COMMENT LETTER 3

CITY OF CARSON

November 13, 2014

AQMD
Michael Krause
Program Supervisor, CEQA Section
Planning, Rules, and Area Sources

Subject: Phillips 66 DEIR Comments, City of Carson

Dear Mr. Krause,

I would like to thank you for the opportunity to provide comments on the above mentioned DEIR. The City believes the Cumulative Impacts Section does not include some major projects in and around the City of Carson. Please add the following projects:

1. Boulevards at South Bay 168-acre development project
2. Shell Carson Revitalization project a 448-acre site
3. Oxy Oil and Gas Exploration and Production project
4. Tesoro Los Angeles Refinery Integration and Compliance Project
5. Harbor-UCLA Medical Campus Master Plan project

3-1

Please send me the Response to Comments and FEIR.

Sincerely,

Saied Naaseh
City of Carson
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RESPONSE TO COMMENT LETTER 3

City of Carson, November 13, 2014

Response 3-1

Comment 3-1 provides suggests that additional projects should be included in the Cumulative Impact Section of the EIR. As discussed in the Draft EIR (see Pages 4-1 through 4-9), the impact analysis for the ULSD Project has been limited to operational air quality, so cumulative air quality impact analysis is also limited to operational air quality. The analysis for operational air quality is focused on the communities adjacent to the ULSD Project and generally within one mile of the Wilmington Plant (including portions of Wilmington, Carson, San Pedro, Rancho Palos Verdes, Lomita and Harbor City) because that is the area of maximum localized air quality impacts and the influence of the Project emissions decreases with distance from the Refinery.

All of the projects identified in Comment 3-1 are all located over two miles from the Phillips 66 Wilmington Plant. The Boulevards at South Bay are located near Del Amo and Main Street in the City of Carson, over four miles north of the Wilmington Plant. The Shell Carson Revitalization Project is located near Del Amo and Wilmington Avenue in the City of Carson, approximate 4.5 miles north of the Wilmington Plant. The Oxy Oil and Gas Exploration Project was located at the Domininguez Technology Center on Charles Willard Street in the City of Carson, over six miles north of the Wilmington Plant. Please note the Oxy Oil and Gas Exploration Project has been cancelled.

The Tesoro Los Angeles Refinery Integration and Compliance Project is located over 2.5 miles east of the Wilmington Plant. The Tesoro project would largely result in emission reductions providing overall air quality benefits[1]. Harbor UCLA Medical Campus is located approximately 2 miles north of the Wilmington Plant. Nonetheless, the projects identified in this comment have been added to the Table 4-1 and Figure 4-1 in the Final EIR. The inclusion of these comments does not change the conclusion of the ULSD Project regarding cumulative impacts and the project-specific air quality impacts associated with operational emissions from the ULSD Project are not considered to be a cumulatively considerable contribution to significant adverse cumulative air quality impacts.

For further details on the cumulative analysis, please see Response 4-27.

[1] See Tesoro Final EIR http://www.aqmd.gov/home/research/documents-reports/lead-agency-permit-projects/permit-project-documents---year-2009/final-eir-for-tesoro-project).

COMMENT LETTER 4

COMMUNITIES FOR A BETTER ENVIRONMENT

November 14, 2014

Mr. Jeff Inabinet
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4182

Via electronic mail: jinabinet@aqmd.gov

Re: *Notice of Errata of CBE Comments on Phillips 66 Los Angeles Refinery Ultra Low Sulfur Diesel Project Draft Environmental Impact Report*

Dear Mr. Inabinet:

Communities for a Better Environment ("CBE") hereby submits a Notice of Errata and Correction to the Comment Letter we filed on November 13, 2014 in response to the Phillips 66 Los Angeles Refinery ULSD Draft Environmental Impact Report ("Comment Letter").

The Comment Letter erroneously attached technical comments authored by Dr. Phyllis Fox, which were filed by Safe Fuel and Energy Resources California ("SAFER California") in support of its comments dated November 13, 2014. We accordingly *withdraw the attachment*, and resubmit CBE's corrected Comment Letter. The corrected Comment Letter makes no substantive changes, but only removes the attachment of and pin-cites to Dr. Fox's technical report. CBE's corrected comment letter is filed concurrently with this Notice. 4-1

Sincerely,

/s/
Gladys Limón
glimon@cbecal.org

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conditions. This initial misstep in determining significant air quality impacts is further compounded by comparing the inflated baseline to a low-production post-project time period, which also uses erroneous metrics. Accordingly, the DEIR fails to meet the California Environmental Quality Act's ("CEQA's") requirements.

We have reviewed the Technical Comments authored by Dr. Phyllis Fox, filed by Safe Fuel and Energy Resources California ("SAFER California") in support of its Comment Letter dated November 13, 2014 ("Fox Report"), which outline substantial flaws that are violative of the CEQA.[1] We hereby adopt and incorporate Dr. Fox's November 13, 2014 technical comments report in its entirety herein. Further, as discussed below, the DEIR is unclear, incomplete, and inadequate, and therefore fails to meet the CEQA's requirements. *See* Pub. Res. Code § 21000, *et seq*. 4-4 cont.

I. THE DEIR'S BASELINE IS LEGALLY DEFICIENT AND DOES NOT PROVIDE THE NECESSARY UNDERLYING DATA UPON WHICH A SIGNIFICANT ENVIRONMENTAL IMPACTS ANALYSIS MUST BE GROUNDED.

The DEIR employs a misleading and wholly inaccurate baseline to measure air quality impacts. Consequently, the DEIR can provide no real guarantee against the very real, likely and significant air emissions from this Project. Baseline determination is critical to the effectiveness of environmental review, because the baseline environmental conditions are those against which the proposed project's impacts are measured. An inaccurate baseline can drastically alter the outcome of environmental review — if baseline emissions are set too low, insignificant impacts become significant, and if baseline emissions are set too high, an EIR can overlook significant impacts on the environment. The defect here is that the pre-project emissions are unjustifiably elevated, thereby invalidating the DEIR's baseline. 4-5

Dr. Fox's report identifies considerable deficiencies and inaccuracies in the baseline determination. As Dr. Fox explains, the District calculated pre-project emissions using maximum daily emissions in 2002-03, rather than average daily emissions. This approach is fatally flawed because the pre-project emissions in the DEIR should be based on a *representative*, average period, rather than an inflated maximum period (which makes any increase in emissions due to the Project appear small by comparison).

CEQA "directs . . . lead agenc[ies to] 'normally' use a measure of physical conditions 'at the time the notice of preparation [of an EIR] is published, or if no notice of preparation is published, at the time environmental analysis is commenced.'" *Communities For A Better Env't*, 48 Cal.4th at 327 (citing Guidelines section 15125) (second alteration in original). However, because "'[e]nvironmental conditions may vary from year to year[,] . . . in some cases it is necessary to consider conditions over a range of time periods.'" *Id.* at 327-28 (quoting *Save Our Peninsula Committee v. Monterey County Bd. of Supervisors* (2001) 87 Cal.App.4th at 125). When baseline emissions are calculated based on a range of time periods, as the District did here, that time period must generally be representative of average conditions, unless the agency can 4-6

[1] *See* SAFER California's Comments in response to Phillips 66 Los Angeles Refinery ULSD Project DEIR, November 13, 2014.

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support use of a different calculation with substantial evidence.

In *Communities For a Better Env't*, the District argued against using "annual averages . . . to arrive at a baseline of daily emissions," because that calculation purportedly "fails to account for . . . the significance of peak production periods." 48 Cal.4th at 327. The Court responded by explaining that, while "[i]n *some* circumstances, peak impacts . . . *may* be as important environmentally as average conditions[,]" an agency's discretionary decision as to how to measure "existing [pre-project] physical conditions" must be supported by "substantial evidence." *Id.* at 328 (emphasis added). "If an EIR presents alternative methodologies for determining a baseline condition, . . . CEQA requires that each alternative be supported by reasoned analysis and evidence in the record so that the decision of the agency is an informed one." *Save our Peninsula Comm.* 87 Cal.App.4th at 120. 4-6 cont.

Here, the DEIR failed to use annual averages to establish the pre-project baseline, and instead used "peak" emissions during 2002-03 for at least some Project components. As Dr. Fox points out in her technical report, such is the case for the heater B-201. *See* Fox Report. The District failed to provide the necessary "reasoned analysis," however, as to why peak emissions provide a more accurate measurement for the heater B-201's pre-project existing physical conditions. Neither is there any evidence in the record, much less substantial evidence, to account for peak emissions use. Consequently, decision-makers and the public cannot determine whether peak production here is "as important environmentally as average conditions[.]" *Communities For A Better Env't*, 48 Cal.4th at 328. Accordingly, the DEIR both artificially inflates the baseline and fails as an informational document.

The baseline is flawed and unreliable based on the additional reason that the DEIR failed completely to identify the baseline years for key Project equipment except for the heater, hydrogen and steam production, resulting in an incomplete DEIR. *See* Fox Report. Moreover, where the base years (2002-03) *are* known for Project components, the District failed to provide any data that supports its selection of 2002-03 as representative of average emissions, calling the accuracy of the baseline into further question. *Id.* 4-7

Further, the DEIR's summary emissions reported for CO, NOx, VOC, SOx, and PM10 for the period of 2000 through 2013 are inapposite for baseline determination. That data, listed in Table 3.1-3, is based on *refinery-wide* emissions. DEIR, Table 3.1-3. According to Dr. Fox's technical evaluation, however, this data cannot support applying a 2002-03 time period as valid baseline years for individual process units because the modified units/operations emit only a very small fraction of the total Refinery emissions. *See* Fox Report. Using refinery-wide emissions data masks increases in emissions from much smaller units thus rendering the table inapplicable and insignificant as baseline support. *See id.* Accordingly, the DEIR should have provided more specific baseline information about the particular processes in the refinery which are key in determining the Project baseline, such as the variation in hydrogen needed in the refinery to produce diesel. 4-8

The baseline for the entire refinery cannot be the same as the baseline for diesel production, because refineries can and do change the proportion of different products they make according to the market price of individual products. So while the DEIR used a generally low period for overall

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refinery post-project emissions (when all production *including* diesel was depressed), it should have provided more specific baseline data on the *maximum potential to emit for diesel production* that the Project allows, including key data such as hydrogen demand used in this production. *See* Fox Report.

4-8 cont.

Based on the foregoing, the DEIR's baseline is fatally flawed, the DEIR cannot be used to accurately determine the Project's significant impacts.

II. THE DEIR'S POST-PROJECT'S EMISSIONS ARE LEGALLY DEFICIENT AND DO NOT ADEQUATELY ANALYZE SIGNIFICANT ENVIRONMENTAL IMPACTS.

The DEIR's post-project emissions determinations are similarly inherently flawed and cannot be used to calculate accurate significant air quality effects.

One of the significant errors found by Dr. Fox in the District's determination of post-project emissions is its measurement of *annual average* emissions from 2006 though 2008, rather measuring the "*maximum potential* to emit." *See* Fox Report. The maximum potential to emit is determined from either permit levels or a unit's engineering evaluation based on physical design. The maximum potential emissions metric is necessary because current emissions do not reflect the full capacity of the new equipment to operate, and Phillips can therefore increase production at will up to the physical constraints of the equipment, causing increased emissions. Not only does basic logic mandate the use of maximum potential emission to determine true Project impacts, but the 1993 SCAQMD CEQA Handbook requires use of that metric. It provides that, "[i]n determining whether or not a project exceeds these thresholds, the project emissions should be calculated . . . utilizing the highest daily emissions." 1993 SCAQMD CEQA Handbook at 6-3. The District failed to apply this standard. For instance, as Dr. Fox explains, the District estimated the increase in emissions resulting from increased hydrogen production based on *average annual emissions*, which, again, is an erroneous measure for post-project emissions. *See* Fox Report.

4-9

Further, where the District did estimate post-project emissions based on permit limits, those limits are not substantiated by the record. *See* Fox Report. Dr. Fox explains that her examination of a Title V Permit for the Wilmington Refinery did not corroborate the DEIR's stated emission limits. *See id.* The use of those limits must therefore be revised.

Another of the numerous deficiencies identified by Dr. Fox concerns the DEIR's use of the 2006-08 period to determine the post-project emissions. *See* Fox Report. Dr. Fox points out that the District failed to state a basis for selecting 2006-08 as an appropriate time period. *Id.* Using emissions data for 2007 to make a post-project determination results in a drastic underestimation of Project emissions because demand for fuel was depressed during that year. *Id.* Specifically, the DEIR uses recession year data for hydrogen production emissions. *Id.* The time period for post-project emission determinations must also be revised.

4-10

Accordingly, the DEIR's post-project emissions are erroneous and cannot accurately determine the Project's significant effects.

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III. THE DEIR DOES NOT ADEQUATELY ANALYZE SIGNIFICANT ENVIRONMENTAL IMPACTS, AND THUS FAILS TO INCLUDE FEASIBLE MITIGATION MEASURES TO ADDRESS THESE IMPACTS.

The DEIR improperly calculated the Project's air quality impacts and therefore fails to meet the CEQA's requirements. The CEQA requires project proponents to address all of a proposed project's anticipated environmental impacts. Public Resource Code § 21100(b)(1); *see also, County of Inyo v. City of Los Angeles* (1977) 71 Cal.App.3d 185, 199. CEQA Guidelines require that "[a]n EIR shall identify and focus on the significant environmental effects of the proposed project." In addition, agencies should not approve projects if there are feasible mitigation measures or project alternatives available to reduce or avoid the significant environmental impacts contained in the project's EIR. Public Res. Code §§ 21002, 21002.1(a).

Because, as already discussed, the DEIR improperly calculated both pre-Project baseline and post-Project emissions, the increase in emissions and resultant air quality impacts are greatly underestimated.[2] When these deficiencies (and other calculation deficiencies described below) are corrected, Project emissions are significant and must be mitigated. 4-11

Further, the District underestimates the significant impacts of the Project by failing to use the most recent significance criteria or the most accurate emissions factors for calculating emissions. As a result, though this DEIR focuses on potential NOx emissions from the Project (DEIR at 1-6), the District nevertheless significantly underestimates NOx emissions, and thereby fails to include the increased NOx emissions as significant impacts. When the DEIR's errors are corrected, emissions are shown to have a significant effect on air quality, and therefore need to be mitigated. For example, Nitrogen Oxide emissions (NOx) are at least 80 lbs/day. *See* Fox Report. The District does not and cannot propose feasible mitigation measures or project alternatives to avoid these impacts. The DEIR thus fails to comply with the requirements of the CEQA that the EIR identify significant environmental impacts and mitigation measures or alternatives to reduce or avoid these impacts.

A. The DEIR Does Not Adequately Analyze Significant Environmental Impacts

The DEIR fails to adequately analyze significant impacts because it relies on out-of-date significance criteria and failed to include emissions from several sources. First, the DEIR relies on regional significance criteria for PM2.5 from 1993. *See* Fox Report; DEIR at 3-32 (Table 3.3-6). In 2006, however, the District revised the significance thresholds to include localized significance 4-12

2

Pre-Project emissions were overestimated	Post-Project emissions were underestimated
Calculated using the maximum daily emissions in 2002-03 rather than average daily emissions.	Calculated using annual average emissions during 2006-08, rather than highest daily emissions, based on permit limits or equipment physical constraints.

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thresholds (LSTs) for PM2.5.[3] The LSTs are significantly lower than the threshold relied upon in the DEIR, yet the District fails to include an analysis of whether the PM2.5 emissions will exceed the LSTs. 4-12 cont.

The DEIR notes that there are regional significance criteria for lead emissions (3 lbs/day), yet ignores potential sources of lead emissions. DEIR at 3-32 (Table 3.3-6). These sources include the heater, hydrogen production, electricity demand, and truck transport, all of which can emit lead. *See* Fox Report. Lead emissions are by their nature very important to evaluate, as lead is persistent in the environment and accumulates, and can cause severe developmental and other impacts to children and adults at low levels. What is more, in order for the DEIR to serve its purpose of informed decisionmaking and public participation, the DEIR must analyze these emissions. *See Berkeley Keep Jets Over the Bay Comm. v. Bd. of Port Comm'rs* (2001) 91 Cal.App.4th 1344, 1355 ("the failure to include relevant information precludes informed decisionmaking and informed public participation, thereby thwarting the statutory goals of the EIR process"). 4-13

The failure to include the lead emissions from these sources highlights a problem throughout the DEIR – its failure to calculate emissions from hydrogen production, energy production, flares, and other sources. This failure (along with other errors, such as flaws in the emissions factors chosen, *see* Fox Report, means that the DEIR significantly underestimates the emissions and significant impacts of NOx.

For example, hydrogen production requires support of many different refinery processes, so increased hydrogen production causes emissions increases in other refinery equipment that were not calculated, including emissions from flaring and indirect sources. *See* Fox Report. Indeed, flare source emissions, which are required to produce hydrogen, are missing from the emissions calculations. These emissions by themselves are major when using updated emissions factors provided by EPA, resulting in NOx emissions of over 100,000 lbs/day, grossly exceeding the 55 lb/day CEQA threshold of significance. *Id.* 4-14

Startup and shutdown NOx emissions of new heater B-401 are also omitted and must be included. During these periods, heater operation would not include SCR controls, which reduce emissions by 90%. These emissions could result in an increase in NOx emissions of about 20 lbs/day, not prohibited by permit limit. When combined with other NOx emissions that were improperly left out of the DEIR, NOx emissions would be significant – 80 lbs/day – even without large NOx emissions from flaring that were also left out. *Id.* 4-15

In addition, the DEIR aggregated data from two units (89 – jet hydrotreater, and 90 – diesel hydrotreater), which can mask increased use of hydrogen in Project Unit 90, with associated increased emissions. *Id.* While the DEIR states that these are not separately reported, the refinery could nevertheless provide related data to disaggregate the impacts of these two units, as the refinery certainly has some separate data on the volumes and qualities of production of jet and 4-16

[3] The LSTs can be found at: http://www.aqmd.gov/docs/default-source/ceqa/handbook/localized-significance-thresholds/particulate-matter-(pm)-2.5-significance-thresholds-and-calculation-methodology/final_pm2_5methodology.pdf?sfvrsn=2, Appendix B.

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diesel.

While these are a few examples of the DEIR's omissions of critical information, the technical report by Dr. Fox, incorporated here by reference as noted above, provide further details on the DEIR's underestimation of emissions or complete failure to estimate emissions for a number of chemicals (carbon monoxide and others) and emissions sources, including indirect emissions sources caused by increased electricity demand, and other indirect sources identified in the Fox Report

4-16 cont.

B. The DEIR Did Not Analyze Mitigation Measures or Alternatives to Avoid or Reduce Significant Impacts

As a result of these errors and omissions, the DEIR significantly underestimates NOx emissions. *See* Fox Report. An EIR must "identify the significant effects on the environment of a project, . . . alternatives to the project, and . . . indicate the manner in which those significant effects can be mitigated or avoided." Pub. Res. Code at § 21002.1(a); *see also id.* at §§ 21002, 21002.1(b) (agency must implement all feasible measures to mitigate or avoid significant impacts). Here, because the DEIR misses the significant emissions of NOx, it does not and cannot identify feasible mitigation measures or alternatives to reduce these emissions and alleviate impacts caused by these emissions, as required by CEQA.

Beyond the potential localized impacts of PM2.5 and other pollutants that the DEIR improperly ignores, in the South Coast, minimizing NOx emissions is critical. The area is out of attainment for ozone and PM2.5. DEIR at 1-12. (In fact, the region missed the deadline to meet the 1-hour ozone standard in November 2010, despite having over two decades to attain the standard. 76 Fed. Reg. 82133 (December 30, 2011)). NOx is a precursor of both ozone and PM2.5. Reducing NOx emissions is critical to attaining those standards. In fact, the California Air Resources Board estimates that to meet the 0.08ppm 8-hour federal ozone standard by 2023, the region will need to reduce its NOx emissions by 80% from 2010 levels, and to meet the 0.075ppm 8-hour ozone standard by 2032, the region will need to reduce its NOx emissions by 90% from 2010 levels. California Air Resources Board, *Vision for Clean Air: A Framework for Air Quality and Climate Planning* (Public Review Draft, June 27, 2012) at 10.[4] It is thus critical that the DEIR correctly analyze and mitigate NOx emissions from this project in order to ensure that it does not interfere with attainment of federal standards.

