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May 5, 2017

Mr. Victor Douglas  
Principal Air Quality Specialist  
Bay Area Air Quality Management District  
375 Beale Street  
San Francisco, California 94105

Re: Draft Environmental Impact Report ("DEIR")  
for Proposed BAAQMD Rules 11-18 and 12-16

Dear Mr. Douglas:

As outside counsel for the Shell Martinez Refinery (Shell), we have been asked to submit the attached comments related to above-referenced DEIR. Please note that where a comment references a title or a chapter of the DEIR, the comment applies to any similar discussion in the Executive Summary of the DEIR and/or Staff Report.

As a general matter and apart from any other specific comments, we believe the DEIR is fatally flawed under the California Environmental Quality Act ("CEQA") because of its limited scope; that is, its failure to comprehensively address the cumulative effects of these proposed rules in conjunction with the battery of rules which have already been directed by the District in recent years towards oil refineries as part the District's Refinery Strategy. Moreover, the DEIR conspicuously omits any analysis of the companion proposed District Rule 13-1 which is also directed at refineries, which was proposed at the same time this DEIR was issued and which is currently scheduled for promulgation at approximately the same time as these rules. This glaring omission renders much of the DEIR's analysis limited, superficial, speculative and incoherent as it applies to complex facilities such as refineries. Therefore, we believe that CEQA demands that this DEIR be withdrawn, expanded, rewritten and recirculated in a more comprehensive and coherent format.

We appreciate this opportunity to submit these comments and look forward to our continuing involvement in the public participation process for these rules.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Keith M. Casto", written in a cursive style.

Keith M. Casto

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The Draft Environmental Impact Report (DEIR) has several substantial flaws that need to be addressed in order to meet the requirements under the California Environmental Quality Act (CEQA). The document had several omissions of statutory requirements under CEQA that were not adequately addressed in the DEIR. The document has numerous technical concerns that need to be addressed to adequately describe the potential environmental impacts. In addition, there are numerous instances of editorial mistakes in the DEIR which makes it confusing and difficult to follow the document and its conclusions.

## ***1 DEFICIENCIES WITH REQUIREMENTS UNDER CEQA***

The DEIR is inadequate as it fails to meet several statutory requirements under CEQA. The following sections describe these deficiencies.

### ***1.1 The DEIR Violates CEQA Because it Fails to Address All of the District's Refinery Strategy Rules Comprehensively, Including Proposed Rule 13-1***

The District adopted a multi-pronged strategy stemming from District Board of Directors Resolution No. 2014-17. This strategy is described in detail in the Strategy Staff Report as including Rule 12-15, Rule 12-16, the Additional Refinery Rules and the 2016 Refinery Rules., all of which are collectively referred to by the District as comprising its Petroleum Refinery Emissions Reduction Strategy ("Refinery Strategy"). To that end, the District has rolled out a series of interlinked regulations directed at refineries through this Refinery Strategy. This most recent incarnation of refinery regulation takes its form in proposed Rules 12-16 and 11-18, which are scheduled for adoption in May and July. At the same time, the District issued this DEIR, the District also proposed a new Rule 13-1 (which is scheduled for adoption in September) to address GHG emissions at refineries, but failed to include any analysis in this DEIR for this new proposed rule.

All three proposed rules, Rules 11-18, 12-16 and 13-1, are based in one way or another on the information to be gathered under the authority of Rule 12-15, which was promulgated a year ago. As indicated, Rule 12-16 is scheduled for promulgation this month; Rule 11-18 is scheduled for promulgation in July; and Rule 13-1 is scheduled for adoption in September of this year. This unnecessarily accelerated schedule at the tail end of implementation of the Refinery Strategy in conjunction with the discontinuous and piecemeal environmental assessment of the individual component regulations appears to be part of a deliberate and systematic policy by the District to circumvent its CEQA obligations; that is the comprehensive programmatic analysis required by CEQA.

All of these rules are part of and connected through the District's continuing "Refinery Strategy." Proposed Rule 12-16 was at one point directly connected with the information-gathering orientation of Rule 12-15 which was adopted in 2015. In fact, a prior version of Rule 12-15 was packaged together with proposed Rule 12-16 in a previous Draft Environmental Impact Report

("DEIR") which was issued by the District in the fall of 2015 and later withdrawn when Rule 12-15 was adopted and consideration of proposed Rule 12-16 was deferred and revised because of its serious legal inconsistencies with both the federal Clean Air Act and the California Global Warming Solutions Act of 2006 ("AB 32"). Proposed Rule 11-18 is a deliberate spinoff of an early draft version of 12-15. The refinery energy efficiency provisions of proposed Rule 13-1 are a direct outgrowth of a prior version of proposed rule 12-16 and proposed Rule 13-1 is thus intended by the District to be either a substitution for or an extension of proposed Rule 12-16 because of the continuing legal flaws in proposed Rule 12-16.

These rules are also directly linked through the Refinery Strategy with Rules 9-14, 6-5, 8-18 and 11-10. With respect to each of these rules, the District has engaged in a fragmented, piecemeal administrative process to avoid a meaningful, comprehensive programmatic analysis under the California Environmental Quality Act ("CEQA"). That has already resulted in two separate lawsuits based in part on challenges to this fatally flawed CEQA process. ( We have attached and incorporate herein copies of the petitioners' briefs in these two cases which fully explicates our CEQA arguments.)

With respect to proposed Rules 12-16 and 11-18, the District once again violated CEQA by segmenting its analysis of multiple rulemaking actions that collectively comprise the District's "Refinery Project." As raised in these prior lawsuits, CEQA demands unified review of "the whole of the action," and a series of actions undertaken to attain the same objective constitutes a single CEQA project. (Tuolumne County Citizens for Responsible Growth, Inc. v. City of Sonora (2007) 155 Cal.App.4th 1214, 1226-27). Under the dictates of Tuolumne County and longstanding core CEQA precepts, the District violated CEQA when it segmented its prior analysis of Rules 12-15 and 9-14 and adopted them in isolation, without any consideration or analysis of the cumulative impacts of the remaining actions taken by the District to achieve its unified objective to more intensively regulate oil refinery emissions. (Tuolumne County, 155 Cal.App.4th at 1226-27). The District has already admitted in court documents that it conceived, developed, and adopted Rules 12-15 and Rule 9-14 as part of a broader, unified effort that encompassed at least seven separate rules that were designed to achieve a single, common objective: tracking and reducing refinery emissions by 20%. As indicated, these particular rules were challenged on the same CEQA ground by certain petitioners (including the Western States Petroleum Association which in turn represents Shell Oil Products U.S.) in the case of Western States Petroleum Association, et al. v. BAAQMD, Case No. N16-0963. This suite of seven rules also include Rules 6-5, 8-18 and 11-10. These latter rules were challenged yet again on the same ground in the case of Valero et al. v. BAAQMD, Case No. N16-0095.

The District's Refinery Project was not developed merely to implement a general, indefinite policy objective, such as "protecting public health" or "ensuring environmental protection." To the contrary, it was developed to implement and achieve a specific and targeted objective to limit refinery emissions by 20%. Proposed Rules 12-16 and 11-18 are simply further steps needed to implement and achieve that specific and targeted objective. Under Tuolumne County and core CEQA precepts, the District violated CEQA yet again when it improperly segmented its analysis

of proposed Rules 12-16 and 11-18 and analyzed them in isolation, without any consideration or analysis of the cumulative impacts of its prior regulatory actions in adopting Rules 12-15, 9-14, 8-18, 6-5, 11-10 to achieve its unified programmatic objective.

The obvious connectivity of these rules is further reinforced by the District's follow-on proposal to adopt in September of this year proposed Rule 13-1 with respect to greenhouse gas ("GHG") emissions from oil refineries with the intention to use the crude slate data which it has been seeking to acquire under Rule 12-15 in implementing proposed Rule 13-1. As indicated, the District has acknowledged the proposed Rule 13-1 is more or less either a substitution for or an extension of proposed Rule 12-16 which is scheduled for hearing on May 17, 2017. This is further reinforced by the District's intention to use the cargo vessel emissions data which it has been seeking to collect under Rule 12-15 in the implementation of proposed Rule 11-18, which is also scheduled for public hearing on May 17, 2017.

Proposed Rule 11-18 is no less a part of the District's overall "Refinery Strategy" merely because it was belatedly and disingenuously expanded to encompass facilities besides oil refineries. At one time, it was part of proposed Rule 12-15 and was specifically targeted at refineries. Because of the CEQA challenges already brought for Rule 12-15 and other regulations, it appears that the scope of the new derived proposed Rule 11-18 was deliberately broadened to avoid characterization as a "refinery-only" regulation. As a result, the District does not have the staff to develop health risk assessments for the 1100 facilities now technically covered under the much broader scope of the proposed regulation. As a result, it appears that it will be necessary to reconfigure this regulation to tier the categories of sources affected and prioritize implementation over an extraordinarily long rollout with refineries unsurprisingly anticipated to be the very first facilities addressed.

The DEIR is inadequate because of its omission of any analysis of the impacts of Rule 13-1. On their face, proposed Rules 11-18, 12-16 and 13-1 form a veritable wall of complementary regulation for refineries with each playing a significant part of the District's overall Refinery Strategy. The accelerated and coordinated rollout of these regulations and their intended cumulative impact on the refineries in the Bay Area dictate that this is one integrated and coordinated project. (As evidence of this intent, we attach a PowerPoint Presentation of the District's Eric Stevenson on February 6, 2017 at the Advisory Council Meeting.) This body of targeted regulations has the potential for putting one or more of these Bay Area refineries out of business by depriving them of the operational flexibility to balance load, safety, capacity, product and regulatory compliance. For that reason, these closely coordinated three rules (and actually all of the recent rules targeting refineries under the District's "Refinery Project") should be (and should have been) analyzed comprehensively and programmatically before promulgation. These three rules are deliberately structured so that proposed Rule 13-1 addresses GHG emissions at refineries from a global perspective through a carbon intensity approach; proposed Rule 12-16 targets criteria pollutants at refineries with a facility cap from a regional air quality approach; and proposed Rule 11-18 targets toxic pollutants at refineries from a local impact perspective. Yet proposed Rule 13-1 is conspicuously left out of this analysis even

though it is clearly a parallel and interlinked outgrowth of the overall refinery strategy being advanced by the District. For example, the DEIR fails to address how add-on control equipment to meet proposed Rules 12-16 and 11-18 may prevent the effectiveness of proposed Rule 13-1 and vice versa.

