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Ms. Lehr,

ExxonMobil thanks you and your team for the efforts to-date on our interim trucking project's draft supplemental environmental impact report (DSEIR). ExxonMobil appreciates the thoroughness of the analysis and its careful consideration of a range of alternatives. After reviewing the DSEIR, we have compiled comments for your consideration. The DSEIR, overall, is a sound document. We provide below, however, comments covering not only technical corrections and clarifications, but also more specific concerns regarding the project alternatives and the analysis of the project impacts. Some aspects of the project impacts analysis are very conservative and should be noted as such. In particular, impact RISK.3 does not present mitigated risk probabilities, nor does it succinctly combine these mitigations with the variability in severity of impacts based on the circumstances. There is also information about the existing conditions that should be either better incorporated into the analysis or at least better disclosed to readers of the document. Specifically, the document discloses potential benefits from the project associated with existing tanker truck displacement and lower crude intensity production, but does not fully incorporate these into the baseline or the no project alternative. The full comments are detailed below. We appreciate your consideration of these comments, and please let us know if we can provide any clarifications or further information to facilitate your review.

Project Alternatives

No Project Alternative

- ExxonMobil recommends that the descriptions of the No Project Alternative in Sections 2.0 and 5.0 reflect the existing baseline of trucks on the road, identify that the Interim Trucking project could have net positive environmental benefits consistent with truck displacement at the Phillips 66 Santa Maria Pump Station (SMPS), and state that the no project alternative is not the environmentally superior alternative given the status quo. The Air Quality section identifies that displacing trucks transporting crude to the SMPS from the east with trucks coming from ExxonMobil Las Flores Canyon (LFC) would result in a net emissions reduction for mobile emissions (Table 4.1-17).The Hazardous Materials and Risk of Upset section identifies that displacing trucks transporting crude to the SMPS from the East with trucks coming from LFC would result in a risk reduction (fewer miles traveled). However, the DSEIR does not fully incorporate this analysis because the County asserts that there "is no guarantee" that trucks from ExxonMobil's interim trucking project would offset other trucks going to the SMPS. This appears to be based on the assumption that the SMPS will add a sixth loading lane, preventing some truck displacement, but that assumption is not warranted (as described below). To maintain consistency with the Air

EXMO-1

Quality and Hazardous Materials and Risk of Upset Sections in the DSEIR, the assumption that trucks from the LFC will displace trucks travelling farther distances should be incorporated into the rest of the DSEIR.

EXMO-1 (con't)

Santa Maria Pump Station Only (SMPS-only) Alternative

- This alternative pre-supposes that P66 will definitely add a sixth loading lane to its SMPS facility in order to accommodate the proposed project's 70 truck trips per day. It is unclear why the DSEIR assumes that P66 would pursue this effort. Even if P66 would pursue a sixth loading lane project, it is far from certain that such a project could be approved under the California Environmental Quality Act (CEQA), or, if so, on a timeline adequate to support the interim trucking project. ExxonMobil suggests that the SMPS-only alternative analysis in Section 5.0 also consider the scenario in which, instead of P66 adding a sixth loading lane, existing trucks are displaced.

EXMO-2

- The SMPS-only alternative suggests that both crude storage tanks will be in service during interim trucking. While not explicitly stated in the project description, only one crude storage tank is expected to be in service during interim trucking operations. This operational decision decreases the number of days that LFC could operate to 20 if SMPS cannot accept deliveries for more than 10 days and deliveries to the Plains Pentland Terminal (Pentland) are limited to 34 truck trips per day. Section 2.0 correctly estimates 20 days of operation under this scenario, assuming the tank starts half full. However, other sections of the document are inconsistent, stating 40 days of non SMPS operation prior to a forced shut-in (e.g., ES-7, Page 5-31). All instances should reflect the 20 day basis.

EXMO-3

- It appears that the SMPS-only alternative limits the number of trucks able to go to Pentland based on the 25 lbs/day NOx emission significance threshold. This detail should be explicitly described. Separately, ExxonMobil proposes that the 34 truck trips per day restriction be lifted and the flexibility remain for 68 truck trips per day to Pentland during times when SMPS is unable to accept deliveries for longer than 10 days. This scenario will still require Mitigation AQ-1 to ensure that operations stay below the 25 lbs/day NOx threshold. This new scenario still mitigates the identified Class I impact RISK.3 as the Pentland route would only be available when SMPS is unavailable for longer than 10 days. Relative to the proposed project and the alternative as-written, the new scenario does not increase the mitigation requirements associated with Class II impact AQ.3 nor the impact classification of AQ.3 for the proposed project.

EXMO-4

- ExxonMobil recommends that the DSEIR clarify the circumstances in which trucks can go to Pentland. Specifically, if it is foreseeable that SMPS will be unable to accept trucks for longer than 10 days (e.g., turnaround, project work), then ExxonMobil proposes that trucking to Pentland be allowable immediately as opposed to waiting for 10 days before trucking to Pentland can begin.

EXMO-5

No Trucking During Rainy Periods

- To help increase operational certainty, we propose that an operational plan be developed between Santa Barbara County Planning and Development (SBC P&D) and ExxonMobil for this alternative. This alternative's guidance for determining when trucking can and cannot

EXMO-6

occur leaves some operational scenarios undefined. For example, at what point is it determined that a given rain event has not occurred or will not occur? An operational plan would help clarify unique scenarios and align P&D and ExxonMobil operations on expectations for individual rain events.

EXMO-6 (con't)

- ExxonMobil supports the decision to increase the peak daily truck limit in this alternative. However, it should be noted that the 78 truck/day limit allows for only 38 days of no trucking in a given year before the facility cannot average 70 trucks per day for the year. Based on Table 2-2 in Section 2.7.3.3, there is a possibility that there could be greater than 38 days of no trucking in a given year. While the average maximum recorded number of rain days with ½ inch of precipitation or above is only 22, the number of days where there is a 50% chance or greater of such levels of precipitation would be higher, potentially limiting trucking below 70 trucks per day for the year. This scenario should be mentioned in the DSEIR.