4-17

IV. FAILURE TO DISCLOSE CRUDE-QUALITY IMPACTS IN PROJECT DESCRIPTION AND SIGNIFICANT IMPACTS ANALYSIS.

As described throughout this comment, the incorrect calculation methods used to determine pre- and post-project emissions have resulted in significantly underestimated project emissions, and the omission of any information disclosing the Refinery's change in crude slate falls among these errors. Nothing in the EIR discusses reasonably foreseeable, significant changes in the Refinery's crude feedstock, which will shift the quality of the crude slate currently processed at the Wilmington Refinery to an overall denser and higher sulfur-content slate.

4-18

[4] Available at: http://www.arb.ca.gov/planning/vision/vision.htm.

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The specific chemicals present in the type of crude processed at the Refinery directly impact the emissions released during processing. According to Phillips 66 corporate statements, the company is executing plans to move "cut-price Canadian crude to its California refineries via rail, and ship."[5] This "cut price," otherwise known as "cost advantaged crude" includes diluted tars bitumen, a type of crude that is notoriously high in sulfur content, dense, and which requires high amounts of electricity and heat to refine. These characteristics implicate significant air quality impacts, including increased air emissions, as well as increased risks of hazards. Disclosure and analysis of the specific chemical composition of the baseline and projected future crude slates processed at the Refinery are, therefore, essential to determining environmental and particularly air quality impacts, as any increases in emissions may become significant when measured in relation to existing impacts from processing the Refinery's current crude slate.

4-18 cont.

These and additional concerns were raised by CBE in its October 9, 2013 Comment Letter Opposing SCAQMD's Notice of Intent to Adopt a Proposed Negative Declaration (ND) for the Phillips 66 Crude Oil Storage Capacity Project at its Carson facility ("CBE's Carson Storage Capacity Project ND Comments").[6] Those comments addressed, *inter alia*, Phillips 66's failure to disclose its corporate plans, described above, and the initial study's failure to analyze the full range of potential impacts resulting from key de-bottlenecking and control process changes, which enable the refinery to process heavy, tar sands bitumen, and Bakken crudes.

The points of opposition raised by CBE in response to the proposed ND for the Crude Oil Storage Capacity Project are relevant to the District's analysis of the DEIR under review here for two primary reasons. First, because the Carson and Wilmington facilities are connected via a shared pipeline and together form what is known as the Phillips 66 Los Angeles Refinery, operations, process changes and resulting impacts at one facility may implicate the same at the other facility. As explained in further detail in CBE's Carson Storage Capacity Project ND Comments, the project description for that project assumes a consistent, continued exchange of petroleum products between the Carson and Wilmington facilities by existing pipelines between the two facilities; by marine terminals and pipeline on the Carson end; and by rail and additional pipeline on the Wilmington end.[7] The inherent process and operational connections between the two facilities require that potential impacts from projects at one facility be fully identified and analyzed in relation to the other. To the extent Philips 66 explicitly states its intent to bring down the "cost-cut," "advantaged," or "cost advantaged" crudes by both rail and ship, the impacts of doing so must be identified and analyzed for potential impacts at both the Carson and Wilmington facilities.

4-19

Second, the ULSD project's incorporation of some of the same project components identified in the Crude Oil Storage Capacity Project ND and CBE's Comments as essential to

4-20

[5] *Phillips 66 moving some Canadian crude to Calif. refineries –exec*, Feb 5, 2013, updated May 2013, last accessed November 12, 2014, available at: http://www.phillips66.com/EN/newsroom/feature-stories/Pages/AdvantagedCrude.aspx

[6] CBE's Comments Opposing SCAQMD's Adoption of the Phillips 66 Carson Plant – Crude Oil Storage Capacity Project ND, October 9, 2013, at 14 (citing ND at 2-48); Report of Julia E. May, CBE, on Phillips 66 LA Refinery Carson Plant Crude Oil Storage Capacity Project Draft ND, Comments to SCAQMD, October 9, 2013.

[7] *Id.*

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processing denser, higher sulfur content crudes, suggests that critical impacts left undisclosed in the ND analysis for that project, are likewise left without analysis in the DEIR for the ULSD project. The Crude Oil Storage Capacity Project involves, for example, modifications to incoming feeds to the Carson Crude Unit, including temperature modifications that are necessary to process Western Canadian tar sands and Bakken crude oils, as documented in CBE's Carson Storage Capacity Project ND Comments.[8] These modifications would debottleneck the Los Angeles refinery allowing it to process these cost-"advantaged" crude oils. Yet, while they are referenced in the DEIR under review here, they are not analyzed, or mitigated.

4-20 cont.

The DEIR refers to temperature monitoring and control valve modifications at the Carson Crude Unit generally, by describing the incorporation of temperature changes at the DU-5 Crude Unit at the Carson Plant into ULSD project operations as follows:

> "The Project scope included temperature monitoring equipment and modifications to flow control valves in order to improve crude distillation operations and minimize the high sulfur portion of the distilled crude routed to Unit 90. Maintenance workers performed the minor modifications (add premanufactured thermocouples and modify existing control valves) that were required to the unit. These changes did not result in physical impacts to the environment (air emissions, noise, traffic, etc.) so the environmental evaluation in this EIR is limited to the project activities at the Wilmington Plant (CEQA Guidelines §15064(d)(1))."

DEIR at 1-10. The DEIR does not, however, proceed to analyze these temperature changes, for any potentially significant impacts, nor does it fully describe the purpose of such changes in relation to overall refinery operations.

4-21

Because the District is in possession of CBE's Comments Opposing the ND for the Crude Oil Storage Modification Project and its attachments, CBE, hereby incorporates by reference, the full record for that project, including the proposed ND, any comments received, and the application submitted to SCAQMD as relevant points of analysis regarding any and all temperature process changes involved in the ULSD, and the Crude Oil Storage Capacity Modification projects. Additional process changes and modifications identified in CBE's Comment letter opposing the ND, and include but are not limited to, any storage tank modifications involved in both projects and the potential use of such storage changes to facilitate shifts in crude oil feedstock for the Los Angeles Refinery overall, including both the Carson and Wilmington facilities.

In sum, the potential for the new ULSD DEIR to mask incorporation of aspects of the Crude Oil Storage Modification Project must be explicitly evaluated in the DEIR for the ULSD. This is necessary in order to avoid piece-mealing and/or an incomplete project description, and to evaluate the major environmental impacts associated with foreseeable changes in feedstock source, and quality.

[8] Report of Julia E. May, CBE, on Phillips 66 LA Refinery Carson Plant Crude Oil Storage Capacity Project Draft ND, Comments to SCAQMD, October 9, 2013.

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Finally, changes in the overall quality and chemical composition of the crude slate currently processed at the Wilmington refinery also carries the risk of significant increases in the cumulative burden of air emissions and other existing environmental impacts in the area. By failing to address issues relating to these changes, the DEIR falls far short of meeting its obligation to identify, analyze, and mitigate where necessary, the direct, indirect and cumulative impacts of the project based on an accurate baseline and reasonable forecasts of future impacts of the Project. *See Laurel Heights Improvement Ass'n v. Regents of University of California* (1993) 6 Cal.4th 1112, 1123; Pub. Res. Code § 21002 (public agencies should not approve projects as proposed if there are feasible alternatives or feasible mitigation measures available which would substantially lessen the significant environmental effects of such projects); Guidelines § 15126.4. For these, and the additional reasons expressed in this Comment, the DEIR fails to meet CEQA requirements, and fails as an informational document. *Santiago County Water District v. County of Orange* (1981) 118 Cal App.818, 831 (An EIR must provide sufficient information "how adverse" potential environmental impacts will be.). 4-22

V. THE DEIR IMPROPERLY CONCLUDES THAT THE PROJECT RESULTS IN NO SIGNIFICANT IMPACTS BASED SOLELY ON LOCAL SIGNIFICANCE THRESHOLDS, DESPITE EXISTING ARGUMENTS TO THE CONTRARY.

The District determined "whether or not air quality impacts from the ULSD Project are significant . . . [by] evaluat[ing] and compar[ing] [the impacts] to the" District's project-specific significant thresholds. DEIR at 3-31. The DEIR considers Project impacts significant only if the "impacts equal or exceed any of the [threshold] criteria[.]" *Id.* The District compared the net increase emissions (which are flawed, as discussed above), and compared them to the District's project specific significant thresholds. In each case, the emissions show to be significantly lower than the thresholds. The District proceeds to conclude that, because the emissions "do[] not exceed any significant thresholds[,]" "the air quality impacts associated with the operational emissions from the ULSD Project are less than significant." *Id.* at 3-40. As the courts have held, however, "the fact that a particular environmental effect meets a particular threshold cannot be used as an automatic determinant that the effect is or is not significant." *Protect The Historic Amador Waterways v. Amador Water Agency*, 116 Cal. App. 4th 1099, 1109, as modified (Apr. 9, 2004) (citing *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 107). 4-23

"[T]hresholds of significance can be used only as a measure of whether a certain environmental effect 'will normally be determined to be significant' or 'normally will be determined to be less than significant' by the agency. *Id.* at 1098 (citing Guidelines, § 15064.7(a)). "In each instance, notwithstanding compliance with a pertinent threshold of significance, the agency must still consider any fair argument that a certain environmental effect may be significant." *Id.* Accordingly, a threshold of significance cannot be applied in a way that would foreclose the consideration of other substantial evidence tending to show the environmental effect to which the threshold relates might be significant." *Id.* at 1099. The District, here, however, did just that.

For all of the reasons discussed above, the District cannot simply stop at comparing the increased emissions against significance thresholds, but must rather consider all of the factors, as

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detailed throughout these comments and Dr. Fox's report, to determine the Project's air quality impacts. 4-23 cont.

VI. THE DEIR DOES NOT IDENTIFY A CLEAR BASELINE AND THEREFORE FAILS AS AN INFORMATIONAL DOCUMENT.

The key inquiry in determining the adequacy of a baseline is whether the baseline "inform[s] decision makers and the public of the project's significant environmental impacts, as CEQA mandates." Pub. Res. Code §21100. Ultimately, the lack of sufficient information in several areas and the lack of crucial technical evidence make the DEIR unclear and far from a single report clearly written to inform the reader of the consequences of the Project. Without this information, the public cannot understand and participate in the decision-making process, and the District cannot fulfill its CEQA obligations. *See Laurel Heights Improvement Ass'n. v. Regents of University of California* (1988) 47 Cal.3d 376, 392. 4-24

The DEIR includes a table summarizing the *net operational* emissions emitted by the ULSD Project. *See* Table 3.3-7. Because the net emissions of the Project are the resulting difference between pre-project (baseline) and post-project (operational) emissions, the public can make sense of the net emissions only by knowing the former. However, there is nothing in the Environmental Settings, Impact, and Mitigation section of the DEIR that describe the baseline or post-project emissions. 4-25

The District calculated the baseline using pre-project emissions from the 2002-03 time period for refinery operations, which assertedly "represents the timeframe during the environmental analysis development for the ULSD Project prior to the construction and operation of the ULSD Project." DEIR at 1-10 & 3-33. The DEIR contains two tables purporting to show the 2002-03 baseline emissions, but neither actually identifies those emissions. Table 3.1-3 reports only tons per year of criteria pollutant emissions for the period of 2000 through 2013, rather than identifying average daily emissions. Further, although the DEIR states that "[d]etailed baseline and post-project information on each component of the ULSD Project is described[,]" that information does not actually follow. *See* 3-33–37. For example, the discussion in the DEIR concerning hydrogen production states that "[t]he baseline hydrogen demand in Units 89 and 90 were based on monitoring data of hydrogen use in 2002-2003 for the two units combined[,]" and proceeds to discuss only net emissions increases. *See id.* at 3-35. There is no information indicating what the baseline and post-project emissions are. *See id.* Without providing a clear comparison between pre-project "existing physical conditions" and post-project conditions, the DEIR violates Section 21100's requirement that the District adequately inform the public of the Project's significant environmental impacts. *See* Pub. Res. Code § 21100. 4-26

The purported pre- and post-project emissions are identified only in Appendix B of the DEIR. It is well-established, however, that readers of any EIR should not be forced to sift through obscure minutiae or appendices, or to rely on outside research and resources to find important components of a thorough environmental analysis. *San Joaquin Raptor Rescue Ctr. v. County of Merced* (2007) 149 Cal.App.4th 645, 649; *see also, California Oak Found. v. City of Santa Clarita* (2005) 133 Cal.App.4th 1219, 1239. Accordingly, the DEIR undermines CEQA's purpose of ensuring the public's understanding and participate in these decision-making processes, and fails to

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serve as an informational document. 4-26 cont.

VII. THE DEIR FAILS TO ADEQUATELY ANALYZE SIGNIFICANT CUMULATIVE IMPACTS.

The DEIR contains a flawed analysis of cumulative impacts of the Project, one of CEQA's most vital requirements. *See* Pub. Res. Code § 21082 (referring to the CEQA Guidelines §§ 15130(a)(1) and 15355 for the applicable definition of cumulative impacts); *see also*, *Bozung v. Local Agency Formation Commission* (1975) 13 Cal.3d 263, 283 (holding that the cumulative impacts analysis of a project's regional impacts is a "vital provision" of CEQA).

A project has a significant cumulative effect if it has an impact that is individually limited but "cumulatively considerable." CEQA Guidelines §§ 15065(a)(3), 15130(a). "Cumulatively considerable" is defined as meaning that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." *Id.* at § 15065(a)(3). Cumulative impacts analysis is necessary because "environmental damage often occurs incrementally from a variety of small sources [that] appear insignificant when considered individually, but assume threatening dimensions when considered collectively with other sources with which they interact." *Communities for a Better Env't v. Cal. Res. Agency* (2002) 103 Cal.App.4th 98, 114. The DEIR fails to meet this requirement because its analysis of cumulative impacts is incomplete and ignores the applicable legal standard.

The DEIR admits that "[t]he past, present, and reasonably foreseeable future projects *would have a significant cumulative impact.*" DEIR at 4-9 (emphasis added). The DEIR then concludes, however, that the "project-specific air quality impacts associated with . . . [the Poject] are not considered to be . . . cumulatively considerable[.]" *Id.* The District justifies its conclusion on the grounds that "[t]he contribution of the project to cumulative air quality is very small[,]" and because the Project's emissions purportedly fall below the District's project-specific significant thresholds. *Id.* The District's conclusion, however, turns the applicable legal standard on its head and is simply indefensible. 4-27

An EIR must "discuss cumulative impacts of a project when the project's incremental effect is *cumulatively* considerable." CEQA Guidelines § 15130(a) (emphasis added). Indeed, District must find "that [the] project may have a significant effect on the environment" if it "has possible environmental effects that are individually limited but cumulatively considerable." CEQA Guidelines § 15065(a). Here, the District found that, while limited on its own, the effects of the Project are in fact cumulatively significant, but nevertheless, and contrary to the mandate of § 15065(a), concluded that the impacts are not cumulatively significant. The District's legal reasoning would altogether discard with the requirement that an agency undertake a cumulative impacts analysis whenever it deems that a project's individual effects fall below significant thresholds or make up a "small portion" of cumulative effects. Such a proposition simply cannot stand, however, since it conflicts with the plain language of CEQA and its implementing Guidelines. The District's position is therefore untenable.

Cumulative effects are "considerable" when "incremental effects of an individual project

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are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." Pub. Res. Code § 21083(b)(2). Applying this standard, the inescapable conclusion, as acknowledged by the DEIR, is that the incremental effects of the Project together with the past, present, and reasonably foreseeable future projects *do* have a significant cumulative effect. *See* DEIR at 4-9. The District's cumulative impacts analysis in the DEIR is therefore entirely deficient.

What is more, the DEIR fails to adequately analyze the existing cumulative impact burden of the larger geographical area. As a result, it fails to analyze and, where necessary, mitigate the full range of the Project's potential impacts in light of this burden. The Wilmington-Carson area houses five refineries, which comprises the highest concentration of refineries in California. Additionally, all of the areas surrounding the Wilmington-Carson refineries rank in the top 20% (with several areas in the top 5%) most overburdened and vulnerable areas in the State according to the most recent version of the California Environmental Protection Agency's CalEnviroScreen, version 2.0.

4-27 cont.

VIII. CONCLUSION

For the reasons stated herein, and in the additional technical reports submitted in response to the DEIR, as well as other comments incorporated by reference in this document, the DEIR fails to adequately identify, analyze and mitigate where necessary the significant impacts from this project, and therefore fails to comply with CEQA. As such, the DEIR must be revised to address its flawed analyses and re-circulated for public comment.

4-28

Sincerely,

/s/

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RESPONSE TO COMMENT LETTER 4

Communities for a Better Environment, November 14, 2014

A number of issues identified in the letter from the Communities for a Better Environment (CBE) were also raised in the letter from Adams and Broadwell/Phyllis Fox. The table below provides a quick reference of which comments in the CBE letter correlate to the responses to the Adams and Broadwell/Phyllis Fox letter.

Summary of CBE Comments

CBE Comment	Topic	Adams & Broadwell/Phyllis Fox Comment/Response
4-1	General/Introductory	None
4-2	General/Introductory	None
4-3	General Information	None
4-4	Summary comment; the Draft EIR is flawed/legally deficient. Baseline is improper. The comment letter incorporates comments from Phyllis Fox. Use of maximum daily emissions rather than average emissions is flawed.	 See Draft EIR pages 3-1 and 3-2. See Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-69, 1-71, and 1-73. See Responses 1-38 through 1-82. See Response 1-3 and 1-55.
4-5	Baseline is inaccurate because pre project emissions should be based on average emissions as opposed to maximum emissions.	See Responses 1-48 and 1-69.
4-6	Baseline did not use average conditions	See Responses 1-3, 1-7, 1-9, 1-48, and 1-69.
4-7	Baseline is flawed	See Draft EIR pages 3-1 and 3-2. See Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-69, 1-71, and 1-73.
4-8	2000-2013 data is not appropriate for baseline determination period.	See Draft EIR pages 3-1 and 3-2. See Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-69, 1-71, and 1-73.
4-9	Post-project emissions are flawed.	See Responses 1-3, 1-45, 1-53, 1-54, 1-55, 1-56, 1-58, 1-59, 1-60, 1-61, 1-62, 1-63, 1-74, 1-75, 1-76, 1-77, 1-78 and 1-80.
4-10	Draft EIR did not explain basis determining post project	See Responses 1-3, 1-9, 1-45, 1-53, 1-54, 1-55, 1-56, 1-58, 1-59, 1-60, 1-61, 1-62, 1-63, 1-74, 1-75, 1-76, 1-77, 1-78 and 1-80.
4-11	Summary comment for Responses 4-12	See Responses 1-43, 1-48, 1-54, 1-

	through 4-16.	55, 1-56, 1-58, 1-59, 1-60, 1-61, 1-62, 1-63, 1-69, 1-74, 1-75, 1-76, 1-77, 1-78 and 1-80.
4-12	Draft EIR relied on out-of-date significance criteria	See Response 1-43.
4-13	Lead emissions were not calculated	See Response 1-44.
4-14	Flare emissions were underestimated	See Responses 1-45, 1-59, and 1-60
4-15	Start up and shut down NOx emissions were omitted	See Response 1-67.
4-16	Data aggregated from Units 89 and 90 could mask the increased use of hydrogen by the Project. Project emissions were generally underestimated based on Phyllis Fox's comments.	See Response 1-54. See Responses 1-38 through 1-82.
4-17	The EIR underestimates NOx emissions.	See Responses 1-38 through 1-82, and specifically Response 1-67.
4-18	The EIR did not disclose that the project would result in a change in crude slate	See Response 4-18 below.
4-19	The EIR did not disclose impacts resulting from de-bottlenecking that would allow the use of other crude slates.	See Response 4-19 below.
4-20	Components of the Crude Oil Storage Capacity Project will allow the Refinery to process heavier crude oils.	See Response 4-20 below.
4-21	Changes to the Crude Unit were not explained in the EIR	See Response 4-21 below.
4-22	The EIR does not fully identify, analyze or mitigate changes to the crude slate.	See Response 4-22 below.
4-23	Inappropriate significance thresholds were used in the EIR	See Response 4-23 below.
4-24	Draft EIR does not establish a clear baseline due to lack of information.	See Draft EIR pages 3-1 and 3-2. See Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-69, 1-71, and 1-73.
4-25	There is nothing in the environmental setting, impacts and mitigation section that describe baseline or post-project emissions	See Draft EIR pages 3-1 and 3-2. See Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-69, 1-71, and 1-73.
4-26	The Draft EIR used an incorrect baseline. Pre- and post-project emissions are identified in Appendix B but not in the text of the Draft EIR.	See Draft EIR pages 3-1 and 3-2. See Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-69, 1-71, and 1-73. See Response 4-26 below.
4-27	Cumulative impact analysis is incomplete.	See Response 4-27 below.
4-28	Letter conclusion that summarizes comments.	See Responses 4-1 through 4-27.