In fact, this DEIR affirmatively concludes that proposed Rules 11-18 and 12-16 together have a significant negative co-pollutant impact on GHG emissions. Yet, this DEIR glaringly omits any analysis of the impacts of proposed Rule 13-1 whose efficacy is directly hampered by implementation of proposed Rules 12-16 and 11-18.

Thus, the District repeats the same fatal CEQA segmentation flaw by treating these proposed rules in isolation from proposed Rule 13-1 and the other rules already targeting refineries. This obvious technical and regulatory interconnection cries for programmatic analysis rather than the slipshod, fragmented, haphazard, piecemeal discussion which this DEIR represents. The prior bundling proposed Rule 12-16 with Rule 12-15 in a DEIR in 2015 and later detachment from Rule 12-15 and rebundling with proposed Rule 11-18 in this DEIR is a stark pronouncement of its procedural inadequacy. In fact, if anything, proposed Rule 13-1 may have an even more direct relationship with proposed Rule 12-16 than it does with proposed Rule 11-18.

Operationally, Rules 13-1 and 12-16 have reciprocally competing co-pollutant impacts in that compliance with one will negatively impact the other. Ratcheting down on criteria pollutants under Rule 12-16 will directly contribute to higher GHG emissions. Conversely, reduction in GHG emissions by way of carbon intensity regulation and concurrent reduction in throughput under Proposed Rule 13-1 will directly impact increasingly more stringent control strategies for criteria pollutants under proposed Rule 12-16 and control of TACs under proposed Rule 11-18. This obvious reciprocal relationship between these rules demands that they be addressed comprehensively in one DEIR.

A public agency such as the District may not segment a large project into two or more smaller projects to mask serious environmental consequences. CEQA prohibits such a "piecemeal" approach and requires review of a projects as a whole. CEQA mandates "that environmental considerations do not become submerged by chopping a large project into many little ones –each with a minimal potential impact on the environment-which cumulatively may have disastrous consequences. (Bozung v. Local Agency Formation Commission (1975), 13 Cal.3d 263, 283-284; City of Santhree v. County of San Diego (1989).

Before approving a project, a lead agency must assess the environmental impacts of all reasonable phases of a project. (Laurel Heights Improvement Assn. v. Regents of University of California (1988), 47 Cal.3d 376, 396-397. Clearly, Rules 12-15, 12-16, 11-18, 13-1, the Additional Refinery Rules, and the 2016 Refinery Rules are all part of one "Project" and regulatory action. Therefore, a cumulative analysis is necessary that includes the recently adopted Refinery Project rules (Rules 6-5, 11-10, 8-18, 12-15, and 9-14), proposed regulations (Rule 13-1), and any planned regulations or amendments to regulation (for example, Rules 2-1,

2-2, and 9-1, which are part of the 2017 Rule Development Schedule in District's 2017 Clean Air Plan). See CEQA Guidelines § 15130.

A new NOP and a new draft EIR need to be prepared and recirculated to include all aspects of the Refinery Strategy project and to analyze all potential environmental impacts associated with the complete set of proposed rules directed at refinery sources, which now also now includes proposed Rule 13-1. Therefore, for the foregoing reasons, this DEIR needs to be withdrawn and be expanded and recirculated on a programmatic basis to comprehensively address the cumulative impact of all of the rules, including proposed Rule 13-1.

### ***1.2 The DEIR Fails to Address How these Rules Will Comply with the Federal Clean Air Act, California Air Quality Laws and Other BAAQMD Regulations***

The federal Clean Air Act and the analogous air quality laws of the State of California have created a body of regulatory regime which articulates three basic principles: (1) the State and the Air Quality Management Districts ("AQMDs") set applicable emission limits, but do not dictate how the regulated sources will operationally achieve compliance; and (2) as long as the legal emissions limits are met, the State and the AQMDs do not attempt to regulate either the energy sources or the throughput of product in the facility. This regulatory infrastructure which has been created through the state implementation plan ("SIP") process to achieve compliance with federal ambient air quality standards ("NAAQS") and analogous state standards, New Source Review ("NSR") for new and modified sources in non-attainment area, Prevention of Significant Deterioration ("PSD") for new and modified sources in attainment areas, New Source Performance Standards ("NSPS") for new sources, the Title V Major Facility Permit Program ("Title V") for major sources, and the California AB 32 Cap and Trade Program for GHG emissions, the California Toxic Hot Spots Program ("AB 2588") for toxic air contaminants ("TACs") have all been designed to allow major sources such as refineries maximum facility-wide operational flexibility to achieve optimal operational safety, efficiency and sustainability.

This operational safety, flexibility and sustainability is reflected in the conditions and provisions in BAAQMD regulations, Title V permits, permits to operate ("PTOs"), consent agreements with EPA and the BAAQMD, and technical guidance documents issued by EPA, the California Air Resources Board ("ARB"), and the BAAQMD. Proposed Rules 12-16 and 11-18 (particularly Rule 12-16) have the potential for overriding well-established emission limits expressed in Title V permit conditions on which the oil refineries have relied to make operational changes, capital expenditures and achieve facility-wide operational flexibility. California Health and Safety Code Section 40001(d)(3) prohibits the BAAQMD from mandating that specific types of air pollution equipment be installed at a particular facility. However, the DEIR lists the specific air pollution control devices that will be required under these proposed rules. In addition, Health and Safety Code Section 40709 specifically requires that districts with nonattainment areas establish a system by which increases in one facility can be offset by decreases at other facilities. The DEIR should address how Rule 12-16 will comply with that requirement.

For example, the District regulations (Regulation 2 Rule 4) allow emissions banking and offsets. The DEIR should address whether Rule 12-16 will abrogate the right to use emissions reduction credits and offsets.

Furthermore, the DEIR should address whether proposed Rule 12-16 will prevent the use of offsets under the federal and District NSR and PSD programs.

### ***1.3 The DEIR Fails to Address the Lack of District Resources Necessary to Implement Proposed Rule 11-18***

As indicated above, the District does not have the staff to implement proposed Rule 11-18 because of the almost universal reach it has to Bay Area sources. This will result in such regulatory delays that the HRA approval process will become virtually unworkable which will greatly disrupt facility planning for refineries and other large facilities. The DEIR must address the environmental and socio-economic impact of the implementation of this regulation.

### ***1.4 The DEIR Fails to Address the Collective Impact of Rules 11-18 and 12-16 of Proposed Rules on the Operational Safety, Flexibility and Sustainability of the Refineries***

Following on the previous comment, the DEIR nowhere discusses the collective economic impact of both of these rules on the ability to continue operating the refineries in the Bay Area with the requisite degree of operational safety, flexibility and sustainability. Since the refineries have been singled out for specific targeted regulation over and above the requirements needed to achieve NAAQS and AB 2588 objectives, the DEIR needs to address environmental impacts of singling out refineries for special emission reduction as contrasted with other sources of criteria pollutants, GHG emissions and TACs. For example, contrary to the statements in the DEIR, refineries are not necessarily the major sources of certain pollutants, such as reactive organic gas, NOx, PM 2.5 and SOx.

For example, the DEIR fails to address the fact that the planned caps under Rule 12-16 may cause some refineries to cut production immediately upon the effective date of the rule which may in turn adversely affect the operability of pollution control equipment which may affect controls for TACs.

### ***1.5 The DEIR fails to have a section on environmental effects found not to be significant.***

This section, though listed on the Chapter 3 divider page and required by CEQA Section 15128, is missing from the document. The document needs to add this section and the DEIR recirculated so that this can be reviewed.

### ***1.6 The DEIR and Initial Study (IS) used an old Appendix G Checklist and failed to include consideration of Tribal Cultural Resources.***

Although this IS was completed in October 2016, the old IS Checklist was used which does not include consideration of tribal cultural resources. This new checklist was prescribed as a result of Assembly Bill 52, passed in 2014, requiring notification to interested tribes for any project requiring CEQA. This analysis should be provided to justify elimination from further consideration including such notifications. As it stands, and bolstered by the lack of inclusion in the Persons Consulted Section of the DEIR, tribes have not had the chance to comment on this CEQA process or proposal. There are prescribed timelines to this notification process that protect tribes' ability to comment and participate before a document is published for draft public review. As a result, even if justifiably eliminated from detailed review in the DEIR, by not complying with the requirements of AB52 before the DEIR review period, the Bay Area Air Quality Management District (BAAQMD) is in violation and must reissue the DEIR after the tribes have had a chance to effectively participate in the process.

### ***1.7 Failure to evaluate Energy Conservation impacts following Appendix F.***

Neither the DEIR nor the IS presented an evaluation of energy conservation impacts required under Appendix F of the CEQA Guidelines. The DEIR needs to describe and evaluate the energy consuming equipment and processes that will be used during construction and operation. The document should include the environmental setting that describes existing energy supplies and energy use in the region. This should include the total energy requirements by fuel type and end use including diesel, gasoline, natural gas, and electricity consumption. The analysis should evaluate whether the project would cause wasteful, inefficient, and unnecessary consumption of energy during construction, operation, and/or maintenance, and if it will cause a substantial increase in energy demand and the need for additional energy resources. This section needs to be included and the DEIR recirculated.

