to be considered. To the extent that the use of a higher quality crude slate may cause emissions to decrease (e.g., from reduced energy needs), this may need to be considered in a refinery emission reduction audit. The cost of higher quality crudes, and any refinery modifications required to process them, could be evaluated relative to any emission reductions that may result from their use.

34. Comment: Reg. 12-15 is being developed to address a perceived problem that *may* occur. This is not a sound scientific basis for imposing a rule, nor is it within the Air District's legal mandate for controlling air pollution in the Bay Area. The Air District is specifically charged with "adopt[ing] and enforce[ing] rules and regulations to achieve and maintain the state and federal ambient air quality standards[.]" Health & Safety Code § 40001(a). But prior to adopting any rule or regulation to accomplish that goal, the Air District must "determine that there is a problem that the proposed rule or regulation will alleviate and that the rule or regulation will promote the attainment or maintenance of state or federal ambient air quality standards[.]" Health & Safety Code § 40001(c). The Air District acknowledges in its own FAQs that it has not made such a finding here. Indeed, Regulation 12-15 serves as a perfect example as to why Section 40001(c) is in place, which is to ensure that the Air District rules are well-targeted and will result in measurable improvements in air quality. Proposed Regulation 12-15, in contrast to Section 40001(c)'s mandate, will be burdensome for the Air District to administer and for the refineries to interpret and follow and will not result in any clear air quality benefits for Bay Area residents.

Response: Health & Safety Code § 40001(c) does not specify that an air district must wait to adopt a rule until after an air quality problem has already occurred. The problem that PRETR is alleviating is potential increases in emissions that may result from the use of lower quality crude slates (or potentially from other factors). Although the extent to which Bay Area refineries will make use of lower quality crude oil in the future is difficult to predict, Air District staff believes it is reasonable to expect that Bay Area refineries will follow the general industry-wide trend towards increased processing of lower quality crudes. Moreover, it is well established that refining lower quality crude requires more energy and therefore tends to cause more emissions. (See for example, *Effects of Possible Changes in Crude Oil Slate on the U.S. Refining Sector's CO₂ Emissions*, Final Report prepared for International Council on Clean Transportation by MathPro Inc., March 29, 2013). Other potential pathways for increased emissions also exist from processing lower quality crude slates.

35. Comment: Just as the Air District is bound to identify real and pressing air quality problems and to tailor its rules to address them, it is also required to do so in a cost-effective manner (calculated in dollars per ton of emissions reduced). See Health & Safety Code § 40920.6. But according to the Air District's own description of the rule, Regulation

12-15 will not do anything to reduce existing emissions from Bay Area refineries; rather, it will simply create a cap to maintain the status quo. Plainly, Regulation 12-15 is not properly targeted to realize real emissions benefits for the Bay Area. At the same time, it is imposing new and additional costs on both the Air District and Bay Area petroleum refiners. On its face, therefore, the proposed rule fails any cost-effectiveness criteria.

Moreover, with no anticipated emission reductions, it's not clear how the Air District can meet its statutory obligation to calculate the rule's cost-effectiveness. While the proposed rule does contemplate future emissions reductions through its "emission reduction plan" requirement that kicks in upon a significant increase in emissions over the baseline, the rule, as proposed, establishes no clear guidelines for these "plans". It merely forecasts the publication of informal guidance documents from the Air District on the subject. Without any specific emission control requirements in the rule, the Air District cannot evaluate whether the rule is technologically feasible, and, therefore, cannot satisfy its obligations under Section 40920.6.

Response: Since the PRETR is neither a BARCT rule nor an "every feasible measure" rule that would be subject to Health & Safety Code § 40920.6, the requirement of that section to conduct a cost-benefit analysis does not apply. Nevertheless, the Air District believes a cost-effectiveness analysis is important information for its Board of Directors, the public, and the regulated community, and intends to conduct such an analysis for this rule. The PRETR presents certain challenges in this regard given that, as alluded to by the commenter, any specific emission control requirements will be decided upon in Emission Reduction Plans. In this respect, the PRETR is similar to the New Source Review program, in which control requirements are made case-by-case based on a generic regulatory definition. This approach therefore has ample precedent in implementation of the federal and California clean air statutes. ***Air District staff will consider adding more specific cost-effectiveness criteria to the PRETR, as this may be valuable in clarifying how the economic feasibility of potential emission reduction measures should be evaluated in an ERP.***

As already noted, the PRETR does not set a not-to-be-exceeded "cap" on emissions. If emissions increase above trigger levels at a refinery, the PRETR will require review and implementation of feasible measure to bring those emissions back down to prior levels, if possible. The intent to reduce emissions is therefore inherent in the design and intent of the rule. At a refinery where emissions do not rise above trigger levels, the cost of compliance will be primarily that of determining a baseline and tracking emissions. These costs can be estimated with a high degree of accuracy, and should be fairly moderate. Costs of implementing all feasible measures may of course be higher, but will be correlated to the benefit of actually reducing emissions.

36. Comment: The proposed rule doesn't account for emissions increases from new projects; particularly those that trigger emission offset requirements under Regulation 2, Rule 2 (in many instances, emission offsets were provided, at significant cost). The proposed rule would be inconsistent with new project permitting and offset requirements under Air District rules if any refinery that implemented a permitted project that increased emissions by more than the proposed trigger-levels would then have to reduce emissions

back to the baseline within two years, even if emission offsets had been provided to mitigate the emission increase. For this reason, the proposed rule may also conflict with the statutory requirements for permit programs specified in the Health and Safety Code, and with the statutory and regulatory requirements for permit programs specified in the Clean Air Act and EPA regulations. In order to avoid these issues, the rule must specifically address how it interacts with the Air District's existing permitting rules in Regulation 2.

Response: The emission reduction requirements of the PRETR are triggered based on increases in actual emissions, and do not apply at the time of permitting of new/modified sources. Once baseline emissions inventories are established, a facility should be able to reasonably predict whether the emissions from proposed projects would trigger the PRETR emission reduction requirements. In many cases, mitigation required for proposed projects under NSR and CEQA would be expected to keep emissions at a refinery from increasing above trigger-levels, or to satisfy the PRETR requirements for implementation of feasible measures (although there may be a need to update the information on feasible measures based on improvements in emission control technology that may have occurred since the permitting process was completed).

The PRETR does not cap emissions, nor does it require that emissions be reduced back to the baseline level within two years as the commenter suggests (the two-year Emission Reduction Plan provision in the PRETR is an option and not a requirement). The PRETR requires the evaluation and implementation of feasible measures to reduce emissions of the pollutant that has been increased above trigger-levels.

Air District staff does not agree with the commenter's suggestion that the PRETR conflicts with statutory requirements for permit programs. The Air District has the authority to require that additional feasible emission reduction measures be used to reduce air emissions at stationary sources, including those sources that have existing permits that don't specify the use of these measures.

Air District staff agrees that it may be appropriate to consider the use of certain ERCs in the PRETR as mitigation for emission increases at a refinery, but only to the extent that: (1) onsite mitigation measures are first considered and implemented, if feasible, and (2) refinery emission increases would not have significant health impacts on local communities. In this manner, valid ERCs could potentially be used to mitigate increases of GHGs and regionally-based pollutants such as ozone precursors and PM precursors (provided that significant localized increases in TACs, NO₂, and SO₂ did not occur). Air District staff will consider how this concept might be incorporated into the PRETR.

37. Comment: The proposed rule is inconsistent with existing permits. Many refinery permits have throughput or mass emission limits that are higher than actual current throughput or emissions, and that are also higher than the highest throughput and/or emissions that occurred during the years that may be used to establish an emissions baseline for purposes of the proposed rule. Since NSR and PSD permit limits are often established to provide operational flexibility in terms of throughput and fired duty, it is very

possible that these existing permit limits are higher than the throughput or emissions that occurred in recent years, i.e., the years that the Air District proposes to use to set the facility-wide “baselines” in Regulation 12- 15. By capping emissions at the baseline, Regulation 12-15 essentially de-rates the refineries by establishing an arbitrary site-wide limit well below emissions levels that were permitted and approved by the Air District. By requiring that refinery emissions remain within the baseline levels identified in accordance with the draft rule, the proposed rule is inconsistent with existing permit rules and permits that allow higher emissions rates. These proposed restrictions are also inconsistent with California’s “vested rights doctrine”, where a permittee’s substantial use of a government-issued development permit causes the permit to become vested (i.e., the permitting agency cannot alter or rescind the permit). See, e.g., *Avco Community Developers v. South Coast Regional Commission*, 17 Cal. 3d 785, 791 (1976). As proposed, Regulation 12-15’s baseline emission cap would effectively rescind the refineries’ current operating limits in violation of their vested rights in those permits.

Response: See response to Comment 8. The PRETR does not cap emissions to baseline levels. Air District staff disagrees with the commenters suggestion that permits provide facilities with a vested right to their full potential-to-emit, which for some regulated air pollutants is much greater than actual emissions, without the Air District being able to require the adoption of additional feasible emission reduction measures (e.g., to attain or maintain AAQS, or reduce exposures to TACs). California “vested rights doctrine” cases such as that cited by the commenter generally have involved situations where a business is effectively shut down despite having a permit to operate. The Air District believes these contrast sharply with the situation where an air pollution control agency adopts a rule that imposes additional restrictions on air emissions, which is the case in virtually every instance where a new rule becomes applicable to highly-regulated facilities such as refineries. The vested rights doctrine does not prevent air districts from imposing stricter controls over time so as to make progress towards statutory air quality goals. From a broad perspective, the PRETR is no different than other air quality rules in this regard, and so does not run afoul of the vested rights doctrine.

38. Comment: Emissions inventories and air monitoring are key elements of the rule, as they provide the basis for determining whether a refinery has an emission increase that exceeds the rule’s proposed trigger-levels, and specify how a refinery must develop and deploy a local monitoring system. The refineries need to see these provisions to understand exactly what Regulation 12-15 would entail. The proposed rule would delegate to Air District staff the authority and obligation to develop and adopt guidelines for refinery emissions inventories and air monitoring plans. However, California law assigns rulemaking authority to the Air District Board, not to the staff. Given the importance of these provisions to the rule, their adoption as guidance by staff rather than as part of the rule would likely constitute an unlawful rulemaking.

Response: The Air District intends on developing the emissions inventory and air monitoring guidelines in a parallel process with the development of the PRETR. Draft air monitoring guidelines will be available for public review and comment well before the rule is considered for adoption. Guidance documents developed pursuant to the PRETR will not have the force and effect of law. Rather, they will explain Air District staff’s

expectations as to how emission inventory and air monitoring plans will be reviewed for approval pursuant to the criteria set forth in the rule itself. The guidance documents should facilitate this process, but they will not stand alone as legal requirements. ***Air District staff will consider revisions to the administrative requirements in which the inventory guidelines are specified to clarify that the guidelines will describe the factors that the Air District will apply in reviewing emissions inventory reports submitted under the PRETR.***

Air District staff will also consider having these guideline documents be adopted by reference in the PRETR. If this is done, language could also be added to the PRETR to indicate that the APCO may make subsequent minor changes to update or improve the guidelines as appropriate, whereas substantive changes would require a rule amendment.