Many of the comments in this comment letter paraphrase comments contained in Comment Letter 1 and Attachment A of Comment Letter 1. Therefore, where a comment paraphrases a comment made in Comment Letter 1 and Attachment A of Comment Letter 1, the reader will be referred to the appropriate Responses to Comments. Otherwise, responses have been prepared below for unique comments that do not appear in Comment Letter 1.

Response 4-1

The South Coast AQMD understands that CBE has withdrawn its comment letter on the ULSD Draft EIR submitted on November 13, 2014 and replaced it with the comment letter dated November 14, 2014 (with attachments dated November 13, 2014), which eliminated Phyllis Fox's technical report as an attachment to CBE's own comments.

Response 4-2

The commenter states that they are writing comments on the 2014 Draft EIR for the Phillips 66 ULSD Project on behalf of the Communities for a Better Environment (CBE). This comment claims that the Draft EIR suffers from flaws and that the Draft EIR should be revised and recirculated. This comment is an introductory comment and does not address the analysis in the ULSD Project in the 2014 Draft EIR, does not outline any flaws in the Draft EIR, so no further response is necessary.

Response 4-3

Comment 4-3 states that CBE is a nonprofit environmental health and justice organization and provides information on the purpose and goals of CBE's to enhance the environment and public health by reducing air and water pollution. This comment does not address the analysis of the ULSD Project in the 2014 Draft EIR so no further response is necessary.

Response 4-4

Comment 4-4 indicates that the 2014 Draft EIR attempts to address the legal deficiencies identified in *CBE v. SCAQMD* but that the Draft EIR improperly inflates the baseline. Comment 4-4 summarizes more detailed comments made later in the letter. The analysis in the Draft EIR does not inflate the baseline, nor does it minimize the impacts. For detailed responses on comments related to the baseline (pre-project emissions) for the proposed ULSD Project, refer to the Draft EIR at pages 3-1 and 3-2 and Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-69, 1-71, and 1-73.

The comment also indicates that it incorporates the November 13, 2014 technical comments from Phyllis Fox; however, the cover letter dated November 14, 2014, states that Phyllis Fox report has been eliminated. Regardless of whether Dr. Fox's report is incorporated, Comment 4-4 is a summary comment and general in nature. Please see

Responses 1- 38 through 1-82 which directly respond to the Phyllis Fox technical comments.

Regarding the comment that the pre-project emissions using maximum daily emissions rather than average emissions is flawed, see Response 1-3. The 2014 Draft EIR for the ULSD Project fully addresses the holdings in *CBE v. SCAQMD*. The California Supreme Court held that the Negative Declaration improperly used the maximum permitted activity as the baseline. The Supreme Court also found that there was a fair argument that the ULSD Project may result in significant impacts related to air emissions during operations, and so remanded for preparation of an EIR. In so doing, however, the Supreme Court did not conclude that the project would result in any significant impact. It left that determination to the South Coast AQMD, based on substantial evidence following preparation of an EIR. The South Coast AQMD has now prepared an EIR using actual operating conditions rather than permitted maximum activity levels as the baseline.

In addition to the holdings, the Supreme Court's discussion also guided the preparation of the EIR. The Supreme Court noted statements of the South Coast AQMD and Phillips 66 that refinery operations are complex and variable. 48 Cal. 4th at 327. The Supreme Court left to the South Coast AQMD's discretion the technical questions regarding how to measure the baseline for existing refinery operations, so long as it is supported by substantial evidence. 48 Cal. 4th at 327, 328. The Supreme Court also stated that, in preparing the EIR, the South Coast AQMD is not required to use the same measurement method as used in the Negative Declaration. 48 Cal. 4th at 328.

The Draft EIR no longer uses the permitted maximum levels as baseline. Rather, as stated on page 3-1 of the Draft EIR, the 2002-2003 time period is considered to be the pre-ULSD Project baseline conditions for Refinery operations as this represents the timeframe prior to commencement of the environmental analysis for the ULSD Project, and was prior to the construction and operation of the ULSD Project. The baseline used in the EIR was the actual refinery conditions and emissions in the 2002-2003 timeframe. Therefore, the EIR used actual data to determine the baseline emissions, which constitutes substantial evidence, as directed by the Supreme Court. For an explanation of the emissions used as the baseline, see Draft EIR at pages 3-1 and 3-2 and Reponses 1-3, 1-7, 1-10, 1-48, 1-50, 1-62, 1-69, 1-71, 1-73, and 1-78.

Response 4-5

Comment 4-5 indicates that the Draft EIR uses an inaccurate baseline to measure air quality impacts and cites comments made by Phyllis Fox regarding the baseline determination and the use of average daily emissions. The comment states that the baseline is fatally flawed because the pre-project emissions should be based on average emissions as opposed to maximum emissions.

See Responses 1-48 and 1-69 which summarize the reasons that the approach used in the 2014 Draft EIR is appropriate. The South Coast AQMD has long-established thresholds of significance for criteria pollutants that are daily and hourly standards.[1] These are derived from state and federal ambient air quality standards that measure compliance on an hourly or daily basis, as well as major sources thresholds in the federal Clean Air Act.[2] The South Coast AQMD significance thresholds examine peak daily scenarios to determine worst-case emissions for a project. Further, the Supreme Court has specifically acknowledged that peak impacts may be an important metric in measuring refinery operations.[3]

The South Coast AQMD makes its significance determinations based on peak daily emissions, as it provides a conservative approach to determining project impacts. The South Coast AQMD permits equipment based on the maximum permitted emissions on a daily basis (or a peak day) as an operator could continuously operate up to the maximum limit. Typically, operators do not operate their equipment at the maximum permitted limits on a continuous basis, but they could. Therefore, using the peak day emissions provides a worst-case estimate of potential air quality impacts and provides complete public disclosure of the potential worst case impacts. Therefore, as explained in the Draft EIR (see Page 3-1 and 3-2), actual peak daily emissions for the 2002-2003 timeframe is considered to be the pre-ULSD Project or baseline conditions for Refinery operations as this represents the timeframe prior to construction or operation of the ULSD Project. The pre-project peak day is then compared to the post-project peak daily emissions (based on maximum potential to emit allowed by the permit) to determine the actual emissions increase resulting from the project.

A simple analogy shows why the methodology advocated by Comment 4-4 would produce a false and misleading conclusion. Assume a man eats an average of one egg per day, so the actual daily consumption ranges from zero eggs to three eggs. He replaces his stove, but does not change his breakfast habits or egg consumption. A comparison of pre-project minimum day (0) to post-project peak day (3) would suggest that replacing the stove caused the man to increase his egg consumption by three eggs per day. A comparison of pre-project average day (1) to post-project peak day (3) would suggest that replacing the stove caused an increase in egg consumption by two eggs per day. Both of these comparisons would be false and misleading, because egg consumption did not change at all. This analogy demonstrates the importance of using same or similar time periods or data sets when trying to make comparisons to identify the impacts ***caused*** by a project. Depending upon the significance threshold applicable to a particular topic, it may be appropriate to compare peaks to peaks, averages to averages, or minimums to

[1]See, *Citizens for Responsible Equitable Environmental Development v. City of Chula Vista* (2011) 197 Cal. App. 4th 327, 344. The Court determined that where it can be found that a project did not exceed the South Coast Air Quality Management's established air quality significance thresholds, the City of Chula Vista properly concluded that the project would not cause a significant environmental effect, nor result in a cumulatively considerable increase in these pollutants.

[2] See, CEQA Air Quality Handbook, South Coast AQMD, May 1993, pages 6-1 through 6-2.

[3] See, *Communities for a Better Environment*, 48 Cal. 4th at 328 ("in some circumstances, peak impacts or recurring periods of scarcity may be as important environmentally as average conditions.")

minimums, but comparisons across different time periods lead to false conclusions. Here, as discussed in detail in Responses 1-48 and 1-69, the relevant significance threshold is peak day, and so the pre-project peak daily emissions are compared to the post-project peak daily emissions to determine the effect of the Project.

The comment suggests that the Supreme Court held in *CBE v. SCAQMD* that CEQA prohibits use of peak emissions for the baseline. *CBE v. SCAQMD* did no such thing. The case disallowed the use of a baseline based on the maximum level of activity or emissions allowed in a permit, where the simultaneous peak operation of multiple pieces of equipment was not achieved. Indeed, the Court expressly stated that peak impacts may be as important as averages: "[T]he date for establishing baseline cannot be a rigid one. Environmental conditions may vary from year to year and in some cases it is necessary to consider conditions over a range of time periods. In some circumstances, peak impacts or recurring periods of resource scarcity may be as important environmentally as average conditions." 48 Cal.4th at 328. The South Coast AQMD has carefully considered the entirety of the Supreme Court opinion in determining the appropriate baseline for the ULSD Project.

Response 4-6

Comment 4-6 quotes CEQA's requirements for the preparation of the baseline period, which is to normally use the physical conditions at the time the NOP is published and recognizes that in some cases is necessary to consider conditions over a range of time periods. The comment alleges that the 2014 Draft EIR used a range of time periods and that average conditions must generally be used, unless the agency can support use of a different calculation method with substantial evidence.

See Responses 1-3, 1-7, and 1-9. The Supreme Court's discussion in *CBE v. SCAQMD* guided the preparation of the EIR. The Supreme Court noted statements of the South Coast AQMD and Phillips 66 that refinery operations are complex and variable. 48 Cal. 4th at 327. The Supreme Court left to the South Coast AQMD's discretion the technical questions regarding how to measure the baseline for existing refinery operations, so long as it is supported by substantial evidence: "We do not attempt here to answer any technical questions as to how existing refinery operations should be measured for baseline purposes in this case or how similar baseline conditions should be measured in future cases… Neither CEQA nor the CEQA Guidelines mandates a uniform, inflexible rule for determination of the existing conditions baseline. Rather, an agency enjoys the discretion to decide, in the first instance, exactly how the existing physical conditions without the project can most realistically be measured, subject to review, as with all CEQA factual determinations, for support by substantial evidence." 48 Cal. 4th at 327, 328. The Supreme Court also stated that, in preparing the EIR, the South Coast AQMD is not required to use the same measurement method as used in the Negative Declaration: "The District is not necessarily required to use the same measurement method in the EIR as in the Negative Declaration. Whatever method the District uses, however, the comparison must be between existing physical conditions without the [ULSD] Project

and the conditions expected to be produced by the project." 48 Cal. 4th at 328. The Draft EIR does not use either the permitted maximum levels as baseline, or the worst case assumption and theoretical calculation regarding the source of the steam required for the project that were used in the 2004/2005 CEQA documents.

Comment 4-6 portrays *CBE v. SCAQMD* as holding that average baseline conditions are the norm and that use of peak baseline conditions is an alternative methodology that requires special justification. This is not what the Supreme Court held in *CBE v. SCAQMD*. The Supreme Court reiterated that CEQA requires a lead agency to normally use a measure of physical conditions at the time the Notice of Preparation is published or environmental review is commenced. Use of physical conditions at any other time – regardless whether it is average or peak – must be explained by the lead agency and supported by substantial evidence. Nothing in the Supreme Court's decision expresses a preference for averages or peaks. Here, the South Coast AQMD has examined two years of pre-project data to determine the most representative baseline conditions, in light of signficiance thresholds stated in terms of pounds of emissions per day. The South Coast AQMD explained its rationale and the data in the Draft EIR and again in these responses.

The comment incorrectly asserts that the Draft EIR uses a hypothetical baseline. As stated on page 3-1 of the Draft EIR, the 2002-2003 time period is considered to be the pre-ULSD Project of baseline conditions for Refinery operations as this represents the timeframe immediately prior to commencement of the environmental analysis for the ULSD Project and was prior to the construction and operation of the ULSD Project. Therefore, the baseline used in the EIR was the peak daily actual refinery emissions in the 2002-2003 timeframe. These facts constitute substantial evidence, as directed by the Supreme Court.

See Response 1-48, 1-53, 1-69, and 4-5 which summarize the reasons that the baseline approach used in the 2014 Draft EIR is appropriate, including the use of peak emissions.

Response 4-7

Comment 4-7 states that the baseline is flawed as it failed to identify the baseline years for key project equipment and no data are provided to support the selection of 2002-2003 as the baseline year. As stated on page 3-1 of the Draft EIR, the 2002-2003 time period is considered to be the pre-ULSD Project of baseline conditions for Refinery operations as this represents the timeframe prior to commencement of the environmental analysis for the ULSD Project and was prior to the construction and operation of the ULSD Project. Therefore, the baseline used in the EIR was the peak day actual refinery emissions in the 2002-2003 timeframe. With regard to establishing the baseline in general, refer to Draft EIR pages 3-1 and 3-2 and Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-53, 1-69, 1-73, and 4-6.

Response 4-8

Comment 4-8 indicates that the 2000 through 2013 data reported in Table 3.1-3 of the 2014 Draft EIR is not appropriate for baseline determination period and that the use of total Refinery emissions data could mask increases from smaller units. As explained in Response 1-9, The Draft EIR presents a wide range of information regarding the environmental setting for air quality. For example, the recent background air quality data presented in Table 3.1-2 of the 2014 Draft EIR includes information regarding actual air quality based on short-term measurements of one hour or 8 hours, and also includes 24 hour and annual averages from 2001 through 2012. Table 3.1-3 of the 2014 Draft EIR presents the reported annual emissions (tons per year) from the Refinery from 2000 through 2013. This allows the reader to see the Refinery's total contribution in any year as well as to see changes or trends over time for the Refinery as a whole. However, this information was not used to determine baseline emissions for purposes of the impact analysis. The Draft EIR uses a baseline period of two years preceding the commencement of environmental review (years 2002-2003). With regard to establishing the baseline, refer to Draft EIR pages 3-1 and 3-2 and Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-53, 1-69, 1-71, 1-73, and 4-6.

Comment 4-8 further asserts that the Draft EIR "should have provided more specific baseline data on the maximum potential to emit for diesel production that the Project allows." The comment is unclear in that it appears to demand baseline data for the post-project period rather than the pre-project period. It should be noted, however, that the maximum potential to emit for diesel production in the pre-project period is represented by maximum operations allowed under the South Coast AQMD permits for the various pieces of equipment, and this is precisely the approach invalidated by the Supreme Court in *CBE v. SCAQMD*. The Draft EIR uses actual emissions in the pre-project period to establish the baseline environmental conditions.

Response 4-9

Comment 4-9 indicates that the post-project emissions are flawed and references comments made by Phyllis Fox that claim the post-project emissions were based on annual average emissions rather than the maximum potential to emit.

See Response 1-45 which discusses the post-project emissions calculations. Table 5 of Response 1-45 outlines the calculation methodologies used for all emission estimates. Note that the peak/maximum equipment operation associated with the ULSD Project was used for all emission calculations, except for the estimated hydrogen production. The Final EIR has been revised to include the peak hydrogen use, as opposed to the average hydrogen use. For more details on the methodologies to determine emissions from the replacement heater, refer to Responses to Comments 1-62 and 1-63. Relative to methodologies to determine emissions from hydrogen production, refer to Responses to Comments 1-54, 1-55, 1-56, 1-58, 1-59, 1-60, and 1-61. Relative to methodologies to determine electrical demand, refer to Responses to Comments 1-74, 1-75, 1-76, and 1-77.

Relative to methodologies to determine steam production, refer to Responses to Comments 1-3, 1-78, 1-80, and 1-81.

Finally Comment 4-9 repeats claims made by Phyllis Fox that the Title V permit did not provide emission limits as stated in the EIR. Heater B-401 and associated conditions and emissions limits have been included in Section H (Permit to Construct) of the Title V permit since 2005. Once the construction and source testing was completed for the equipment, the permit was converted from a Permit to Construct to a Permit to Operate. Please note that Section D (Permit to Operate) of the August 31, 2017 Title V permit includes Heater B-401. The applicable portions of the 2017 Title V permit are provided in Attachment 3 to these Responses to Comments. As explained in Responses 1-61, 1-62, 1-63, and 1-64, the Title V permit limits the concentrations of CO (10 ppmv), NOx (5 ppmv), and SOx (sulfur limited to 40 ppm in the fuel gas) from Heater B-401 and limits the maximum firing rate of the heater. Emissions of VOC, PM10 and PM2.5 are limited in the South Coast AQMD Title V permit by limiting the maximum firing rate of Heater B-401 to 34 mmBtu/hr (see Section H page 25, of the September 25, 2017 Title V permit, Condition C1.26, the applicable portions of which are included in Attachment 3).

Response 4-10

Comment 4-10 repeats claims made by Phyllis Fox that the Draft EIR failed to state a basis for selecting 2006-08 as the appropriate post-project time period and that the EIR used recession year data to estimate emissions and the post-project emissions are erroneous.

As explained in Responses to Comment 1-53 and 1-56, this comment incorrectly asserts that the Draft EIR did not state any basis for selecting the years 2006 through 2008 as the post-project. In Section 3.1 of the Draft and Final EIRs, the following rationale is given for why the years 2006 through 2008 were selected as the post-project period.

> Since the ULSD Project went through start-up and de-bugging procedures in April 2006, the "post-project" period is considered to be May 2006 and thereafter. For the purposes of evaluating air quality impacts from the ULSD Project, the "post-project" period for the ULSD Project is May 2006 through April 2008. This period length was selected in order to compare an equivalent period of time, two years of operation, to the baseline conditions, which were developed using two years (2002 – 2003) of historical data. A two year period allows the data to reflect the various changes in operation such as shut down for maintenance, market demands, etc. Where available data did not precisely match these pre- and post-Project periods, the impact analysis relies on the best available match.

In addition to the above, the baseline and the post project periods were selected to avoid other events and refinery changes that would have obscured the emissions consequences of the project. In particular (as discussed in Response 1-9), in November 2001 flue gas

recirculation was added to Boiler 7, reducing NOx emissions from about 85 ppm to about 46 ppm (a 46 percent reduction, based on RECLAIM data). If a longer pre-project period were used for the baseline, the baseline emissions would appear to be substantially higher because the baseline would have included many months when Boiler 7 was operating without the added controls. A Selective Catalytic Reduction (SCR) air pollution control unit was added in December 2008, reducing NOx from 46 ppm to 11 ppm (an 82 percent reduction). If a longer post-project period were used, the post-project period would appear to have substantially lower emissions because it would include many months of operation of Boiler 7 at very low emissions rates due to the SCR unit. The combined effect of using a higher baseline and lower post-project emissions would be to shrink the emissions attributed to the project. The baseline pre-project and post-project periods were chosen to avoid the change in NOx emissions due to these two refinery modifications, which were unrelated to the ULSD Project. To avoid inappropriate influences from these and other independent projects, the South Coast AQMD used an approximately two-year period for the pre-project baseline and the post-project period.

With regard to the influence of the recession on post-project emissions, refer to Response 1-53. Relative to methodologies to determine emissions from hydrogen production, refer to Responses to Comments 1-54, 1-55, 1-56, 1-58, 1-59, 1-60, and 1-61. For more details on the methodologies to determine emissions from the replacement heater, refer to Responses to Comments 1-62 and 1-63. Relative to methodologies to determine electrical demand, refer to Responses to Comments 1-74, 1-75, 1-76, and 1-77. Relative to methodologies to determine steam production, refer to Responses to comments 1-3, 1-78 and 1-80.

Response 4-11

Comment 4-11 is a summary comment that summarizes further concerns outlined in Comments 4-12 through 4-16. Comment 4-11 claims that the Draft EIR improperly calculated baseline and post project emissions, air quality impacts are underestimated, when the emission calculations are corrected air quality impacts would be significant, and that significant air quality impacts require mitigation. Finally, the comment claims that the most recent significance criteria and the most "accurate" emissions factors were not used in the Draft EIR.

Comment 4-11 repeats claims made previously in the letter and by Phyllis Fox in Comment Letter No. 1. As discussed in Responses 4-6, 4-7, and 4-8, baseline emissions were appropriately analyzed. Also see Response 1-48, 1-69, and 4-5 which summarize the reasons that the baseline approach used in the 2014 Draft EIR is appropriate.