### ***1.8 Dismissal of Resource Topics is not justified.***

The justification for eliminating various technical resources from detailed review in the DEIR, as provided in the IS, is incomplete in that there are no attempts to identify affected resources. The types of facilities that would be affected are known and the BAAQMD even knows the specific locations, at least in part, of these facilities even if not fully described in the document. However, the IS only speaks to 'typical' or 'general' conditions of such facilities without any consideration of the specific facilities. The mandate of a CEQA document is to work with the best data available at the time and to give fair and consistent consideration when evaluating these resources. This analysis, as it stands, appears to be a basic bare-bones analysis of conditions without a substantiated and referenced analysis. While this can be a good tool to plan a project, after the lead agency determines that an EIR is required, the justifications for elimination and focus in the EIR must be backed by substantial evidence. Specifically, each of these resource discussions that are found to not likely result in a potential for significance should complete a



critical analysis of what those resources are at these specific sites rather than assuming conceptual, stereotypical conditions of such an industrial facility.

*1.8.1 Elimination of resources from further analysis did not consider specific potential emissions controls when justifying the omission from the detailed analysis in the EIR.*

The EIR states that because "...the actual control measures that will be required to reduce emissions, if any, is unknown" that "the EIR evaluates the impacts of potential emissions control measures that could be utilized." The IS does not evaluate potential emissions controls however and therefore does not appear to consider the potential impacts of those controls when eliminating resources from further analysis.

*1.8.2 Several dismissed resource topics in the IS concluded the impact was not significant because they lacked detailed information to evaluate the impact on specific facilities.*

The resources that concluded that potential impacts could occur, but that adequate information was not available to evaluate the specific impacts, should be revised and mitigation measures included that require a detailed analysis of the potential impact on a project-specific basis. Programmatic level analyses are commonly not able to adequately evaluate all impacts for individual projects. However, these situations typically prescribe mitigation measures that require impacts to be evaluated on individual projects.

*1.8.3 The Agriculture and Forestry section should evaluate if distribution infrastructure or other infrastructure and components within public and private right-of-ways potentially be included under the purview of either proposed ruling.*

More specifically, if emissions reduction requirements could not be met, should modifications to these components be considered outside the existing footprint of the refinery or toxic air contaminant (TAC) emitting facility? If so, these locations should also be considered and such modifications could potentially affect some of the eliminated resources. Note that this comment applies to several resource areas, not just Agriculture and Forestry Resources.

*1.8.4 The biological analysis includes a number of incomplete analyses requiring substantial evidence to justify elimination and should also include regulatory review.*

The biological analysis includes a number of incomplete analyses that require substantial evidence to justify elimination and should also include regulatory review. Relevant agencies including California Department of Fish and Wildlife (CDFW), U.S. Fish and Wildlife Service (USFWS), National Oceanic and Atmospheric Administration (NOAA), Regional Water Quality Control Board (RWQCB), Bay Conservation and Development Commission (BCDC), and U.S. Army Corp of Engineers (USACE) have not had the opportunity to review and provide agreement with this level of consideration. This analysis is very conceptual without providing any specific information that relates to locations where possible issues affecting coastal/bay or

other wetlands resources may occur. Coastal and wetland resources are found on each of the refinery locations, several related dock facilities, and likely many of the TAC-emitting facilities. There is a cursory elimination of considering migratory patterns as a result of possible modifications and retrofits without any consideration of nesting or migratory bird impacts if stacks are raised or trees/vegetation removed. Wetlands are in fact found on several of these facilities as well. While this might be considered a programmatic level review requiring additional analysis at the time of such a requirement when better information is available, therefore it should be required as a mitigation measure for additional analysis be conducted if applicable. As a result, this analysis is inadequate to allow for effective agency input and inadequate to justify elimination from detailed review in the DEIR.

*1.8.5 The cultural analysis is incomplete.*

The cultural analysis is incomplete. At a very basic level, the Rule 11-18 discussion only addresses archaeology and does not consider historic structures, while the Rule 12-16 analysis addresses historic structures and not archaeology. Paleontology and human remains are not discussed.

*1.8.6 Evaluation in the IS is incomplete related to the impacts on the potential for soil erosion.*

Lacking sufficient information regarding the nature of the construction activities that would be associated with implementing control technologies (information missing from the project description), particularly the expected area of earth disturbance, if any, sufficient justification has not been provided for the conclusion that construction and implementation of control technologies would not significantly increase the potential for soil erosion, or for not carrying forward this potential impact into the DEIR. Note that in Section 3.5.4.1.1 of the DEIR, the analysis assumes that an excavation site for a new flue gas treatment (FGT) unit would be approximately 6,000 square feet; this estimate suggests that cumulatively across the project area, there could be a potential for significant erosion during construction activities associated with installation of the control technologies.

*1.8.7 The noise analysis is inadequate.*

Insufficient information has been provided in the IS to support the conclusion that control technologies would not significantly increase noise levels. Lacking sufficient information regarding the nature of the construction activities that would be associated with implementing control technologies (information missing from the project description) and noise levels associated with operating the control technology equipment, sufficient justification has not been provided for the conclusion that implementing control technologies would not significantly increase noise levels.

#### *1.8.8 The transportation analysis is incomplete.*

Because the stated refineries, and likely other TAC emitting facilities, utilize marine vessels, equipment, etc., marine transportation should have been a component of the transportation analysis. Similarly since many facilities utilize rail cars, rail transportation should have been a component of the transportation analysis.

#### *1.8.9 The Utilities and Service Systems analysis is inadequate.*

Insufficient information has been provided in the IS to support the conclusion that control technologies would not significantly increase the volume of solid waste generated such that it could exceed landfill capacity. Without sufficient information regarding the nature and volume of solid waste associated with implementing control technologies (information missing from the project description), sufficient justification has not been provided to support the conclusion that implementing control technologies would not significantly increase the amounts of solid waste generated, or that the waste could be addressed by available landfill capacity. Furthermore, information regarding landfill capacity in the project vicinity should be provided in the Setting section.

#### *1.9 The DEIR fails to include the limitations on discussion of environmental impacts.*

The DEIR should include a discussion of the limitations on discussion of environmental impacts, specific to those factors not known or beyond the scope of the rule proposal. CEQA Guidelines Section 15127 requires such a discussion for an EIR prepared in connection with the adoption, amendment, or enactment of a plan, policy, or ordinance of a public agency, or the adoption of a resolution making determination. Such cases might be the specific scenarios where such a modification or measure might be needed, specific locations, or extent of authority to prescribe such an action. Resolutions should then be set to base the analysis with the intent to make this DEIR a useful and objective analysis of potential impacts with substantiated resource elimination, alternative elimination, and findings.

#### *1.10 The IS references were inadequate.*

This analysis was cursory and incomplete on many levels and inadequate to identify potential impacts or to justify elimination of specific resources from detailed review. The fact that only three references were used in the development of the IS further demonstrates the lack of intent to comply with the spirit of CEQA. This analysis was cursory and incomplete on many levels and inadequate to identify potential impacts or to justify elimination of specific resources from detailed review. This analysis should be revised with citable sources and the DEIR should be recirculated considering all CEQA-prescribed resource sections.

### ***1.11 The List of Preparers and Agencies Consulted is deficient.***

The List of Agencies Consulted is inconsistent with the requirements of CEQA Section 15129. Section 15129 of the CEQA Guidelines requires that “The EIR shall identify all federal, state, or local agencies, other organizations, and private individuals consulted in preparing the draft EIR, and the persons, firm, or agency preparing draft EIR by contract or other authorization.” This section of the DEIR provides a list of names, but does not provide any affiliation or interest rationale to offer insight into the consultation value to the process.

The List of Preparers is inconsistent with the requirements of CEQA Section 15129. Per Section 15129 of the CEQA Guidelines and as a matter of practice, the list of preparers must clearly identify all staff, agencies, and organizations who prepared the EIR. The list must indicate the name, affiliation, and a very brief explanation of each individual’s role in the preparation of the EIR. This section serves as a basis of qualification to prepare such an analysis.

## ***2 THE PROJECT DESCRIPTION IS INADEQUATE***

### ***2.1 The justification for eliminating various technical resources from detailed review in the DEIR, as provided in the IS, is incomplete in that the project description used as a basis of analysis in the initial study did not provide detail as to what measures and activities might take place if emissions reductions cannot be met.***

The justification for eliminating various technical resources from detailed review in the DEIR, as provided in the IS, is incomplete in that the project description that was used as a basis of analysis in the initial study did not describe what measures and activities might take place if emissions reductions cannot be met. Descriptions should include operational changes; equipment type and size; location where they could typically be installed; the duration of construction activities; the nature and extent of earth disturbance associated with their installation; hazardous materials associated with their operation; waste (nature and quantity) that would be generated from their use; how that waste would be disposed of; resulting noise levels from control technologies; energy demands; etc.

Several of the analyses raised possible types of activities that might occur including stack raising, ground disturbance, and other activities that were generally dismissed without substantive detail as to why. The fact that these examples were provided, be it only in isolated resource discussions, but without any kind of relation to the specific type of facility, placement, etc. appears to skew the analysis to justify the conclusion before substantiating the analysis. While these types of modifications might be minor in the end and might not result in measurable impacts to these resources, the analysis does not adequately, completely, or consistently define the project being analyzed in the IS, and therefore this IS cannot be reasonably relied on to justify the ultimate focus of the DEIR. It is recommended that a complete IS be prepared or otherwise, that all resources be carried forward in the DEIR before recirculation. Likewise, the

DEIR should also discuss the specific types of modifications that might be required to fully justify its conclusions.