EXMO-7

Reduced Trucking Alternative

- ExxonMobil believes that the DSEIR correctly identifies the risks associated with the reduced trucking alternative. The DSEIR also accurately depicts the operational challenges that the Santa Ynez Unit (SYU) and LFC experienced during minimum turndown operations after the Plains Pipeline incident in 2015. The DSEIR's analysis adequately reflects the concerns with operating the facilities below the 70 truck trips per day limit for the duration of the project. However, the DSEIR then suggests an infeasible solution to the issue - a variance for LFC's Air Pollution Control District (APCD) permit to operate. There is no guarantee that APCD would issue such a variance, and based on ExxonMobil's understanding of the variance process[1], the proposed solution would not likely qualify for a variance. The DSEIR also includes significant infrastructure modifications that would not support the long term, non-trucking operations of the facility. For example, offshore pipeline modifications are an extensive expansion of the proposed project and would interfere with the long-term use of the facility once full-scale operations have resumed. The modifications would also require permitting efforts that would likely take significant additional time. This is especially notable given the short amount of time that trucking is expected to occur. While it is fair to assess the alternative, ExxonMobil believes that these enabling requirements for the alternative are not reasonable, making the alternative itself infeasible. This should be more affirmatively stated in the final SEIR.

EXMO-8

Air Quality

General Comments

- Page 4.1-26 states that "there are no CO thresholds and the area is in compliance for CO ambient air quality…" This could be made more clear – the Santa Barbara County Environmental Thresholds and Guidelines Manual does include a specific threshold:
    - "**Carbon Monoxide (CO)**. A project will have a significant air quality impact if it causes, by adding to the existing background CO levels, a carbon monoxide "hot

EXMO-9

[1] https://www.ourair.org/variance/

spot" where the California one-hour standard of 20 parts per million carbon monoxide is exceeded. This typically occurs at severely congested intersections."

ExxonMobil proposes modifying the language on Page 4.1-26 and quoting the Santa Barbara County Environmental Thresholds and Guidelines Manual. The document provides a screening procedure for CO impacts that considers peak hour trips contributed by a project and the level of service at existing congested intersections. The discussion should be revised to include a CO screening for the project. Section 4.5.4, Transportation and Circulation – Project Impacts and Mitigation Measures, states that the project is expected to generate 140 additional one-way trips per day, and an average of six additional trips during the AM and PM peak hours. (Discussion of Impact TR.2, Operational Traffic Trips, at Page 4.5-15.) This represents less than one percent of the 800 peak hour trip threshold specified in the County's screening procedure. Therefore, CO impacts are expected to be less than significant. EXMO-9 (con't)

- Page 4.1-28, Section 4.1.4 states that "[f]ugitive emissions associated with the proposed Project are expected to increase LFC facility emissions by about five percent." While this may be true relative to the baseline described in Table 4.1-18, it does not account for the fact that the facility will not be running at full capacity during interim trucking. The analysis is therefore conservative and the DSEIR should disclose that reduced operations also reduce fugitive emissions, but that the DSEIR provides a conservative estimate. EXMO-10
- In Table 4.1-2, the data indicates that the maximum 24-hour concentration of PM 2.5 during 2017 was 10 ug/m^3, below the 35 ug/m^3 limit. The row below says that there were 130 days in which the limit was exceeded, which seems inconsistent if the daily maximum for the entire year was 10 ug/m^3. It is unclear if this is just a typographical error or a data inconsistency. EXMO-11
- Upon further review of the project's estimate of fugitive emissions associated with the loading rack, ExxonMobil believes it necessary to update the fugitive component counts associated with the project description. A revised fugitive component table and calculation are attached to this letter. EXMO-12

Cumulative Activities

- Platform emissions presented in Table 4.1-19 reflect average annual emissions occurring during the 2012 to 2014 baseline operational period and are described as a 'worst case scenario' on Page 4.1-31. These emission numbers reflect operation at a daily average production level of 28,400 barrels per day, rather than the peak production rate of 11,200 barrels per day expected during the proposed project. Given the production limitations associated with the proposed trucking project, this is an unrealistic worst case scenario and therefore, Table 4.1-19 underestimates the emission reductions expected from SYU facilities during the proposed project. EXMO-13
- The last paragraph on Page 4.1-32 reads, "[a]s the duration of the Project is also relatively short and near term, the emissions would not overlap with many of the cumulative projects." As this section is describing cumulative construction impacts specifically, ExxonMobil proposes a revision to read, "As the duration of the Project <u>construction activities</u> is also relatively short and near term, the emissions would not overlap with <u>construction activities associated with</u> many of the cumulative projects." EXMO-14

Climate Change and Greenhouse Gases

General

- The global warming potential (GWP) factors used in the DSEIR utilize the 100-year GWPs presented in the Intergovernmental Panel on Climate Change's Fourth Assessment Report (IPCC 2007), rather than the 100-year GWPs from the IPCC's Fifth Assessment Report (IPCC 2014). The factors should be updated to reflect the most recent IPCC report. EXMO-15
- ExxonMobil suggests explicitly stating that the countywide Greenhouse Gas Emissions data shown on Pages 4.2-5 to 4.2-7 are for unincorporated Santa Barbara County only. Also, Figure 4.2-1 is missing the emission count for Off-Road contributors. EXMO-16

Project Impacts

- Page 4.2-21 discusses the indirect sources of GHG associated with "Increased Production of Crude Oil Supply." In fact, consistent with the baseline, the project is operating at a reduced production rate. The language in this section should be clarified to be more specific and provide context for the fully permitted aspect of the LFC facility. The facility is also expected to run at approximately 39% of the baseline (11,200 bbls/day divided by 28,400 bbls/day), not 37%. To reflect the changes, ExxonMobil recommends: "The proposed product will result in resumption of crude oil production at 39 percent [not 37 percent as presented in the document] of the baseline period production levels." EXMO-17
- In the 'Indirect Sources of GHG' section on Page 4.2-21, the text provides CARB calculations for carbon intensity of the crude production from the Hondo reservoir. While Harmony and Hondo platforms produce crude oil from the Hondo field, the Heritage platform produces from the Sacate and Pescado fields. ExxonMobil recommends also providing the carbon intensity from the Sacate and Pescado fields to allow for a more complete evaluation of the carbon intensity from SYU crude. In addition, the text cites an average crude carbon intensity value of 5.54 gCO2e/MJ for Hondo crude oil in the year 2012. The source, the Calculation of 2017 Crude Average Carbon Intensity Value (July 2018), only shows data from 2015-2017. The 5.54 gCO2e/MJ is consistent with the 2015 data. If the DSEIR were to use year 2014 data (the last full year of production), the source would need to be the same report from the year 2016.[2]. The 2014 crude intensity values for Hondo, Pescado, and Sacate are 4.27, 3.45, and 2.33 gCO2e/MJ, respectively. These values are also the same as the 2012 data. EXMO-18