As discussed in Responses 4-9 and 4-10, the Draft EIR did not underestimate air quality impacts associated with the proposed project, with the exception of hydrogen production. Note that the peak/maximum equipment operation was used for all post-project emission calculations, except for the estimated hydrogen production. The Final EIR has been revised to include the peak hydrogen use, as opposed to the average hydrogen use.

Therefore, emission associated with the project have not been underestimated and are not expected to be significant. Relative to methodologies to determine emissions from hydrogen production, refer to Responses to Comments 1-54, 1-55, 1-56, 1-58, 1-59, 1-60, and 1-61. For more details on the methodologies to determine emissions from the replacement heater, refer to Responses to Comments 1-62 and 1-63. Relative to methodologies to determine electrical demand, refer to Responses to Comments 1-74, 1-75, 1-76, and 1-77. Relative to methodologies to determine steam production, refer to Responses to comments 1-3, 1-78 and 1-80.

As explained in Response 1-43, contrary to the opinion of Phyllis Fox, the Draft EIR used the most recent significance criteria adopted by the South Coast AQMD. Table 3.3-6 in the 2014 Draft EIR contains the most current air quality significance thresholds adopted by the South Coast AQMD Governing Board. Mass daily significance thresholds for criteria pollutants provided in the 1993 Handbook were adopted by the South Coast AQMD Governing Board in 1993. Several air quality significance thresholds identified in the 1993 Handbook have been revised by the South Coast AQMD Governing Board over the years, or additional thresholds adopted, to reflect the latest pollutant standards or attainment status of the region. For example, changes to the significance thresholds in the 1993 Handbook include developing and adopting a mass daily significance threshold for PM2.5, which was approved by the South Coast AQMD Governing Board in October 2006 (http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/pm-2-5-significance-thresholds-and-calculation-methodology). This PM2.5 significance threshold has been used by South Coast AQMD and has been recommended for use by other public agencies evaluating air quality impacts since that time. Other significance thresholds adopted by the South Coast AQMD and included in Table 3.3-6 of the 2014 Draft EIR include localized significance thresholds for NO_2, PM10, PM2.5, and CO, adopted by the South Coast AQMD Governing Board in July 2003 (http://www.aqmd.gov/home/governing-board/agendas-minutes). As a result, the significance thresholds identified in Table 3.3-6 in the 2014 Draft EIR are accurate and reflect the most current air quality significance thresholds used by the South Coast AQMD and recommended for use by other public agencies. Applying these current significance criteria, the South Coast AQMD concluded that the Project would not result in significant adverse air quality impacts, and so no mitigation is required under CEQA. Even so, the South Coast AQMD will impose Mitigation Measure AQ-1, which contains specific reporting requirements, to ensure that the Refinery operations are consistent with the assumptions upon which the air quality analysis is based.

Response 4-12

Comment 4-12 claims that the 2014 Draft EIR relied on out-of-date significance criteria and failed to include emissions from several sources. As explained in Response 1-43 and Response 4-11, contrary to the opinion of Phyllis Fox, the Draft EIR used the most recent significance criteria adopted by the South Coast AQMD. Comment 4-12 does not provide detail regarding the sources that the comment asserts were omitted from the

analysis. If the commenter is referring to lead emissions, please see Response 4-13 and 4-14, as well as 1-44. As explained in Response 1-43, the 2014 Draft EIR's analysis did include an evaluation of localized PM2.5 air quality impacts and compared the results to an applicable screening threshold. See Draft EIR Section 3.3.2.3, which includes the PM2.5 analysis and the conclusion that localized impacts are less than significant. An additional localized significance threshold modeling completed as part of the Final EIR (see Response 1-43 and Final EIR, Appendix D), the ambient air quality analysis for Heater B-401, the only stationary combustion sources associated with the ULSD Project. The modeling analysis concluded that the ULSD Project results in no significant changes in air quality and no exceedances of any state or federal air quality standards for CO, NO_2, SOx, PM10, or PM2.5.

Response 4-13

Comment 4-13 reiterates claims made by Phyllis Fox, including that: lead emissions associated with the project were not calculated, and that this failure as well as other errors means the Draft EIR underestimated emissions and significant impacts of NOx.

This comment reiterates Comment 1-44 made by Phyllis Fox regarding lead emissions. As discussed in Response 1-44, the 2014 Draft EIR did consider that the ULSD Project had the potential to generate lead emissions. However, using source test data for the heaters, it was demonstrated that lead emissions for both the pre-project and post-project operations were non-detectable. In addition, other indirect sources cited in the comment do not combust fuels that contain measurable quantities of lead. Therefore, the comment that the Draft EIR is deficient because it did not analyze lead emissions is without merit. Further, the commenter did not provide any data or other information supporting the assertion that the proposed project has the potential to generate lead emissions.

Response 4-14

The comment reiterates comments provided in Comments 1-45 and 1-59 from Phyllis Fox that flare emissions from hydrogen production and other indirect emission sources associated with hydrogen production have been omitted. As discussed in Response 1-59, peak emissions from material delivery, truck transport, worker travel, and flaring associated with hydrogen production have already been accounted for in the 1998 Final EIR for the Air Products Hydrogen Plant. In addition, as noted in Response 1-45, assigining all daily emissions from indirect sources to the ULSD Project is inappropriate and obscures the actual contribution of indirect emission impacts from the ULSD Project, as the amount of hydrogen used by the ULSD Project is one to four percent of the total Air Products hydrogen production. As shown in Table 13 (see Response 1-59), the actual total emissions of NOx from the operation of the Air Products Hydrogen Plant (including flaring emissions) ranged from about 35.3 to 75.5 lbs/day as opposed to the NOx emissions estimated in Comment 1-59, Table 1 of 240 lbs/day. Therefore, the emissions estimated by Phyllis Fox in Comment 1-59 and referenced in Comment 4-14 are

incorrect. Also, see Response 1-60 regarding the appropriate U.S. EPA emission factors for flares.

Response 4-15

Comment 4-15 reiterates comments provided by Phyllis Fox in Comment 1-67 regarding NOx emissions from startup and shutdown operations. As discussed in Response 1-67, the average NOx emissions for fully operational days, when the SCR would be in full use, was 1.5 lbs/day. The average NOx emissions on start-up and shut-down days when the SCR would not be in full use was 1.8 lb/day. Therefore, emissions during start-up/shutdown were essentially the same as they were when the heater was in full operation. The reason for this is that the heater is operating at much less than full operation during start-up/shut-down days. When the heater is fully operational, the SCR is in full use and NOx emissions are fully controlled. In addition, the NOx emissions from Heater B-401 on the peak start-up/shut-down day (4.9 lbs/day on June 29, 2006) remained below the estimated peak NOx emissions of 5 lbs/day (4.96 lbs/day) in the EIR. Also, as shown in Table 16 (see Response 1-67) the overall NOx emissions associated with the ULSD Project is estimated to be 7 to 13 lbs per day, well below the South Coast AQMD significance threshold of 55 lbs per day. See Response 1-67 for further details.

Response 4-16

Comment 4-16 reiterates comments provided by Phyllis Fox in Comment 1-54, that aggregated data from Units 89 and Unit 90 can mask increased use of hydrogen and the emissions generated in Unit 90. As discussed in Response 1-54, the baseline hydrogen demand in Units 89 and 90 was based on monitoring data of hydrogen use in 2002-2003 for the two units combined because the hydrogen use for each unit was not monitored separately and the hydrogen use for each unit cannot be "disaggregated" as suggested in this comment. The total increase in hydrogen used by Units 89 and 90 combined between the pre-project and the post-project periods was attributed to the Unit 90 for ULSD Project because no physical or operational modifications were made to Unit 89 as part of the ULSD Project or any other project during the post-project time period. The Draft EIR clearly states that the overall use of hydrogen increased over the baseline period by about 511 million standard cubic feet per year (mmscf/year) or about 1.40 mmscf/day (see Appendix B). The analysis included the conservative assumption that all of the increase in hydrogen use was attributed to the ULSD Project (Unit 90 hydrogen demand increase). The assumption is considered to be conservative because any increase in hydrogen demand compared to the baseline, regardless if it is from Unit 89 and/or Unit 90, is attributed to the ULSD Project. However, the estimated increase in hydrogen use in the Draft EIR was based on actual average conditions. The Final EIR has been revised to include emission estimates for peak hydrogen use as well as average hydrogen use and detailed emission calculations can be found in Appendix B of the Final EIR. The actual increase in peak day hydrogen demand for Units 89 and 90 combined was calculated as the difference between the pre-project peak day from 2002-2003 (13.12 mmscf on June 26, 2002) and the post-project peak day from 2006-2008 (16.96 mmscf on October 23,

2007), or 3.84 mmscf. This increase of 3.84 mmscf was attributed solely to Unit 90 to ensure the worst-case demand was attributed to the ULSD Project. The average actual emissions as shown in the Draft EIR and the peak hydrogen production emissions are shown in Table 11 (see Response 1-54). The Final EIR has been revised to include the peak hydrogen production emission estimates as well as the average hydrogen production emission estimates.

This comment also incorporates by reference the assertions in the technical report prepared by Phyllis Fox that the Draft EIR underestimated emissions, including indirect emissions. Please see Responses to Comments 1-38 through 1-82 for responses to the comments raised by Phyllis Fox.

Response 4-17

Comment 4-17 reiterates issues raised by Phyllis Fox that the NOx emissions in the Draft EIR were underestimated, and that feasible mitigation measures or alternatives to reduce these emissions were not provided. The comment further states that the Basin is out of compliance with the ozone and PM2.5 standards and additional NOx reductions are needed to meet ambient air quality standards. Please see Responses to Comments 1-38 through 1-82 for responses to the comments raised by Phyllis Fox. As discussed in Response 1-67, minor revisions have been made to emission calculations in the Draft EIR based on comments received on the Draft EIR. Those revised emissions are summarized in Table 16 (see Response 1-67) and the emissions for the ULSD Project would remain below the significance thresholds for all pollutants, including NOx. Since the ULSD Project-related air emission increases would be less than significant, no mitigation measures or alternatives are required for the ULSD Project.

Also, the ULSD Project was implemented to comply with the U.S. EPA's diesel fuel standards that required refiners to sell highway diesel fuel that meets a maximum sulfur standard of 15 ppmw. Compliance with the U.S. EPA sulfur standards reduced SOx and sulfate emissions from mobile sources in California; allowed for the widespread use of particulate filters to reduce particulate matter emissions; and resulted in a reduction in diesel particulate matter (DPM) emissions and the related health risk associated with DPM emissions.

The California Air Resources Board (CARB) studied the impact of implementing the ULSD regulations and implemented them to help comply with ambient air quality standards. These studies indicate that reducing sulfur content, aromatic hydrocarbon content, and specific gravity and increasing cetane number reduces PM emissions. They also show that reducing aromatic hydrocarbon content and specific gravity and increasing cetane number reduces NOx emissions from diesel engines. The California diesel fuel regulations reduce emissions of PM and NOx because they limit the sulfur and aromatic hydrocarbons content of diesel or require changes to other properties that produce equivalent emission benefits. The studies reviewed confirm that this flexibility is possible because emission benefits accrue not only from the reduction in the content of sulfur and

aromatic hydrocarbons in diesel fuel, but also from the lower specific gravity and higher cetane number of complying alternative diesel fuel formulations. This interrelationship of multiple diesel fuel properties that affect emissions enables fuel producers to employ considerable flexibility in formulating California diesel fuel, so long as their alternative formulations provide the same environmental benefits as defined reference fuels.[4] CARB estimated that the ULSD emission standards would result in NOx emission reductions of approximately 100 tons per year in 2005 to about 35 tons per year in 2020. CARB estimated that the particulate matter emission reductions in California are expected to range from about 16 tons per year in 2005 to about seven tons per year in 2020. A 72% reduction in non-methane hydrocarbon emissions was also predicted. The ULSD standards applied to all medium-duty and heavy-duty diesel engines produced for sale in California in the 2007 and subsequent model years. The ULSD requirements also enabled the retrofitting of existing diesel engines with control devices that reduce PM emissions. CARB staff estimated the full implementation of the measures resulted in an overall 85 percent reduction in the diesel PM inventory and the associated potential cancer risk for 2020, when compared to the diesel PM inventory and risk in 2003. Therefore, implementation of the ULSD requirements, including the Phillips 66 ULSD Project, accomplished the goal of reducing emissions from mobile sources, resulting in a large reduction in emissions from mobile sources. These reductions are critical to the South Coast AQMD's efforts to achieve the ambient air quality standards mentioned in the comment.

Response 4-18

Comment 4-18 asserts that another way the Draft EIR underestimates project emissions is by not disclosing a change in the refinery's crude slate. The comment argues that this undisclosed change in crude slate will include high sulfur "cost advantaged crude." These crudes, according to the comment, are associated with increased hazard risks and air quality impacts that may be significant.

The Phillips 66 refinery has operated more than ten years following completion of the project without any evidence that the project has caused harm to the environment, worker health, the surrounding community or the local economy, and the comment letter provides no evidence of such harm. With the exception of the emissions baseline issue identified by the Supreme Court, it is too late to raise issues regarding the adequacy of the environmental review of the ULSD Project, including the opinion that the ULSD Project would shift the quality of the crude slate. Further, the commenter provided no evidence to support the claim that the ULSD Project would result in a change in crude slate. The CEQA analysis for the ULSD Project was initially completed in 2004 and 2005 with the approval of the Negative Declaration, Addendum and Subsequent Negative Declaration. Any issue not raised in a petition for writ of mandate challenging the 2004/2005 approvals is foreclosed by the statute of limitations. Pub. Res. Code § 21167. In addition, some of the topics mentioned in the comment were raised in timely petitions

[4] CARB, 2003. Proposed Amendments to the California Diesel Fuel Regulations. Staff Report: Initial Statement of Reasons, June 6, 2003. Available at https://www.arb.ca.gov/regact/ulsd2003/isor.pdf

for writ of mandate filed in 2004 and 2005, but were rejected by the Superior Court or the Court of Appeal. Therefore, this EIR is limited to the single issue for which the Supreme Court ordered remand.

Regardless, hazardous materials and hazardous processes (including the risk of injury or death and catastrophic events) were evaluated in the 2004 Negative Declaration at pages 2-27 through 2-31; Appendix B; and Response 1-5 on page C-29 in Appendix C. Hazardous materials and hazardous processes (including the risk of injury or death and catastrophic events) were evaluated in the 2005 Supplemental Negative Declaration at pages 2-23 to 2-33 and Appendix B. In Superior Court Case No. BS091276, the petitioners challenged the adequacy of the analysis with respect to exposure of construction workers to high levels of toxic chemicals during site excavation and earthmoving activities, and exposing commenters, construction workers and nearby residents to increased risk of exposure to aqueous and anhydrous ammonia from the increased transportation to the Wilmington Refinery, and use and storage at the Wilmington Refinery of aqueous and anhydrous ammonia. See, e.g., Fourth Amended Petition for Writ of Mandate, paragraphs 7.b., 7.f., 68.d, 69, 85.c. through 85.e., 97-104, 114.d., 164.a., 205.c. through 205.f., and 212-217 at pages 3-4, 14-15, 17, 19, 21, 28, and 35-37. The Superior Court rejected the petitioner's argument that the hazards analysis was deficient. See Order Denying Motions for Peremptory Writ of Mandate and Statement of Decision filed August 1, 2005, pages 22-24; and Order Denying Petition for Peremptory Writ of Mandate and Statement of Decision filed June 12, 2006, pages 14-22. The petitioners opted not to seek appellate review of the Superior Court's decision on this topic. Accordingly, the decision of the Superior Court is *res judicata* with respect to the hazards issues litigated. The petitioner had the opportunity to challenge other aspects of the hazards analysis in that litigation, and did not do so. It is now too late to raise new issues related to hazards.

Health and safety hazards were discussed in the 2004 Negative Declaration: at pages 2-11 to 2-12 for exposure to air toxics; pages 2-28 to 2-29 and Appendix B for exposure to hazards and hazardous materials, etc.; and Response 1-33 on pages C-56 to C-57 for worker safety. In the 2005 Supplemental Negative Declaration health and safety hazards were discussed: at pages 2-13 and 2-14 for exposure to air toxics; at pages 2-25 to 2-28 and Appendix B for exposure to hazards and hazardous materials, etc.; and at page 2-26 for worker exposure to soil contamination and Response 1-19 on page C-30 of Appendix C. In Superior Court Case No. BS091276, in addition to the impacts described above with respect to hazards, the petitioners asserted that the CEQA documents failed to adequately analyze potential impacts with respect to increased cancer risk. See Fourth Amended Petition for Writ of Mandate, paragraph 164.c., page 28. Except as noted, the petitioner opted not to press its other challenges and/or to seek appellate review of the Superior Court's decision. Accordingly, the prior CEQA documents are final and the decision of the Superior Court is *res judicata* with respect to all these health and safety issues. The petitioner had the opportunity to challenge other aspects of the safety analysis in that litigation, and did not do so. It is now too late to raise new issues related to safety.

Response 4-19

Comment 4-19 identifies that the concerns raised in Comment 4-18 were first raised in a comment letter previously submitted in conjunction with the South Coast AQMD's proposed Notice of Intent to adopt a Negative Declaration for a different project, the Phillips 66 Carson Plant Crude Oil Storage Capacity Project. Further, the comment states that impacts evaluated at the Carson or Wilmington facilities should be evaluated for both facilities because the two facilities are connected via pipelines. The comment specifically calls out "advantaged" crudes as needing to be addressed for potential impacts at both facilities.

As discussed in Response 4-18, with the exception of the emissions baseline issue identified by the Supreme Court, it is too late to raise new issues regarding the adequacy of the environmental review of the ULSD Project, including the opinion that the ULSD Project would shift the quality of the crude slate. Further, the commenter provided no evidence to support the claim that the ULSD Project would result in a change in crude slate. The CEQA analysis for the ULSD Project was initially completed in 2004 and 2005 with the approval of the Negative Declaration, Addendum and Subsequent Negative Declaration. Any issue not raised in a petition for writ of mandate challenging the 2004/2005 approvals is foreclosed by the statute of limitations. Pub. Res. Code § 21167. Therefore, this EIR is limited to the single issue for which the Supreme Court ordered remand.

Moreover, the commenter's assertion that the Crude Oil Storage Capacity Project would cause a change in the refinery's crude slate was itself rejected for lack of evidence. The trial court found:

> Petitioner [CBE] cites to no direct evidence in the record that the changes in storage capacity will impact LARC's [Los Angeles Refinery – Carson Plant's] crude blend. Instead, Petitioner relies on Real Party's [Phillips 66's] 2012 Annual Report and a news report. This evidence merely indicates that Real Party's corporate strategy involves the increased exploitation of "cost-advantaged" crudes. It does not suggest that the proposed project description – which concerns increased refinery storage and oil throughput capacity, as well as the facilitation of marine supertanker offloading, and does not include any new chemical processing facilities – is impermissibly incomplete or inaccurate because it does not discuss an alteration to the mixture of crudes that Petitioner speculates will occur. Indeed, as Petitioner notes, the specifically discussed crudes are primarily transported to the Los Angeles area by rail, but the project does not expand the LARC's rail facilities and further prohibits rail delivery of crudes for the primary new and expanded tanks, limiting their storage to crudes delivered by marine vessels. Accordingly, alteration of the blend of cride oils processed by the LARC facility is not a reasonably

> foreseeable activity attributed to the Project and its omission does not render the project description incomplete.

Los Angeles Superior Court Case No. BS153472, Ruling on Submitted Matter, October 5, 2015, pages 15-16 (administrative record citations omitted). The court further observed: "The evidence in the record merely indicates Real Party's general corporate plan to utilize cheaper crudes. The connection between the general corporate plan and the Project is speculation by Petitioner." The petitioner also lost this argument at the Court of Appeals. Similarly, the commenter here speculates but provides no evidence that a corporate crude purchasing strategy discussed in 2012 has any connection to the ULSD Project, for which construction and start-up was completed many years earlier.

Response 4-20

Comment 4-20 claims that components in the Crude Oil Storage Capacity Project Negative Declaration and similar such components in the ULSD Project will allow the Phillips Refinery to process heavier crude oils. The comment states that these modifications would "debottleneck" the Refinery, which is not stated or analyzed in the Draft EIR.