***2.2 The Project Description failed to adequately characterize facilities that may be impacted by the proposed rules.***

***2.2.1 The DEIR does not include a full list of affected facilities.***

Several emission sources are not listed in Section 1.3.3.1 as affected by Regulation 11-18. For instance, San Joaquin Valley Air Pollution Control District (SJVAPCD) has demonstrated that a typical hospital would have trouble meeting the risk thresholds established in Regulation 11-18 (SJVAPCD 2015. *Final Draft Staff Report with Appendices for Update to District's Risk Management Policy to Address OEHHA's Revised Risk Assessment Guidance Document* p. 21). Numerous small business owners would be impacted due to backup emergency generators that may exceed the risk thresholds of Regulation 11-18. Staff estimates that this rule could impact hundreds of facilities and several have not yet been engaged on this issue or were only recently aware of the potential impacts.

***2.2.2 The DEIR failed to convey the location of facilities impacted.***

The DEIR was limited in its use of figures to convey the geographic scope of facilities impacted by the proposed rules. Given the specific list of facilities covered by each proposed ruling, one could assume that the lack of mapping might be intentionally trying to generalize or suppress the potential impacts of these rulings. As a readability tool, which is critical and heavily encouraged in the CEQA process, a figure showing each area of coverage would offer a very easy tool to understand the affected facilities. Furthermore, offering similar figures among the alternatives considered would be helpful. Understanding that sensitive information is included, these maps could be developed in a way to show data without compromising facility standings.

***2.2.3 The DEIR fails to describe major category of sources at refineries.***

In characterizing the different types of emission sources at a refinery, the DEIR fails to describe process heaters and boilers that can potentially emit substantial amounts of criteria pollutants and TACs contained in the natural gas or refinery fuel gas. In addition, other sources such as sulfur recovery plants that are major sources of sulfur oxides (SOx) emissions are not described.

***2.2.4 The DEIR fails to describe major category of sources at facilities.***

In characterizing the different types of emission sources at manufacturing and chemical facilities, the DEIR fails to describe process heaters and boilers that can potentially emit substantial amounts of criteria pollutants and TACs contained in the natural gas. In addition, the DEIR fails to describe the TACs associated with pollution control devices such as TACs from thermal oxidizers and selective catalytic reformers (SCRs).

*2.2.5 The DEIR is inconsistent in its list of potential pollution control technologies.*

The several sections of the DEIR in Chapter 3 contain pollution control equipment not adequately described in the project description section. High efficiency particulate air (HEPA) filters as pollution control devices have not been previously mentioned in the DEIR and are mentioned in several sections of Chapter 3. The project description should be modified to include a discussion of HEPA filters since these are pollution control devices evaluated in several resource topics as potentially having impacts. For instance, the Hazards section requires mitigation measures to address some of the hazards associated with HEPA filters.

*2.2.6 The DEIR does not adequately describe potential control technologies that may be used to comply with Regulation 11-18 and 12-16.*

The DEIR fails to adequately describe potential control technologies that may be used to comply with Regulation 11-18. For example typical efficiency ranges that would be expected should be provided in Table 2.5-2. In addition several viable technologies are excluded. For example, in similar rule making, the South Coast Air Quality Management District (SCAQMD) included HEPA filters, dry scrubbers, and fixed or moving bed regenerative solvent reclaimers as potential control technologies (SCAQMD 2016. *Final Environmental Assessment for PARs 307.1, 1402, 1402 & Associated Rule 1402v Guidance Documents*. SCAQMD NO 160817CC SCH No. 2016081057). In addition, the DEIR did not discuss that a combination of control devices may be needed to adequately control the criteria and TAC emissions of a source.

The DEIR does not describe the range of control technologies for regulation 11-18 that are described in Table 2.5-3 for ways refineries could lower emissions.

The description of basic wet gas scrubber principles in Section 2.5.2.7 does not provide relevant information such as information that scrubbers in general, and especially high efficiency scrubbers, are very energy intensive and generate a liquid waste stream often requiring additional treatment. Note that Table 2.5-3 inconsistently lists wet gas scrubbers as an SO<sub>2</sub> control technology, but not PM<sub>2.5</sub> control technology for FCCU and FCC process units, while it is listed as controlling both types of pollutants for application to sulfur recovery units.

The description of the Claus unit converters and condensers is noted to remove as much as 95 percent of the sulfur in incoming gas streams. Subsequent paragraphs describe tail gas treating processes. It should be noted that all Bay Area refineries are required to use tail gas treating units and that the combined efficiency is well above 99+ percent sulfur removal.

*2.2.7 The DEIR does not adequately describe control technologies for GHG emission reductions.*

The DEIR does not clearly describe greenhouse gas (GHG) emission reduction strategies. The strategies for GHG emission reductions should be fully described and added to Table 2.5-3 of the DEIR.

*2.2.8 The DEIR and Regulation 11-18 do not include an accurate representation of toxic emission inventories for facilities.*

Providing an accurate and detailed toxic emission inventory is not currently a requirement for many facilities that will be covered by Regulation 11-18. BAAQMD currently provides an estimate of toxic emissions for intermediate facilities as required under AB2588. This inventory is not based on detailed information sufficient to produce an accurate annual emission inventory. Regulation 11-18 does not require a detailed toxic emission inventory to be provided for prioritization purposes. The regulation only specifies this upon request to the facility to provide information necessary to complete a Health Risk Assessment (HRA).

*2.3 The project objectives are inadequate.*

A project objective to provide accurate and representative data should be added. Objectives that serve to provide the public the opportunity to comment on draft HRAs and risk reduction plans are clearly stated. Also not stated and addressed in the rule is the objective to ensure that the source's emissions and operating conditions reflect actual and representative rates. An objective that provides the facility the opportunity to verify and confirm the accuracy of the use of best available data and review/confirm results should be added to the rule and project objections. Objectives could be expanded to involve affected businesses as stakeholders.

*2.3.1 The project objective relating to an emission cap is flawed.*

It has not been demonstrated that an emission cap would necessarily reduce the emission intensity of the production of transportation fuels. One of the project objectives of Rule 12-16 is to prevent any significant increase in the emission intensity of the production of transportation fuels. It is not clear that this objective will always be achieved by instituting emission caps. For instance, installing pollution control devices to reduce emissions of a criteria pollutant may result in an increase in direct or indirect GHG emissions or increases in other criteria pollutants; therefore there could potentially be an increase in emission intensity of the production of transportation fuels with respect to those pollutants. Additionally, the emission intensity per barrel of transportation fuel may increase if a facility must curtail production on some sources at the facility in order to meet the emission cap limits. This would result in the refinery not operating as efficiently and thus may produce less transportation fuel per ton of pollutant. A refinery is optimized to be most efficient when its source units are operating near full capacity. The project description states that an exceedance of a cap would be considered a violation over

the entire calendar year. An emissions cap should not be considered as exceeded before the date that the limit was exceeded.

*2.3.2 The emission cap of 7 percent allowance is unsubstantiated.*

A limit is proposed for emission caps including a 7 percent threshold allowance or threshold factor intended to account for year-to-year variations. Is there information to support that 7 percent is appropriate to capture year-to-year variation? A reference should be provided that points to this information. The DEIR did not adequately address the impact of this 7 percent allowance on future socioeconomic impacts, impacts from decreased operational flexibility and impacts from leakage.

*2.3.3 The project objective that discourages investment in new refinery equipment is flawed.*

Discouraging investment in new refinery equipment that would lead to increased emissions of GHG, particulate matter (PM), nitrogen oxides (NOx), or SOx does not consider that some new equipment may substantially decrease one or more of these pollutants, while having some increases in other pollutants. This objective may result in the inability to substantially reduce a specific pollutant since the new equipment may have increases in another pollutant. Little flexibility is provided to balance tradeoffs in equipment and the potential pollution increases or decreases that may occur. For instance, installing equipment to reduce SOx emissions could result in substantial increases in GHG emissions. There is no mechanism to provide a balance of emission reductions between pollutants such that while the new equipment may have some increases, it may overall cause a decrease across pollutants. This objective also fails to consider the safety aspect of not encouraging newer and safer equipment to be installed. The discouragement from investing in new refinery equipment does not encourage improvement in process efficiencies due to new technologies being discovered. New equipment with new technology has the largest potential to dramatically improve carbon intensity and overall refining efficiency.

*2.3.4 The DEIR objectives refer to transportation fuels, but do not discuss other refined products at a refinery.*

The DEIR objectives repeatedly discuss transportation fuel efficiencies. The definition of transportation fuels is not defined. In addition, Regulation 12-16 does not describe how it will determine emissions and efficiency for refineries that produce non-transportation products such as lubrication oils and petrochemical feed stocks. For instance, several refineries have lubrication plants, carbon plants, and asphalt plants. It is unclear how these are being considered for the refineries in particular since not all refineries have these sources and plants.



**2.4 *The DEIR fails to give a comprehensive list of chemicals and their effects that would be addressed with this rule.***

The DEIR only discusses in detail four types of pollutants targeted for reduction under Regulation 11-18, benzene, 1,3-butadiene, polycyclic aromatic hydrocarbons (PAHS), and diesel particulate matter (DPM). Other pollutants that should be discussed that were mentioned in the October 2016 BAAQMD draft staff report and Table 2.5-1 of the DEIR include formaldehyde, metals, hydrogen sulfide, hydrogen chloride, vinyl chloride, ammonia, ethyl benzene, and any other TACs listed by Office of Environmental Health Hazard Assessment (OEHHA) and BAAQMD Regulation 2-5.

**2.5 *The DEIR mentions that emission limits would change if the method of monitoring or estimating emissions changes, but fails to describe the mechanisms.***

The specific mechanism for determining methodology changes is unclear. This is complicated by the fact that a detailed methodology for the criteria pollutant emissions has not been adequately described. It is unclear that that methodology used as a basis for establishing the proposed emission caps has been consistently applied to all applicable facilities. In addition, it is unclear if this is the same methodology that is being required for facility use under Regulation 12-15. Since it is likely that Regulation 12-15 information will form the basis of compliance with Regulation 12-16, it is imperative that any discrepancies with the methodology be disclosed including emission factors and the range of sources included. Some key anticipated changes in methodology that should be addressed include startup and shutdown operations, permanently removed equipment, and inclusion of condensable particulate matter.