Potential Impact to Current Trucking to SMPS

- Potential GHG reductions by displacing trucks currently going to SMPS from the east are discussed on Page 4.2-24. ExxonMobil believes that the potential GHG reductions are significantly understated. Assuming the same types of trucks in the calculation, 70 trucks per day traveling 108.4 miles round trip would travel fewer total miles than 38 trucks per day traveling 255 miles round trip. As long as the emission factors are consistent between the two scenarios, one would expect a net GHG reduction. This is logically consistent with the description of net criteria pollutant reductions in Section 4.1, Table 4.1-17. The DSEIR calculates only a 22% reduction relative to the proposed project, or 424 MTCO2e per year, EXMO-19

[2] https://www.arb.ca.gov/fuels/lcfs/crude-oil/2016_crude_average_ci_value_final.pdf

as opposed to a net reduction from baseline, which would be expected. ExxonMobil suggests a table similar to 4.1-17 for clarity and to ensure the calculations of the potential reductions are accurate. EXMO-19 (con't)

Cumulative Activities

- Section 4.2.5.3 discusses the potential benefit of the proposed interim trucking project displacing import of foreign crude. ExxonMobil suggests that this section also consider the benefit of offsetting other crude produced in California and USA. On Page 4.2-21, the DSEIR discusses the CARB analysis of carbon intensity of crude oils, and this should also be further discussed in Section 4.2.5.3. The carbon intensity of producing and transporting SYU crude is significantly lower than that of the California average and that of importing from foreign sources and Alaska. The DSEIR states that the GHG reduction from this benefit is "speculative" and does not disclose the potential benefits. ExxonMobil suggests comparing the relative carbon intensities of these crude sources to estimate the potential GHG benefit. The carbon intensity values are provided in the *Climate Change and Greenhouse Gases, Project Impacts* comments above. EXMO-20

Hazardous Materials and Risk of Upset

Water Resources

- On page 4.3-11, the 'Streams, Rivers, Wetlands, and Other Waterbodies' paragraph states that, "a minimum of 28 major streams and rivers, 75 unnamed streams, and one lake (Twitchell Reservoir) are crossed by or located within 500 feet of the transportation route." If the data is available, ExxonMobil suggests delineating further - how many are crossed vs. how many are within 500 feet? The differentiation is important, especially considering that the anticipated size of a 160 bbl spill is only 118 feet in diameter as discussed in the DSEIR. This description is also confusing given the second paragraph on page 4.3-12, which says that the proposed trucking routes "cross" a combined 28 (11 to SMPS and 17 from Santa Maria to Pentland) major streams and rivers and only 74 unnamed streams (27 to SMPS and 47 from Santa Maria to Pentland)." ExxonMobil suggests that the text clarify if these are all physical crossings or if some are only within 500 feet as described on page 4.3-11. EXMO-21
- Similarly, Page 4.3-32 states that "[s]ome of the creeks that could be affected by an oil spill flow into major waterways such as the Santa Ynez River, Cuyama River, Santa Maria River, and Twitchell Reservoir. *If the oil spill occurred during periods when these creeks were flowing* it is possible that oil could enter into these major waterways and impact biological and water resources" (emphasis added). If there is information available that discusses the frequency with which the creeks flow, then it should be incorporated into the document. This information is especially important in light of the no rainy day alternative – if streams are only flowing during rain events, this should be better documented when analyzing the no rainy-day alternative because trucking would not occur during such events under that scenario. If the stream flow frequency information is available, this information should be added to further delineate the reduced likelihood that a significant impact might occur. EXMO-22

Biological Resources

- **Page 4.3-6 (Table 4.3-5) –** The federal/state/CRPR status for the following species appears to be incorrect. The status listings in parentheses are the current status for species utilizing the same abbreviation scheme as the table: marsh sandwort (FE/SE/1B.1), California jewelflower(FE/SE/1B.1), Blakely's spineflower (--/--/1B.3), saltmarsh bird's-beak (FE/SE/1B.2) EXMO-23
- **Page 4.3-8 and 4.3-9 (Table 4.3-6) –** The federal/state/other status for the following species appears to be incorrect. The status listings in parentheses are the current status for species utilizing the same abbreviation scheme as the table: El Segundo blue butterfly (FE/--/--), green sturgeon (FT/--/SSC), delta smelt (FT/SE/--), California tiger salamander (Santa Barbara County Distinct Population segment) (FE/ST/SSC), arroyo toad (FE/--/SSC), giant garter snake (FT/ST/--), tricolored blackbird (--/SE/SSC), marbeled murrelet (FT/SE/--), western snowy plover (FT/--/SSC), California condor (FE/SE/--), California brown pelican (delisted/delisted/FP), California clapper rail (FE/SE/FP), California least tern (FE/SE/FP), Southern sea otter (FT/--/FP), Buena Vista Lake ornate shrew (FE/--/SSC). EXMO-24