39. Comment: As structured, the proposed rule would provide that any increase of PM_{2.5}, TACs and CO would exceed the trigger-level that would require preparation and implementation of an emission reduction plan, unless the refinery prepared a modeling demonstration meeting specified requirements. However, the modeling demonstration would have to include background levels of pollution that the refinery is not responsible for. As a result, the background pollution levels could cause the refinery to be required to reduce emissions through an emission reduction plan even if the refinery emissions do not cause a health risk. We believe that this approach is arbitrary and capricious, because of its over-reliance on background levels of pollution rather than assessing the impacts of any actual emission increases from the refinery.

Response: The PRETR's approach to TACs is somewhat different than criteria pollutants, in that the intent is to draw a line at baseline levels unless there is justification for an increase (by contrast, criteria pollutant increases up to trigger-level amounts are automatically allowed). The Air District believes the more stringent approach to TACs is justifiable given the greater potential impacts on nearby communities, and moreover believes it is reasonable to require that the justification for allowing any increase take into account the existing risk level in the community, including risks created by other air pollution sources. Far from being arbitrary, the Air District believes this approach allows a more realistic determination of whether an increase in TACs should be subject to the Emissions Reduction Plan requirements of the rule.

The basis for this approach has been explained in detail in an Air District support document referenced in the Workshop Report. There are other regulatory precedents for the use of this type of approach. For example, the PSD program requires a facility to adopt additional emission reduction measures if a modeling analysis indicates that ambient pollutant concentrations from a project and all other sources would cause or contribute to a violation of an NAAQS. In addition, CEQA requires that a project include feasible mitigation measures if the project's impacts would be cumulatively considerable.

40. Comment: The proposed rule should be internally consistent. For example, the proposed rule would exclude certain accidental release emissions from a refinery's baseline, but would include those same emissions in the refinery's ongoing annual

emissions inventory. Accidental release emissions should either be considered in the rule or not, but should not count for one purpose and not for another. We believe that excluding accidental release emissions from a refinery's baseline but requiring that those emissions be considered in the annual emissions inventory is arbitrary and capricious.

Response: It is standard practice (e.g., in NSR programs) to adjust baseline inventories to exclude emissions that exceeded regulatory or permitted limits. This is done to disallow a facility from receiving future "credit" for excessive emissions occurring during the baseline period. The PRETR would do this, and also exclude emissions resulting from accidents required to be reported in a Risk Management Plan under 40 CFR 68.168. These are incidents that resulted in deaths, injuries, or significant property damage on site, or known offsite deaths, injuries, evacuations, sheltering in place, property damage, or environmental damage. These major incidents involve excessive emissions, whether or not specific regulatory or permitted limits were exceeded, and Air District staff believes that they should be excluded from baseline inventories. The PRETR is intended to provide comprehensive air emissions tracking information from refineries – to exclude air emissions from incidents from on-going emissions inventories would not serve this purpose. Excluding accidental releases from baseline levels, while including them in ongoing inventories, is not an inconsistency, but rather a policy choice that creates a disincentive to future accidental releases.

Comments from Valero

41. Comment: Though this regulation is entitled "Petroleum Refining Emissions Tracking Rule", it is, in actuality, a means to cap refinery emissions below levels legally permitted through the Air District's existing regulatory process.

Response: Air District staff disagrees with the commenter's statement. See responses to Comments 8 and 20.

42. Comment: Valero strongly urges the BAAQMD to significantly restructure and re-focus their regulatory development efforts to strictly managing conditions of "upset" emissions from refining operations and abandon the proposed overly-broad, redundant, and highly inefficient regulatory action presented in the workshop in March 2013.

Response: Air District staff will continue to consider the need for new regulations that focus specifically on "upset" emissions from refineries. Although the PRETR is intended to broadly address air emissions from refineries, its primary focus is not on managing or preventing "upset" emissions. Certain existing Air District rules address "upset" emissions at refineries including Reg. 8-28, Reg. 9-2, and Reg. 12-12. Moreover, regulatory oversight of accidental releases is covered by existing process safety management programs and accidental release prevention programs (implemented by Cal/OSHA and local Administering Agencies, respectively). The State has recently added additional refinery enforcement inspectors to increase the effectiveness of their process safety management program.

The rule creates a cap on refinery emissions that circumvents the existing regulatory process. (Comments 43 – 45).

43. Comment: The draft rule does not explain or clarify how permitted emissions that may go above the trigger-levels established in the rule would be compared against the baseline, implying that these types of increases would never be acceptable. This would potentially prohibit expansions and production increases that may be necessary to meet product demands.

Response: The PRETR would not prohibit expansions or production increases. Rather, if these actions result in increases in annual air emissions above trigger-levels, the PRETR would require that additional feasible emission reduction measures be evaluated and implemented to reduce emissions. See also the responses to Comments 20, 36, and 37.

44. Comment: Since trigger-levels listed in the draft rule for POC, NO_x, and SO₂ are more restrictive than NSR/PSD permitting threshold levels, the regulatory mechanisms that already exist to evaluate and permit emission increases become moot. The Bay Area is a marginal nonattainment area for ozone, and its design value for the current 24-hour PM_{2.5} standard is 36 µg/m³, just above the 35 µg/m³ standard. The Bay Area is in attainment for SO₂. Based on these classifications, the federal significance emission rates for POC, NO_x, and SO₂ would be 40 TPY. For comparison, the trigger-levels for these same pollutants under this rule are 10 TPY. The BAAQMD has not demonstrated why the Bay Area needs such low trigger-levels compared to other areas of the country with similar ambient pollutant concentrations.

Response: Air District staff disagrees with the commenter's suggestion that the POC, NO_x, and SO₂ trigger-levels in the draft PRETR, which are all 10 TPY, are more restrictive for new/modified sources than those in the Air District's pre-construction permit rule. Under Reg. 2-2, BACT is triggered for any new/modified source with a potential-to-emit 10 pounds per highest day (less than 2 TPY on an annual basis). In addition, offsets are required at refineries for any increases of POC, NO_x, and SO₂ (note that, for SO₂, the offsets don't have to be provided until the facility's cumulative increase exceeds 1 TPY). If the commenter is again suggesting that the PRETR's trigger-levels are an emissions cap, this is incorrect.

Air District staff believes that the 40 TPY federal significance levels that the commenter mentions are not stringent enough for the Bay Area. More stringent air quality requirements exist in California than in many other areas of the country, including those established by the California Clean Air Act. These requirements consider not just the air quality of the region where sources are located, but also the air quality in downwind regions to which pollutants from these sources are transported. The PRETR's 10 TPY trigger-levels are based on the California Clean Air Act's transport mitigation requirement to achieve no net increase in emissions of nonattainment pollutants or their precursors from all new or modified stationary sources which emit, or have the potential to emit, 10 tons or more per year.

45. Comment: The BAAQMD notes that GHGs are not directly associated with local or regional health risks which the rule is supposed to address. Therefore, we see no reason that GHGs should be included in such a rule. Finally the GHG trigger-level is set to only 10 TPY. This is equivalent to an increase in firing rate of only 0.02 MM Btu per hour and is 7500 times more stringent than the federal GHG tailoring rule. Once permitting is triggered under this rule, the emissions reduction plan will require that every source in the refinery be considered for emission reductions. This amounts to a refinery wide “Best Available Control Technology” (BACT) requirement and is significantly more restrictive than current state and federal permitting regulations.

Response: GHGs were included in the PRETR due to their contribution to climate change, which poses a number of threats to air quality and public health. For example, higher temperatures and heat waves increase ground level ozone concentrations (and also increase the demand for electricity thereby generating more air pollutants). In addition, climate change may increase the occurrence and severity of wildfires in and around the Bay Area, resulting in increased PM_{2.5} exposure and associated negative health impacts. The Air District’s Board of Directors has adopted an aggressive GHG emission reduction goal for the Bay Area due to these concerns.

Air District staff agrees with the commenter that a 10 TPY trigger-level for GHG is too low. This was a typographical error in the draft PRETR, which has since been corrected to 10,000 metric TPY. The basis for the 10,000 metric TPY trigger-level is provided in the Air District’s *Revised Draft Options and Justification Report: California Environmental Quality Act Thresholds of Significance, October 2009* (see BAAQMD website). Air District staff acknowledges that the 10,000 metric TPY GHG trigger-level represents a very small percentage of each Bay Area refinery’s overall GHG emissions (i.e., in some cases, less than 0.25%). This trigger-level may even be less than the uncertainty in GHG emissions inventory monitoring and estimation methods for an entire refinery. ***For this reason, Air District staff will consider if an alternative GHG trigger-level may be more appropriate for the PRETR.***

The commenter indicates that “once permitting is triggered under this rule, the emissions reduction plan will require that every source at the refinery be considered for emission reductions.” Air District staff would like to clarify that, while the PRETR may trigger a requirement for the preparation of an Emission Reduction Plan (ERP), it does not trigger “permitting”. The ERP provides an option for the identification of air emission reduction measures that are sufficient to reduce emissions below trigger-levels within a two year period (this could be from a single, or multiple, sources). If this is not done, then a refinery-wide emission reduction audit must be completed to identify all feasible measures to reduce emissions of the pollutant(s) that has increased above trigger-levels. Air District staff disagrees with the commenter’s statement that this amounts to a BACT requirement. BACT (in California) is a level of control that is required for new/modified sources and that may be based on the most effective control device or technique which has been successfully utilized for a particular type of source, without consideration of costs or other factors. The PRETR would require that ERP’s contain feasible air emission reduction measures, which are capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and

technological factors. These are the same type of factors that Air District staff use to evaluate feasible “retrofit” control measures for Clean Air Plans. ***Air District staff will consider adding more specific cost-effectiveness criteria to the PRETR, as this may be valuable in clarifying how the economic feasibility of potential emission reduction measures should be evaluated in an ERP.***

46. Comment: *Formation of an Additional Refinery Air Emissions Baseline is Unnecessary.* The BAAQMD has failed to demonstrate why a requirement to calculate a baseline for tracking refinery air emissions is necessary in light of existing state and federal obligations. Refineries currently prepare and submit emissions inventories. Baseline emissions are documented for permitting purposes whenever modifications are made. Agencies and the public have access to the permit applications and emissions inventories. The requirement to calculate an additional baseline should be deleted.

Response: Air District staff believes that it is important that baseline and on-going emissions inventories have a common methodological basis, so that the difference between the two represents changes in actual emissions. Emissions inventory methodologies are updated and improved over time, and so the use of historically available emissions inventories (or baseline emissions documented for permit modifications, which only cover certain sources) as baseline inventories for the PRETR, without further review, may not achieve this desired outcome. Air District staff believes that the information that the commenter identifies will assist the refineries in preparing appropriate baseline inventories under the PRETR, however.

The BAAQMD has failed to Adequately Demonstrate the Need or Statutory Basis for this Rule. (Comments 47 – 49)

47. Comment: The BAAQMD discusses the “possibilities” of the impacts of processing “lower quality crude” without citing solid evidence. Bay Area air quality has improved despite increases in both refinery fuel production and a trend towards heavy feed stocks.

Response: See responses to Comments 4, 5, 6, and 34.