As discussed in Response 4-18, with the exception of the emissions baseline issue identified by the Supreme Court, it is too late to raise new issues regarding the adequacy of the environmental review of the ULSD Project, including the commenter's opinion that the ULSD Project would shift the quality of the crude slate to "cost-advantaged" crudes and debottleneck the Refinery, along with a separate project that was permitted and built about 7-8 years after the ULSD Project was operational. Further, the commenter provided no evidence to support the claim that the ULSD Project would result in a change in crude slate. The CEQA analysis for the ULSD Project was initially completed in 2004 and 2005 with the approval of the Negative Declaration, Addendum and Subsequent Negative Declaration. Any issue not raised in a petition for writ of mandate challenging the 2004/2005 approvals is foreclosed by the statute of limitations. Pub. Res. Code § 21167. Therefore, this EIR is limited to the single issue for which the Supreme Court ordered remand.

Response 4-21

Comment 4-21 quotes the ULSD Project Draft EIR Executive Summary in discussing temperature monitoring and control valve modifications. The comment claims that temperature changes and potential impacts regarding to temperature changes were not fully analyzed in the Draft EIR. Additionally, the comment claims that the ULSD Draft EIR is being used to incorporate project components of the Crude Oil Storage Capacity Modifications project, thereby piece-mealing CEQA impacts and/or providing an incomplete project description

Comment 4-21 quotes the ULSD Project Draft EIR Executive Summary in discussing the temperature monitoring and control volve modifications. Further details on this portion of the ULSD Project are provided in the Chapter 2 – Project Description, subsection 2.6 which provides more details on the installation of temperature monitoring equipment (see page 2-9):

> The Carson Plant processes straightrun diesel or heavy gas oil feed in the Unit 90, which contains sulfur species that are some of the most difficult to hydrotreat. To reduce sulfur content in the feed and maintain a desirable catalyst life, the crude column needed to be capable of controlling the temperature between 650 and 700°F. The ULSD Project included the installation of temperature monitoring equipment (thermocouples) and flow control valves in order to improve crude distillation operations and minimize the high sulfur portion of the distilled crude routed to Unit 90. This allowed the crude column to be operated on advanced computer control within the existing Crude Unit throughput capacity rate.
>
> The 2004 Final Negative Declaration ULSD Project included an analysis of the physical modifications associated with the changes at the Carson Plant, which were concluded to be very minor. No major construction activities were required and these changes were incorporated into a normally scheduled refinery turnaround (i.e., refinery shutdown for routine maintenance) or into regular, ongoing maintenance activities. Maintenance workers performed the minor installation of pre-manufactured equipment (thermocouples and modify existing control valves) that were required to the unit. These changes did not result in physical impacts to any environmental topic identified in the environmental checklist in Chapter 2 of the 2004 Final Negative Declaration, so the environmental evaluation in this EIR is limited to the Wilmington Plant (CEQA Guidelines §15064(d)(1)).

Therefore, as discussed in the Draft EIR, the thermocouples were needed to: (1) allow the crude column to be computer operated; (2) to better maintain optimum operating temperatures between 650 and 700 ^{o}F (no change in operating temperatures or conditions, but it allowed the refinery the ability to control the temperature to a specific ranges); (3) to minimize the potential for high sulfur streams to be sent to Unit 90 which would impact the ability of the Unit to produce low sulfur diesel fuel. As stated in the Draft EIR, these changes did not result in physical impacts to any environmental topic identified in the environmental checklist in Chapter 2 of the 2004 Final Negative Declaration, so the environmental evaluation in this EIR is limited to the Wilmington Plant (CEQA Guidelines §15064(d)(1)).

As discussed in Response 4-18, with the exception of the emissions baseline issue identified by the Supreme Court, it is too late to raise new issues regarding the adequacy of the environmental review of the ULSD Project, including the comments raised by the commenter on another project. Thc commenter litgated the Phillips 66 Crude Oil Storage Capacity Modification Negative Declaration and all of the arguments raised by the

commenter on that project – including claims of piecemeal environmental review – were rejected by the trial court and Court of Appeal (see *Communities for a Better Environment v. South Coast Air Quality Management District*, Case No. B269258, Court of Appeal of the State of California, Second Appellate District, decision filed March 13, 2017 (unpublished decision)). The CEQA analysis for the ULSD Project was initially completed in 2004 and 2005 with the approval of the Negative Declaration, Addendum and Subsequent Negative Declaration. Any issue not raised in a petition for writ of mandate challenging the 2004/2005 approvals is foreclosed by the statute of limitations. Pub. Res. Code § 21167. Therefore, this EIR is limited to the single issue for which the Supreme Court ordered remand.

Response 4-22

Comment 4-22 claims that due to changes in crude slate, the Draft EIR does not fully identify, analyze, and mitigate when necessary, the direct and indirect cumulative impacts of the proposed project.

As discussed in Response 4-18, with the exception of the emissions baseline issue identified by the Supreme Court, it is too late to raise new issues regarding the adequacy of the environmental review of the ULSD Project, including the opinion that the ULSD Project would shift the quality of the crude slate. Further, the commenter provided no evidence to support the claim that the ULSD Project would result in a change in crude slate. The CEQA analysis for the ULSD Project was initially completed in 2004 and 2005 with the approval of the Negative Declaration, Addendum and Subsequent Negative Declaration. Any issue not raised in a petition for writ of mandate challenging the 2004/2005 approvals is foreclosed by the statute of limitations. Pub. Res. Code § 21167. Therefore, this EIR is limited to the single issue for which the Supreme Court ordered remand.

The ULSD Project impacts associated with the direct and indirect emissions from the project have been evaluated extensively in the Draft EIR and have been modified by public comments received on the document. However, as discussed in the Draft EIR (see pages 3-33 through 3-45) and modified in Response to Comments (see Response 1-67, Table 16), air emissions associated with the ULSD Project would be less than significant; therefore, feasible alternatives and mitigation measures are not required. As discussed in the Draft EIR (see page 4-10), operational emissions from the ULSD Project are substantially less than the applicable project-specific operational significance thresholds and cumulative Refinery projects have resulted in a net reduction in emissions. Further, as discussed in Response 4-17, CARB estimated that the ULSD emission standards would result in NOx emission reductions in California of approximately 100 tons per year in 2005 to about 35 tons per year in 2020. CARB estimated that the particulate matter emission reductions in California are expected to range from about 16 tons per year in 2005 to about seven tons per year in 2020. A 72% reduction in non-methane hydrocarbon emissions was also predicted. CARB staff estimated the full implementation of the measures resulted in an overall 85 percent reduction in the diesel

PM inventory and the associated potential cancer risk for 2020, when compared to the diesel PM inventory and risk in 2003. Therefore, implementation of the ULSD requirements, including the Phillips 66 ULSD Project, accomplished the goal of reducing emissions from mobile sources, resulting in a large reduction in emissions from mobile sources. These reductions are critical to the South Coast AQMD's efforts to achieve the ambient air quality standards. Based on the above, operational emissions associated with the ULSD Project are not considered to be a cumulatively significant contribution to significant adverse cumulative air quality impacts.

Response 4-23

Comment 4-23 states that the localized significance thresholds used in the Draft EIR are an insufficient means of making a significance determination for air quality. The comment goes on to state that the District cannot simply stop at comparing the increased emissions against significance thresholds, but must consider all factors, including those made in the comment letter, should be used to determine the proposed project's air quality impacts. However, the commenter provides no evidence as to why the significance thresholds are inappropriate as applied to the ULSD Project in particular, or what other factors or significance thresholds should be used. Moreover, the District did consider air quality impacts in a variety of ways, as described here, which supported the conclusion of no significant impact.

As discussed in Response 1-43, Table 3.3-6 in the 2014 Draft EIR contains the most current air quality significance thresholds adopted by the South Coast AQMD Governing Board. Mass daily significance thresholds for criteria pollutants provided in the 1993 Handbook were adopted by the South Coast AQMD Governing Board in 1993. Several air quality significance thresholds identified in the 1993 Handbook have been revised by the South Coast AQMD Governing Board over the years, or additional thresholds adopted, to reflect the latest pollutant standards or attainment status of the region. For example, changes to the significance thresholds in the 1993 Handbook include developing and adopting a mass daily significance threshold for PM2.5, which was approved by the South Coast AQMD Governing Board in October 2006 (http://www.aqmd.gov/home/regulations/ceqa/air-quality-analysis-handbook/pm-2-5-significance-thresholds-and-calculation-methodology). This PM2.5 significance threshold has been used by South Coast AQMD and has been recommended for use by other public agencies evaluating air quality impacts since that time. Other significance thresholds adopted by the South Coast AQMD and included in Table 3.3-6 of the 2014 Draft EIR include localized significance thresholds for NO_2, PM10, PM2.5, and CO, adopted by the South Coast AQMD Governing Board in July 2003 (http://www.aqmd.gov/home/governing-board/agendas-minutes). As a result, the significance thresholds identified in the Draft EIR are accurate and reflect the most current air quality significance thresholds used by the South Coast AQMD and recommended for use by other public agencies.

In addition to the screening analysis that was completed in the Draft EIR, air quality modeling for Heater B-401 has been included in the Final EIR (see Appendix D). The peak day emission estimates for Heater B-401 were modeled to determine the potential ground level or localized air quality impacts. The air quality modeling was worst-case since it did not account for the emission decreases associated with the removal of Heater B-201, which included a decrease of 16.6 lbs/day of CO and 25.52 lbs/day of NOx emissions.

The CO 1-hour, CO 8-hour, NO_2 1-hour, NO_2 annual average, SOx 1-hour, SOx 3-hour, SOx 24-hour, and SOx annual average concentrations are combined with the ambient background concentrations and compared to the Most Stringent Air Quality Standard (State and Federal standards). The PM10 and PM2.5 24-hour, and PM10 and PM2.5 annual average concentrations are compared to the Significant Change in Air Quality Concentration thresholds established by the South Coast AQMD, due to nonattainment status in the South Coast Basin. Based on the results of air quality modeling, the ambient air quality analysis for charge Heater B-401 indicates that the ULSD Project results in no significant changes in air quality and no exceedances of any state or federal air quality standards for CO, NO_2, SOx, PM10, or PM2.5. Please see Response 1-43 for further details.

Regarding information provided in Phyllis Fox's comments, please see responses 1-38 through 1-82.

Response 4-24

Comment 4-24 claims that the Draft EIR does not establish a clear baseline, due to a "lack of significant information in several areas." It goes on to say that due to this lack of information the public cannot understand or participate in the decision-making process.

The comment does not provide specific information of the "lack of sufficient" baseline information and therefore, specific responses are not required. However, for detailed information on the baseline please refer to the Draft EIR at pages 3-1 and 3-2, as well as Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-69, 1-71, and 1-73.

Response 4-25

Comment 4-25 expands on the previous comments' issues; claiming that there is nothing in Environmental Settings, Impact, or Mitigation sections that describes the baseline or post-project emissions.

The comment is not correct as there is detailed information in the Draft EIR on the baseline for the project (see pages 3-1 and 3-2). Additional information is provided as part of the responses to comments. Please refer to Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-69, 1-71, and 1-73.

Response 4-26

Comment 4-26 claims that the Draft EIR uses the incorrect baseline due to inconsistencies in data presentation on tables found on pages 1-10 and 3-33. The comment also claims that the Draft EIR does not present both pre- and post-project emissions data and only reports net emissions increases. The comment notes that pre- and post-project emissions are identified in Appendix B but states that these project components are too important to "force readers to sift through obscure minutiae or appendices."

As noted in Response 4-25, there is detailed information on the baseline in the Draft EIR (see pages 3-1 and 3-2). Additional information is provided as part of the responses to comments. Please refer to Responses 1-3, 1-7, 1-9, 1-10, 1-48, 1-50, 1-69, 1-71, and 1-73.

The Draft EIR was prepared in compliance with the CEQA statutues and guidelines. CEQA Guidelines §15147 requires that "information contained in an EIR shall include summarized technical data, maps, plot plans, diagrams, and similar relevant information sufficient to permit full assessment of significant impacts by reviewing agencies and members of the public. Placement of highly technical and specialized analysis and detail in the body of an EIR should be avoided through inclusion of supporting information and analyses as appendices to the main body of the EIR." The Draft EIR included a summary of the emission calculations in the body of the document and the detailed emission calculations in Appendix B, precisely as the CEQA Guidelines §15147 requires.

Response 4-27

Comment 4-27 claims that the Draft EIR's analysis on cumulative impacts is not adequate or complete. The comment continues to say that the finding that the proposed project is not cumatively considerable is not valid because the use of project-specific significant thresholds is not valid for a cumulative analysis. The comment proceeds to ask that the project be considered potentially significant for cumulative impacts. Finally, the comment reasserts that the cumulative section of the proposed project should be expanded to a larger area, citing legal and environmental justice concerns.

The third paragraph of Comment 4-27 contains a partial quote from the Draft EIR. The Draft EIR states that: "The past, present, and reasonably foreseeable future projects would have a significant cumulative impact. However, the ULSD Project operational emissions are substantially less than the SCAQMD project-specific significance thresholds (see Table 3.3-7). Therefore, project-specific air quality impacts associated with the operational emissions from the ULSD Project are not considered to be a cumulatively considerable contribution to significant adverse cumulative air quality impacts." Therefore, the Draft EIR did not conclude that the project would result in cumulatively significant air quality impacts.

The South Coast AQMD has properly evaluated the cumulative impacts associated with the proposed project. As described in the Draft EIR, CEQA Guidelines § 15130 requires that an EIR discuss cumulative impacts of a project when the project's incremental effects are cumulatively considerable. A "cumulative impact" is an impact that is created as a result of the combination of the proposed project together with other projects causing related impacts.[5] "Cumulatively considerable" means that the incremental effects of the individual project are significant when viewed in connection with the effects of past projects, current projects, and probable future projects.[6] The discussion of cumulative impacts should reflect the severity of the impacts and their likelihood of occurrence, but the discussion does not need to provide as great detail as is provided for the effects attributable to the project alone.[7] When the combined cumulative impact associated with the project's incremental effect and the effects of other projects is not significant, the EIR need only briefly indicate why the cumulative impact is not significant.[8]

The South Coast AQMD guidance on addressing cumulative impacts for air quality is as follows: "As Lead Agency, the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR."[9] "Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."[10] This policy is appropriate when addressing air quality impacts because project-specific air emissions are already evaluated in the South Coast AQMD's Air Quality Management Plan and regional programs like RECLAIM on a cumulative basis in the context of emissions occurring Basin-wide. When the impact analysis for a particular environmental resource area examines the impact of the project in the context of existing and future conditions that incorporates other contributors to that impact, that analysis is cumulative.

The South Coast AQMD's mission is inherently focused on cumulative impacts. The South Coast AQMD is charged with regulating air emissions so that the ambient air quality of the region achieves the federal and state ambient air quality standards. Ambient air quality is the product of all of the emissions in the air basin. For example, few if any sources emit ozone directly; rather, the elevated ozone levels in the South

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[5] CEQA Guidelines § 15130(a)(1).
[6] CEQA Guidelines § 15065(a)(3).
[7] CEQA Guidelines § 15130(b).
[8] CEQA Guidelines § 15130(a)(2).
[9] See South Coast AQMD Cumulative Impacts Working Group *White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution*, August 2003, Appendix D, *Cumulative Impact Analysis Requirements Pursuant to CEQA*, at D-3. Available at: http://www.aqmd.gov/hb/2003/030929a.html. Accessed: August, 2016.
[10] See Attachment B, South Coast AQMD Cumulative Impacts Working Group *White Paper on Potential Control Strategies to Address Cumulative Impacts From Air Pollution*, August 2003, Appendix D, *Cumulative Impact Analysis Requirements Pursuant to CEQA*, at D-3. Available at: http://www.aqmd.gov/hb/2003/030929a.html. Accessed: August, 2016.

Coast Air Basin result from millions of actors (businesses, vehicles and individuals) emitting NOx, which combines with VOCs emitted by millions of actors and transforms in the atmosphere in the presence of sunlight to become ozone. The South Coast AQMD adopts plans and rules to reduce air emissions to achieve the ambient air quality standards. The adopted plans (e.g., Air Quality Management Plan) and rules are aimed at reducing air pollutants and minimizing cumulative air quality impacts overall so that concentrations of pollutants are reduced, and the Basin maintains and/or achieves compliance with ambient air quality standards. The South Coast AQMD's selection of pound-per-day CEQA significance thresholds was based on the plans and regulatory thresholds required to achieve its overall mission. Thus, the selection of project-specific significance thresholds is driven in large measure by the need to address the cumulative impacts.

The South Coast AQMD's approach to cumulative air quality impacts analysis was upheld by the Court in *Citizens for Responsible Equitable Environmental Development v City of Chula Vista* (2011) 197 Cal. App. 4th 327, 334. The court determined that where it can be found that a project did not exceed the South Coast AQMD's established air quality significance thresholds, the City of Chula Vista properly concluded that the project would not cause a significant environmental effect, nor result in cumulatively considerable increase in these pollutants. The court found this determination to be consistent with CEQA Guidelines §15064.7, stating, "The lead agency may rely on a threshold of significance standard to determine whether a project will cause a significant environmental effect." The court found that, "Although the project will contribute additional air pollutants to an existing nonattainment area, these increases are below the significance criteria . . . Thus, we conclude that no fair argument exists that the Project will cause a significant unavoidable cumulative contribution to an air quality impact."[11]

Likewise, in *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 928, the court approved cumulative air emissions impacts analysis where the EIR analysis was based on "the project's emissions alone."[12] Explicitly referencing the South Coast AQMD's policy to assess a project's contribution to cumulative impacts using the same significance criteria as used for project-specific impacts, the court upheld the analysis and explained that "[s]ubstantial evidence shows that it was neither reasonable nor practical to analyze the project's cumulative impact on air quality by, for example, quantifying its emissions in relation to other nearby projects."[13] Because project-specific thresholds necessarily take into account area-wide air emissions, analysis in accordance with the South Coast AQMD policy ensures that "whether the project's additional impact on air quality should be considered cumulatively significant in light of the existing air quality problem" is addressed.[14]

[11] *Chula Vista*, 197 CA 4th at 334.
[12] *Rialto*, 208 Cal.App.4th at 931.
[13] *Rialto*, 208 Cal.App.4th at 933.
[14] *Rialto*, 208 Cal.App.4th at 933.

Using the air quality cumulative impacts methodology that was expressly approved by California courts in *Chula Vista* and *Rialto*, the South Coast AQMD evaluated whether the ULSD Project would exceed the established South Coast AQMD significance thresholds. The Draft EIR concluded that the operational emissions from the ULSD Project were substantially less than the applicable project-specific operational significance thresholds and cumulative Refinery projects have resulted in a net reduction in emissions. The ULSD Project resulted in indirect (off-site) emissions associated with increases in hydrogen production, electricity demand, truck transport, and increases use of the Sulfur Recovery Plant. Daily operational emissions are summarized and have been updated in Table 3.3-7 of the Final EIR. As demonstrated in the table and explained in the Responses to Comments, operational air quality impacts associated with the ULSD Project were not expected to exceed any significance thresholds and thus were not cumulatively considerable. Further, TAC emissions generated by the ULSD Project were evaluated and did not exceed their applicable thresholds and thus were not cumulatively considerable.[15]

Further, as discussed in Response 4-17, CARB estimated that the ULSD emission standards would result in NOx emission reductions in California of approximately 100 tons per year in 2005 to about 35 tons per year in 2020. CARB estimates that the particulate matter emission reductions in California were expected to range from about 16 tons per year in 2005 to about seven tons per year in 2020. A 72% reduction in non-methane hydrocarbon emissions was also predicted. CARB staff estimated the full implementation of the measures resulted in an overall 85 percent reduction in the diesel PM inventory and the associated potential cancer risk for 2020, when compared to the diesel PM inventory and risk in 2003. Therefore, looking cumulatively at the implementation of the ULSD requirements, including the Phillips 66 ULSD Project, the entire ULSD Rule accomplished the goal of reducing emissions from mobile sources, resulting in a large reduction in emissions from mobile sources. These reductions are critical to the South Coast AQMD's efforts to achieve the ambient air quality standards. Based on the above, the Draft EIR accurately concluded that the ULSD Project did not make a contribution to a cumulatively significant air quality impact.

Response 4-28

Response 4-28 concludes the letter, claiming that the Draft EIR has flawed analyses, fails to comply with CEQA, and should be fixed and re-circulated for public comment.