Risk Analysis

- Impact RISK.3 says that, "[o]il spills and fires associated with the trucking of oil could impact sensitive resources, including biological, water, and cultural resources at the LFC facility and along the trucking routes." Impact RISK.3 is classified as a Class I impact.
    - The Class I designation for this impact is highly conservative. The DSEIR only discloses the unmitigated risk of release, and acknowledges that "it is unlikely a spill would occur during the four to seven years of the project." The sensitive receptors described in the DSEIR represent a small fraction of the entire route. Even then, a release could be entirely kept on the roadway, depending on the circumstances. The DSEIR does reference this issue in multiple locations – for example on Page ES-10, "the volume, location and seasonal timing of any potential spill would influence the severity of impacts to biological, cultural and water resources." However, the document does not succinctly combine these factors in analyzing the risk of the impact.
    - ExxonMobil recognizes SBC P&D precedent concerning Class I impacts for risk of upset in oil and gas projects. If this is to be applied to all oil and gas projects, though, it should be recognized that not all Class I impacts are equivalent. The analysis showing the mitigated probability of an incident, in addition to the other events that need to occur for an actual impact, should be better emphasized for public and decision maker knowledge. EXMO-25
- The DSEIR discusses three sets of numbers – unmitigated, applicant mitigated, and SBC P&D proposed mitigated. The text should be simplified to represent the original unmitigated risk, and then the final mitigated risk. The present variation between the analyses could lead to confusion and can be simplified.
    - The numbers in Table 4.3-12 are not directly quoted from the TQRA report. It appears that non mitigated fire frequency numbers have been back calculated. Due to number rounding associated with significant figures, these are not accurately reported. For example, on line 3 of Table 4.3-12 "Truck Accident Rate per Trip", numbers 1.72×10^{-5} and 5.26×10^{-5} per trip are used for the 2 routes. These are EXMO-26

different from the numbers shown on Table 4.3-10 Page 4.3-25 which are 1.8×10^{-5} and 5.4×10^{-5} per trip and should be the same in both tables.

- Mitigated incident and fire frequency numbers are not shown in the DSEIR. ExxonMobil proposed mitigation measures provide an overall 18% mitigation on the likelihood of release. With the additional mitigation measures described in Mitigation Measure RISK-02 on DEIR page 4.3-34, this will provide an additional 15% mitigation and a total risk mitigation of 33%. This information should be included in the DSEIR.
- DSEIR Table 4.3-12 mixes accident and incident numbers – not all incidents are accidents. For clarity, the table should be changed to incident only.
- Should the above remarks be incorporated, the final pre and post-mitigation numbers would be reflected as in **Table 1** and **Table 2** below.

EXMO-26 (con't)

- After correcting the back calculation errors for unmitigated risk, the annual large spill probability would be once in 87 years for the SMPS route and once in 29 years to the Pentland Terminal. After adding the 33% mitigation based on the County's mitigation measures, the probability would be reduced to once in 129 years for the SMPS and once in 43 years for the Pentland Terminal.

EXMO-27

Table 1 - Non-Mitigated

Item	Truck Route 1 to SMPS	Truck Route 2 to Plains Pentland Terminal
Route Length (miles)	54.3	140.0
Average Incident Rate per million miles	0.39	0.46
Truck Incident Rate per Trip	2.1×10^{-5}	6.4×10^{-5}
Number of Daily Laden Trips	70	68
Number of Annual Laden Trips	25,550	24,820
Truck Incidents per year	0.54	1.6
Probability of Large Fire on Incident	0.0043	0.0043
Frequency of Large Fire per year	2.3×10^{-3} (1 in 440 years)	6.8×10^{-3} (1 in 150 years)
Probability of Small Fire on Incident	0.00064	0.00064
Frequency of Small Fire per year	3.5×10^{-4} (1 in 2,900 years)	1.0×10^{-3} (1 in 970 years)

Table 2 - Mitigation measures applied (33% total mitigation):

Item	Truck Route 1 to SMPS	Truck Route 2 to Plains Pentland Terminal
Route Length (miles)	54.3	140.0
Average Incident Rate per million miles	0.26	0.31
Truck Incident Rate per Trip	1.4×10^{-5}	4.3×10^{-5}
Number of Daily Laden Trips	70	68
Number of Annual Laden Trips	25,550	24,820
Truck Incidents per year	0.36	1.1
Probability of Large Fire on Incident	0.0043	0.0043
Frequency of Large Fire per year	1.6×10^{-3} (1 in 640 years)	4.6×10^{-3} (1 in 220 years)
Probability of Small Fire on Incident	0.00064	0.00064
Frequency of Small Fire per year	2.3×10^{-4} (1 in 4,300 years)	6.9×10^{-3} (1 in 1,400 years)

Clarifying Suggestions

- Section 4.3.3 discusses significance thresholds for the proposed project. ExxonMobil suggests that this section be revised to clarify that the highest risk 1-km of the transportation route is equivalent to the risk criteria set for a fixed facility. The DSEIR accurately explains this distinction on Page 4.3-27, but the criteria should be described in this section as well as they pertain to the thresholds used for significance. ExxonMobil proposes the following language, though language from 4.3-27 could also be used here.
    - "The County's FN curves were originally developed based upon the United Kingdom and the Netherlands research and guidance on societal risk associated with fixed facilities handling hazardous materials. For this transportation risk assessment, societal risk criteria have been selected based on United Kingdom and Netherlands methodology which equates the highest one-kilometer road segment risk to that of a fixed facility. This is further described in Section 4.3.4. The societal risk criteria developed by the United Kingdom Health and Safety Executive (UKHSE) for facilities handling hazardous materials is discussed in a guidance document titled *Reducing Risks, Protecting People* (UKHSE 2001)[3]. The UKHSE Hazardous Installation Directorate (HID) also developed an annex to this document, titled Societal Risk and Societal Concern that specifically addresses societal concerns and societal risk and defines a set of acceptable and unacceptable societal risk areas for specific projects.

EXMO-28

[3] United Kingdom Health and Safety Executive (UKHSE), *Reducing risks, protecting people: HSE's decision-making process*. 2001. Accessed: http://www.hse.gov.uk/risk/theory/r2p2.pdf

The principles of acceptable and unacceptable societal risk outlined in the aforementioned document emulates the green, amber, and red zones that are currently used by Santa Barbara County. The Santa Barbara County risk criteria levels selected are more stringent than those used in the United Kingdom and the Netherlands, effectively one to three orders of magnitude (10 to 1,000 times) more stringent for acceptable fixed facility and transportation risk."

EXMO-28 (con't)

- Wording of the additional mitigation benefit (RISK-02) should be clarified. The 29% mitigation is total collision risk reduction and is not added on top of the 12% collision risk reduction initially proposed. The additional collision risk benefit is 17%. For clarity, ExxonMobil suggests combining risk reduction into one number for collision and non-collision mitigation measures for the final SEIR:
    - The ExxonMobil proposed mitigation measures provide an overall 18% incident rate reduction (collision and non-collision). Implementation of the additional mitigation measures described in Mitigation Measure RISK-02 on page 4.3-34 of the DSEIR will provide additional mitigation for a total 33% incident rate reduction.