48. Comment: We disagree with the assertion that “high quality crudes are less available”. New oilfield discoveries such as Bakken and Eagle Ford fields are creating an abundance of lighter crudes such that the U.S. is becoming less dependent on foreign crudes, further discrediting the position that refiners will use increasingly heavier crudes from abroad as the only available feedstock.

Response: The commenter should note that the statements made by Air District staff regarding the decline in crude oil quality were made with respect to crude oil imports, rather than domestic production. The U.S. Energy Information Administration has indicated that the observed trend in decreasing quality of U.S. crude oil imports will likely continue for many years. While foreign crude oil imports are not the “only available feedstock” to Bay Area refineries, they have become the most extensively used feed stocks by California refineries as crude oil supplies from California and Alaska have gradually declined.

Domestic crude oil production has increased greatly in recent years because of increased use of horizontal drilling and hydraulic fracturing in shale formations, coupled with elevated prices for crude oil. Most of this domestic “shale oil” is light and sweet. It is unclear, however, how much of this shale oil, most of which is currently from mid-U.S. states, will be delivered to the Bay Area for refining. According to the California Energy Commission, in 2011 50% of the crude oil refined in California was from foreign imports, 38% was from in-state production (mostly from Kern County), and 12% was from Alaska. It therefore appears that recent usage of light domestic shale oil at Bay Area refineries is negligible. California’s Low Carbon Fuel Standard (LCFS) will also provide an increasing regulatory disincentive to refine shale oils (which generally have relatively high production-related carbon intensities).

49. Comment: The BAAQMD has not demonstrated the proper statutory authority to form a sound legal basis on which to place this rulemaking effort. Given the cited redundancy and lack of demonstrative environmental goals and objectives, we strongly suggest that the BAAQMD consider the risks of proceeding with such a proposal when statute does not support such a program.

Response: Air District staff believes that the PRTER is consistent with the Air District’s statutory authorities. See responses to Comments 33 – 40.

The rule will significantly impact operational flexibility that has already been addressed through existing permitting processes. (Comments 50 – 52)

50. Comment: The proposed rule contains provisions for establishing a facility-wide emissions baseline that effectively overrules existing Title V permits and PTOs. These permits contain operating limits that are based on thorough NSR and PSD permitting practices. The baseline approach to capping emissions de-rates the refineries by establishing an arbitrary site-wide limit well below currently permitted levels.

Response: See response to Comment 8.

51. Comment: Unlike the current permitting rules, this rule limits flexibility needed for day to day operations. Previously, a refinery could operate up to its permit allowable emission rates as long as equipment was modified to operate at such rates. These emission rates were based on acceptable impacts and reasonable controls as established through formal, long established permitting procedures. The current proposal essentially invalidates the established current emission allowables and replaces them with an arbitrary baseline.

Response: Unlike some NSR permit conditions and other regulatory requirements, the PRETR has no provisions that track or limit daily operations or emissions. Action trigger-levels in the PRETR are based solely on annual emissions inventories, allowing facilities considerable day-to-day flexibility to manage their emissions to avoid a significant increase in annual emissions from baseline levels. If this is not done, and an increase in annual emissions occurs above trigger-levels, the refinery would need to evaluate and implement additional feasible emission reduction measures to reduce emissions. If the refinery is

found to be already implementing all feasible measures to reduce emissions, no further action would be required except for updating the analysis on an annual basis to see if additional measures become feasible based on technological improvements (the concept is similar to what applies for minimizing flare emissions under the FMP update requirements of Air District Reg.12-12).

52. Comment: The proposal ignores modifications and is automatically triggered by day-to-day emission changes, making it possible for a refinery to trigger requirements under this rule annually because the trigger-levels are so low. Since an entire refinery typically has allowable emissions of several hundred tons for a given pollutant, it is possible that a small percentage increase in emissions may trigger permitting. We contend that currently permitted, day-to-day operational changes and the resulting changes in emissions should not result, under any circumstances, in an additional permit review when such review has already occurred under federal law.

Response: As was stated in the response to Comment 51, the PRETR does not track or limit daily operations or emissions. On the one hand, it is true that most of the proposed trigger-levels represent relatively small percentages of annual refinery emissions. For example, the 10 TPY trigger-levels (that are based on regional air quality impacts) represent roughly 1 to 10% of current refinery inventories. As is noted in the response to Comment 45, the proposed 10,000 metric TPY trigger-level for GHG may be less than the uncertainty in GHG emissions inventory monitoring and estimation methods for an entire refinery. ***Air District staff will therefore consider if an alternative GHG trigger-level may be more appropriate for the PRETR.*** On the other hand, the PRETR allows refineries to use a 10-year look-back period to select baseline emissions to address year-to-year variations in emissions that occur due to economic cycles and other factors.

With respect to the commenter's assertion that currently permitted, day-to-day operational changes and the resulting changes in emissions should not result, under any circumstances, in an additional permit review when such review has already occurred under federal law, Air District staff notes: (1) the PRTER does not track or limit daily emissions, (2) State law permit review requirements are often more stringent than federal law requirements, (3) the PRETR requires Emission Reduction Plans to address significant increases in emissions above baseline levels, but does not require "permit reviews", (4) a facility does not have a vested right to their full "permit-potential" without the ability for the Air District to require the use of additional feasible emission reduction measures (e.g., to attain or maintain AAQS, or reduce public exposures to TACs).

There is no justification or specifics for a community monitoring system. (Comments 53 – 54).

53. Comment: The workshop report and draft rule do not specifically list a justification for a community air monitoring system other than express concern with ensuring that levels of toxic pollutants do not exceed published health effect criteria. The existing permitting process includes requirements for modeling to ensure that permitted levels of pollutants do not exceed levels that adversely impact public health. Refineries are currently subject to numerous reporting rules under state, local and federal programs in the event of a toxic or

potentially toxic substance above federal and state reporting levels. Investigation of these events is required by numerous federal, state, and local rules. Existing regulations require sites to implement measures to prevent reoccurrences or be subject to enforcement action for repeat issues.

Response: Additional information is needed to better understand public exposures to air pollutants in communities located in close proximity to refineries. Refineries are a major source of air emissions in these communities, and in addition to chronic public exposures resulting from a refinery's routine emissions, air emissions releases associated with upsets or other incidents may result in acute public health impacts. Both modeling (using emissions inventories) and ambient air monitoring are needed for robust evaluations of public exposures to air pollutants. Air District permit reviews include modeling evaluations for certain emission increases of criteria pollutants and TACs from new/modified sources. The ATHS program uses models to estimate public exposures to routinely emitted TACs from stationary sources at entire refineries (the PRETR's modeling for TACs would act as a mechanism to update refinery HRAs under the ATHS program should TAC emissions increase above trigger-levels). Ambient air monitoring, which involves direct measurements of pollutant concentrations in the air, provides more definitive results than modeling (but generally provides more limited spatial and temporal data). Monitoring also provides information regarding air pollutant concentrations resulting from all emission sources, whereas models provide concentration estimates only for the sources included in the emissions inventory being used. Finally, monitoring data can be extremely valuable in making intra-site comparisons of pollutant exposures and resulting health risks (e.g., data from sites in close proximity to refineries could be compared to data from sites at more distant locations), and in examining trends in air quality over time.

Air District staff is aware of the existing programs for the reporting and prevention of incidents that apply to refineries. In fact, the PRETR was designed to leverage the information generated by these existing programs. Because the PRETR is intended to be a comprehensive rule covering all refinery air emissions, it does not follow that it would exclude incident emissions (in either emissions or air quality tracking provisions). In terms of incident prevention, this is covered by existing process safety management and accidental release prevention programs, and is not the primary focus of the PRETR.

54. Comment: Fence-line monitoring requirements in the proposed rule are not clear as to the compounds expected to be monitored, the type of equipment necessary, specific QA/QC requirements, etc. A methodology for fence-line monitoring GHG emissions is currently not technically feasible.

Response: The Air District will not require monitoring that is technically infeasible. See also the response to Comment 30.

The rule creates competitive disadvantages and disincentives for refinery investments (Comments 55 – 56).

55. Comment: The proposed rule provides refineries outside of California a competitive advantage since they would not be required to comply with the overly burdensome

provisions of the rule. The baseline monitoring, reporting, and record keeping requirements will require additional personnel to comply with the requirements as written. Valero estimates this could be 2 – 3 additional staff positions.

Response: Air District staff intends for the PRETRs emissions inventory tracking requirements to be integrated with existing Air District inventory updating efforts, but acknowledges that additional staff resources will be needed to comply with this and other aspects of the PRETR. Air District staff believes that implementation of the PRETR will not be burdensome to the refineries relative to the benefits derived from the rule. It is difficult for Air District staff to believe that the additional staff resources that the commenter estimates will be required to comply with the PRETR would give refineries outside of the Bay Area a significant competitive advantage. Nonetheless, Air District staff will have a contractor complete a socioeconomic impact analysis for the proposed rule prior to its consideration of adoption.

56. Comment: Refineries will have no incentive to invest in their facilities since any increase in emissions above trigger-levels will result in the requirement for an emission reduction plan and additional controls to offset all emission increases, even though the refinery has permitted emission limits above baseline plus the trigger-level. Given a choice, the refineries with out of state facilities may elect to invest outside of California as a better strategic option.

Response: Bay Area refineries are, by a considerable margin, the largest sources of air emissions that the Air District regulates. Great strides have been made in reducing emissions from refineries over the past 50 years through the use of feasible, cost-effective, emission reduction measures. The Emission Reduction Plans that may be required under the PRETR (should emissions increase significantly above trigger-levels) would be required to contain only feasible, cost-effective, emission reduction measures. Air District staff believes that it is not unreasonable for Bay Area refineries to employ feasible, cost-effective, controls at their facilities to minimize health risks to local communities, and to improve and protect regional air quality and the climate.

The BAAQMD is severely underestimating the complexity and burden on agency and refinery staff (Comments 57 - 58).

57. Comment: Based on the definition of owner/operator in the draft regulation, emissions from sources not controlled or operated by the refinery would need to be tracked. This seems inappropriate at best, and creates an unnecessary record keeping and monitoring burden. It would be difficult and inappropriate to certify to the accuracy of data provided by operations that are not under the control of the refinery.

Response: See response to Comment 25.

58. Comment: The proposed rule states that as pollutants are added to the Cal/EPA list of TACs, then baseline numbers would need to be developed for these new compounds. The process would be “never-ending” and retrospective to a point that determining these emissions would be potentially impossible. In effect, there are no de minimus emission

sources or emission levels, making it necessary to track every molecule generated by the refinery.

Response: See response to Comments 18 and 23. The commenter's suggestion that the PRETR would make it necessary "to track every molecule generated by the refinery" is a gross exaggeration.

59. Comment: If the BAAQMD decides to proceed with adopting and implementing this rule, Valero maintains the agency has created duplicative permitting regulations and programs. If adoption occurs, the BAAQMD should evaluate the necessity and practicality of maintaining and administering multiple permitting programs and regulations, and should move to redact unnecessary regulations.