Furthermore, it is not clear on the permitting process for updating the air operating permits for refineries subject to these regulations, including any Title V requirements for public comment.

**2.6 *The DEIR is confusing as it fails to adequately define qualifying terms.***

The IS refers to *major* sources, *significant* contributions, *substantial* impacts, and the like. Without an objective definition of these terms, the analysis is unsubstantiated and further appears biased to justify the conclusion without a thoughtful analysis.

The DEIR does not adequately define key terminology that is part of the proposed rules and important for understanding the analysis. This includes the regulatory definition of a “major source”, “significant source of TAC”, “significant risk threshold”, and “risk action levels”. The term “significant source” is used in different contexts within the DEIR. This needs to be clarified to ensure that a consistent definition and context are used throughout the DEIR.

**2.7 *The DEIR does not describe the calculation of prioritization score which is a key determination of which facilities are impacted by the proposed rules.***

The DEIR should provide a citation or include a detailed description of the prioritization score methodology that will be used to initiate the Regulation 11-18 process.

**2.8 *The requirement to install TBARCT on all significant TAC sources is not clear, thus its impacts are not able to be determined.***

The criteria for ‘significant sources of TAC’ is defined, but does not clarify whether the criteria applies to the risk at any receptor or only those receptors that experience risk above the facility-wide threshold. If interpreted at any receptor, TBARCT could apply to many more operations and equipment that might not affect the goal of reducing facility health impacts to below 10 in a million cancer risk or hazard index of 1.0. The impact of installing TBARCT on these sources that do not affect the highest overall facility risks should be evaluated.

**2.9 *Options for risk reduction does not include TBARCT alternative for a source to be below significant risk threshold.***

The project description in the DEIR on Rule 11-18 in section 2.1.2, only presents the option of install TBARCT on sources if a facility is above a specified risk threshold. Section 11-18-301.2.2 also allows for a source to demonstrate that it is not above the significant risk thresholds set forth in Section 11-18-217. The significant risk thresholds in section 11-18-217 are a cancer risk of 1.0 in a million; or a chronic HI of 0.20 or an acute HI of 0.2. The project description should be modified to define clearly what a significant source of TAC emissions is at the facility.

The DEIR needs to clearly indicate that even after all sources implement TBARCT, the facility may still result in significant risk levels such as a cancer risk above 10 in a million, but that a facility would not have to take any further actions under Regulation 11-18 since all sources meet TBARCT.

**2.10 *The context and relative amount of risk of these TAC pollutants should be illustrated to support rationale for phasing implementation.***

Recent BAAQMD presentations provide detail showing the relative amount of risk by pollutant. These presentations show that the largest overall contributor to risk in the Bay Area is DPM as well as components of gasoline fuel. However, sources of DPM and gasoline stations are prioritized for phases 3 and 4 of implementation. The rationale for prioritizing sources should be explained further.

***2.11 The effectiveness of the project objectives is minimal since it does not capture the dominant sources of TACs in the region.***

The DEIR correctly states that BAAQMD has jurisdiction over stationary sources, as opposed to mobile sources. The DEIR distinguishes that DPM emissions sources mainly include mobile sources, such as heavy-duty trucks, buses, construction equipment, locomotives, and ships, but also stationary sources such as stationary diesel engines and backup generators. Since BAAQMD lacks jurisdiction of mobile sources, the HRAs should include stationary diesel engines and generators, but not include ships, locomotives and construction equipment. This would be consistent with the types of stationary sources evaluated under AB2588 HRAs. TAC emission reductions for mobile sources are regulated by CARB under Air Toxic Control Measures (ATCMs).

***2.12 The draft rule and DEIR do not clarify how it will involve the facility in the process of refining the emission inventory.***

Conducting an HRA for a complex facility is complicated and involves acquisition of multitudes of data to establish source characteristics, operations, emission rates, measurements and representative factors. Emission rates in inventories include estimates which can sometimes include worst-case or conservative assumptions when measurements or accurate determination is not readily available or feasible. Estimates can be subject to refinement if determined to be a significant contributor to overall risk results. Important factors are not often apparent until after running an initial screening HRA. The development of an HRA is most often an iterative process and involves the knowledge of subject matter experts, operations personnel and sometimes further investigation or testing. It is important that the BAAQMD reviews its preliminary work with knowledgeable facility representatives to ensure that adequate information and estimates have been provided and that sources are characterized appropriately. Neither the rule nor the DEIR describe the process BAAQMD will use to review its preliminary assessments and results with facility representatives to ensure they are accurate. Real risk reduction will be difficult for facilities to achieve if the basis for the HRA is flawed.

Proposed Rule 11-18-401 requires submission of any information required to conduct an HRA within 30 days to BAAQMD upon notification. Without advance notification to the facility of this requirement specifically applying to them, it will be difficult for facilities to provide the detail and quality of information required to prepare a meaningful HRA in a 30 day period. Some important information may not be readily available and may require testing or research to ensure accuracy. More importantly, it is often not possible to know what emission estimate or measurement data will be adequate for the HRA without conducting an initial screening HRA and identifying the key inputs and impacts to verify the input data. It is an iterative process for most facilities. This data collection and validation step is not contemplated in the proposed rule language. The BAAQMD should consider following timing and facility involvement similar to other regulations such as AB2588 and SCAQMD Rule 1402. BAAQMD should revise its

timeframe for submittal of data and validation of the HRA results. This should be addressed to ensure meaningful HRAs are prepared.

The exclusion of the facility from the HRA process makes no sense in ensuring transparency between the facility, BAAQMD and the public. The facility has unique knowledge about its facility and operations which are difficult to fully capture in a data request. This is even more confusing for the HRA process with the facility given that BAAQMD intends to hire 3<sup>rd</sup> party vendors who are even further removed from the facility and BAAQMD. The use of 3<sup>rd</sup> party vendors rather than reliance on the facility knowledge adds a further layer of decreased transparency and insurance that information is adequately considered and implemented in the HRA.

***2.13 The DEIR limited its analysis of secondary impacts only to installing air pollution control equipment to comply with the risk reduction plan requirements of rule 11-18 and emission limits under 12-16.***

The NOP/IS for the proposed rule identified that installing APC technologies could cause significant adverse environmental impacts. The DEIR limited its analysis of secondary impacts only to installing APC. To comply with the risk reduction plan requirements of rule 11-18 and emission limits under 12-16, the DEIR suggests that one likely measure taken by facilities would be to reduce operations, thus reducing fuel availability in the local area. The DEIR does not contemplate the potential gap in limiting fuel production versus fuel supply trends and projections, and where the fuel would come from to make up the gap. The fuel produced and shipped from locations other than the local bay area refineries, and the environmental impacts of supplying this fuel should be considered as they would be potentially significant adverse environmental impacts.

***2.14 The DEIR does not provide references for its assertion of the refinery average utilization rates.***

The DEIR Project Description fails to provide adequate citation for its assertion that annual average utilization is 80-87 percent. It does also not describe if specific facilities had lower than typical utilizations due to various economic and processing issues during this base period which may have caused an individual facility to have lower than average utilization. All types of economic and processing issues may not have occurred in the past and/or some may not be anticipated to occur in the future.

### **3 INADEQUATE REGULATORY BACKGROUND AND ENVIRONMENTAL SETTINGS**

#### **3.1 *Most resource sections only include a general boilerplate statement of the regulatory framework of each given resource area.***

If these documents were not reviewed, and cited, the statement is not useful to the analysis and should not be included. If statements of the regulatory framework that are not appropriately cited are not included, the validity of the analysis is limited. As an example, though certainly not the only example, Land Use and Planning refers to “the City and/or County General Plans” but does not include any reference to these. As a result, in the analysis of whether the proposed rulings conflict with any applicable land use plan, policy, or regulation, there is no basis for comparison or judgement. This conclusion is unsubstantiated without consideration of these plans or a citable analysis.

### **4 DEFICIENCIES WITH AIR QUALITY ANALYSIS**

#### **4.1 *The DEIR Table 3.2-1 is missing some AAQS.***

The DEIR Table 3.2-1 does not show the state AAQS for sulfates, hydrogen sulfide and vinyl chloride.

#### **4.2 *The DEIR is misleading by providing a 70-year cancer risk in the air quality setting section while intending to utilize a 30-year cancer risk for implementation of regulation 11-18.***

The DEIR is misleading by providing a 70-year cancer risk in the air quality setting section while intending to utilize a 30-year cancer risk for implementation of regulation 11-18. The DEIR setting section should be revised to show the cancer risk on an equivalent basis as the Regulation 11-18 will use in order to adequately characterize the environmental setting and background to establish baseline conditions.

#### **4.3 *The air toxics emission inventory used in the air quality setting is outdated.***

The air toxics emission inventory used in the air quality setting is outdated. The information referenced is from 2010 and is more than 6 years out of date. This should be updated with more recent information in particular as this is important in characterizing the baseline used to evaluate regulation 11-18.

**4.4 *The ambient monitoring network should describe the location of the stations or provide a map indicating their locations.***

The ambient monitoring network should describe the location of the stations or provide a map indicating their locations. It should also indicate at which station the maximum concentration of TACs listed in Table 3.2-5 occurred.

**4.5 *The construction emissions significance criteria are provided with no citation of substantial evidence.***

The construction emissions significance criteria are provided with no citation of substantial evidence. The DEIR presents construction emission thresholds of significance for air quality without providing citations or discussion on how these thresholds were developed. The DEIR mentions the BAAQMD's 1999 significance threshold as having no significance threshold for construction emissions. They do not provide adequate substantial evidence describing why they believe significance thresholds provided in Table 3.2-7 represent a level above which a project's individual emissions would result in a considerable contribution to existing non-attainment air quality conditions.