As explained in Responses 4-1 through 4-27, the South Coast AQMD disagrees with the commenter's opinion that the Draft EIR is flawed and fails to adequately identify, analyze and mitigate significant impacts. The EIR has been prepared in compliance with CEQA and no new issues or significant new information have been identified that would

[15] As explained in the Draft EIR, South Coast AQMD's policy of evaluating cumulative TAC significance by focusing on whether risks associated with the proposed project exceeded South Coast AQMD thresholds is appropriate because TAC emissions are not additive unless they are emitted from the same or similar location. (see Draft EIR at pages 5-19 to 5-20).

require recirculation of the EIR under CEQA Guidelines §15088.5 prior to certification of the document.

ATTACHMENT 1: 2002-2003 RECLAIM DATA

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2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20020701000000	16.8	1.6	324.2	D144
20020702000000	17.4	1.4	329.9	D144
20020703000000	18.9	1.3	365.6	D144
20020704000000	16.3	1.3	307.3	D144
20020705000000	17.5	1.5	337.8	D144
20020706000000	19.9	1.7	385.3	D144
20020707000000	21.3	2.0	409.2	D144
20020708000000	20.6	1.9	398.5	D144
20020709000000	18.2	1.6	352.5	D144
20020710000000	16.0	1.2	309.9	D144
20020711000000	16.8	1.3	324.7	D144
20020712000000	16.1	1.1	311.4	D144
20020713000000	15.6	1.2	302.2	D144
20020714000000	15.4	1.2	298.1	D144
20020715000000	18.4	1.3	347.9	D144
20020716000000	18.4	1.3	356.5	D144
20020717000000	20.3	1.6	393.0	D144
20020718000000	22.5	2.1	432.1	D144
20020719000000	23.4	2.3	452.4	D144
20020720000000	21.7	2.4	420.5	D144
20020721000000	21.0	2.2	401.1	D144
20020722000000	19.6	2.1	378.8	D144
20020723000000	19.4	1.9	374.3	D144
20020724000000	20.5	2.3	395.6	D144
20020725000000	21.1	2.6	401.6	D144
20020726000000	21.1	2.8	407.7	D144
20020727000000	19.1	2.6	369.8	D144
20020728000000	20.5	2.7	396.3	D144
20020729000000	19.4	2.7	376.1	D144
20020730000000	21.7	2.9	419.0	D144
20020731000000	22.3	3.0	431.5	D144
20020731000000	24.2	3.2	468.4	D144
20020731000000	24.6	3.2	476.6	D144
20020803000000	27.0	3.5	523.0	D144
20020804000000	23.7	3.1	457.6	D144
20020805000000	23.3	3.1	451.1	D144
20020806000000	26.7	3.4	512.1	D144
20020807000000	25.2	3.3	488.1	D144
20020808000000	29.6	3.5	571.9	D144
20020809000000	25.6	3.2	494.5	D144
20020810000000	21.9	3.0	424.4	D144
20020811000000	17.9	2.5	345.7	D144
20020812000000	19.0	2.6	367.5	D144
20020813000000	17.5	2.5	337.5	D144
20020814000000	17.1	2.6	331.1	D144
20020815000000	18.1	2.8	349.3	D144
20020816000000	18.5	2.6	357.9	D144
20020817000000	18.4	2.5	355.3	D144
20020818000000	17.2	2.4	332.8	D144
20020819000000	18.5	2.5	357.8	D144

2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20020820000000	18.8	2.4	364.5	D144
20020821000000	19.2	2.7	371.5	D144
20020822000000	19.6	2.8	378.4	D144
20020823000000	19.3	2.6	362.9	D144
20020824000000	19.0	2.6	366.7	D144
20020825000000	19.0	2.8	368.4	D144
20020826000000	19.3	3.0	373.9	D144
20020827000000	19.8	3.7	374.3	D144
20020828000000	19.1	2.1	368.9	D144
20020829000000	19.8	2.8	382.6	D144
20020830000000	19.5	3.0	377.7	D144
20020831000000	19.0	2.9	367.7	D144
20020901000000	18.5	2.3	357.7	D144
20020902000000	18.9	1.1	365.7	D144
20020903000000	19.1	1.3	370.3	D144
20020904000000	18.3	1.5	354.0	D144
20020905000000	18.4	1.7	356.8	D144
20020906000000	18.9	1.7	366.3	D144
20020907000000	19.8	1.7	383.0	D144
20020908000000	20.1	1.8	388.5	D144
20020909000000	19.8	1.7	383.1	D144
20020910000000	20.9	1.8	403.4	D144
20020911000000	22.3	1.8	429.0	D144
20020912000000	22.0	1.8	425.7	D144
20020913000000	23.4	2.2	451.9	D144
20020914000000	22.8	1.7	440.1	D144
20020915000000	22.4	1.6	433.5	D144
20020916000000	23.0	1.6	445.4	D144
20020917000000	22.8	1.8	435.9	D144
20020918000000	23.6	2.2	456.1	D144
20020919000000	23.3	2.1	451.0	D144
20020920000000	23.0	2.0	445.6	D144
20020921000000	22.6	2.1	436.6	D144
20020922000000	25.1	2.4	483.2	D144
20020923000000	24.1	2.5	465.1	D144
20020924000000	23.0	2.6	443.3	D144
20020925000000	18.9	2.0	366.2	D144
20020926000000	21.1	2.3	407.1	D144
20020927000000	23.9	2.5	462.9	D144
20020928000000	23.6	2.5	452.6	D144
20020929000000	23.6	2.6	456.6	D144
20020930000000	23.6	2.5	455.6	D144
20021001000000	24.8	2.7	479.0	D144
20021002000000	26.3	2.0	507.7	D144
20021003000000	24.2	2.0	468.5	D144
20021004000000	20.6	1.8	398.5	D144
20021005000000	21.3	2.0	398.3	D144
20021006000000	20.8	1.9	402.2	D144
20021007000000	18.9	1.5	307.2	D144
20021008000000	13.0	1.1	250.6	D144

2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20021009000000	15.1	1.1	280.7	D144
20021010000000	14.5	1.1	280.0	D144
20021011000000	13.8	1.0	266.5	D144
20021012000000	14.7	1.1	284.7	D144
20021013000000	15.0	1.0	290.3	D144
20021014000000	14.0	1.0	270.2	D144
20021015000000	18.7	1.8	349.5	D144
20021016000000	20.5	2.1	397.0	D144
20021017000000	20.0	2.0	386.3	D144
20021018000000	18.0	2.0	347.9	D144
20021019000000	17.3	2.4	334.8	D144
20021020000000	17.0	2.0	328.8	D144
20021021000000	15.9	1.8	306.7	D144
20021022000000	14.8	2.0	286.0	D144
20021023000000	15.9	3.1	306.8	D144
20021024000000	15.0	2.2	288.6	D144
20021025000000	15.5	2.1	299.8	D144
20021026000000	15.2	2.0	293.7	D144
20021027000000	15.1	2.2	291.7	D144
20021028000000	15.8	2.3	306.3	D144
20021029000000	16.2	1.9	303.5	D144
20021030000000	16.0	1.9	309.0	D144
20021031000000	16.0	2.4	309.3	D144
20021101000000	17.0	2.2	329.4	D144
20021102000000	17.1	2.4	330.4	D144
20021103000000	16.6	2.6	321.6	D144
20021104000000	16.4	2.8	317.6	D144
20021105000000	17.4	2.7	335.7	D144
20021106000000	17.8	2.6	343.5	D144
20021107000000	19.1	2.5	369.5	D144
20021108000000	18.5	2.1	358.4	D144
20021109000000	20.4	2.7	394.4	D144
20021110000000	21.6	2.3	417.4	D144
20021111000000	20.2	2.8	390.7	D144
20021112000000	22.5	3.6	434.7	D144
20021113000000	22.9	3.0	443.5	D144
20021114000000	23.5	3.1	455.2	D144
20021115000000	25.0	3.0	482.7	D144
20021116000000	25.6	2.8	494.8	D144
20021117000000	26.0	2.7	499.9	D144
20021118000000	23.3	2.7	450.7	D144
20021119000000	19.8	2.5	382.7	D144
20021120000000	12.7	2.2	235.5	D144
20021121000000	14.8	1.6	285.8	D144
20021122000000	17.2	2.2	323.2	D144
20021123000000	19.8	2.7	377.5	D144
20021124000000	18.7	2.7	361.4	D144
20021125000000	18.1	2.7	350.0	D144
20021126000000	18.4	2.1	354.9	D144
20021127000000	19.4	2.1	374.7	D144

2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20021128000000	19.3	2.4	373.7	D144
20021129000000	19.7	2.6	380.8	D144
20021130000000	19.8	2.8	383.4	D144
20021201000000	18.5	2.1	357.4	D144
20021202000000	18.2	1.9	352.6	D144
20021203000000	18.9	1.4	358.5	D144
20021204000000	18.0	1.5	340.9	D144
20021205000000	17.2	1.7	331.9	D144
20021206000000	16.0	1.7	309.2	D144
20021207000000	11.0	1.1	211.9	D144
20021208000000	10.7	1.1	207.0	D144
20021209000000	12.0	1.0	233.0	D144
20021210000000	16.6	1.2	309.6	D144
20021211000000	18.8	1.6	363.4	D144
20021212000000	22.1	2.2	428.1	D144
20021213000000	23.3	2.4	450.1	D144
20021214000000	21.3	2.2	412.0	D144
20021215000000	19.5	1.9	376.2	D144
20021216000000	18.7	1.9	361.7	D144
20021217000000	19.2	2.0	363.7	D144
20021218000000	19.6	2.2	378.7	D144
20021219000000	17.7	1.5	342.2	D144
20021220000000	19.2	1.6	371.0	D144
20021221000000	18.1	1.7	349.8	D144
20021222000000	19.5	1.8	372.4	D144
20021223000000	19.4	1.4	374.3	D144
20021224000000	19.5	1.6	377.3	D144
20021225000000	20.0	1.7	387.1	D144
20021226000000	19.7	2.0	381.5	D144
20021227000000	20.3	1.8	391.7	D144
20021228000000	21.3	1.8	412.6	D144
20021229000000	22.2	2.1	429.1	D144
20021230000000	25.9	1.3	501.1	D144
20021231000000	26.8	1.5	519.0	D144
20030101000000	26.6	1.5	513.1	D144
20030102000000	27.0	1.7	521.2	D144
20030103000000	22.1	1.8	426.1	D144
20030104000000	13.1	1.2	253.9	D144
20030105000000	12.4	1.0	240.0	D144
20030106000000	12.8	1.0	246.8	D144
20030107000000	14.3	1.5	274.6	D144
20030108000000	15.9	1.3	307.8	D144
20030109000000	16.5	1.6	318.6	D144
20030110000000	19.6	1.5	379.1	D144
20030111000000	26.5	1.0	512.5	D144
20030112000000	27.1	1.2	523.9	D144
20030113000000	26.2	0.8	503.1	D144
20030114000000	25.1	0.6	481.7	D144
20030115000000	22.1	0.6	330.4	D144
20030116000000	15.1	0.6	291.9	D144

2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20030117000000	17.6	0.9	339.9	D144
20030118000000	18.7	1.0	361.1	D144
20030119000000	17.2	0.7	332.2	D144
20030120000000	18.0	0.8	347.9	D144
20030121000000	18.5	0.9	357.6	D144
20030122000000	19.5	1.0	376.3	D144
20030123000000	21.1	1.1	408.7	D144
20030124000000	20.9	1.0	405.0	D144
20030125000000	21.1	1.2	408.1	D144
20030126000000	21.0	1.6	400.1	D144
20030127000000	21.1	1.7	401.6	D144
20030128000000	17.7	1.3	331.9	D144
20030129000000	17.2	1.4	333.4	D144
20030130000000	18.9	1.4	366.2	D144
20030131000000	19.2	1.6	371.7	D144
20030201000000	20.2	1.6	390.9	D144
20030202000000	21.4	1.6	414.1	D144
20030203000000	24.3	1.9	469.8	D144
20030204000000	23.1	2.3	445.8	D144
20030205000000	25.4	2.0	490.7	D144
20030206000000	26.9	2.1	518.6	D144
20030207000000	28.1	2.3	543.5	D144
20030208000000	30.5	2.5	590.5	D144
20030209000000	29.0	2.4	561.2	D144
20030210000000	27.8	2.5	535.7	D144
20030211000000	24.1	3.0	465.1	D144
20030212000000	23.5	2.3	453.8	D144
20030213000000	13.1	0.8	146.4	D144
20030214000000	15.6	0.9	302.4	D144
20030215000000	21.4	1.3	413.7	D144
20030216000000	20.9	1.3	404.1	D144
20030217000000	20.6	1.0	398.7	D144
20030218000000	20.9	1.6	403.3	D144
20030219000000	20.9	2.3	403.5	D144
20030220000000	20.2	1.6	381.5	D144
20030221000000	19.2	1.7	371.6	D144
20030222000000	21.2	1.2	409.3	D144
20030223000000	20.6	1.3	398.1	D144
20030224000000	21.0	1.2	397.6	D144
20030225000000	22.5	1.2	434.8	D144
20030226000000	21.7	1.2	419.5	D144
20030227000000	23.2	1.3	440.8	D144
20030228000000	22.2	1.3	428.9	D144
20030301000000	21.2	1.5	409.8	D144
20030302000000	19.9	1.1	385.1	D144
20030303000000	20.5	1.6	396.4	D144
20030304000000	22.0	1.6	425.1	D144
20030305000000	22.7	1.7	438.3	D144
20030306000000	22.1	1.7	426.5	D144
20030307000000	20.5	1.3	395.8	D144

2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20030308000000	22.4	1.3	434.1	D144
20030309000000	21.0	1.9	406.6	D144
20030310000000	21.5	2.3	416.4	D144
20030311000000	22.2	2.4	427.6	D144
20030312000000	22.2	1.8	422.8	D144
20030313000000	22.7	1.9	435.7	D144
20030314000000	22.3	2.4	430.9	D144
20030315000000	22.4	2.2	433.1	D144
20030316000000	23.3	1.8	450.0	D144
20030317000000	23.7	2.1	458.2	D144
20030318000000	22.5	1.9	435.9	D144
20030319000000	22.8	1.9	441.1	D144
20030320000000	23.8	3.0	460.6	D144
20030321000000	23.5	2.8	453.8	D144
20030322000000	23.7	2.1	457.5	D144
20030323000000	23.8	3.0	457.3	D144
20030324000000	23.6	3.4	453.5	D144
20030325000000	23.6	3.3	456.9	D144
20030326000000	21.4	2.8	411.1	D144
20030327000000	20.3	2.5	392.7	D144
20030328000000	21.0	2.6	400.6	D144
20030329000000	23.7	3.1	456.6	D144
20030330000000	23.3	3.1	447.6	D144
20030331000000	23.2	3.2	448.6	D144
20030401000000	23.1	3.3	447.4	D144
20030402000000	22.7	3.3	439.6	D144
20030403000000	21.8	2.8	420.7	D144
20030404000000	23.1	2.6	446.6	D144
20030405000000	24.1	3.2	463.9	D144
20030406000000	23.7	3.6	451.5	D144
20030407000000	23.5	3.6	450.9	D144
20030408000000	23.9	3.3	462.2	D144
20030409000000	21.3	4.0	412.4	D144
20030410000000	22.0	6.1	426.0	D144
20030411000000	24.2	6.2	467.0	D144
20030412000000	23.3	5.3	449.6	D144
20030413000000	23.0	3.8	445.7	D144
20030414000000	22.9	1.7	443.7	D144
20030415000000	24.6	2.9	476.5	D144
20030416000000	24.1	3.4	465.8	D144
20030417000000	23.1	2.0	447.7	D144
20030418000000	24.0	3.2	463.0	D144
20030419000000	22.9	8.1	439.3	D144
20030420000000	21.9	7.1	422.8	D144
20030421000000	22.7	5.6	439.9	D144
20030422000000	22.5	2.6	435.6	D144
20030423000000	21.3	2.3	412.7	D144
20030424000000	21.0	2.8	406.8	D144
20030425000000	21.5	2.6	416.1	D144
20030426000000	20.9	2.8	397.9	D144

2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20030427000000	21.0	2.2	406.3	D144
20030428000000	22.6	1.8	437.4	D144
20030429000000	23.9	2.1	462.3	D144
20030430000000	23.3	2.2	450.3	D144
20030501000000	23.3	1.7	450.3	D144
20030502000000	25.5	1.9	491.8	D144
20030503000000	23.8	1.9	459.7	D144
20030504000000	22.5	1.9	435.0	D144
20030505000000	22.6	1.9	437.4	D144
20030506000000	22.8	1.9	435.6	D144
20030507000000	22.9	3.3	442.7	D144
20030508000000	23.3	2.7	446.8	D144
20030509000000	22.8	2.6	441.3	D144
20030510000000	21.5	2.7	415.0	D144
20030511000000	20.8	2.3	402.2	D144
20030512000000	20.5	2.2	395.9	D144
20030513000000	21.1	2.4	407.2	D144
20030514000000	19.2	2.0	371.5	D144
20030515000000	18.7	1.9	361.9	D144
20030516000000	17.6	2.1	340.8	D144
20030517000000	18.5	2.1	356.8	D144
20030518000000	17.0	2.2	328.9	D144
20030519000000	18.1	2.2	349.7	D144
20030520000000	19.2	2.1	371.0	D144
20030521000000	19.8	2.4	382.2	D144
20030522000000	18.6	1.7	351.4	D144
20030523000000	18.6	1.9	359.7	D144
20030524000000	19.6	2.3	378.8	D144
20030525000000	21.2	2.6	409.6	D144
20030526000000	21.2	2.0	410.1	D144
20030527000000	20.8	2.0	395.4	D144
20030528000000	20.7	2.9	399.4	D144
20030529000000	21.8	3.9	417.4	D144
20030530000000	18.9	3.2	366.4	D144
20030531000000	17.8	2.7	344.2	D144
20030601000000	17.7	2.8	342.7	D144
20030602000000	18.9	3.0	364.8	D144
20030603000000	17.9	3.0	346.9	D144
20030604000000	18.2	2.7	352.7	D144
20030605000000	18.3	2.6	353.8	D144
20030606000000	18.5	2.7	357.7	D144
20030607000000	19.4	2.1	375.1	D144
20030608000000	19.7	2.7	381.1	D144
20030609000000	19.2	2.5	371.6	D144
20030610000000	19.1	1.6	369.9	D144
20030611000000	18.7	1.9	362.4	D144
20030612000000	18.9	2.1	366.1	D144
20030613000000	17.6	1.6	338.1	D144
20030614000000	0.0	0.0	0.0	D144
20030615000000	0.0	0.0	0.0	D144

2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20030616000000	0.0	0.0	0.0	D144
20030617000000	0.0	0.0	0.0	D144
20030618000000	0.0	0.0	0.0	D144
20030619000000	0.0	0.0	0.0	D144
20030620000000	0.0	0.0	0.0	D144
20030621000000	0.0	0.0	0.0	D144
20030622000000	0.0	0.0	0.0	D144
20030623000000	0.0	0.0	0.0	D144
20030624000000	0.0	0.0	0.0	D144
20030625000000	0.0	0.0	0.0	D144
20030626000000	0.0	0.0	0.0	D144
20030627000000	4.3	0.2	64.9	D144
20030628000000	20.8	2.5	403.2	D144
20030629000000	18.5	1.6	329.7	D144
20030630000000	17.2	1.9	331.1	D144
20030701000000	14.7	1.8	284.7	D144
20030702000000	11.1	1.3	181.3	D144
20030703000000	9.1	1.0	175.2	D144
20030704000000	8.0	0.8	126.6	D144
20030705000000	9.4	0.9	129.4	D144
20030706000000	7.7	0.9	128.0	D144
20030707000000	8.8	0.9	130.4	D144
20030708000000	8.1	1.1	156.5	D144
20030709000000	7.9	0.9	152.0	D144
20030710000000	8.9	0.9	158.8	D144
20030711000000	8.0	0.9	155.0	D144
20030712000000	8.0	0.9	153.9	D144
20030713000000	8.0	1.1	155.3	D144
20030714000000	7.9	0.8	152.6	D144
20030715000000	8.4	0.7	147.2	D144
20030716000000	7.7	0.7	146.6	D144
20030717000000	8.6	0.5	121.2	D144
20030718000000	7.6	0.4	80.0	D144
20030719000000	9.8	0.5	108.3	D144
20030720000000	0.0	0.0	0.0	D144
20030721000000	2.3	0.1	27.1	D144
20030722000000	8.7	0.6	125.2	D144
20030723000000	9.1	0.6	137.7	D144
20030724000000	8.9	0.9	172.6	D144
20030725000000	9.4	1.0	182.7	D144
20030726000000	10.9	1.2	210.8	D144
20030727000000	12.5	0.7	242.3	D144
20030728000000	12.6	1.0	231.7	D144
20030729000000	12.9	1.3	248.7	D144
20030730000000	14.7	1.0	284.9	D144
20030731000000	14.8	1.1	286.8	D144
20030801000000	13.7	1.3	265.2	D144
20030802000000	9.2	0.7	177.7	D144
20030803000000	8.6	0.4	166.5	D144
20030804000000	10.0	0.8	192.5	D144