EXMO-29

- The Project Impacts and Mitigation Measures section on Page 4.3-27 need some clarification. Specifically, fixed facility risk often includes hazards from non-continuous operations (e.g., loading and unloading risks that occur only as needed) – ExxonMobil suggests language below to clarify the specific differences between transportation and fixed facility societal risks. Also – it is ExxonMobil's understanding that the California Department of Education (CDE)[4] approach to pipeline risk assessment uses individual risk, not societal risk, so that reference should be removed. The proposed language for this section is:
    - "Santa Barbara County has established risk threshold that use societal risk profiles (known as FN curves) to determine the significance of hazardous material releases (see Section 4.3.3.3). These FN curves address both serious injury and fatality. The Santa Barbara County's adopted thresholds are generally applicable to fixed facilities where the hazard potential and public exposure is within the impact range around the facility.

      When considering vehicle hazardous material transportation, a release can occur anywhere along a route between the origin and destination, and the population distribution varies along the length of the route. Transportation risk analysis deals with a linear source of risk, versus a relatively discrete point source for a fixed facility. The linear source may be static as in the case of pipelines or may be a moving source for other modes of transport (CCPS TQRA 1995)[5]. The societal risk is spread out along the length of the transportation route, and the length may range between studies from a short road segment to a long statewide or national

EXMO-30

[4] California Department of Education (CDE), *Guidance Protocol for School Site Pipeline Risk Analysis*, prepared by URS, March 2007. Section 4.0 – Pipeline Risk Estimate Calculations. https://www.cde.ca.gov/ls/fa/sf/protocol07.asp

[5] Center for Chemical Process Safety, *Guidelines for Chemical Transportation Risk Analysis*, American Institute of Chemical Engineers, 1995.

operation. To deal with these variables, the TQRA utilized an alternate methodology which follows approaches used in the United Kingdom and Netherlands for assessing transportation risk. The transportation routes have been divided into road segments with similar population and road characteristics. The risks of serious injury and fatality have been calculated by segment for on and off-road populations, then combined to calculate the risk per one-kilometer length along the entire transportation route. The highest one-kilometer segment risk for each of the truck routes was selected for developing the societal risk profiles. Figures 4.3-5 provides the serious injury and fatality risk profiles (FN curves) for the proposed truck route to the SMPS. Figures 4.3-6 provides the serious injury and fatality risk profiles (FN curves) for the proposed truck route to the Plains Pentland Terminal."

EXMO-30 (con't)

- On Page 4.3-34, the list of truck mitigation measures appears to be taken from the mitigation measures proposed in the Aera East Cat Canyon DEIR – they should be modified to reflect only the additional mitigation measures proposed for the ExxonMobil project. For example, Bullet #5 quotes a mitigation measure for East Cat Canyon access roads which is specific to the Aera project and should be revised to reflect this project. After the mitigation list, the language should be clarified to properly reflect the additional incident mitigation as discussed in earlier comments.

EXMO-31

Significance Thresholds

- On Page 4.3-20, it should be made clear that Appendix G of the CEQA Guidelines is not a checklist of thresholds. Appendix G specifically states that, "[t]he sample questions in this form are intended to encourage thoughtful assessment of impacts, and do not necessarily represent thresholds of significance."

EXMO-32

- Page 4.3-20 also defines a significant safety event through Appendix G of the CEQA Guidelines, defining it as if the project "create[s] a potential health hazard or involve[s] the use, production or disposal of materials which pose a hazard to people, animal or plant populations in the area affect." The document should cite specifically to where this quote is located.

EXMO-33

Land Use

General

- Section 4.4 does not discuss the existing Final Development Plan (FDP) for SYU and the associated facilities. It is important to identify that the facility's existing permit contemplates a scenario in which a crude transport option other than a pipeline might be needed and permitted. Specifically, Condition VI-1, Oil Transportation, states,

  "All oil processed by ExxonMobil's oil treatment facility shall be transported from the facility and the County by pipeline in a manner consistent with Santa Barbara Local Coastal Plan Policy 6-8. Transportation by a mode other than pipeline may be permitted only in accordance with Coastal Zoning Ordinance Section 35-154.5(i), applicable Local Coastal Plan policies and Control Measure R-12 of the Air Quality Attainment Plan, to the extent it is applicable."

EXMO-34

It is ExxonMobil's understanding that Control Measure R-12 pertains to precursors of the APCD's Rule 327, which is not applicable here. While the DSEIR does discuss the Coastal Zoning Ordinance and the applicable Local Coastal Plan policies, it does not discuss that SYU's path to permitting a pipeline alternative is also allowed by its permit. Separately, the discussion of Coastal Zoning Ordinance Section 35-154.5(i) in Table 4.4-1 on Page 4.4-11 does not fully discuss consistency with the requirements for permitting transportation by a mode other than pipeline – only noting i.3. ExxonMobil suggests that the DSEIR also comment on consistency with i.1, i.2, and the relevant portion of i.4 (i.4.a). EXMO-34 (con't)

- Table 4.4-1 documents the preliminary policy consistency analysis. The DSEIR states that the decision makers are responsible for the final consistency determination. Labeling the consistency analyses as 'potentially consistent' leaves it unclear as to staff's view on the project's consistency with SBC policies. ExxonMobil suggests labeling the consistency analyses as "consistency determinations." EXMO-35

Noise

- The sections on Article II, Coastal Zoning Ordinance (Page 4.4-10) and Land Use & Development Code – Inland (4.4-13) for Noise both state, "therefore, the [trucks] would be expected to result in an exceedance of the 70 dBA standard at the property line." Given the prior sentence, which indicates that the noise level would be ~38 dBA at the property line, ExxonMobil believes these sentences should read, "therefore, the trucks would not be expected to result in an exceedance of the 70 dBA standard at the property line." EXMO-36

Transportation and Circulation

Existing Operating Conditions

- Paragraph 2 in Section 4.5.1.3 says, "[p]rior to the shutdown there were 100 employees." ExxonMobil would like to clarify that this number reflects the approximate number of staff coming to and from the LFC facility each day during regular operations, consistent with the intent of the traffic analysis. As a reference, total staff prior to shut-in, including those on hitches and those offshore, was closer to approximately 200 employees and 130 contractors. EXMO-37

Mitigation Measure TR-1

- It is ExxonMobil's understanding that the Betteravia Improvement Project is currently under construction and is set to be completed before yearend 2019. ExxonMobil suggests updating the language around this improvement project to reflect its actual status at the time of finalization of the SEIR. EXMO-38
- Mitigation measure TR-1 seeks to mitigate the impact associated with traffic traveling through the U.S. Highway 101 Southbound Ramps/Betteravia Road during the PM peak hours (3 PM to 6 PM). It is ExxonMobil's understanding from Appendix D of the DSEIR, SBC P&D's Final EIR (FEIR) for the ERG West Cat Canyon Revitalization Plan[6], and SBC P&D's EXMO-39

[6] http://www.countyofsb.org/plndev/projects/energy/ERGWestCC.sbc, Final Environmental Impact Report, February 2019, Section 4-10, Page 4.10-4.