**4.6 *The construction estimates for installing pollution control devices is not realistic.***

Installing a wet gas scrubber at a refinery is a major capital project taking years in planning, design and construction, which may not be feasible to implement in a timely fashion to allow a refinery flexibility to operate according to market demand for products. The BAAQMD points out that installation of a wet gas scrubber is a possible necessity in order for refineries to fully utilize the capacity of their plant. The BAAQMD assumes that the construction completion a wet gas scrubber, from concept stage through construction could take months or years. Experience shows that concept, funding, design, permitting and construction of these units take several years and are very expensive units to purchase and operate. By capping refinery emissions and utilization of each local refinery, Rule 12-16 could eliminate current flexibility for the refineries which combined may not be able to meet the local demand for fuels in the event of a long-term temporary loss of production at any one of the facilities or within the California fuels market.

**4.7 *The emission inventory used for setting emissions caps for Regulation 12-16 is flawed.***

BAAQMD should perform an audit of the data in CEIDARS and compare to actual reported historical plant direct measured emissions (e.g. CEMS) and cite the specific emission factor calculated data. The CEIDARS data is inaccurate due to the use of general emission factors in emission calculations. It is strongly suggested that the emission caps should be revised using site-specific data before proposing a cap. Furthermore, a five-year snapshot of emissions does not accurately depict what could happen to a facility in any given year and does not reflect that the economy and demand for transportation fuels has not fully recovered from the recession.

The definition of the emission inventory in rule 12-15 includes cargo carriers, yet the standards proposed for Regulation 12-16 fails to include baseline numbers for cargo carriers as well as several other source categories. These may also be outside the authority of the BAAQMD to regulate as part of the refinery. The cargo carriers are generally not owned or operated by the refineries and therefore the refineries do not have any specific control over the operation of the cargo carriers

***4.8 Regulation 12-16 is in conflict with existing State and Federal approved permit programming rules.***

There is no justification for imposing a fixed numeric cap on petroleum refining facilities; it is fundamentally inconsistent with the State's cap and trade program. District rules must be consistent and in harmony with existing State law and not be arbitrary, capricious, or without a reasonable or rational basis. Thus the impact statement that there is no significant impact or conflict with existing rules is inaccurate. This impact analysis needs to be revised and the DEIR recirculated.

***4.9 The regulatory basis and context for Regulation 11-18 has not been adequately described in the DEIR.***

The DEIR needs to clarify authority for 11-18 and identify the relevant state and federal codes, particularly those sections related to establishing TBARCT. The DEIR needs to clearly state that this is not based on BAAQMD's authority under AB2588. The DEIR needs to explain how the process would work in practice for applying TBACT and TBARCT in accordance with NSR permits and clarify whether a significant source would need to apply TBARCT, TBACT, or both. Prior to adoption of the rule, BAAQMD needs to develop a process to make TBARCT determinations and in defining TBARCT for specific sources. TBARCT should be defined as part of the 11-18 rulemaking. Note that the current unavailability of TBARCT guidelines discourages early actions to reduce risk. BAAQMD's intent is that TBARCT can be no less stringent than an existing source MACT standard. However, TBARCT cannot and should not be defined in reference to new source MACT standards, which may be unachievable, infeasible, or prohibitively costly for existing sources subject to TBACT. Where post-project actual emissions are projected to be lower than pre-project actual emissions, that project should be exempt from Rule 2-5 TBACT requirements.

***4.10 The DEIR relies on deferred mitigation measures which are not allowed under CEQA.***

The mitigation measures to address the significant NOx emissions are deferred mitigation which is not allowed under CEQA. The mitigation measures while presenting an array of options, fail to provide a minimum performance standard which would be required for the overall NOx mitigation strategy to achieve. The NOx mitigation measures need to be revised and the DEIR recirculated.

#### ***4.11 The DEIR failed to evaluate exposure to sensitive receptors.***

The DEIR needs to be revised and recirculated to specifically evaluate the impact of exposing sensitive receptors to air pollutants. While Regulation 11-18 is aimed at reducing and characterizing toxic air containments released from facilities, the DEIR did not reach an impact determination. In addition, these health impacts need to be determined if they would also be cumulatively considerable given the ambient levels of toxic air contaminants from all sources in particular mobile sources.

#### ***4.12 The DEIR failed to evaluate odor impacts.***

The DEIR did not present significance determination associated with odor impacts in the DEIR. Construction activities such as fossil-fueled equipment and odors from soil disturbances can occur. The analysis should require that odors be minimized and piles of organic matter in soil be covered to reduce odors.

### **5 DEFICIENCIES WITH GREENHOUSE GAS ANALYSIS**

#### ***5.1 It is unclear how the proposed GHG emission cap is consistent with state regulations, plans and policies for GHG emissions.***

The DEIR says that there is a potential conflict with the state's cap and trade program since this would not allow a facility to participate in the cap and trade program to its full extent by purchasing offsets above the BAAQMD emission cap without being in violation of the BAAQMD regulation. This essentially creates a new legal limit on GHG emissions in conflict with state regulations and does not reflect the spirit of the cap and trade program which allows for reductions in GHG emissions to occur where most economically beneficial while still allowing for operational flexibility across facilities. Furthermore, the DEIR fails to address CARB's latest scoping plan and any plans to reach reduction levels in GHG emissions beyond 2020. The DEIR does not discuss this regulation and the potential for leakage in the context of the Low Carbon Fuel Standard. The DEIR needs to more adequately address the state regulations, plans and policies and properly determine the impact of this regulation in the context of these regulations and Scoping Plan.

#### ***5.2 The GHG emission significance threshold is not based on substantial evidence.***

The GHG emission significance threshold is not adequately based on substantial evidence. The DEIR suggests a "no net increase in emissions" thresholds as appropriate for overall air quality plans, but fails to provide proper justification that there are sufficient alternative measures in its overall air quality plan to ensure that any GHG emission increases as a result of the proposed rules would be adequately offset by other measures.



In addition, the district mentions a 10,000 metric ton of carbon dioxide equivalent (CO<sub>2</sub>e) emissions threshold but fails to provide substantial evidence indicating that this is sufficient to not have a cumulatively considerable impact on global climate change. BAAQMD also references a document that they no longer recommend for use as a general measure of a project's significant impact.<sup>1</sup>

Furthermore, this 10,000 metric ton CO<sub>2</sub>e threshold or the "no net increase in emissions" do not discuss how they will ensure that the state laws, plans, and policies requiring reductions below 1990 levels with interim goals in 2020, 2030 and 2050 will be achieved. Thus these thresholds of significance are inadequate. The DEIR needs to be revised to use significance thresholds that are based on substantial evidence and the DEIR recirculated.

### ***5.3 GHG emission inventory excludes indirect emissions which is inconsistent with previous guidance.***

The GHG emission inventory does not adequately include all indirect GHG emissions which is consistent with BAAQMD's guidance on methodologies and included in GHG emission inventory models used throughout the state. The GHG emission inventory did not address the indirect GHG emissions associated with water use, water treatment, and solid waste disposal. The GHG emission inventory failed to capture the extent of electricity use increase associated with addition of pollution control devices. Most pollution control devices use electricity to run control systems, power blowers, or perform mechanical functions. In particular a heavy user of electricity such as an ESP has not been included in the emission inventory. These omissions have the potential to change the significance conclusion. Therefore the GHG emission inventory should be revised and the DEIR recirculated.

### ***5.4 The GHG analysis dismisses accounting for changes in source of gasoline supply as being speculative when adequate data is readily available.***

The California Air Resources Board (CARB) has developed a sophisticated model for evaluating emissions associated with automobile use in California. This model is called the EMFAC2014. It includes not only estimates of air emissions and fuel use from motor vehicles in California, but it includes estimates of economic growth in motor vehicle use. This estimate from CARB as well as other emission models that have estimates of future economic growth in fuel consumption should be used to provide an analysis of the potential impacts associated with increased demand for transportation fuels in California. In addition, the Low Carbon Fuel Standard provides calculation methodologies to estimate the GHG emissions associated with supplying fuels from other sources. The DEIR needs to be revised to account for the shift in GHG emissions globally if the emission caps of Regulation 12-16 prevent local refineries from being able to supply transportation fuels predicted by increased demand.

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<sup>1</sup> (<http://www.baaqmd.gov/plans-and-climate/california-environmental-quality-act-ceqa/updated-ceqa-guidelines>)

**5.5 *The conclusion that GHG impacts from 12-16 are less than significant is only an assumption and not based on substantial evidence presented in the DEIR.***

Given the importance of the objective of protecting the climate, the analysis of the actual impact of 12-16 on increasing or reducing GHG emissions should be better studied. Measures to reduce emissions below caps for criteria pollutants can involve controls that increase GHG. Another example, if a reduction in demand for fuels does not occur, the caps proposed by this rule could impose limitations on producing fuels locally, resulting in shipment of fuels from other locations with less efficient processes to this local market which could increase globally GHG emissions. The likelihood of this circumstance should be better understood to fully address and conclude upon GHG impacts.

**6 *DEFICIENCIES WITH HAZARDS AND HAZARDOUS MATERIALS***

**6.1 *The hazards analysis failed to consider the presence and potential disturbance of asbestos containing materials and/or lead based paint.***

The DEIR needs to evaluate the impact of disturbing areas containing asbestos and/or lead based paint. It is likely that several industrial facilities that have been in operation a long time will have asbestos containing material or lead based paint. This needs to be evaluated and proper mitigation measures to address these hazards needs to be included in the DEIR.

**6.2 *This section failed to address impacts for facilities that are on known contaminated sites.***

The DEIR needs to be revised and mitigation measures implemented to address potential disturbances of areas known to be contaminated. This should include proper methods to deal with these hazards to prevent further contamination.