2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20030805000000	11.8	1.1	227.9	D144
20030806000000	11.1	1.0	215.1	D144
20030807000000	12.5	0.9	242.6	D144
20030808000000	12.6	1.0	244.0	D144
20030809000000	13.1	1.4	251.2	D144
20030810000000	14.0	1.3	271.5	D144
20030811000000	13.7	1.0	264.6	D144
20030812000000	12.2	1.3	236.0	D144
20030813000000	12.0	1.1	185.0	D144
20030814000000	10.8	1.0	208.1	D144
20030815000000	10.8	0.9	209.6	D144
20030816000000	12.2	1.4	232.9	D144
20030817000000	12.2	1.3	235.0	D144
20030818000000	12.4	0.9	239.0	D144
20030819000000	13.5	1.2	261.9	D144
20030820000000	12.8	1.0	248.3	D144
20030821000000	13.1	1.0	252.5	D144
20030822000000	15.6	1.2	302.4	D144
20030823000000	13.8	1.1	267.7	D144
20030824000000	15.3	1.4	296.2	D144
20030825000000	14.6	1.5	282.5	D144
20030826000000	14.0	1.0	270.1	D144
20030827000000	14.8	1.3	285.6	D144
20030828000000	15.4	1.4	297.4	D144
20030829000000	15.1	1.5	291.7	D144
20030830000000	15.5	1.5	299.3	D144
20030831000000	15.2	1.6	294.8	D144
20030901000000	14.9	1.3	287.6	D144
20030902000000	15.0	1.0	291.0	D144
20030903000000	13.3	0.8	256.9	D144
20030904000000	15.3	1.1	295.3	D144
20030905000000	15.3	1.1	296.2	D144
20030906000000	15.5	1.0	300.2	D144
20030907000000	13.8	1.1	267.2	D144
20030908000000	13.8	0.9	267.3	D144
20030909000000	13.4	0.7	259.7	D144
20030910000000	13.6	0.8	253.2	D144
20030911000000	12.5	0.8	240.8	D144
20030912000000	12.0	0.8	231.6	D144
20030913000000	12.3	0.9	237.6	D144
20030914000000	14.0	0.9	270.9	D144
20030915000000	13.1	0.8	245.1	D144
20030916000000	10.8	0.8	209.2	D144
20030917000000	10.4	0.8	201.3	D144
20030918000000	14.5	1.3	219.5	D144
20030919000000	10.6	0.8	205.0	D144
20030920000000	11.2	0.9	217.4	D144
20030921000000	10.5	1.1	202.4	D144
20030922000000	11.1	0.9	213.9	D144
20030923000000	10.8	0.8	199.5	D144

2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20030924000000	11.8	0.8	227.5	D144
20030925000000	12.5	1.1	242.5	D144
20030926000000	13.1	1.3	253.6	D144
20030927000000	14.6	1.4	275.1	D144
20030928000000	15.6	1.2	301.0	D144
20030929000000	17.8	1.4	343.6	D144
20030930000000	19.0	2.0	364.6	D144
20031001000000	18.6	2.0	359.9	D144
20031002000000	19.2	1.9	372.1	D144
20031003000000	18.5	1.9	356.8	D144
20031004000000	20.1	1.6	388.0	D144
20031005000000	20.4	1.8	393.8	D144
20031006000000	19.9	1.9	383.9	D144
20031007000000	19.6	1.9	379.6	D144
20031008000000	19.2	2.1	370.4	D144
20031009000000	19.1	2.0	366.7	D144
20031010000000	17.6	1.9	340.3	D144
20031011000000	17.9	1.9	345.6	D144
20031012000000	20.6	1.4	398.2	D144
20031013000000	21.5	1.3	416.6	D144
20031014000000	21.5	1.5	416.0	D144
20031015000000	20.7	1.8	399.5	D144
20031016000000	20.6	1.8	398.2	D144
20031017000000	21.4	2.1	413.9	D144
20031018000000	19.7	1.9	380.8	D144
20031019000000	19.9	1.7	384.6	D144
20031020000000	18.7	2.1	361.7	D144
20031021000000	16.2	1.3	308.0	D144
20031022000000	15.1	1.5	291.1	D144
20031023000000	12.3	1.2	220.1	D144
20031024000000	11.4	1.0	200.8	D144
20031025000000	13.9	1.2	268.2	D144
20031026000000	13.0	1.1	252.4	D144
20031027000000	15.7	1.4	302.9	D144
20031028000000	15.7	1.4	304.4	D144
20031029000000	16.6	1.4	321.6	D144
20031030000000	16.7	1.0	322.5	D144
20031031000000	17.1	1.3	330.2	D144
20031101000000	17.8	1.5	344.6	D144
20031102000000	18.3	1.6	354.6	D144
20031103000000	18.0	1.7	349.1	D144
20031104000000	16.7	1.9	323.3	D144
20031105000000	16.8	1.8	324.4	D144
20031106000000	16.8	1.8	325.5	D144
20031107000000	17.2	1.9	332.4	D144
20031108000000	16.8	1.9	324.2	D144
20031109000000	16.5	1.8	318.7	D144
20031110000000	16.2	2.1	313.6	D144
20031111000000	16.7	2.2	323.2	D144
20031112000000	17.4	2.3	336.0	D144

2002-2003 Reclaim Data

Date/Time	NOx Rate lbs/day	SOx Rate lbs/day	Fuel Gas mscfd	Unit Name
20031113000000	17.5	2.4	335.5	D144
20031114000000	17.9	2.4	346.4	D144
20031115000000	17.7	2.3	343.0	D144
20031116000000	18.0	2.5	347.3	D144
20031117000000	16.9	2.1	326.0	D144
20031118000000	15.8	1.5	305.1	D144
20031119000000	16.8	1.4	325.2	D144
20031120000000	18.4	1.8	356.5	D144
20031121000000	17.2	1.9	332.7	D144
20031122000000	17.2	1.9	333.0	D144
20031123000000	17.3	2.0	334.8	D144
20031124000000	16.1	1.9	306.8	D144
20031125000000	16.6	2.0	317.2	D144
20031126000000	16.0	1.9	304.5	D144
20031127000000	17.7	1.9	168.3	D144
20031128000000	0.0	0.0	0.0	D144
20031129000000	0.0	0.0	0.0	D144
20031130000000	0.0	0.0	0.0	D144
20031201000000	18.7	2.5	218.0	D144
20031202000000	18.7	2.5	362.3	D144
20031203000000	17.2	2.2	333.4	D144
20031204000000	17.5	1.6	338.6	D144
20031205000000	17.6	1.7	340.8	D144
20031206000000	16.9	1.8	322.7	D144
20031207000000	16.7	1.6	323.1	D144
20031208000000	16.5	1.4	319.1	D144
20031209000000	17.0	1.7	328.4	D144
20031210000000	17.2	1.9	332.0	D144
20031211000000	18.2	1.7	351.3	D144
20031212000000	18.0	1.6	349.0	D144
20031213000000	16.9	1.9	326.2	D144
20031214000000	17.4	1.7	336.5	D144
20031215000000	19.6	1.6	378.8	D144
20031216000000	19.4	1.8	375.8	D144
20031217000000	18.9	1.5	363.6	D144
20031218000000	18.8	1.0	363.3	D144
20031219000000	19.2	3.5	372.1	D144
20031220000000	17.7	2.2	342.3	D144
20031221000000	17.7	2.5	342.9	D144
20031222000000	18.4	2.4	355.8	D144
20031223000000	19.2	2.2	371.1	D144
20031224000000	18.9	2.2	363.6	D144
20031225000000	18.4	2.8	354.9	D144
20031226000000	18.8	2.6	362.7	D144
20031227000000	18.3	2.7	351.4	D144
20031228000000	19.3	2.8	372.5	D144
20031229000000	19.6	3.2	377.5	D144
20031230000000	19.2	3.6	371.9	D144
20031231000000	19.3	3.4	373.0	D144

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ATTACHMENT 2: HEATER B-201 PERMIT

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FACILITY PERMIT TO OPERATE
CONOCOPHILLIPS COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions * And Requirements	Conditions
Process 2 : HYDROTREATING					P13.2
BURNER, THREE (3) BURNERS, REFINERY/NATURAL GAS, JOHN ZINK, MODEL PNDR-16, WITH LOW NOX BURNER, 17 MMBTU/HR					
System 9 : HYDROTREATING UNIT 90 HEATERS					
HEATER, 90-B-201, REFINERY/NATURAL GAS, WITH LOW NOX BURNER, STEAM OR WATER INJECTION, 34 MMBTU/HR WITH A/N: 445864	D144		NOX: LARGE SOURCE**; SOX: MAJOR SOURCE**	**CO:** 400 PPMV (5A) **[RULE 1146,11-17-2000]** ; **CO:** 2000 PPMV (5) **[RULE 407,4-2-1982]** ; **NOX:** 37 PPMM REFINERY/NATURAL GAS (3) **[RULE 2012,5-6-2005]** **PM:** 0.1 GRAINS/SCF (5) **[RULE 409,8-7-1981]** ; **PM:** (9) **[RULE 404,2-7-1986]**	A26.4, B61.4, C1.26, D232.1, D328.1, H23.1
BURNER, FOUR (4) BURNERS, REFINERY/NATURAL GAS, JOHN ZINK, MODEL PNDR-16, WITH LOW NOX BURNER, 34 MMBTU/HR					
HEATER, RERUN FEED, 90-B-202, REFINERY/NATURAL GAS, 76 MMBTU/HR WITH A/N: 445865	D146		NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	**CO:** 2000 PPMV (5) **[RULE 407,4-2-1982]** ; **PM:** 0.1 GRAINS/SCF (5) **[RULE 409,8-7-1981]** ; **PM:** (9) **[RULE 404,2-7-1986]**	A26.4, B61.4, C1.46, D28.5, D232.1, H23.1

* (1)(1A)(1B) Denotes RECLAIM emission factor
(2)(2A)(2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit
(4) Denotes BACT emission limit
(5)(5A)(5B) Denotes command and control emission limit
(6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit
(8)(8A)(8B) Denotes 40 CFR limit(e.g. NSPS, NESHAPS,etc.)
(9) See App B for Emission Limits
(10) See Section J for NESHAP/MACT requirements

** Refer to Section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
CONOCOPHILLIPS COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

A26.3 The operator shall comply with the following condition number(s) within 180 days from the EPA's determination on an alternative monitoring plan (AMP).

Condition Number A 1- 1

[40CFR 60 Subpart J, 10-4-1991]

[Devices subject to this condition : D1]

A26.4 The operator shall comply with the following condition number(s) within 180 days from the EPA's determination on an alternative monitoring plan (AMP).

Condition Number D 232- 1

[40CFR 60 Subpart J, 10-4-1991]

[Devices subject to this condition : D39, D41, D42, D129, D133, D135, D136, D137, D138, D139, D142, D144, D146, D148, D150, D152, D154, D155, D156, D157, D158, D161, D163, D194, D220, D259, D260, D262, D264, D329, D684, D686, D688]

A63.2 The operator shall limit emissions from this equipment as follows:

CONTAMINANT	EMISSIONS LIMIT
CO	Less than or equal to 401 LBS IN ANY ONE DAY
PM10	Less than or equal to 269 LBS IN ANY ONE DAY
PM	Less than or equal to 269 LBS IN ANY ONE DAY
ROG	Less than or equal to 166 LBS IN ANY ONE DAY

For the purposes of this condition, the limit(s) shall be based on the total combined emissions from Turbine Device D828 & Boiler Device D829.

[RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D828, D829]

FACILITY PERMIT TO OPERATE
CONOCOPHILLIPS COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

B61.4 The operator shall not use fuel gas containing the following specified compounds:

Compound	ppm by volume
H2S greater than	160

The H2S concentration limit shall be based on a rolling 3-hour averaging period

[40CFR 60 Subpart J, 10-4-1991]

[Devices subject to this condition : D39, D41, D42, D129, D133, D135, D136, D137, D138, D139, D142, D144, D146, D148, D150, D152, D154, D155, D156, D157, D158, D161, D163, D194, D220, D259, D260, D262, D264, D329, C436, C456, D684, D686, D687, D688]

B61.5 The operator shall not use diesel fuel containing the following specified compounds:

Compound	weight percent
Sulfur compounds greater than	0.05

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D669, D670, D671, D672, D673, D674, D675, D676, D677, D678, D679, D680, D681, D683, D1553, D1657, D1658]

FACILITY PERMIT TO OPERATE
CONOCOPHILLIPS COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

C1.26 The operator shall limit the firing rate to no more than 34 MM Btu per hour.

To comply with this condition, the operator shall monitor and record the fuel rate and the fuel high heating value for the refinery fuel gas/natural gas. Such records shall be made available to District personnel upon request.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(b)(2)-Offset, 5-10-1996]

[Devices subject to this condition : D144]

C1.27 The operator shall limit the firing rate to no more than 38 MM Btu per hour.

To comply with this condition, the operator shall maintain records of the fuel rate and the fuel high heating value. Such records shall be made available to District personnel upon request.

[RULE 1301(b)(1), 12-7-1995]

[Devices subject to this condition : D150]

C1.28 The operator shall limit the firing rate to no more than 30 MM Btu per hour.

To comply with this condition, the operator shall maintain records of the fuel rate and the fuel high heating value. Such records shall be made available to District personnel upon request.

[RULE 1301(b)(1), 12-7-1995]

[Devices subject to this condition : D152]

C1.33 The operator shall limit the firing rate to no more than 31 MM Btu per hour.

To comply with this condition, the operator shall maintain records of the fuel rate and the fuel high heating value. Such records shall be made available to District personnel upon request.

[RULE 1301(b)(1), 12-7-1995]

[Devices subject to this condition : D161]

FACILITY PERMIT TO OPERATE
CONOCOPHILLIPS COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D182.4 The operator shall test this equipment in accordance with the following specifications:

The operator shall conduct an inspection for visible emissions from all stacks and other emission points of this equipment whenever there is a public complaint of visible emissions, whenever visible emissions are observed, and during each filling operation of the storage silo. The inspection during the filling operation shall be conducted during daylight hours

If any visible emissions are detected, the operator shall stop the filing operation and take corrective action(s) that eliminates the visible emissions and report the visible emissions as a potential deviation in accordance with the reporting requirements in Section K of this permit

The operator shall keep the records in accordance with the recordkeeping requirements in Section K of this permit and the following records:

1) stack or emission point identification;

2) Description of any corrective actions taken to abate visible emissions; and

3) Date and time visible emissions was abated

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D1695, D1697]

D232.1 The operator shall install and maintain a continuous emission monitoring device to accurately indicate the H2S concentration at the fuel inlet to the combustion device pursuant to 40CFR60 Subpart J. Compliance with the fuel gas H2S concentration can alternately be determined by measuring the SO2 emissions at the outlet of the device and complying with the 20 ppmv (dry basis, zero percent excess air) SO2 limit allowed by 40CFR60 Subpart J. The measurement may be performed at a single device that shares a common source of fuel gas.

[40CFR 60 Subpart J, 10-4-1991]

[Devices subject to this condition : D39, D41, D42, D129, D133, D135, D136, D137, D138, D139, D142, D144, D146, D148, D150, D152, D154, D155, D156, D157, D158, D161, D163, D194, D220, D259, D260, D262, D264, D329, C436, C456, D684, D686, D688]

FACILITY PERMIT TO OPERATE
CONOCOPHILLIPS COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

D328.1 The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with the CO emission limit(s). The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 407, 4-2-1982]

[Devices subject to this condition : D39, D41, D42, D129, D133, D142, D144, D148, D150, D152, D154, D155, D156, D157, D158, D161, D163, D220, D259, D260, D262, D329, D332, D684, D686, D687, D688]

D330.1 The operator shall have a person that has been trained in accordance with Rule 461(d)(5) conduct a semi-annual inspection of the gasoline transfer and dispensing equipment. The first inspection shall be in accordance with Rule 461, Attachment B, the second inspection shall be in accordance with Rule 461, Attachment C, and the subsequent inspections shall alternate protocols. The operator shall keep records of the inspection and the repairs in accordance to Rule 461 and Section K of this Permit.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 461, 3-7-2008]

[Devices subject to this condition : D698]

D332.1 The operator shall determine compliance with the CO emission limit(s) by conducting a test at least every five years using a portable analyzer and AQMD-approved test method or, if not available, a non-AQMD approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with the CO emission limit(s). The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 407, 4-2-1982]

[Devices subject to this condition : D40]

FACILITY PERMIT TO OPERATE
CONOCOPHILLIPS COMPANY

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

H23.1 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
SOX	40CFR60, SUBPART	J

Pursuant to 40CFR60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

The operator shall keep records to demonstrate compliance or exemption from this condition.

[40CFR 60 Subpart J, 10-4-1991]

[Devices subject to this condition : D1, D39, D41, D42, D129, D133, D135, D136, D137, D138, D139, D142, D144, D146, D148, D150, D152, D154, D155, D156, D157, D158, D161, D163, D194, D220, D259, D260, D262, D264, D329, C436, C456, D684, D686, D687, D688, D828, D829]

H23.2 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1173

[RULE 1173, 5-13-1994; RULE 1173, 6-1-2007]

[Devices subject to this condition : D556, D1565, D1569, D1571, D1573, D1575, D1577, D1579, D1581, D1583, D1587, D1589, D1590, D1591, D1596, D1597, D1599, D1600, D1601, D1602, D1604, D1605, D1606, D1607, D1608, D1609, D1611, D1612, D1613, D1617, D1618, D1619, D1620, D1621, D1623, D1800, D1801, D1802, D1804]

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ATTACHMENT 3: HEATER B-401 TITLE V PERMIT

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South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

Equipment	ID No.	Connected To	RECLAIM Source Type/ Monitoring Unit	Emissions* And Requirements	Conditions
Process 2: HYDROTREATING					P13.2
HEATER, 90-B-401, REFINERY/NATURAL GAS, WITH LOW NOX BURNER, 41.3 MMBTU/HR WITH A/N: 535188 BURNER, REFINERY/NATURAL GAS, ZEECO, MODEL GLSF, WITH LOW NOX BURNER, 4 TOTAL; 10.34 MMBTU/HR	D1720	C1722	NOX: MAJOR SOURCE**; SOX: MAJOR SOURCE**	**CO**: 10 PPMV (4) **[RULE 1303(a)(1)-BACT, 5-10-1996]**; **CO**: 2000 PPMV (5) **[RULE 407, 4-2-1982]**; **HAP**: (10) **[40CFR 63 Subpart DDDDD, 11-20-2015]**; **NOX**: 5 PPMV REFINERY/NATURAL GAS (4) **[RULE 2005, 6-3-2011]**; **PM**: (9) **[RULE 404, 2-7-1986]**; **PM**: 0.1 GRAINS/SCF (5) **[RULE 409, 8-7-1981]**; **SO2**: 20 PPMV (8) **[40CFR 60 Subpart J, 12-1-2015]**	A99.3, A99.4, A195.4, A195.5, B61.6, C1.26, D28.21, D82.6, D328.2, H23.34, H23.37

* (1) (1A) (1B) Denotes RECLAIM emission factor (2) (2A) (2B) Denotes RECLAIM emission rate
(3) Denotes RECLAIM concentration limit (4) Denotes BACT emission limit
(5) (5A) (5B) Denotes command and control emission limit (6) Denotes air toxic control rule limit
(7) Denotes NSR applicability limit (8) (8A) (8B) Denotes 40 CFR limit (e.g. NSPS, NESHAPS, etc.)
(9) See App B for Emission Limits (10) See section J for NESHAP/MACT requirements

** Refer to section F and G of this permit to determine the monitoring, recordkeeping and reporting requirements for this device.