DEIR for the AERA East Cat Canyon Oil Field Redevelopment Project[7] that PM peak hours are 4 PM to 6 PM and recommends that the mitigation measure should be modified to reflect this peak. Also, the DSEIR states that the impact threshold for a level of service (LOS) F intersection is 5 passenger car equivalents (PCEs). Therefore, two trucks per hour through the Betteravia intersection (4 PCEs/hr) would also be below the significance threshold. Prohibiting all truck trips during the PM peak is excessive relative to the significance thresholds. ExxonMobil therefore suggests that the peak hour limitation be modified to no more than 2 trucks per hour during this peak as opposed to zero. This issue is contemplated in Appendix D and was proposed as a mitigation measure on Page D-35. EXMO-39 (con't)

- On Page 4.5-2, in the 5th paragraph, the DSEIR indicates that mitigation measure TR-1 would eliminate the Project's cumulative contribution for PM peak hour impacts. While this is true, it is not necessary to avoid significant cumulative impacts. The County's cumulative impact criteria state that an increase in the V/C ratio of less than 0.01 is an insignificant impact for an intersection operating at a LOS F – the document indicates that the proposed project would not contribute an increase above this level. Therefore, the cumulative impact during the PM peak hours is already less than significant, even without mitigation measure TR-1 and so the language that requires TR-1 to mitigate the impact should be removed. EXMO-40

Other Comments

- Some tables (e.g., 4.5-7, 4.5-11, 4.5-15, 4.5-17) list delays and LOS for the worst approach at intersections controlled by stop signs, but historically in Santa Barbara County reviews, the delays and LOS for stop sign controlled intersections have been based on the average delay per vehicles for all vehicles that are required to wait for a gap in traffic before traversing the intersection. The document should include why there was a change in this analysis. EXMO-41
- The Santa Barbara County Association of Governments (SBCAG) 2016 Congestion Management program was deleted from the SBCAG monitoring programs in January 2019 and should therefore not be referenced in the DSEIR. EXMO-42

Section 5.0 – Environmental Analysis and Comparison of Alternatives

- As discussed previously, ExxonMobil does not view the reduced trucking alternative as a feasible alternative due to the proposed APCD variance and infrastructure modifications associated with the alternative (see Page 1 of this letter). While the analysis of its relative impacts is warranted, the DSEIR should separately also conclude that the alternative is infeasible so as to properly inform the public and decision makers. EXMO-43

Section 7.0 – Mitigation Monitoring

- ExxonMobil looks forward to working with SBC P&D to create a project-specific, fit-for-purpose Mitigation Monitoring and Reporting Plan (MMRP) and resulting Environmental Quality Assurance Program (EQAP). The MMRP and EQAP should be crafted with specific EXMO-44

[7] http://www.countyofsb.org/uploadedFiles/plndev/Content/Projects/4-10%20Traffic-Transportation.pdf, Page 4.10-7

mandates for managing the identified potential significant impacts associated with this project.

EXMO-44 (con't)

General Consistency Comments

SMPS Daily Truck Unloading Average

- Across multiple sections (e.g., 2.0, 4.1, 4.3, and 4.5) there is variation in the stated average number of trucks unloading at SMPS. The average is listed as both ~135 trucks/day and ~138 trucks a day depending on the section, which impacts the additional number of trucks that SMPS could handle without backing out trucks currently going to SMPS. The analysis across the sections mostly says that SMPS would be able to handle approximately 32 additional trucks per day, and the air analysis on Table 4.1-17 is consistent with this, assuming 38 trucks per day would need to be displaced to support all 70 trucks per day from LFC. If the analysis is correct, then the instances where the document states SMPS's average is 135 trucks/day should be updated.

EXMO-45

ExxonMobil thanks you again for your diligence in drafting the DSEIR. ExxonMobil believes that the suggested comments above will improve the DSEIR and yield a more functional, clear, and informational document. Please let us know if you have any questions regarding our comments.