**6.3 *This section does not acknowledge possible fuel transportation hazards.***

If a reduction in demand for fuels does not occur, the caps proposed by this rule could impose limitations on producing fuels locally, resulting in shipment of fuels from other locations and potential increase in hazards from materials transport. The potential likelihood of this circumstance and impacts should be better understood.

**6.4 *Evaluation in the IS related to impacts to air traffic safety is incomplete.***

Elsewhere in the Initial Study (page 2-1), reference is made to increasing stack heights as a control technology. The impact evaluation should consider whether this facility modification (or other control technologies that involve vertical structures) could result in impacts to air traffic safety. Note that this option is also mentioned in passing in the DEIR (for example on pages 2-23, 4-9, 4-10), but is not discussed as a control technology in either Section 2.5.2 (for Rule 11-18) or 2.5.3 (for Rule 12-16).

**6.5 *The hazard analysis in the DEIR is incomplete in analysis of potential hazards associated with control devices.***

Table 3.4-1 of the DEIR indicates that there would be a potential hazard associated with (1) the increased use of caustic or lime for the LoTox technology, and (2) the catalysts used for selective oxidation catalyst - neither hazard is evaluated further in the DEIR, and no justification is provided for this omission.

In addition, the impact evaluation focuses on hazardous materials used by control equipment and hazards associated with equipment operation. The discussion should be expanded to address hazards associated with the waste generated by equipment operation, and the handling of that waste.

**7 *DEFICIENCIES WITH HYDROLOGY AND WATER QUALITY***

**7.1 *The basis for the water demand significance threshold is not explained.***

The DEIR states that impacts of the project on water demand would be considered significant if the project would use more than 262,820 gallons per day of potable water. The basis of this number should be provided in the DEIR. In addition, references to this threshold should be consistent throughout the report. On page 3.5-20, the threshold is referenced as being 263,000 gallons per day.

**7.2 *The evaluation of impacts to water quality is incomplete.***

As written, the impact evaluation assumes that wastewater from a wet scrubber is “typically [underlined for emphasis] treated and recycled to minimize water demand and wastewater generated.” Similarly, the discussion notes that wastewater from a wet gas scrubber “can” be treated and recycled. If there are instances in which this is not done, the analysis should (1) acknowledge that wastewater quantity could increase and its characteristics could change due to operation of these types of equipment under Rules 11-18 and 12-16, and (2) assess the potential for impacts to water quality.

**7.3 *Insufficient information has been provided in the IS to support the conclusion that construction activities associated with control technologies would be limited in size, thus limiting the potential for increases in runoff.***

Without having been provided sufficient information regarding the nature of the construction activities that would be associated with implementation of control technologies (information missing from the project description), it is not clear that construction areas would be limited in size. Sufficient justification has not been provided for the conclusion that construction activities would not contribute substantially to runoff. Note that in Section 3.5.4.1.1 of the DEIR, the analysis assumes that an excavation site for a new FGT unit installation would be approximately

6,000 square feet, and that a total peak of 18,000 gallons of water would be applied each day during construction. This hypothetical scenario suggests the potential for significant runoff.

***7.4 The scenario related to water usage for dust suppression was not fully substantiated, and the water application rates were unrealistic.***

The impact evaluation assumes that the typical control system would require approximately 6,000 square feet of space (using an FGT unit as an example of one of the largest expected). Because information regarding control technology unit sizes/construction footprints were not provided in the project description, this assumption could not be corroborated.

For assessing the water demand for dust suppression during construction, the impact evaluation assumed that one gallon of water would be applied to each square foot of exposed soil, up to three times a day. This assumption appears over conservative for the purpose of estimating water usage for dust suppression; an application rate of this magnitude would likely result in significant runoff. It is suggested that the discussion in Section 3.5.4.1.1 be clarified to note that the estimates used in the analysis are overly conservative for the purpose of estimating water usage and unlikely to occur in practice.

***7.5 The format of this section is not consistent with the other impact assessment sections.***

Specifically, the Hydrology and Water Quality section contains a section (3.5.6) entitled Mitigation Monitoring Requirements. It is unclear why this section contains this section, when none of the other resource discussion do. If this section is to be retained, we suggest that the mitigation measures listed in Table 3.5-2 be revised to reflect the actual wording in the MMs listed in Section 3.5.5. The wording for HWQ-2 is particularly confusing. The entry for “Methodology” in Table 3.5-2 refers to two mitigation measures that are not associated with hydrology and water quality, and should be revised accordingly.

## ***8 DEFICIENCIES WITH CUMULATIVE IMPACTS***

***8.1 The DEIR failed to adequately evaluate the project impact with respect to the cumulative setting of past, present, and future projects.***

The DEIR failed to adequately describe the cumulative setting and characterize the past, present, and future projects that need to be considered with the proposed project to evaluate cumulative impacts.

***8.2 The DEIR failed to take into account the impact of projected regional growth and how this would influence the impacts of the proposed Regulations.***

The DEIR failed to consider the regional growth which may require additional need for goods and materials provided by refineries and other facilities subject to the proposed regulations. The

ability for existing facilities to grow to meet this increased demand or for these goods and services to be provided outside of the region needs to be discussed for each resource topic. For instance, there will likely be an increased demand for transportation fuel that may require local refineries to increase capacity and/or these be supplied by facilities outside the region. Another example is that increased population growth may require expanded or new office buildings, hospitals, and gasoline refueling stations which all will be impacted by Regulation 11-18 especially those areas located in dense population centers where sensitive receptors are located adjacent to these facilities.

**8.3 *The DEIR failed to adequately characterize the cross-media environmental impacts and potential unintended consequences in particular leakage given the breadth of regulations the BAAQMD intends to enact on the refineries.***

Deficiencies in regulations and potential unintended consequences become evident when viewed more holistically. BAAQMD needs to address cross-media impacts in the context of the breadth of regulations proposed for refineries. The DEIR needs to evaluate Regulations 11-18 and 12-16 in the context of all regulations BAAQMD is proposing or has recently enacted on the refineries. Without this comprehensive cumulative analysis, the full impact of these regulations is not being evaluated.

**8.4 *The DEIR failed to address cumulative impacts of measures taken to comply with proposed emission caps of Rule 12-16, toxic air contaminant risk reductions of Rule 1-18, and concurrently proposed regulations to limit refinery carbon intensity of combustion emissions Rule 13-1.***

The DEIR concludes that while Rule 11-18 would reduce toxic air contaminant emissions, it could generate significant direct and indirect GHG emissions impacts and that Rule 12-16 would generate less than significant GHG emission impacts. The DEIR also states that GHG emission impacts are by definition a cumulative impact analysis. The DEIR considered the GHG impacts of implementing these rules alone and together, but did not consider the impacts together with concurrently proposed Rule 13-1, which aims to limit refinery carbon intensity relative to the facility's production of fuels. Since these rules would in some ways affect some of the same sources at the facilities (e.g. combustion sources, including both process devices and control devices), potential operational and control approaches would be determined by considering these rules together as the facilities might be subject to and have to comply with one or all of them. In addition, operational and control approaches will also affect the facility's net imports of power, steam, natural gas and/or hydrogen, which could likely result in an increase in indirect energy use and carbon intensity. For instance, installing pollution control devices, such as a wet gas scrubber or combustion device to reduce emissions of a criteria pollutant may result in an increase in direct or indirect GHG emissions or increases in other criteria pollutants; therefore there could potentially be an increase in emission intensity or carbon intensity of the production of transportation fuels with respect to those pollutants. What concurrent rules are in place will have a bearing on what emission control decisions and investments are made, so they must be

evaluated together. With competing objectives and complex operating conditions to consider, operational flexibility is likely compromised.

Given all these constraints, facilities will have fewer feasible options to implement. The DEIR states that to comply with Rule 11-18 and Rule 12-16 facilities could reduce operations. As previously noted, the emission intensity per barrel of transportation fuel may increase if a facility must curtail production on some sources at the facility in order to meet the emission cap limits or risk reduction plan requirements. This would result in the refinery not operating as efficiently and thus may produce less transportation fuel per ton of pollutant. A refinery is optimized to be most efficient when its source units are operating near full capacity. This potential outcome should be considered along with the objectives of Rule 13-1 which seek to limit refinery carbon intensity, and thus would encourage operation at efficient optimized conditions. Therefore, the DEIR is deficient without a more complete cumulative analysis considering competing objectives of all the currently proposed rules.

#### ***8.5 The DEIR failed to address cumulative impacts of toxic air contaminants.***

The DEIR failed to evaluate the impact of Regulation 11-18 and any residual health impacts that may be potentially significant even after implementation of this rule. This needs to be evaluated in the context of the current ambient levels of toxic air contaminants and existing regulations and policies that will change the environmental setting in the near future. It is unclear the extent that Regulation 11-18 will have on the cumulative amount of toxic air contaminants and associated health risks within the region.

#### ***8.6 The DEIR failed to fully evaluate the combined impacts of the two proposed regulations and any other related regulations being proposed by BAAQMD.***

The BAAQMD has stated that these regulations are part of a larger strategy to address emissions in particular from refineries. This DEIR fails to evaluate Regulation 11-18 and 12-16 in the context of all of the proposed refinery regulations, as well as other regulations suggested in their draft air quality plan. By not evaluating the impacts of these regulations together as a single project and in a cumulative context, the DEIR fails to adequately capture potential significant impacts that could occur when the regulations are considered together. This is a classic example of splitting up projects to avoid disclosing an otherwise significant impact, which is not allowed under CEQA.

### ***9 ALTERNATIVES ANALYSIS***

#### ***9.1 The No Project Alternative is inadequate.***

This section does not acknowledge that reduction in TAC emissions would result from controls adopted just to maintain risk below existing AB2588 notification and risk reduction thresholds, due to facilities reassessing health impacts using the updated OEHHA HRA methodology.