Response: The requirements of the PRETR will supplement other existing regulations and programs. Air District staff intends for the PRETR's emissions inventory tracking requirements to be integrated with existing inventory updating efforts, so that duplicate inventory reporting is not required. Requirements for Emission Reduction Plans and air monitoring systems will supplement, and not duplicate, existing requirements. While it is true that some of the information on incidents that is required to be reported in an Emission Reduction Plan may also have to be reported in other existing regulatory programs, Air District staff does not consider this degree of duplication to be excessive, given the goals of the PRETR as a comprehensive tracking mechanism for refinery air emissions.

Comments from Contra County Health Services

60. Comment: The proposed rule is a step forward in achieving the goals of the Contra Costa Health Services (CCHS) and the Air District. Notably, the rule seeks to assure that refinery emissions do not increase in the future, noting that the lower quality crude oils may cause some increases in emissions. CCHS supports limiting refinery emission increases. Any increase will have additional impacts on public health, notably in areas surrounding the refineries.

Response: Air District staff agrees with the commenter's statements in general terms, but also notes that there are many different regulated air pollutants with widely different relative effects on health. Many pollutants are believed to have threshold exposure levels below which adverse effects are unlikely to occur, and even "non-threshold" pollutants (e.g., carcinogenic agents) may present minimal health risks at low exposure levels. The PRETR therefore would allow small emission increases above baseline levels before emission reduction actions would be required. Emission increases below these trigger-levels should have insignificant health impacts.

61. Comment: The proposed rule would result in additional air monitoring, including in the communities surrounding the refinery. The information gained by the additional monitoring will be very useful in measuring public exposures to air pollutants emitted routinely and as a result of incidents. The addition of real-time monitoring will provide more information to assist in protecting the public during an incident.

Response: Air District staff agrees with the commenter.

62. Comment: Contra Costa is home of four major refineries in the Bay Area, and thus our communities are significantly impacted by this rule. CCHS strongly supports the intent of the proposed new rule, and is committed to working with interested parties in its development.

Response: Air District staff notes the comment, and appreciates the commitment to participate in the rule development effort.

Comments from Floyd Smith

63. Comment: I applaud the Air District's current initiative to track and regulate refinery emissions.

Response: Air District staff notes the comment, and appreciates the commenter's interest in the rule development effort.

64. Comment: Fracked oil, fracked natural gas, and tar sands dilbit all contain fracking chemicals or diluents. There are many known toxins and known carcinogens among the materials used. In addition, the specific contents of fracking fluids and diluents are a secret. They are held to be "trade secrets" by the industry, though this is probably more about keeping secrets from regulators and the public than from other companies. I also note that fracked natural gas is accompanied by large leaks of methane and tar sands dilbit is notoriously dirty, from greenhouse-gas emitting steam production in the tar sands to petcock production from refineries.

Response: Hydraulic fracturing (or "fracking") is a well completion technology that results in the creation of fractures in rocks that allows oil and gas in the source rock to move more freely through the rock into the well. It is now used worldwide in tens of thousands of oil and natural gas wells, including those used in "tight" formations (e.g., shale and sandstone). Chemical additives, which make up less than one percent of the fluid used in a typical hydraulic fracturing operation, serve various functions and may include: (1) gelling materials and/or foaming agents used to increase the viscosity of the water, (2) surfactants, a soap-like material designed to enhance water recovery, (3) friction reducers, (4) biocides to prevent microorganism growth, (5) oxygen scavengers and other stabilizers to prevent corrosion of metal pipes, and (6) acids to remove drilling mud damage. Oil from wells in which hydraulic fracturing is used must be cleaned of contaminants and/or be "upgraded" to render it suitable for acceptance at refineries. Diluted bitumen (or "dilbit") is a type of "crude oil that consists of the bitumen extracted from tar sands deposits, which is then diluted or thinned with a lighter hydrocarbon liquid to reduce viscosity and density for transportation. The diluent used is typically conventional light crude oil or natural gas condensates.

Air District staff is aware of a number of air quality concerns that have been expressed regarding the production, transportation, and refining of "fracked" oil and gas, and tar sands dilbit. It is partially because of these concerns that the Air District has proposed the

PRETR, which would expand refinery air emissions and air quality tracking. Air District staff will also continue to evaluate additional information on unconventional oil as it becomes available. This includes information from the South Coast AQMD's recently adopted Rule 1148.2: Notification and Reporting Requirements for Oil and Gas Wells and Chemical Suppliers, and the recently adopted SB 4 (Pavley), which requires a comprehensive study of oil and gas well stimulation treatments including hydraulic fracturing, and the development of regulations and public notification and disclosure.

65. Comment: None of this is consistent with the Air District's value of Leadership - with improving, rather than degrading, air quality; with achieving healthy air; nor with protecting the climate. As such, I would like the Air District to take a pro-active stance. The climate cannot withstand methane leaks and emissions from tar sands bitumen processing. In addition, no one will want known toxins, known carcinogens, and additional unknown chemicals introduced into our air here in the Bay Area. I am requesting that the Air District take a pro-active, not a reactive, stance. Tracking and regulating emissions isn't nearly enough. I, and I imagine you, don't want fracked oil, fracked natural gas, and tar sands dilbit to be introduced into the Bay Area at all. We don't want them because of the damage they cause to the climate before they ever get here, and we don't want them because of the known, plus the unknowable, damage they will do to our air quality if they are burned in local refineries. I would like the Air District to take steps to keep fracked oil, fracked natural gas, and tar sands dilbit from being refined in the Bay Area, to the benefit of Bay Area residents and people all over the world.

Response: Air District staff has designed the PRETR consistent with the Air District's legal authority to evaluate and regulate air emissions from facilities located within the Bay Area. As such, the PRETR focuses on directly tracking air emissions and air quality from the refineries (e.g., as opposed to the commenter's suggestion to ban the use of certain refinery feed stocks based in part on environmental issues associated with the production of these feed stocks which occurs outside of our jurisdiction).

66. Comment: I agree that the Air District should also take steps to track and regulate emissions after the fact. I also believe that this inherently re-active approach, if strictly applied and backed by significant penalties, can help achieve the pro-active goals I have set out in this note, and which I believe we share.

Response: Air District staff notes the comment, and agrees with the commenter's statement that the approach that the Air District has proposed in the PRETR can help achieve air quality goals.

Comments from the Environmental/Labor Collaborative

67. Comment: The Air District should provide illustrative scenarios to explain to the public how "trigger levels" would work to identify a significant emissions increase.

Response: Some of the trigger-levels in the proposed PRETR are simply based on whether a refinery's on-going annual emissions exceed baseline levels by more than specified quantities (e.g., an emissions increase of precursor organic compounds (POC) of

more than 10 tons per year). Other trigger-levels use a more detailed approach that involves determining localized air pollutant concentrations using an air dispersion model. Air District staff has developed detailed guidelines and tools for conducting these model-based analyses in a document entitled “Recommended Methods for Screening and Modeling Local Risks and Hazards” (BAAQMD, May 2012). This document, and other tools, can be found at: <http://www.baaqmd.gov/Divisions/Planning-and-Research/CEQA-GUIDELINES/Tools-and-Methodology.aspx>. (It should be noted that this guidance was developed for assisting lead agencies in conducting a risk and hazard analysis as part of their CEQA environmental review for proposed land use projects. In the context of the PRETR, the “project” should be taken to be the entire refinery in which an increase in annual emissions has occurred from baseline levels).

68. Comment: While a calendar year approach to routine emission reporting is appropriate, we recommend additional tracking on a shorter-term basis to protect communities from short-term spikes in air pollution.

Response: Air District staff believes that short-term emissions tracking would add greatly to the resources needed to implement the PRETR without commensurate benefits. Refineries are continuous operations, with scheduled process unit maintenance shutdowns that typically occur only once every five years. Individuals that live or work near refineries are therefore exposed to emitted air pollutants on a long-term (chronic) basis. Elevated short-term (acute) exposures result primarily from non-routine emissions that occur during malfunctions and other incidents. The PRETR would require that emissions from incidents be estimated and included in annual on-going emissions inventories (and be flagged as incidents along with the date and time of occurrence). The fence-line and community air monitoring elements of the PRETR, along with supplemental incident-based air monitoring conducted by the Air District, will be capable of recording short-term elevated spikes in air concentrations associated with incident-based acute public exposures. In terms of incident prevention, this is covered by existing process safety management and accidental release prevention programs, and is not the primary focus of the PRETR. The State has recently added additional refinery enforcement resources to increase the effectiveness of their process safety management program.

69. Comment: We support documenting current emission rates accurately and agree that such “baseline” emissions should be updated and adjusted each year to account for any new regulations or requirements.

Response: The PRETR was intended to address increases in air emissions from refineries that might occur over time relative to recent historic levels. Air District staff has therefore not included updating or adjusting of baseline emissions inventories based on new regulations or requirements that apply after July 1, 2014. (It should be noted that the revisions to baseline emissions inventories provided under Section 2-15-403 of the initial draft PRETR are only for addressing improvements in inventory methodologies that are also applied to on-going emissions inventories. In this manner, a consistent basis can be maintained in determining whether annual emissions from a refinery have increased over time.).

Other commenters have suggested that, under certain circumstances, it may be appropriate to adjust baseline emissions to reflect changes that occur over time (for example, if a refinery is required to add new equipment to meet new fuel standards). ***Air District staff is considering these comments, and agrees that if adjustments are allowed to be made to baseline emissions in the PRETR over time (based on changes in actual emissions, rather than those that are due to methodological refinement), than those adjustments should include consideration of new regulatory requirements.***

70. Comment: A ten year look-back period appears far too long for purposes of establishing a baseline. Some emissions have decreased significantly over the past decade; thus, a baseline period that long could negate that progress.

Response: As was indicated in the Workshop Report for the PRETR, Air District staff does not believe that variations in emissions at a refinery due to business or economic cycles should trigger requirements for Emission Reduction Plans. The PRETR would allow each refinery to choose a calendar year baseline period within the ten year timeframe Jan. 1, 2004 through Dec. 31, 2013. This look-back period was chosen primarily because it includes four years that preceded the 2008 U.S. recession, which impacted business activity for refineries and many other industries. Recovery from the 2008 recession has been slow in the U.S. industrial sector, and only a few industry types (e.g., mining, aluminum, machinery) have fully recovered to pre-recession production levels. A review of refinery activity data compiled by the U.S. Energy Information Administration (EIA) for PAD District 5 (West Coast) indicates that gross refinery inputs, utilization of operable refining capacity, and fresh feed inputs to downstream processing equipment (i.e., catalytic cracking, hydrocracking, and coking) reached peak levels prior to the recession.

Air District staff believes that a facility should be able to determine baseline emissions using production levels that have historically occurred, including levels that have been achieved under more favorable market conditions. The 10-year look-back period that has been proposed is consistent with baseline emission procedures used for determining modifications in EPA's New Source Review regulations. EPA chose the ten year look-back period based on a study of business cycles that it contracted, which recommended that a minimum of ten years of data is needed to capture an entire industry cycle. This look-back provision was litigated, but the Court upheld the EPA's approach (*New York v. EPA*, 413 F.3d 3 (D.C. Cir. 2005)).