Regards,

Jing Wan

Santa Ynez Unit Asset Manager

Comment Code	Response
EXMO-1	Text has been added to Section 5.2.1 to discuss the issue of possible displacement of trucks using State Route 166 if the proposed Project trucks all went to the SMPS. However, as discussed in the SEIR, there is no guarantee that these trucks would be displaced . With the option of trucks going to the Plains Pentland Terminal as part of the proposed Project, the potential for displacing trucks is uncertain. Therefore, the No Project Alternative has remained the Environmentally Superior Alternative.
EXMO-2	The Trucking to the Santa Maria Pump Station (SMPS) Only Alternative has been modified to eliminate the addition of a sixth truck lane at the SMPS. It is acknowledged that Phillips 66 is not pursuing or interested in adding a sixth truck lane at the SMPS facility.
EXMO-3	The text covering the Trucking to the SMPS Only Alternative has been modified to state that with only one crude oil storage tank operating at LFC, it it's likely that operations could continue for approximately 20 days of SYU operations if the SMPS was shutdown for an extended period of time.
EXMO-4	Text has been added to the SEIR to make it clear that the limit of 34 trucks per day to the Plains Pentland Terminal when the SMPS is down for 10 days or more is based upon keeping the mobile source NOx emission below the 25 lbs/day threshold. Given that the Trucking to the SMPS Only Alternative allows for up to 78 trucks per day, the limit on trucks going to the Plains Pentland Terminal is appropriate. While the 34 truck per day was based upon air quality thresholds, limiting trucks using State Route 166 offers several other environmental benefits as discussed in Section 5.0 of the SEIR. As such, no change has been made to the 34 truck per day limit as part of the Trucking to the SMPS Only Alternative.
EXMO-5	The text for the Trucking to the SMPS Only Alternative has been modified to state at if the SMPS has a planned shutdown of longer than 10 days, then trucks can be routed to the Plains Pentland Terminal once the shutdown begins.
EXMO-6	Implementation of this alternative would be done through permit conditions on the Project issued by the County of Santa Barbara and as part of the EQAP that would be prepared for the project to assure implementation of the permit conditions. The EQAP would address the specifics on how the Applicant would comply with the condition requirements of a No Trucking During Rainy Day permit condition.
EXMO-7	At 78 trucks per day under the No Trucking During Rainy Periods, a maximum of 38 days of no trucking could occur before the Project would not be able to meet the annual average of 70 trucks per day. The data in Table 2-2 of Section 2.7.3.3 shows that the historical rain days in the area of the truck routes was a maximum of 27 days and an average of 12 days. If one assumes these numbers double based upon a 50% probability of rain, then the maximum days would be 54 and the average would be 24. However, not all days when rain is forecast does it occur. If one assumes that 30% of the time when there is a 50% chance of rain, it does not materialize, then the estimated maximum days when trucking could not occur is estimated to be 38 days per year with an average of 17 days. This was the basis for selecting the 78 trucks per day. However, these are just estimates and as such text has been added to the No Trucking During Rainy Periods Alternative that if the total rain days with no

Comment Code	Response
	trucking exceeds 38 days per year, then the Proposed Project would not be able to meet an average oil production rate of 11,200 barrels per day over the full calendar year.
EXMO-8	The Santa Barbara County Air Pollution Control District (SBCAPCDD) has stated that a variance to the LFC air permit would not be allowed for the cogeneration turbines to operate at a level that would exceed their current APCD permit limits. The text in the SEIR covering the variance has been modified to reflect that a variance would not be allowed by the SBCAPCD.
EXMO-9	A discussion of CO hot spots has been added to the AQ.3 impact discussion under the Impacts of Mitigation Measures to include the Santa Barbara County Environmental Thresholds and Guidelines Manual discussion of CO hot spots and threshold vehicle traffic verses the anticipated Project levels. The data, indicates that Project vehicles levels would be well below the Guidelines traffic thresholds.
EXMO-10	The screening approach in the Draft SEIR to estimating the health risks was revised in the Final SEIR to utilize more detailed modeling (HARP2) as opposed to estimating health risks from the changes in fugitive emissions levels, although the results are similar. Therefore, this comment is no longer applicable.
EXMO-11	Table 4.1-2 had the number of days and the concentrations reversed for $PM_{2.5}$ hourly. This has been corrected in the Final SEIR.
EXMO-12	The revised fugitive component counts have been added to the air emissions estimates in the Final SEIR.
EXMO-13	The emissions associated with the operations of the SYU facilities under the Proposed Project trucking scenario have been revised in section 4.1.5.1 by the Applicant to account for the higher loads and emissions that could be associated with the facilities in order to achieve the required permit levels of CO emissions, and to be able to balance the steam loading of the facility. This includes the use of the POPCO facility, which may be required, as well as operation of the cogeneration unit close to the levels that were operated in 2012-2014. These emissions levels are notably higher than those estimated in the Draft SEIR.
EXMO-14	Text in section 4.1.5.2 has been revised.
EXMO-15	The County utilized the Global Warming Potential (GWP) values as per the California GHG mandatory reporting requirements and is in line with the current State of California GHG emissions estimating protocols.
EXMO-16	Text has been added to the Final SEIR that indicates the GHG 2007 County data is for the unincorporated areas only. The Figure has been updated with a figure directly from the SBC 2013 Inventory reference.
EXMO-17	Text has been modified in the Final SEIR to reflect the baseline percentage of crude production.

Comment Code	Response
EXMO-18	Information on the Pescado and Sacate fields as well as updating the information to the year 2014 has been added to the Final SEIR.
EXMO-19	The text in the SEIR has been modified to better explain the possible reduction in GHG emissions from displaced tanker truck trip at the SMPS. It is estimated in the Draft SEIR that proposed Project could displace 38 trucks coming from the east that are currently going to the SMPS. Phillips 66 estimated that average round trip distance for trucks currently coming from the east was about 225 miles. Displacement of 38 trucks from the east would reduce baseline daily truck miles to the SMPS by about 9,690 miles. The daily truck miles to the SMPS for the proposed Project would be about 7,588 miles. Therefore, the proposed Project could result in a net reduction in miles traveled of about 2,102 miles, which would serve to reduce the baseline GHG emissions by about 9%.
EXMO-20	Text that the crude may be replaced with foreign, or other California or US crude, has been added to the Final SEIR. Also, text has been added that indicates foreign or other crude may also have a higher carbon intensity. Additional analysis on the benefits of these speculative replacements has not been added.
EXMO-21	Section 4.3.1.5 *Water Resources along the Trucking Routes* has been edited to indicate the streams identified in Table 4.3-9 are those that cross or are adjacent the route. Additional streams have been identified in Table 4.3-9 and Figure 4.3-10 and other information added in response to comments.
EXMO-22	Data is not available to identify when surface water flow may be present or greater, in the case of perennial streams, to determine how far a spill may travel downstream. Flows are most likely to be greater during and immediately after rainfall, but it also depends on other factors, such as the frequency of storms and location of the rainfall within a watershed. The authors of the SEIR agree that the No Trucking During Rainy Days Alternative is the Environmentally Superior Alternative as discussed Under Section 5.4. However, while this alternative would reduce the likelihood of an oil spill impacting downstream biological, cultural and water resources thereby reducing the overall severity of the Class I impact, location or timing of an accident cannot be predicted. Therefore, the potential for loss of individuals or habitat of a federal or state-listed species or other impacts to sensitive resources (biological, cultural and water) remains, and the impact remains significant and unavoidable (Class I) in the event that an accidental spill occurred.
EXMO-23	Table 4.3-6, Special Status Plant Species Reported as Potentially Present along the Trucking Route, was edited to correct status errors.
EXMO-24	Table 4.3-7, Special Status Wildlife Species Reported as Potentially Present along the Trucking Route, was edited to correct status errors.
EXMO-25	The SEIR lays out the various things what would need to happen for a spill to impact sensitive resources. Impact RISK-3 describes the effect of the mitigation measures that could be used to reduce the overall probability of a truck incident leading to a release. The SEIR acknowledges that the likelihood of a spill occurring and impacting sensitive resources is low for the proposed Project. However, these types of events do occur as demonstrated by