Several facilities with updated higher calculated risk would likely choose to or be required to adopt controls to remain below even the existing notification and risk reduction thresholds.

***9.2 The basis for selecting Alternative 1.2 is not provided.***

No basis is given for selecting a 25 in a million cancer risk and a Hazard index of 2.5 as appropriate thresholds. At a minimum this section could mention this level is consistent with that chosen by SCAQMD or perhaps based on similar rationale, though BAAQMD is choosing a HI threshold that is more stringent and less flexible than that chosen by SCAQMD. Some reference to the approaches taken in other regions of the state is relevant and should be included. The only justification provided is that this was requested in scoping comments.

***9.3 Regulation 11-18 should be revised to match Alternative 1.2 which is designated as the superior environmental alternative.***

If Alternative 1.2 is the environmentally superior alternative, why is it not the proposed project?

***9.4 The evaluation of alternatives to Rule 12-16 are limited to only one proposal for establishing the caps.***

BAAQMD does not provide support for the proposed 7 percent threshold allowance, nor does it consider whether an alternative to setting the caps at any other level might eliminate concerns of fuel shortage in the event of unanticipated long-term temporary loss of production or the ability to provide future adequate fuel supply to the local market. These important consequences and their potential environmental impacts should be evaluated and considered so that the possibility of unanticipated relocation (i.e., leakage) of emissions is minimized.

***9.5 The Alternatives should have included a scenario where a facility or refinery is shut down.***

These regulations have the real possibility of causing facilities and refineries in particular to cease operations in the region. The result of this leakage needs to be evaluated in the DEIR as an alternative. It is unclear if the impact of this would be a net benefit to the environment given socioeconomic impacts, additional transportation of goods and materials with increased air emissions and hazards to the area compared to the reduction in local air emissions that may occur. As mentioned earlier, transportation including goods movements is a dominant source of air quality emissions in far greater quantities than individual facility sources.

## **10 ACCURACY OF REFERENCES AND EDITORIAL MISTAKES**

### ***10.1 The introduction to Section 3 notes that the DEIR provides analysis for a list of environmental areas, not all of which are provided in the report.***

Section 3.1 states that environmental analyses are provided in the DEIR for the following environmental areas:

- Air Quality;
- Climate change and greenhouse gas emissions;
- Hazards;
- Hydrology and water quality;
- Noise;
- Transportation and traffic; and
- Utilities and service systems

The Introduction further states that (1) Environmental Setting; (2) Regulatory Setting; (3) Significance Criteria; (4) Environmental Impacts; (5) Mitigation Measures (if necessary and available); and (6) Cumulative Impacts will be presented for each of those impact areas. Discussions related to noise and transportation/traffic impacts are not discussed in the DEIR. The Introduction should be revised for clarification, or these sections should be added to the DEIR. Note that the Initial Study concluded that the project would not cause potentially significant impacts related to noise or transportation/traffic. The Initial Study concluded that the project could have significant impacts on utilities (water supply and wastewater treatment). A brief section on Utilities and Service Systems is provided in the Executive Summary, but a separate section is not provided in the main text. A separate section should be included in the main text, or the Hydrology/Water Quality section should be revised to note that the discussions therein pertain to the potentially significant impacts associated with utilities as well.

### ***10.2 Very few citations are provided for the data provided and when provided not all references listed are used and not all references used are referenced accurately or at all.***

While this might just seem like an editing issue, it triggers the perception that this DEIR was developed in haste. The reviewer is not able to see on what this data is based that are presumably setting very stringent regional policy. Likewise a draft EIR (BAAQMD 2017) is cited several times over, which is considered in practice to be a questionable source.

### ***10.3 There are numerous examples where available information was not obtained for the purpose of completeness.***

There are numerous examples where available information was not obtained for the purpose of completeness. One such example, though not the only one, is in the Noise section which states that “It is not known if the existing commercial or industrial facilities affected by the rule are



located within existing airport land use plans.” This is available information and the BAAQMD has access to the locations of the affected facilities. There is no reason why answers to these questions could not be obtained and incorporated in order to complete and informed analysis to cite and substantiate the finding. If the detailed information is not available for potentially significant impacts, mitigation measures should be added to ensure that these impacts are evaluated on a project specific basis when complete information is available.

***10.4 The General Information section does not provide General Plan Designations or Zoning as required.***

These sections require information from the specific general plans. It appears that a cursory explanation and general reference that general plans typically exist was compiled, however no actual effort expended to research these Plans. This judgment is validated by the lack of referencing to such Plans in the document.

***10.5 The introduction and Executive Summary provide subjective statements and concerns as context for the rule without reference to real trends and data.***

The second paragraph of the introduction and executive summary alleges that refineries are ‘significant’ sources of global greenhouse gas, and regional/local criteria pollutants and toxics. A more specific reference to quantify their contribution (e.g., percentage of total) of specific pollutants to overall inventories could avoid misleading the reader. In addition, the possibility of an increase in refinery emissions due to changing operations might also be put in perspective as this would directionally not be expected given the many existing ‘caps’ on Potential to Emit and source emission limits in refinery permits, as well as continually tighter limits through New Source Review, numerous existing BAAQMD requirements, CARBs requirements, including the Cap and Trade program for GHG, and USEPA requirements.

***10.6 Table 3.3-15 Title is inaccurate.***

Table 3.3-15 includes electricity use for wet gas scrubbers and SCRs while the title only indicates that wet gas scrubbers are included.

***10.7 The text citation of source of the 2015 GHG emission inventory does not match Table 3.3-3.***

The text citation of source of the 2015 GHG emission inventory does not match Table 3.3-3. The DEIR should be corrected to use a consistent and accurate reference for the GHG emission inventory in 2015.

## ***11 COMMENTS ON NOP/IS THAT WERE NOT ADDRESSED***

This DEIR and staff reports have failed to address several previous comments on the regulation and the NOP/IS. CEQA requires that all comments are addressed prior to certification of the final environmental document.

### ***11.1 The Areas of Potential Controversy provides an incomplete capture of potential areas of controversy received from scoping comments.***

Some areas not included in this summary include (a) a request to include a dispute resolution process, (b) the concern with the adequacy of review given the span of possible facilities, (c) an understanding of how cumulative emissions might be factored when determining thresholds for enforcement, (d) how these regulations might discourage new renewal energy projects, and (e) how these regulations conflict with other legislation and specifically the District's Authority. Response to scoping comments is of course not required under CEQA, however by not doing so in some format it appears that each of these issues have not been addressed. It was noted that many of these facilities, specific to proposed Rule 11-18, are not aware of their status and have not had a reasonable opportunity to review these measures. The proposal as it stands does not include exceptions or dispute resolution to avoid more onerous, and in some cases more impactful, enforcement actions. The IS gave no specification on the facilities and the DEIR does not give consistent consideration of the types of facilities and resources that might be affected. Though it is assumed that the HRA process might consider cumulative emissions, without clarity on the process, the strength of the process and consistent application of the process is called to question.

### ***11.2 The time period for Risk Reduction Plan is not enough time and does not allow for changes during detailed design.***

A Risk Reduction Plan requires careful planning and detailed analysis of a variety of measures. With only 180 days, the Plan may result in insufficient characterization and planning with higher potential for unnecessary engineering. BAAQMD should extend the response time to 365 days to complete a thorough Risk Reduction Plan to ensure meaningful compliance. BAAQMD should add language to allow updating and modification of the risk reduction plans to provide a way to adjust a plan if there are problems during detailed design and implementation with a strategy outlined in the original plan.

### ***11.3 Methods to demonstrate effectiveness of risk reductions measures needs to be clarified.***

BAAQMD needs to clarify within the rule or within the Staff Report the methods that are acceptable for a facility to demonstrate effectiveness of risk reduction measures that are implemented.

***11.4 Regulation 11-18 needs to be revised to include a process to reconcile potential disputes over risk reduction plan disapprovals***

A dispute resolution mechanism is warranted given the unclear process to be used to make TBARCT determinations and the current lack of guidance available on what would be considered TBARCT for new and modified sources.

***11.5 The release of draft documents is not appropriate for HRAs.***

Facility information released to the public should be limited to only those facilities above risk action levels, and that only final, District-approved documents be released. Draft HRAs should not be released as only the final HRA that has been vetted by experts is appropriate for release to the public. HRA's are complex and require careful consideration by experts and they are not meant to be changeable or subjective based on public comments.

***11.6 It is unclear how BAAQMD would determine appropriate time frames for implementation of risk reduction plans.***

The Regulation 11-18 needs to clarify how BAAQMD would determine what is "technically feasible and economically practicable" and how or on what basis BAAQMD would determine the appropriate time period.

***11.7 It is unclear under what conditions an updated risk reduction plan would be required.***

Regulation 11-18 needs to clarify what new information it is anticipating in regards to health risks. What level of a health risk increase would prompt BAAQMD to act? Can BAAQMD force a facility to change its plan whenever a new control technology or risk reduction measure becomes available? BAAQMD should revise the language to clarify that the obligation to update the risk reduction plan is triggered only if new information (i) causes a facility to exceed the threshold for preparing such a plan for the first time, or (ii) increases the risk associated with the site by more than the significant risk threshold. Other triggers for updates should also be specifically addressed in the regulation such as when equipment no longer qualifies as TBARCT, addition or changes to TACs and toxicity factors, and changes to risk assessment models or methodologies. Would a new HRA be required every time the US EPA updates AERMOD?

***12 MANADATORY FINDINGS OF SIGNIFICANCE IS INADEQUATE***

***12.1 The Mandatory Findings of Significance is inadequate and notably lacks substantial justification for impact findings; the findings under this section require reconsideration.***

Based on many of these other resource-specific comments and notably the lack of substantial justification for impact findings, the findings under this section require reconsideration. The

justification for there being no potential to degrade the quality of the environment is unsubstantiated and non-objective.