A review of Bay Area refinery emissions inventory trends over the last ten years based on available data generally shows declining emissions (although not for every pollutant at all refineries). Some of the changes in emission figures are due to methodological changes in inventory methods rather than actual changes in emissions. Nonetheless, in many cases actual emissions have declined significantly over the last ten years, and much of this is due to more recent regulatory limits rather than business cycles (for example, several projects at refineries resulted in large emission reductions). This is why the PRETR requires a downward adjustment in the baseline emissions calculation to account for any legally enforceable emissions limits and restrictions that have been imposed since the

selected baseline period (up to July 1, 2014) and which are more stringent than the limits and restrictions in effect during the baseline period.

71. Comment: Each refinery should use the previous year as a baseline unless significant changes in business, such as production levels, can be documented so that 3 years prior could be used to inform the baseline emissions.

Response: See responses to Comments 69 and 70.

72. Comment: In order to invoke the prospect of penalties for noncompliance more effectively, we recommend making baseline emissions an explicit emissions limit for each facility.

Response: Air District staff has structured the PRETR consistent with the Air District's legal authority and with due regard for requiring measures that are feasible and cost-effective. Staff believes that limiting a refinery's emissions to existing baseline levels as the commenter recommends would not allow an adequate opportunity to evaluate feasibility and cost-effectiveness of the measures necessary to do so. Staff does not favor such an approach as a policy matter, and believes it might raise significant questions as to the extent of the Air District's legal authority.

73. Comment: We recommend monitoring, reporting and documentation of refinery oil feedstock, the full range of potential emission impacts from feedstock changes, and the measures taken to ensure that such potential impacts will be prevented when feasible. This reporting and documentation should be transparent, meaning that information including raw data and summary data is made available to the public in easily accessible format for independent verification of analyses and conclusions.

Specifically, we recommend that each refinery would be required to monitor and report its oil feedstock, and any proposed equipment change related to enabling a change in feedstock quantity or quality. Any proposed change in equipment related to enabling the refining of more oil, lower quality oil, or both, or any actual worsening of oil quality or increase in total oil throughput or both, would trigger a requirement to demonstrate that:

- the change in oil quantity, quality, or both (of the blend, or "slate," of oils refined) will not increase incident emission risk;
- the change in oil quantity, quality, or both will not increase routine emissions of any pollutant; and
- the change in oil quantity, quality, or both will not use up any emission reduction measure that is needed to reduce the refinery's ongoing emission of any pollutant that currently causes or contributes to air quality or environmental health harm.

Refiners would bear the burden of making each of these three demonstrations. The Air District would bear the burden of ensuring transparent reporting and third-party verification through an independent community/worker oversight board that selects and oversees experts. Refiners would bear the burden of funding this independent verification (the independent oversight board and the experts it selects).

Non reporting consequences: Non reporting must not be allowed to defeat prevention. Equipment changes enabling the refining of more oil, lower quality oil, or both that are not reported before installation: (1) cannot be considered in a feasibility analysis as a reason for failure to return to baseline emissions, (2) trigger all required demonstrations retroactively, and (3) require refiner-financed Air District monitoring in place of self-monitoring.

Response: The commenter's recommendations are in some ways similar to what Air District staff has recommended. The initial draft PRETR would require that refineries include in an Emissions Reduction Plan (ERP) a causal analysis that specifically addresses the degree to which any changes in crude slate composition may have caused or contributed to increases in emissions above trigger-levels. Records of crude slate composition would need to be provided to support this aspect of the causal analysis. The ERPs would be made available to the public through posting on the Air District website (with the exception of trade secrets, which are not public records under State law).

ERPs would also need to contain measures to reduce emissions back below trigger-levels within two years, or include all feasible measures to reduce emissions (beyond the many Air District, State, and federal air emissions requirements that already exist) based on the results of a refinery emission reduction audit. All identified feasible measures to reduce emissions would be required to be implemented on an expeditious schedule.

Air District staff believes that the approach proposed for the PRETR is appropriate for several reasons:

1. The approach is consistent with the Air District's legal authority because: (1) it focuses on directly tracking air emissions and air quality (e.g., as opposed to the commenter's recommendation to track feed stocks or other materials that a refinery uses), and (2) it requires the use of feasible measures to reduce air emissions based on emission increases that exceed trigger-levels (e.g., as opposed to the commenter's recommendation to set hard limits on emissions of all air pollutants based on actual baselines).
2. The approach provides an additional incentive for refineries to manage their annual emissions to avoid significant emissions increases that trigger an ERP requirement. Avoiding increases in air emissions is believed to be realistic for a number of reasons including: (1) most Bay Area refineries already require more energy-intensive processes due to: (a) their existing design to process very heavy, sour, crude slates, (b) their product mix favors "lighter" transportation fuels like gasoline, diesel, and aviation fuels needed in the California market, and (c) stringent California environmental requirements for both the facilities and the products require more energy-intensive processing like hydrotreating, (2) many air pollutants can be effectively controlled after they are generated (note, however, that cost-effective add-on control devices for CO₂ currently generally do not exist), (3) additional pollution prevention projects (e.g., improvements in energy efficiencies) in some cases are available to reduce emissions of CO₂ and other pollutants, and (4) the refineries are subject to California GHG regulatory requirements including the Cap-and-Trade regulation and the Low Carbon Fuel Standard.

3. The approach uses action trigger-levels that represent relatively small increases in emissions or impacts that are appropriate for triggering consideration of further emissions mitigation (for example, the proposed 10 TPY POC and NO_x trigger-levels, which are based on the pollutant's role as regional ozone and PM_{2.5} precursors, are less than 0.001% of overall Bay Area anthropogenic POC and NO_x emissions).
4. The emissions tracking and air monitoring provisions of the PRETR will provide the Air District with robust data to evaluate on an ongoing basis whether refinery emissions are causing, or significantly contributing to, localized air quality issues that need to be addressed through additional emission reduction measures.
5. The commenter's recommendation for the use of a third party to verify compliance with rule provisions is outside of the limits of the Air District's authority. The Air District cannot delegate its authority to some other entity unless a statute expressly provides for that, and there is no such statutory provision.

74. Comment: To reduce ongoing harm by ensuring continuous air quality improvement through gradual and feasible reductions in emissions of pollutants that are known to cause or contribute to environmental health risk, an emission limit would be applied to each refinery's facility-wide emissions of selected pollutants so that the refinery could choose to:

- reduce emissions 20% below the refinery's baseline by 2020, showing adequate incremental progress each year; or
- install the best available emissions control technology refinery wide (i.e., eliminate "grandfathered" and "non-BACT" sources in the refinery).

At least initially—in the rule as adopted and implemented through 2020—these limits would be applied to reduce refinery wide emissions of fine particulate matter (PM_{2.5}), oxides of nitrogen (NO_x), sulfur dioxide (SO₂), hydrogen sulfide (H₂S), and volatile organic compounds (VOC). Additionally, if the statewide industrial audit regulation shows that appropriate measures that reduce emissions significantly are feasible—as we expect—completing these measures in a timely manner might be considered as a possible third alternative.

Response: During the development of the Bay Area 2010 Clean Air Plan (CAP), Air District staff considered a wide variety of potential control measures, including measures that were similar to the commenter's suggestions. Control measures were evaluated based on a variety of considerations including feasibility based on technological, social, legal, environmental and economic factors (including cost-effectiveness). The adopted 2010 CAP includes 55 future control measures, a number of which apply to sources at refineries.

The PRETR was not included in the 2010 CAP, and it is not intended to be a rule that would reduce emissions below existing baseline levels. Nonetheless, the ERP requirements in the proposed PRETR, if triggered based on a refinery emissions increase, would use the same considerations of feasible measures that are used by the Air District in the air quality planning process. The PRETR therefore would supplement the CAP, while maintaining a consistent approach to selecting emission reduction measures that is within

the Air District's authorities. Air District staff will consider the commenter's suggested emission reduction approaches in the development of future CAP updates.

Comments from MD Environmental

75. Comment: My client performs tank degassing using a Thermal Oxidizer (<8.0 MM Btu per hour) as well as performs tank cleaning using combination TO/CatOx (<8.0 MM Btu per hour) at refineries in the Bay Area. In preparing for this future rule enforcement, what additional air contaminants would we have to monitor when we are performing a subcontractor job at the refinery, besides the current air contaminants of non-methane hydrocarbon (NMHC) using a PID, FID or other approved method by the Air District, as well as, NO_x, CO, and O₂. At this time, we are not required to obtain a permit for our tank degassing operation since the BTU/hr rating is below the permit threshold requirements. But for this draft rule, we assume air monitoring will be required, so in preparation will we need to be monitor NO_x, SO₂, CO, PM, NMHC, benzene, toluene, ethyl benzene, xylene? How about greenhouse gases such as CO₂, methane, and propane? With regards to tank cleaning our permit requires us to monitor benzene (using method 8015 and 8020 or equivalent). Will CARB registered portable engines need to be included with these emissions inventories for each job as well? These include portable diesel engines used to drive our pumps, air compressors, and electrical generators.

Response: The PRETR would require comprehensive emissions inventory tracking at Bay Area refineries, and emissions from tank degassing and cleaning activities would need to be included in emissions inventories under the PRETR. The emissions inventory methodology required under the PRETR will be specified in emissions inventory guidelines that are being developed concurrently with the new rule. Tank degassing and cleaning are subject to existing control and monitoring requirements under Air District Reg. 8-5, and additional case-by-case Air District permit requirements may be set for these operations if they do not meet criteria for exemption from permit requirements. It is expected that existing monitoring requirements will generally be adequate for establishing emissions of most air pollutants resulting from tank degassing and cleaning operations in the PRETR, although some additional information may be needed to calculate emissions. The emissions inventory guidelines will clarify whether CARB-registered portable engines (that are preempted from Air District permit requirements) are considered to be stationary sources subject to emissions inventory tracking under the PRETR and, if so, how emissions are to be calculated from these engines.

Comments from the Environmental Collaborative

76. Comment: While refineries in the region are subject to Air District regulations as well as Title V Clean Air Act permits through your agency, we are concerned that emissions increases could occur at refineries processing dirtier crude oils including Canadian tar sands; without this important regulation, these increases are unlikely to be accounted for. This regulation will also ensure that increases in refinery emissions are either prevented or mitigated, assuring no increased risks to the health of residents. As several Bay Area refineries consider new sources of crude oils, some of which may be heavier and more

corrosive, increasing the risk of accidents and greater air pollution, the timing of this regulation is critical.

Response: Air District staff has proposed the PRETR, which would expand refinery air emissions and air quality tracking, partially because of the concerns that the commenter notes. Air District staff will also continue to evaluate additional information regarding these issues as it becomes available.

77. Comment: We are very supportive of the Air District regulatory effort that would apply to all Bay Area oil refineries and would, for the first time, address all emissions from each refinery comprehensively, and all potential causal factors that can increase emissions, including changes in crude feed quality. However, because the communities near refineries have historically endured disproportionately high levels of pollution and emissions from refineries remain quite high, we believe it is important to go a step further than the current proposal and *prevent* any emissions increases from occurring. We urge the Air District to explore different pro-active approaches to prevent refinery emission increases as part of this regulation, including actively monitoring crude oil quality and ensuring continuous air quality improvement at any facilities not currently using “Best Available Control Technology” throughout (as outlined by Communities for a Better Environment et al. in their June 13, 2013 comments).