Comment Code	Response
	the oil tanker accident that occur on State Route 166 on March 22, 2020 that resulted in a release of oil into the Cuyama River.
EXMO-26	The discussion of public safety risk is discussed in Impact RISK.1. This section discusses the overall risk of the project with and without the Applicant-proposed avoidance and minimization measures. Since the public safety risk (F/N curves) are within the green region, the impacts to public safety were found to be less than significant, so no additional mitigation was required under CEQA. For Impact RISK-3, the potential impacts for sensitive species from a truck spill was found to be significant so additional mitigation was proposed as required by CEQA. This mitigation was recommended to reduce the overall probability of a truck incident leading to an oil spill. This is the reason that the SEIR contains three sets of truck incident/spill probabilities. The text in Impact RISK-3 has been modified to combine the overall effects of the mitigation measures and the Applicant-proposed avoidance and minimization measures. The numbers in Table 4.3-14 have been updated to be consistent with the final TQRA and presents the numbers as incidents.
EXMO-27	The TQRA provides an estimate of the probability of an oil spill from a tanker truck. The annual probability of a spill of about one gallon or more has been estimated to be once in 34 years for trucks going to the SMPS and once in 12 years for trucks going to the Plains Pentland Terminal. This assumes no mitigation or Applicant-proposed avoidance or minimization measures. With Mitigation Measure RISK-1, which includes the Applicant-proposed avoidance or minimization measures, the annual probability of a spill of about one gallon or more would drop to once in 52 years for trucks going to the SMPS and once in 17 years for trucks going to the Plains Pentland Terminal. The probability of a large spill (17-160 barrels) occurring was estimated to be equivalent to once in 86 years for trucks going to the SMPS and once in 29 years for trucks going to the Plains Pentland Terminal assuming no mitigation. With Mitigation Measure RISK-1, which includes the Applicant-proposed avoidance or minimization measures, the annual probability of a large spill (16-160 barrels) would drop to once in 129 years for trucks going to the SMPS and once in 42 years for trucks going to the Plains Pentland Terminal.
EXMO-28	Text has been added to Section 4.3.3 to expand on the threshold discussion.
EXMO-29	The text regarding the effectiveness of mitigation measure RISK-1 has been modified so that the overall risk reduction from RISK-1 and the Applicant-proposed avoidance and minimization measures have been combined to give a 33 percent reduction.
EXMO-30	The text in Section 4.3.4 under Impact RISK-1, *Societal Risk Profiles* has been modified to address the issues raised in the comment.
EXMO-31	The list of mitigation items contained in Mitigation Measure RISK-1 has been modified to reflect the issues raised in the comment.

Comment Code	Response
EXMO-32	The section on the CEQA Guidelines has been removed from the Final SEIR since they do not represent thresholds. The Thresholds used in the SEIR are based upon the County of Santa Barbara's Environmental Thresholds and Guidelines Manual (Santa Barbara County, 2015).
EXMO-33	See Response to Comment EXMO-32.
EXMO-34	Section 4.4, Land Use and Policy Consistency Analysis has been updated to discuss Condition VI-1, Oil Transportation, that is part of the Final Development Plan (FDP) f for the SYU Project. The discussion of Coastal Zoning Ordinance Section 35-154.5(i) in Table 4.4-1 has been expanded to include the other relevant sections of this ordinance.
EXMO-35	The consistency analysis presented in Section 4.4, *Land Use and Policy Consistency Analysis* is only preliminary. The County decision-makers are the ones responsible for making the final determination of consistency with County Polices. What is presented in Table 4.4-2 of the SEIR are only a preliminary consistency analysis. The County staff report for the Project will contain a final Project Consistency Analysis, which will serve as the basis for the County decision maker deliberations. The title for Table 4.4-2 has not been changed.
EXMO-36	The text has been corrected in the Final SEIR to indicate that the Project would not be expected to result in an exceedance of the 70 dBA standard.
EXMO-37	Section 4.5.1.3 has been updated to clarify that 100 employees are the typical number traveling to the site per day, not the total number employed.
EXMO-38	The Final SEIR has been updated to reflect the recent completion of improvements to the U.S. 101/Betteravia Road Ramp.
EXMO-39	The recent completion of improvements to the U.S. Highway 101/Betteravia Road Ramp make Mitigation Measure TR-1 no longer necessary. The SEIR has been updated accordingly and the Mitigation Measure TR-1 addressing this intersection has been eliminated. With the completed improvements, the intersection operates at a LOS of B in the peak afternoon hours.
EXMO-40	Mitigation Measure TR-1 has been modified to address the potentially significant impact at the U.S. Highway 101/State Route 166 Northbound Ramp during the 5:30-6:30 AM peak hour and the 4:00-5:00 PM peak hour for the U.S. Highway 101/State Route 166 Southbound Ramp. The impact to the U.S. 101/Betteravia Road Southbound Ramp has been reclassified as Class III due to the recent construction of improvements at that location.
EXMO-41	For side-street-stop controlled intersections the analysis reports delay on the worst approach, consistent with guidance in the Highway Capacity Manual, 6th Edition.
EXMO-42	Section 4.5.2.2 has been revised to note that the Congestion Management program was deleted.

Comment Code	Response
EXMO-43	See Response to Comment EXMO-8.
EXMO-44	This comment does not address an issue associated with the adequacy of the SEIR. The SEIR is a disclosure document for the County decision makers, responsible agencies, interest groups, and public. The Planning Commission and Board of Supervisors maintain approval jurisdiction over the Project and the public hearing process provides a forum for these decision-makers to determine the merits of the proposed Project.
EXMO-45	The correct number for the baseline average daily truck deliveries to the SMPS is 138 trucks per day. The SEIR has been updated to reflect this number. The 135 trucks per day was an error.