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

CONTAMINANT	EMISSIONS LIMIT
NOX	Less than or equal to 20 TONS IN ANY CALENDAR YEAR

[CONSENT DECREE CIVIL NO. H-05-0258, 8-11-2008]

[Devices subject to this condition : D686]

A99.1 The 9 PPM NOX emission limit(s) shall not apply when the equipment is in startup, shutdown, or on-line fuel transfer periods (for NOx).

[RULE 2005, 5-6-2005]

[Devices subject to this condition : D828]

A99.2 The 10 PPM CO emission limit(s) shall not apply when the equipment is in startup, shutdown, or on-line fuel transfer periods (for CO).

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D828]

A99.3 The 5 PPM NOX emission limit(s) shall not apply during the refractory dryout period not to exceed 96 hours, or when the heater exhaust temperature is below 500 degrees F during the equipment's startup or shutdown..

[RULE 2005, 6-3-2011; RULE 2005, 12-4-2015]

[Devices subject to this condition : D1720]

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

A99.4 The 10 PPM CO emission limit(s) shall not apply when this equipment is startup, shutdown, or during the refractory dryout period.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D1720]

A195.1 The 7 PPM NOX emission limit(s) is averaged over 15 minutes.

[**RULE 2005, 5-6-2005**]

[Devices subject to this condition : D1349]

A195.2 The 104 PPM NOX emission limit(s) is averaged over 15 minutes for NOx when the gas turbine is fired with natural gas during startup, shutdown, or on-line fuel transfer periods, dry uncorrected.

[**RULE 2005, 5-6-2005**]

[Devices subject to this condition : D828]

A195.3 The 165 PPM NOX emission limit(s) is averaged over 15 minutes for NOx when the gas turbine is fired with butane during startup, shutdown, or on-line fuel transfer periods, dry uncorrected.

[**RULE 2005, 5-6-2005**]

[Devices subject to this condition : D828]

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

A195.4 The 5 PPMV NOX emission limit(s) is averaged over 60 minutes.

[RULE 2005, 6-3-2011; RULE 2005, 12-4-2015]

[Devices subject to this condition : D1720]

A195.5 The 10 PPMV CO emission limit(s) is averaged over 60 minutes.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : D1720]

A195.6 The 5 PPMV NH3 emission limit(s) is averaged over 60 minutes.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002]

[Devices subject to this condition : C1722]

A195.7 The 20 PPMV NOX emission limit(s) is averaged over 365 rolling days at 0% O2, dry basis.

The 20 ppmv NOx emission limit shall become effective on March 1, 2011.

[CONSENT DECREE CIVIL NO. H-05-0258, 8-11-2008]

[Devices subject to this condition : D1]

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

The H2S concentration limit shall be based on a rolling 3-hour averaging period

[40CFR 60 Subpart J, 9-12-2012; CONSENT DECREE CIVIL NO. H-05-0258, 8-11-2008]

[Devices subject to this condition : D39, D129, D133, D135, D136, D137, D138, D139, D142, D146, D148, D150, D152, D154, D155, D156, D157, D158, D161, D163, D194, D220, D259, D260, D262, D264, D329, C436, C456, D684, D686, D688]

B61.5 The operator shall not use diesel fuel containing the following specified compounds:

Compound	weight percent
Sulfur compounds greater than	0.05

[RULE 1303(a)(1)-BACT, 5-10-1996]

[Devices subject to this condition : D670, D675, D676, D677, D678, D679, D680, D681, D683, D1553, D1657, D1658]

B61.6 The operator shall only use fuel gas containing the following specified compounds:

Compound	ppm by volume
Total sulfur compounds calculated as H2S less than or equal to	40

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D260]

C1.26 The operator shall limit the firing rate to no more than 34 MM Btu per hour.

The 34 MM Btu per hours limit is based on a 30-day calendar month average..

To comply with this condition, the operator shall monitor and record the fuel rate and the fuel high heating value for the refinery fuel gas/natural gas. Such records shall be made available to District personnel upon request.

[RULE 1303(a)(1)-BACT, 5-10-1996; RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002]

[Devices subject to this condition : D1720]

C1.27 The operator shall limit the firing rate to no more than 38 MM Btu per hour.

To comply with this condition, the operator shall maintain records of the fuel rate and the fuel high heating value. Such records shall be made available to District personnel upon request.

[RULE 1301(b)(1), 12-7-1995]

[Devices subject to this condition : D150]

C1.28 The operator shall limit the firing rate to no more than 30 MM Btu per hour.

To comply with this condition, the operator shall maintain records of the fuel rate and the fuel high heating value. Such records shall be made available to District personnel upon request.

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : C832]

D28.21 The operator shall conduct source test(s) in accordance with the following specifications:

The test shall be conducted within 120 days after achieving maximum production rate, but no later than 180 days after initial start-up.

The test shall be conducted to determine emission rates of NOX, SOX, ROG, CO, PM, and PM10. The operator shall submit a test protocol to the District at least 60 days prior to the test. The tests shall be conducted according to the approved test protocol or any subsequently approved revisions.

The test shall be conducted with the equipment operating at least 80 percent of the permitted maximum capacity or within a capacity range approved by the District. Report of the test and operating condition of the equipment shall be submitted to the District within 60 days after the test. The test for PM10 shall be conducted once every three years.

The District shall be notified of the date and time of the test at least 10 days prior to the test.

[**RULE 1303(a)(1)-BACT, 5-10-1996;** RULE 1303(a)(1)-BACT, 12-6-2002; **RULE 1303(b)(2)-Offset, 5-10-1996;** RULE 1303(b)(2)-Offset, 12-6-2002; **RULE 2005, 6-3-2011;** RULE 2005, 12-4-2015]

[Devices subject to this condition : D1720]

D29.2 The operator shall conduct source test(s) for the pollutant(s) identified below.

Pollutant(s) to be tested	Required Test Method(s)	Averaging Time	Test Location

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[40CFR 60 Subpart J, 9-12-2012; CONSENT DECREE CIVIL NO. H-05-0258, 8-11-2008]

[Devices subject to this condition : C436, C456]

D82.5 The operator shall install and maintain a CEMS to measure the following parameters:

1. CO
2. O2

[40CFR 60 Subpart J, 12-1-2015; CONSENT DECREE CIVIL NO. H-05-0258, 8-11-2008]

[Devices subject to this condition : D1]

D82.6 The operator shall install and maintain a CEMS to measure the following parameters:

SOX concentration in ppmv

Oxygen concentration in percent volume

Concentrations shall be corrected to zero percent excess air on a dry basis.

The CEMS shall be installed in accordance with the requirements of the 40CFR60 Subpart J with an appropriate range approved by the AQMD.

[40CFR 60 Subpart J, 12-1-2015]

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 401, 3-2-1984; RULE 401, 11-9-2001]

[Devices subject to this condition : D44]

D328.1 The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with the CO emission limit(s). The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

[RULE 1146, 11-1-2013; RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 407, 4-2-1982]

[Devices subject to this condition : D39, D40, D129, D133, D139, D142, D148, D150, D152, D158, D161, D163, D259, D260, D262, D329, D332]

D328.2 The operator shall determine compliance with the CO emission limit(s) either: (a) conducting a source test at least once every five years using AQMD Method 100.1 or 10.1; or (b) conducting a test at least annually using a portable analyzer and AQMD-approved test method. The test shall be conducted when the equipment is operating under normal conditions to demonstrate compliance with the CO emission limit(s). The operator shall comply with all general testing, reporting, and recordkeeping requirements in Sections E and K of this permit.

[RULE 3004(a)(4)-Periodic Monitoring, 12-12-1997; RULE 407, 4-2-1982]

[Devices subject to this condition : D1, D44, D135, D136, D137, D138, D146, D154, D155, D156, D157, D194, D220, D264, D333, C436, C456, D684, D686, D687, D688, D828, D829, D1349, D1720]

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

[Devices subject to this condition : D675, D676, D677, D678, D679, D1553, D1657, D1658, D1768]

H23.30 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	District Rule	1110.2
CO	District Rule	1110.2

[RULE 1110.2, 2-1-2008; RULE 1110.2, 9-7-2012]

[Devices subject to this condition : D670]

H23.34 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
SOX	40CFR60, SUBPART	J

Pursuant to 40CFR60.8(c), emissions in excess of the level of the applicable emission limit during periods of startup, shutdown and malfunction shall not be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

The operator shall keep records to demonstrate compliance or exemption from this condition.

[40CFR 60 Subpart J, 12-1-2015]

[Devices subject to this condition : D687, D828, D829, D1349, D1720]

South Coast Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178

FACILITY PERMIT TO OPERATE
PHILLIPS 66 CO/LA REFINERY WILMINGTON PL

SECTION D: FACILITY DESCRIPTION AND EQUIPMENT SPECIFIC CONDITIONS

The operator shall comply with the terms and conditions set forth below:

H23.35 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
PM	District Rule	1470

[RULE 1470, 5-4-2012]

[Devices subject to this condition : D670]

H23.36 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR	Part 64

[40CFR Part 64, 10-22-1997]

[Devices subject to this condition : D1, D502, D503, D504, D518, D772, D1380, D1386, D1543, D1544, D1550, D1551, D1624]

H23.37 This equipment is subject to the applicable requirements of the following rules or regulations:

Contaminant	Rule	Rule/Subpart
VOC	40CFR63, SUBPART	DDDDD

[40CFR 63 Subpart DDDDD, 11-20-2015]

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ATTACHMENT 4: REPORT ON ANNUAL FUEL CONSUMPTION FOR MITIGATION MEASURE AQ-1

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Los Angeles Refinery
1660 West Anaheim Street
Wilmington, CA 90744
P.O. Box 758
Wilmington, CA 90745-0758
Telephone (310) 952-6000
www.phillips66.com

March 16, 2020

Mr. Mike Krause
Planning & Rules Manager
South Coast Air Quality Management District
21865 Copley Drive
Diamond Bar, CA 91765-4178

ULSD PROJECT STEAM DEMAND

Dear Mr. Krause:

As you know, Mitigation Measure AQ-1 requires Phillips 66 to calculate and report a ratio derived from the annual fuel consumption per barrels of feed (MMBtu/1000 bbl feed) for the Wilmington Plant steam boilers and Cogen for the years 2014 through 2018. Where the annual fuel/feed ratio exceeds the baseline year (in 2014) or the prior year (for the years 2015 through 2018), Phillips must state whether or not the increase is due to the ULSD project and, if it is not, explain the causes or circumstances for the increase. In order to comply with Mitigation Measure AQ-1, we are submitting the required information, which includes the pre- and post-project periods, the years 2014-2018 (the years specified in the mitigation measure), as well as the intervening years not required by the mitigation measure. There are no increases in annual fuel consumption per barrels of feed attributable to the USLD project. The data attached to this letter show that there have been fluctuations – including some increases – in the heat input ratio in certain years. However, as this letter explains, where the increases have occurred, they are not a result of, or related to, the ULSD Project and are generally the result of refinery operational changes that would have occurred with or without the ULSD Project.

Heat input ratio data from the years immediately post-project (2006-2008) show no increase at all. This is the result we expected to see, and which is explained in Figure 3-1 of the EIR. Nonetheless, this letter explains why there are some increases in the ratios from year-to-year (particularly beginning in 2015 when a significant operational change was made at the refinery).

The refinery's operations are complex: there are many different factors that can affect steam generation and the ratio of fuel gas firing to barrel of process input (feed). For example, total annual process input, crude plus other feedstocks, into the refinery varies from year to year depending on many factors (market conditions, planned refinery maintenance activity, unplanned downtime, etc.). In general, the variation is within a narrow range close to the refinery's maximum design rate because that is where overall refinery operation is most economical. Despite the economic downturn around 2008, process input in the post-project period was actually slightly higher than the pre-project period (2002-2003). Furthermore, steam supply in the refinery does not come solely from the four boilers and the Cogen. Steam is also produced in several of the process units from energy intensive processes that require high temperatures. Instead of wasting the heat that is exhausted from these processes, it is recovered by

passing it through heat exchangers that transfer the heat into water to generate steam. Steam made from these recovery processes is primarily dependent on throughput of the individual process unit, so the steam production cannot be varied at will. If the process unit is temporarily at reduced rate, or shut down, for maintenance, the steam it normally makes must be made up by the boilers and/or the Cogen. First, the lack of causation or relationship between increased steam demand post-project and the ULSD Project is best-evidenced by the data itself for the years immediately post-project. In the three-year period immediately post-project (2006-2008), the ratio of steam produced to barrel of process input was lower than pre-project (2002-2003): 147.7 post-project as compared to 147.9 pre-project. And in 2009, the ratio was even lower: 145.4 post-project as compared to 147.9 pre-project. If the ULSD project had caused an increase in the ratio (which it has not), it would have been readily apparent during this timeframe.

Subsequent fluctuations and increases are not a result of the ULSD project. While there is an increase in 2010 compared to 2009, this was due to a major turnaround at the Phillips 66 Wilmington Plant involving the FCCU, Alkylation Unit, Sulfuric Acid Plant and hydrotreating units, which affected steam production by the boilers and Cogen because steam produced within these process units from recovered energy was significantly reduced. The reduced steam production from recovered energy had to be made up by the Cogen and boilers, including Boiler #4, and was unrelated to the ULSD project.

The increase in 2013 compared to 2012 was due to a turnaround at the Sulfuric Acid Plant, a major steam producer from recovered energy, when the Sulfuric Acid Plant was shut down. The increase in 2014 compared to the pre-project period was due to a major Cogen turnaround lasting over a month when the Cogen was shut down, and both planned and unplanned downtime (shutdown) of the Sulfuric Acid Plant. None of these increases was related to the ULSD project.

Then, beginning in 2015, there was a step-change increase in the ratio of heat input into the boilers and Cogen that was not related to the ULSD Project, the latter of which became operational nine years prior (i.e., in 2006). Rather, the increase resulted from Phillips 66's operational decision in early 2015 to modify operations to reduce the risk of a sudden refinery-wide shut down and the consequential environmental and safety risks associated with such an incident. This decision is further described below.

The ratio of heat input into the boilers and Cogen increased in 2015 because Phillips 66 had chosen to run all four boilers full time for steam system reliability. This decision was made following an incident on January 1, 2015, when the Cogen suddenly shut down due to a mechanical failure, starting a "domino effect" that resulted in the sudden shutdown of several process units, including the FCCU. Prior to that time, Boiler #4 was typically used only when one of the other three boilers, the Cogen, or other major steam generator was down for maintenance. Boiler #4 was not put on line full time to increase steam production; it was put on line for the refinery to have a larger cushion between maximum available on-line capacity and actual demand.

The reason to run all boilers concurrently is to improve the steam system's ability to absorb the shock of a sudden, unexpected shutdown of one of the major steam producers, like the Cogen failure on January 1, 2015. This Cogen shutdown caused a domino effect that resulted in Boiler #7 & Boiler #8 also shutting down. The sudden drop in steam system pressure due to the deficit in steam production then caused the shutdown of Wilmington's FCCU, Alkylation Unit and two other supporting units.

Fortunately, in this incident, Boiler #6 did not shut down and we were able to get the other boilers back on line quickly enough that the remaining operating process units did not shut down.

When all boilers are on-line and a sudden, unexpected shutdown of one of the major steam producers occurs, there is a lower chance of this domino effect. This domino effect can occur because the operating boilers' control systems are trying to react to fast-changing, transient conditions and any one of the many safety shutdowns every boiler has can easily be triggered when the control system tries to suddenly increase steam output by a large amount. If the entire steam system shuts down, it can cause an emergency shutdown of all Wilmington process units, which can result in significant flaring. We determined that the increased reliability of running all boilers concurrently was overall better for safety, human health, and the environment, despite the increase in our operating costs that results from such operation.

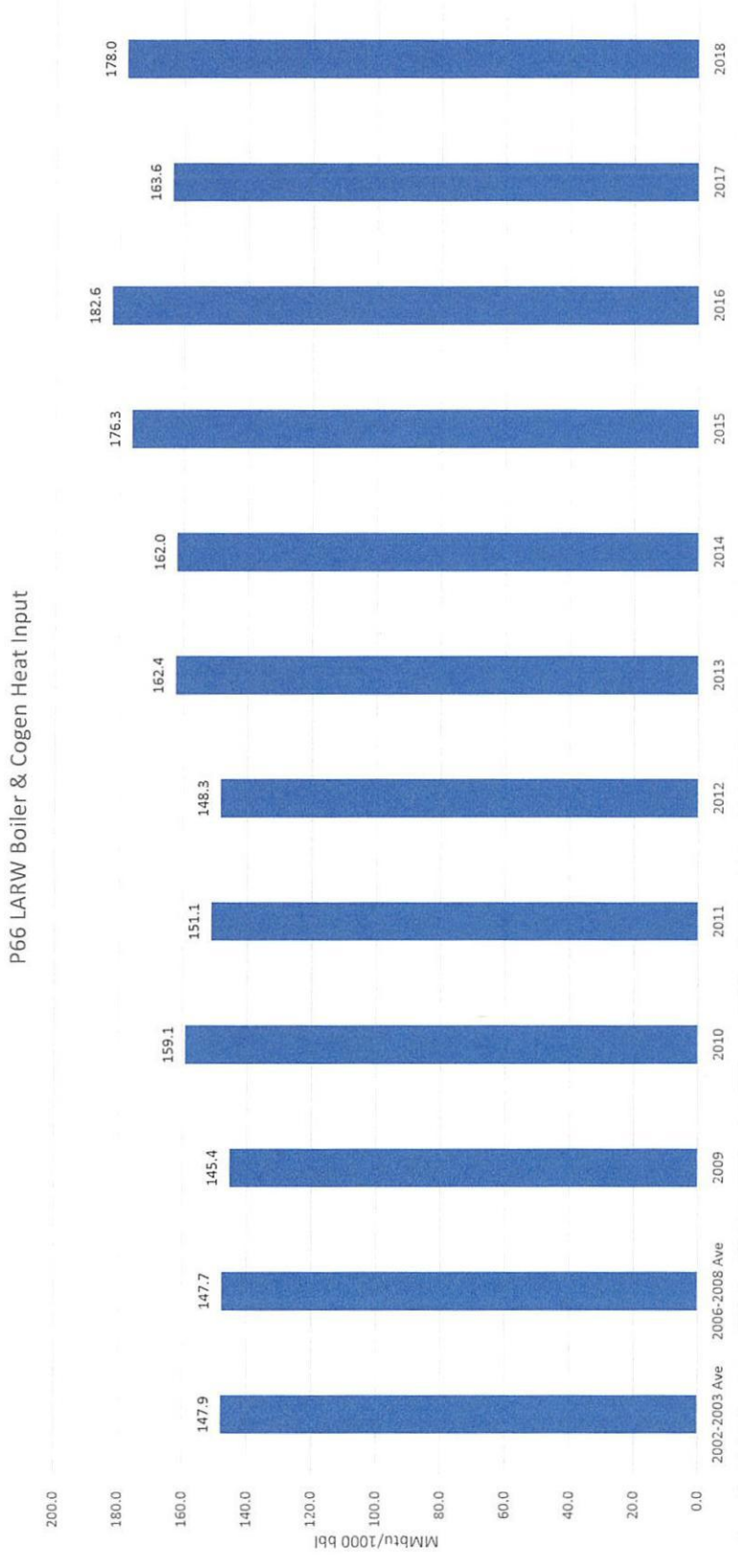
From 2015 through 2019, which shows the results of this operational change, there are year-to-year changes in the ratio that are not related to the ULSD project, but instead are the result of independent refinery events or operations. The increase in 2016 compared to 2015 was due to an unplanned shutdown of the Sulfuric Acid Plant lasting over a month. The increase in 2018 compared to 2017 was due to a major turnaround and shutdown of the Hydrocracker, and its accompanying hydrogen plant, which is also a large steam producer from recovered energy, lasting over a month. The attached data depicts that the operational decision described above resulted in an increase in the ratio of steam produced to barrel of process input (MMbtu/1000bbl) beginning in 2015 (as compared to the 2002-2003 pre-project level).

I trust this addresses the Mitigation Measure AQ-1, but please let me know if you have any questions or need additional information.

Sincerely,

Marshall Waller
Principal Environmental Consultant

Attachment


P66 LARW Boiler & Cogen Heat Input
MMbtu/1000 bbl
200.0
180.0
160.0
140.0
120.0
100.0
80.0
60.0
40.0
20.0
0.0
147.9
147.7
145.4
159.1
151.1
148.3
162.4
162.0
176.3
182.6
163.6
178.0
2002-2003 Ave
2006-2008 Ave
2009
2010
2011
2012
2013
2014
2015
2016
2017
2018