Response: See response to Comment 73.

78. Comment: We support many aspects of the preliminary draft regulation such as broad pollutant coverage, including Toxic Air Contaminants in addition to criteria pollutants, the comprehensive scope covering the full refinery including carbon-intensive hydrogen production, rigorous emissions inventory reporting, and new requirements for fence-line and community air monitoring systems around each refinery.

Response: Air District staff notes the comment.

Tesoro Comments

The Draft Rule Conflicts with Existing Laws for Analyzing New Projects (Comments 79 – 83).

79. Comment: Under federal, state, and BAAQMD rules, there is already a comprehensive, intricately-woven regime for addressing refinery modifications that potentially increase emissions: NSR. The Air District’s NSR rule carefully balances the interest of existing sources in the certainty that they can continue to operate under the expectations and terms of their initial development and the interest of the public in ensuring that new sources meet rigorous air quality standards for determining whether a change constitutes a “modification” and an emission increase can be attributed to it, and the appropriate thresholds for when major modifications trigger NSR for both attainment and nonattainment pollutants. In turn, applicants triggering the requirements of nonattainment NSR must achieve the lowest achievable emission rate (LAER, which is equivalent to Air District BACT), offset new emissions with creditable emission reductions, and certify that all major sources owned or operated by the applicant in the same state are

in compliance with all legal requirements. Applicants triggering PSD review must achieve Air District BACT, and demonstrate, through an air quality analysis that the major modification will not interfere with the attainment or maintenance of any NAAQS.

By effectively supplanting the Air District's NSR program and CEQA for refineries, PRETR would run afoul of the "consistency" and "nonduplication" requirements imposed by California law. Further, by essentially eliminating the ability of any refinery to ever increase its emissions in reliance upon offsets, PRETR turns its back on the approach set forth by both California law and the Clean Air Act, imposing a *de facto* construction moratorium upon any refinery expansion when none is authorized or warranted under such laws.

Response: Air District staff disagrees with the commenter's suggestion that the PRETR would conflict with existing laws or regulations for analyzing new projects. Such a conflict would occur if a new project could not comply with existing requirements and those of the PRETR. This is clearly not the case as the emission reduction requirements of the PRETR are triggered based on increases in actual emissions, and do not apply at the time of permitting of new/modified sources. If the commenter meant that the PRETR could impose additional requirements for projects beyond those of NSR and CEQA (after the project is constructed and begins operation), Air District staff believes that this most often should not be the case, but is possible. The PRTER would supplement existing regulatory requirements, but not conflict with them.

The PRETR would track air emissions from petroleum refineries on an on-going basis and trigger requirements for the preparation of an Emission Reduction Plan (ERP) if annual refinery emissions increase above significance-based trigger- levels. Refinery emissions may increase over time for a variety of reasons, including modifications involving physical changes, or changes in the method of operation, that are subject to regulatory requirements under NSR and/or CEQA. (It should be noted that the reason(s) for a given increase in annual emissions at a refinery are not always self-evident and, therefore, causal analysis of significant emission increases is an element of the PRETR). As the commenter indicates, these existing regulatory programs include stringent requirements which are intended to avoid or mitigate significant air quality impacts.

If NSR and/or CEQA requirements result in a "project" having less than significant air quality impacts, then the project generally should not create the need for an ERP requirement under the PRETR (note that the trigger-levels that Air District staff has proposed to use for the PRETR are those that the Air District developed based on substantial evidence as CEQA thresholds for new projects). Projects with significant air quality impacts should already have considered and adopted feasible mitigation measures (including those available from existing on-site sources), and thereby satisfy ERP requirements (although there may be a need to update the feasible measures information in an ERP based on improvements in emission control technology that may have occurred since the permitting process was completed). If this is not the case, and a project (or projects) that would have significant air quality impacts receives the necessary agency approvals without the adoption of feasible measures to mitigate these impacts, Air District staff believes that additional feasible mitigation measures should be considered in an ERP under the PRETR.

Air District staff agrees that it may be appropriate to consider the use of certain ERCs in the PRETR as mitigation for emission increases at a refinery, but only to the extent that: (1) onsite mitigation measures are first considered and implemented, if feasible, and (2) refinery emission increases would not have significant health impacts on local communities. In this manner, valid ERCs could potentially be used to mitigate increases of GHGs and regionally-based pollutants such as ozone precursors and PM precursors (provided that significant localized increases in TACs, NO₂, and SO₂ did not occur). Air District staff will consider how this concept might be incorporated into the PRETR.

Air District staff disagrees with the commenter's suggestion that the PRETR would be inconsistent with, and/or duplicative of, existing regulatory requirements for new projects. While the PRETR is generally consistent with other existing regulatory requirements that are also intended to avoid or mitigate significant air quality impacts of new projects, it would serve the additional purpose of filling any unintended "gaps" that may exist in these programs.

80. Comment: Air District rules, such as the NSR rule, ensure that new projects at major facilities adhere to the most stringent emission limitation while offsetting emissions increases (under nonattainment review) or demonstrating that the project will not interfere with the NAAQS (under PSD review). Such rules, along with fuels and automobile regulations, are leading to cleaner air. As the Air District itself notes, "[f]or ozone and PM_{2.5}, the two pollutants for which the Bay Area is designated as non-attainment, the Air District's emissions projections show an increase in emissions from stationary sources in future years, while at the same time showing overall reductions in total emissions leading towards attainment and maintenance of the NAAQS". Existing legal requirements, such as NSR, will help ensure progress towards attaining the ozone and PM_{2.5} NAAQS and maintaining attainment with other NAAQS, obviating the need for the PRETR.

Response: Although significant progress has been made towards achieving ozone and PM_{2.5} NAAQS, more is needed. In addition to these NAAQS, there are also the California Ambient Air Quality Standards (CAAQS) for ozone, PM₁₀, and PM_{2.5}, for which the Bay Area has a non-attainment status. These CAAQS are more difficult to attain than the NAAQS because they are numerically more stringent and are not to be exceeded. Additional feasible, cost-effective, emission reduction measures are needed to reduce the emissions from existing sources of these pollutants and their atmospheric precursors. See also response to Comment 5.

81. Comment: In the Air District's recent amendments to its NSR regulations, the Air District clarified that, for sources not previously subject to an enforceable limitation on emissions, a "modification" does not include a change that results in no increase in the source's potential to emit, even if that potential should exceed historical emissions levels. Tesoro is concerned that the PRTER will require petroleum refineries alone to be subject to emission reduction requirements in the absence of any physical or operational change that might otherwise trigger NSR.

Response: The difference between a source's actual emissions and its PTE can be substantial. It is for this reason that air quality planning, including evaluation of the need for additional control measures to achieve air quality goals, is based on actual emissions rather than PTE. NSR permits, and operating permits, don't provide a facility with a vested right to their full PTE without the ability for the Air District to consider the adoption of additional feasible emission reduction measures (e.g., to attain or maintain AAQS, or reduce public exposures to TACs). The PRETR establishes a mechanism for the review of additional feasible emission reduction measures through its ERP requirement (for refineries that would increase emissions above trigger-levels). Air District staff has proposed this for refineries, and not for other types of facilities at this time, because: (1) refineries (and not other facilities) may have changes in crude oil composition in the future (that may increase emissions) due to several factors including the continuing decline in the quality of crude oil imports, and increased supplies of unconventional crude oils, and (2) Bay Area refineries are, by a considerable margin, the largest facilities that the Air District regulates in terms of air emissions, so that a potential increase in emissions from this source category presents a greater threat to air quality than other types of facilities. Air District staff will continue to evaluate other source categories for which potentially significant increases in emissions may occur where emission tracking rules similar to the PRETR may be appropriate to consider.

82. Comment: The PRETR would not only require refineries to develop an emission reduction plan for emissions increases resulting from new projects, but, rather, for any increases in emissions regardless of the cause. Regardless of the fact that the Air District states that "[t]he intent of the [PRETR] is not to trigger mitigation requirements based on changes in emissions that occur due to cyclical factors [such as business cycles that affect the demand for products produced], there is no exemption from the draft rule's requirement to submit an emission reduction plan if the triggering emissions increase is due solely to increased production at the refinery. Nor is there an exemption from such a requirement and the concomitant emission reduction requirements for increases attributable to projects that have undergone Air District NSR and been required to mitigate their emissions pursuant to CEQA. Even if a particular project were to offset any increase in nonattainment pollutants pursuant to the Air District's NSR program and mitigate any significant environmental impacts attributable to its emissions of GHGs and criteria pollutants, it could still trigger the emission reduction planning and reduction requirements under PRETR.

In sum, the draft rule is an "about-face" to the existing legal paradigm for permitting of stationary source emissions, triggering emissions reduction obligations in the absence of any physical change or change in the method of operation. The Air District has not provided justification for making such a departure from the approach reflected by the existing NSR program and CEQA for assuring that changes occurring at petroleum refineries do not adversely impact air quality or frustrate the Bay Area's attainment of air quality standards.

Response: With regard to the issues that the commenter identifies with respect to the PRETR and new projects subject to NSR and/or CEQA, see the response to Comments 79 and 80. With regard to the issues that the commenter identifies with respect to the

PRETR and existing sources, see the response to Comment 81. With regard to the commenter's question as to why the PRETR does not have an exemption from ERP requirements based on emissions increases solely due to increases in production, Air District staff notes: (1) the proposed baseline period encompasses a 10 year look-back period that covers several years of historically high refinery production levels, and (2) Air District staff intended for the PRETR to address emission increases that may occur from refineries for a variety of reasons including production levels increasing above historically high levels, and (3) even if the scope of the PRETR were not intended to include production increases, it would be very difficult to attribute an emission increase from a facility that is as complex as a refinery as being solely due to a production increase without some contribution from other factors.

83. Comment: The draft rule is not analogous to the Air District's regulations governing flares. Unlike the flaring rules, which targeted a specific type of emissions source at refineries and established standards for such emissions, the draft rule would impose a *de facto* cap on refinery-wide emissions and essentially supplant the existing permitting regime, rendering existing permits meaningless and preventing a refinery from making any change that might increase emissions above trigger-levels, even if otherwise permitted to do so. The Air District provides no justification for singling out petroleum refineries and essentially changing the permitting rules solely with respect to them. Tesoro would submit that the Air District has no authority under either the Health and Safety Code or the Clean Air Act to abandon the existing framework for permitting of stationary sources and establish what is essentially a wholly new paradigm that would disallow any future emission increase from one source category.

Response: Air District Reg. 12-12 did not set any specific emission standards for refinery flares, as the commenter suggests. Rather, Reg. 12-12 requires that each refinery prepare and submit an annual Flare Minimization Plan (FMP), in which the refinery owner/operator must identify and expeditiously implement all feasible flare prevention measures based on the results of an audit and review completed by the refinery and reviewed by the Air District. The PRETR's ERP requirements are very similar to this in concept albeit, as the commenter indicates, covering the entire refinery rather than just flares.

Air District staff disagrees with the commenter's statements that the PRETR would impose any sort of a cap on refinery emissions, supplant the existing permitting regime, render existing permits meaningless, or prevent a refinery from making any changes that might increase emissions above trigger-levels. All of these statements are either entirely inaccurate or gross exaggerations. The PRETR would supplement existing regulatory requirements and require the consideration and implementation of additional feasible, cost-effective, emission reduction measures at refineries that have significant increases in emissions above baseline levels. See also the responses to many of the other comments included in this document including Comments 8, 9, 10, 20, 36, 37, 51, 79, 80, 81, and 82.

The Draft Rule Conflicts with Existing Title V Permits (Comments 84 - 86)

84. Comment: The draft rule conflicts with the regulatory framework for major stationary sources, including all Bay Area refineries, to undergo Title V review and comply with the terms of their Title V permits. Title V permits are intended to encompass all federal, state, and Air District air quality requirements. Indeed, the Air District has established extensive requirements regarding what information Title V permits must contain, consistent with federal regulations. However, none of these requirements suggests that, once a Title V permit was issued, the Air District would then establish new de facto limitations on facility emissions and operations equivalent to historical emissions. According to Reg. 2-6-416, “[o]nce a major facility review permit is issued to a facility...the terms and conditions of that permit shall remain valid for a period of five years from the date of issuance...” Moreover, operation in accordance with the terms of a Title V permit is tantamount to operation in compliance with the universe of applicable air requirements. The draft rule would upend the approach for issuance of Title V permits for a small subset of permitted sources and voiding their rights to rely upon their existing permits to assure compliance with the applicable requirements.

Response: Air District staff disagrees with the commenter that the PRETR would conflict in any way with the Title V permit program, or the implication that the terms of a Title V permit cannot be changed after issuance. If the PRETR is adopted by the Air District’s Board of Directors, it would establish new applicable air quality regulatory requirements for Bay Area refineries. Accordingly, these new requirements would have to be incorporated into the Title V permits for the refineries (as non-federally enforceable requirements not specifically required under the federal Clean Air Act). The required timing of the action to incorporate new requirements into Title V permits depends on several factors including the compliance date of the specific requirement, and the time period remaining on the term of the current Title V permit. Newly established applicable requirements are generally incorporated into Title V permits through permit re-openings or renewals (see Air District Reg. 2-6-415.1).

If the PRETR’s requirement for an Emission Reduction Plan were triggered for a refinery, additional feasible emission reduction measures may be required. Implementation of these emission reduction measures in most cases will require an Authority to Construct (ATC) and Permit to Operate (PTO) from the Air District. Title V permits for refineries and other facilities are routinely revised to incorporate requirements included in newly issued ATC/PTO’s.

85. Comment: As the Air District is aware, the Air District has imposed “grandfathered” throughput limits in each refinery’s Title V permit, along with a standard condition that clarifies that an exceedance of these limits does not constitute a violation and does not establish a presumption that a modification has occurred; nor does compliance with the limit establish a presumption that such a modification has not occurred. These limits were based on information in the Air District’s possession at the time of issuance of the Title V permit. While these grandfathered throughput limits are not “firm” limits, they do trigger a reporting obligation and, in practice, a requirement to demonstrate that no change has occurred that should have undergone NSR review.

Now, the Air District would essentially render this standard condition moot and require that any change resulting in an emission increase above historic operating levels trigger a causal analysis and obligation to reduce emissions to back below the trigger-levels, irrespective of whether or not any modification has occurred.

Response: Air District staff disagrees with the commenter that the PRETR would render moot the reporting thresholds for grandfathered sources that are included in refinery Title V permits. The purpose of these reporting thresholds is to establish a mechanism for Air District staff to review potential modifications at a facility that may trigger NSR requirements. These NSR requirements may be considerably more stringent than those of the PRETR. For example, applicability of NSR is generally determined at the individual source-level, while the applicability of ERP's under the PRETR would be based on emission changes at the entire refinery. A refinery may therefore have a source that is modified and subject to NSR without being subject to the ERP requirements under the PRETR. In addition, the control requirement of NSR (i.e., BACT) is generally more stringent than the control requirements of the PRETR. BACT is a level of control that may be based on the most effective control device or technique which has been successfully utilized for a particular type of source, without consideration of costs or other factors. The PRETR would require that ERP's contain feasible air emission reduction measures, which are capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, environmental, legal, social and technological factors.

Air District staff also disagrees with the commenter's statement that the PRETR establishes an obligation to reduce emissions to back below the trigger-levels. Rather, the PRETR requires that feasible, cost-effective, measures be considered and implemented to reduce emissions that increase above trigger-levels. If emissions are not reduced below trigger-levels, the review of feasible measures must be annually updated to consider changes that may have occurred in factors considered such as technological and economic feasibility.

86. Comment: The draft rule is inconsistent with the existing rules for revocation and reopening on Title V permits. Under Reg. 2-6-314, the Air District can only revoke a permit by "request[ing] the Hearing Board to hold a hearing to determine whether a major facility should be revoked if it is found that the holder of the permit is violating any provision in the permit or any applicable requirement." Further, under Reg. 2-6-415, the Air District may only reopen and reissue a Title V permit for cause, with notice to the permittee. The draft rule effectively creates a mechanism for reopening and revoking Title V permits, without satisfying the procedural requirements for doing so.

Response: The PRETR does not, as the commenter suggests, create a mechanism for re-opening and revoking Title V permits. As is indicated in the response to Comment 84, the PRETR would establish new applicable requirements which would (based on existing mechanisms) need to be incorporated into refinery Title V permits. If a refinery fails to meet the requirements of the PRETR, the Air District would take appropriate enforcement action which potentially could include permit revocation. The procedural requirements for permit revocation that the commenter notes would need to be followed.

The Draft Rule is Redundant and Unnecessary (Comments 87 - 89)

87. Comment: The PRETR is unnecessarily duplicative of existing State-wide measures that serve the same function and could, in fact, frustrate implementation of these other measures. Pursuant to AB 32, CARB has promulgated the Energy and Co-Benefits Assessment of Large Industrial Facilities Regulation. This regulation applies to all five Bay Area refineries and requires the refineries to conduct energy consumption and emissions analyses that identify the facility's processes and equipment types used in the processes, and provide facility energy consumption and resulting GHG, criteria pollutant, and TAC emissions. The AB 32 Scoping Plan emphasizes that this measure is designed to determine the potential reduction opportunities, including criteria air pollutants and toxic contaminants (in addition to GHGs). Pursuant to this regulation, the refineries must conduct an analysis of the energy efficiency improvements opportunities that exist at each facility, including the identification of potential improvement projects for equipment, processes, or systems that cumulatively account for 95 percent of the facility's total GHG emissions.

The draft PRETR would require essentially the same type of analysis and pursuit of the same reduction opportunities if and when an increase is identified that cannot be reduced to less than the trigger-levels within the required two-year timeframe. Accordingly, the PRETR is duplicative of CARB's efforts. Although CARB is the lead agency with respect to the implementation of AB 32 generally, and the Energy and Co-Benefits Assessment Regulation in particular, the local air districts have a supporting role in AB 32 implementation.

Response: Air District staff does not agree that the PRETR would be unnecessarily duplicative of CARB's existing Energy Efficiency and Co-Benefits Assessment of Large Industrial Facilities Regulation (EEA regulation). The EEA regulation requires operators of California's largest industrial facilities to conduct a one-time Energy Efficiency Assessment (EEA). This regulation required refineries to conduct a one-time assessment of fuel and energy consumption, and provide estimates of GHG, criteria pollutants, and TAC emissions. Refineries were further required to identify potential energy efficiency improvements for equipment, processes, and systems that cumulatively account for at least 95 percent of the facility's total GHG emissions. CARB is to use the EEA's to identify the best approaches to secure energy efficiency improvements and the associated emission reductions at California's largest facilities.

It is not clear at this time if CARB will develop a regulation that would require California refineries to make energy efficiency improvements to reduce GHG emissions, but this is possible. If CARB does adopt such a regulation, the resulting reduced GHG emissions should help Bay Area refineries to avoid Emission Reduction Plan requirements for GHGs under the PRETR. If a refinery were to have a significant increase in GHG emissions even with such a CARB regulation, the PRETR would essentially require (for refineries with a GHG increase above trigger-levels) that their CARB EEA (which was a one-time assessment) be updated to consider changes that may have occurred since the EEA was prepared (the CARB EEA regulation required that EEAs be submitted in 2011; the soonest that an ERP would be required under the PRETR is 2015). If CARB does not adopt a

regulation that requires energy efficiency improvements for California refineries, the PRETR would serve a similar function (for refineries that have an increase in GHG emissions above trigger-levels).

88. Comment: As the Air District itself acknowledges, CARB’s Cap-and-Trade Program Regulation establishes a price on GHG emissions and is intended to incentivize reductions in refinery GHG emissions. As the Air District further acknowledges, measures resulting in reductions in GHG emissions “typically result in co-benefits in terms of reducing criteria and TAC emissions”. However, the draft rule would mute the price signal that the Cap-and-Trade Program is intended to create and could act as a bar to making the type of process or feedstock changes that might be needed to produce lower carbon intensity fuels in accordance with the LCFS. It could also bar efficiency improvements under a number of conceivable scenarios, frustrating refineries’ ability to produce their products more efficiently. Therefore, not only is the draft rule unnecessary and duplicative of existing measures implemented by CARB under AB 32, but it might possibly undermine achievement of the other measure’s goals.

Response: Air District staff agrees that CARB’s Cap-and-Trade regulation will incentivize reductions in refinery GHG emissions. It is not clear, however, whether these financial incentives will be great enough to result in refineries taking actions to reduce their GHG emissions (and realize any associated criteria pollutant and TAC emission reduction co-benefits). The PRETR would provide a further incentive for refineries to avoid increases in GHG emissions, and would require only feasible, cost-effective GHG controls if such an increase were to occur. If CARB believed that additional direct regulation of GHGs from industries subject to the Cap-and-Trade regulation would significantly undermine the goals of the regulation, it is unlikely that they would have included the EEA regulation in their AB 32 Scoping Plan.

In terms of the commenter’s statement that the PRETR could act as a barrier to making the type of process or feedstock changes that might be necessary to produce lower carbon intensity fuels in accordance with the LCFS, Air District staff notes that the PRETR would require only additional feasible, cost effective, emission reduction measures for reducing emissions that increase above trigger-levels. ***Nonetheless, Air District staff acknowledges the importance of the success of the LCFS to climate goals, and would be willing to consider exemptions in the PRETR for refinery emissions increases specifically needed to comply with mandated transportation fuel standards, provided that such emissions increases would not significantly impact the health of local communities.***

89. Comment: The Air District has made no effort to satisfy the other procedural requirements set forth by California law, including the “necessity” requirement, the requirement to conduct a socioeconomic impact analysis, and the requirement to demonstrate that PRETR will promote attainment of the state or federal AAQS.

Response: As is the case with all rule development projects, Air District staff will prepare the required information and make the necessary findings required under State law prior to consideration of rule adoption.

The Trigger-Levels are Inappropriate and Baseless (Comments 90 - 91)

90. Comment: The Air District proposes low trigger-levels in the Draft rule for a complex operation such as a petroleum refinery. The draft rule defines “Trigger-Levels” as “[a]n increase in air emissions from a petroleum refinery relative to the baseline period that, if exceeded, initiates requirements under this rule to prepare or update an emission reduction plan.” Trigger-levels are, *inter alia*, “10 tons per year of GHGs.” We understand that this was a typographical error and that the proposed trigger-level is supposed to be consistent with the Air District’s “Revised Draft Options and Justification Report: California Environmental Quality Act Thresholds of Significance”, which sets a stationary source threshold of 10,000 metric tons per year CO_{2e}. While the draft rule’s 10 TPY threshold for GHG is obviously in error, a threshold of 10,000 metric TPY is low and could result in triggering PRETR’s emission reduction requirements for even the most minor increase in production to meet growth in demand, absent any change in a refinery’s crude slate or equipment or any other project that might otherwise trigger the Air District’s NSR requirement or CEQA review. Such an increase could occur if, for example, a hydrogen plant operated by a third-party, but included within the definition of the “Petroleum Refinery” subject to PRETR, should increase its production for use as a transportation fuel.

Response: As the commenter indicates, the 10 TPY trigger-level for GHGs given in the initial draft PRETR was a typographical error, which has since been corrected to 10,000 metric TPY. The basis for the 10,000 metric TPY trigger-level is provided in the Air District’s *Revised Draft Options and Justification Report: California Environmental Quality Act Thresholds of Significance, October 2009* (see BAAQMD website). Air District staff acknowledges that the GHG trigger-level represents a very small percentage of each Bay Area refinery’s overall GHG emissions (i.e., in some cases, less than 0.25%), and the trigger-level may even be less than the uncertainty in GHG emissions inventory monitoring and estimation methods for an entire refinery. ***For this reason, Air District staff will consider if an alternative GHG trigger-level may be more appropriate for the PRETR.***

With regard to the commenter’s concern about GHG emissions from a third-party hydrogen plant that should increase its production for use as a transportation fuel, please see the response to Comments 25 and 92.

91. Comment: The ambient concentration-based, or health risk-based, trigger-levels for PM_{2.5}, CO, and TACs would be extremely challenging to manage. For instance, the trigger-level for PM_{2.5} is “10 tons per year of PM_{2.5}, or a lesser amount that would increase PM_{2.5} air concentrations at a sensitive receptor by more than 0.3 micrograms per cubic meter (annual average) or that, when considered cumulatively with all sources of PM_{2.5} at the refinery and all other sources located within 1000 feet of the refinery’s property line, would result in PM_{2.5} air concentrations at a sensitive receptor of more than 0.8 micrograms per cubic meter (annual average).” The problem with this trigger-level is that there is no *de minimis* threshold, below which a refinery’s PM_{2.5} emissions are not considered cumulatively with all sources of PM_{2.5} located within 1000 feet of the refinery’s property. As a consequence, if a refinery is located in an area occupied by other sources of PM_{2.5}, then even the slightest increase in PM_{2.5} from the refinery could be deemed to

contribute to cumulative PM_{2.5} air concentrations at a sensitive receptor of more than 0.8 micrograms per cubic meter (annual average) and thereby trigger the draft rule's emission reduction requirements. This trigger-level is made all the more challenging by the fact that the projected PM_{2.5} impacts are based on an air dispersion modeling analysis, which is complex in the PM_{2.5} context. The same cumulative impacts and modeling problems arise with respect to the CO and TACs trigger-levels as well.

Response: The basis for the proposed trigger-levels for PM_{2.5} and TACs is provided in the Air District's *Revised Draft Options and Justification Report: California Environmental Quality Act Thresholds of Significance, October 2009* (see BAAQMD website). As the commenter indicates, if the existing refinery and other air pollution sources located within 1000 feet of the refinery property-line cumulatively contribute to an annual average concentration of PM_{2.5} of more than 0.8 micrograms per cubic meter, as determined by an air dispersion modeling analysis, than any on-going increase in the refinery's annual emissions of PM_{2.5} would trigger the PRTER's requirements for consideration and implementation of additional feasible PM_{2.5} emission reduction measures at the refinery. Similarly, if the existing refinery and other air pollution sources located within 1000 feet of the refinery property-line cumulatively contribute to lifetime cancer risks of more than 100-in-a-million, as determined by an air dispersion modeling analysis-based health risk assessment, then any on-going increase in the refinery's annual emissions of TACs would trigger the PRTER's requirements for consideration and implementation of additional feasible TAC emission reduction measures at the refinery. Air District staff believes that air quality impacts above these trigger-levels are significant enough to warrant consideration of additional feasible measures to control emissions. In addition, Air District staff believes that refineries should have the capability to conduct air dispersion modeling analyses to address refinery emissions, and Air District staff can assist refineries in providing model inputs for non-refinery sources located within 1000 feet of the refinery's property-line. Once dispersion models are initially set up, they are not difficult to maintain.

92. Comment: *The Refinery Definition is Problematic.* The draft rule defines "Petroleum Refinery (Refinery)" as [a]n establishment that processes crude oil to produce more usable products such as gasoline, diesel fuel, aviation fuel, lubricating oils, asphalt or petrochemical feedstocks. Petroleum refinery processes include separation processes (e.g., atmospheric or vacuum distillation, and light ends recovery), petroleum conversion processes (e.g., cracking, reforming alkylation, polymerization, isomerization, coking, and visbreaking) petroleum treating processes (e.g., hydrodesulfurization, hydrotreating, chemical sweetening, acid gas removal, and deasphalting), feedstock and product handling (e.g., storage, blending, loading, and unloading), and auxiliary facilities (e.g., boilers, waste water treatment, hydrogen production, sulfur recovery plant, cooling towers, blowdown systems, compressor engines, and power plants)." In turn, "[t]he refinery owner/operator is responsible for submittal of reports and plans required by this rule that cover the entire petroleum refinery, including any refinery processes or auxiliary facilities that may be separately owned or operated."

Tesoro owns and operates the Golden Eagle Refinery (GER) and owns the aspects of the refinery that pertain to separation processes, petroleum conversion processes, petroleum treating processes, feedstock and product handling, and *some* auxiliary facilities. However

Air Products and Chemicals, Inc. owns and operates a hydrogen plant and Foster Wheeler AG owns and operates the cogeneration power plant co-located with GER; each of these facilities supply services to the refinery. (This problem is highlighted by the fact that, in the case of GER, and the co-located cogeneration plant, Foster Wheeler AG sells electricity to PG&E. It is entirely unclear how the Air District would allocate the emissions for such a third-party auxiliary facility that is not solely dedicated to servicing a refinery. Likewise, it would be patently unreasonable to require Tesoro to reduce emissions throughout the refinery for emissions that are associated with increased deliveries of electricity to the grid). Despite the fact that Tesoro has no ownership or operational control over these auxiliary facilities, if GER were to experience an increase above the trigger-levels, PRETR would require that GER submit an emission reduction plan that contemplates emission reductions at the *entire* refinery, including the hydrogen plant and the cogeneration facility. Tesoro cannot dictate emissions reductions at third party facilities.

Further, the requirement to include existing hydrogen plants within the definition may run contrary to existing CARB policies designed to increase the use of hydrogen as a transportation fuel. CARB has estimated that use of hydrogen in fuel cell vehicles could amount to 9.2 percent of statewide supply, triggering the need for increased production of hydrogen. If any of this were to result in increased utilization of existing hydrogen plants, the “refinery” could experience an increase in its emissions and thereby be subject to the requirements of PRETR, even though it may have no control over the source of the emission increase or of reductions at the hydrogen plant. Accordingly, the Air District should reconsider this broad definition of “refinery”.

Response: Air District staff will consider adding language to the PRETR to clarify that emissions that are under common control of the refinery and that are associated with refinery operations need to be included in refinery emissions inventories. In the case where co-located third-party facilities provide some auxiliary services to a refinery and also have emissions associated with other non-refinery operations, facility emissions will need to be allocated to each component (adequate records should be available for making these allocations). Appropriate adjustments will be made to avoid double-counting of these emissions in the regional emissions inventory. Regarding the commenter’s concern that the refinery owner/operator cannot dictate emissions reductions at third-party facilities, this seems as though it could be accomplished through appropriate contractual terms between the refinery and the third-party engaged in refinery processes. ***If this cannot be done, Air District staff may consider revisions to the PRETR that would specify that the owner/operator of the auxiliary facility is directly responsible for evaluating and implementing any feasible emission reduction measures required under the PRETR for their sources that are engaged in refinery processes.***

The Draft Rule’s Monitoring Requirements are Undefined (Comments 93 - 94)

93. Comment: The draft rule lacks sufficient definition of what will be required of refineries under the fence-line and community monitoring provisions of the rule. Experience has shown that existing fence line monitoring systems operated by refineries (e.g., ground level monitors for hydrogen sulfide) frequently indicate exceedances of standards and/or

elevated concentrations as a result of non-refinery operations. Similarly, without any specification in the draft rule for the constituents that must be monitored or the standards for siting and operation of community monitoring systems, the draft rule could result in a petroleum refinery being required to report elevated concentrations of pollutants due solely to sources other than the refinery.

Response: Air District staff acknowledges that fence-line and community air monitoring systems measure air concentrations of pollutants emitted from sources other than refineries. It is for that reason that the PRETR does not establish enforceable standards for refineries based on the data collected from these systems. In some instances, air monitoring data may be used to identify or help quantify refinery emissions sources (e.g., leaks that are not detected by other monitoring programs). Moreover, these data will provide a much better indication of local community exposures to air pollutants emitted from refinery sources, other nearby sources, and more distant sources from which emissions are transported. The Air District is also pursuing additional incident-based air monitoring capabilities to supplement that provided in the PRETR to address incident-based emissions.

94. Comment: The draft rule delegates publication of air monitoring guidelines to the APCO, i.e., to Air District staff. By failing to articulate standards for the required fence line and community monitoring programs, the draft rule creates a real risk that the required programs will produce data bearing on relation to a refinery's actual operations or contributions to regional air quality. At the very least, the Air District should publish the guidelines required by the PRTER as part of this rule development process, so that representatives of the refineries can offer their technical advice and assistance to be sure that the data generated through implementation of the required monitoring programs accurately characterize refineries' impacts on air quality.

Response: Draft air monitoring guidelines will be available for public review and comment well before the rule is considered for adoption. ***Air District staff will also consider having the air monitoring guideline document be adopted in the PRETR (by reference). If this is done, language could also be added to the PRETR to indicate that the APCO may make subsequent minor changes to update or improve the guidelines as appropriate, whereas substantive changes would require a rule amendment.***

95. Comment: Tesoro believes that certain provisions of the PRETR would be beneficial to the Bay Area, the Air District and the refineries. These are the provisions of the rule that would have refineries submitting emissions inventories. The submittal of emissions inventory data will provide data that will help determine if some of the problematic elements of this rule are necessary to ensure continuing improvements in air quality in the Bay Area. Emissions inventory data would also be instructive as the monitoring provisions of the rule are developed.

Response: Air District staff notes the comment, and agrees that the emissions inventory provisions of the PRETR would be beneficial.

96. Comment: Tesoro suggests a meeting between the Air District and technical representatives of the area refineries to discuss this area of common ground.

Response: Air District staff welcomes dialog with stakeholders on the PRETR, and suggests that the appropriate refinery contact Air District staff to arrange any desired meetings.