

processed in the refinery. Thus the DEIR erroneously concludes that there are no significant GHG impacts.<sup>248</sup>

The SCAQMD created a threshold of significance in order to determine when GHG emissions from a project become significant. When acting as lead agency for industrial projects, SCAQMD relies on a threshold of 10,000 metrics tons per year over existing conditions.<sup>249</sup> In adopting this interim threshold, the SCAQMD board mandated that in “determining whether or not GHG emissions from affected projects are significant, project emissions will include direct, indirect, and, to the extent information is available, life cycle emissions during construction and operation.”<sup>250</sup> While the DEIR relies on SCAQMD’s threshold of significance, the document entirely ignores the need to include life cycle emissions during operation when determining whether GHG impacts may be significant.

G1-86.65  
cont’d.

The DEIR does not provide a rationale for excluding life cycle emissions analysis in the GHG impact. As evidenced in the DEIR and Tesoro’s investment reports, Tesoro has extensive knowledge of Bakken crude oil and its total import for processing in the Refinery.<sup>251</sup> Tesoro plans to bring Bakken crude through Washington to Los Angeles.<sup>252</sup> Tesoro is also purchasing crude oil storage and transport facilities *within* the Bakken extraction region, specifically to bring to West Coast refineries.<sup>253</sup> Furthermore, Tesoro recently announced its plans for *added* capacity to pump 65,000 bpd of crude oil out of the Bakken oil field, and to store and transport this crude for West Coast use.<sup>254</sup> Extensive studies have been conducted regarding GHG emissions associated with extraction and transport of Bakken crude oil.<sup>255</sup> Additional data has also been collected specific to Bakken extraction impacts, including studies by NOAA, showing significantly higher methane leakages of field gases, and reports in the scientific journal, *Nature*.<sup>256</sup> Since the data is available to include in the DEIR, the life cycle emissions of these

G1-86.66

<sup>248</sup> *Id.* at 5-26.

<sup>249</sup> SCAQMD Board Approval of Interim GHG Threshold, 5, [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2).

<sup>250</sup> *Id.*

<sup>251</sup> May Technical Report, § II(B).

<sup>252</sup> May Technical Report, § II(B).

<sup>253</sup> Elizabeth Alford, *Tesoro Buys Bakken Midstream Assets*, BAKKEN SHALE, December 22, 2105, <http://bakkenshale.com/bsp-news/news/tesoro-buys-bakken-midstream-assets>.

<sup>254</sup> Jessica Holdman, *Tesoro plans to purchase Bakken pipeline, storage*, BISMARCK TRIBUNE, Dec. 17, 2015, <http://tsocorp.com/customers-and-suppliers/wholesale/terminals/> (Acquisitions include the 97-mile BakkenLink crude oil pipeline, which connects to several third-party gathering systems, a 28-mile gathering system in the core of the Bakken, “where most of the drilling in today’s low price environment is being done,” a 154,000 bpd rail loading and a 657,000 bbl storage facility in Fryburg.)

<sup>255</sup> See Energy Intensity and Greenhouse Gas Emissions from Crude Oil Production in the Bakken Formation: Input Data and Analysis Methods, Argonne National Laboratory, September 2015, <https://greet.es.anl.gov/publication-bakken-oil>.

<sup>256</sup> See National Oceanic and Atmospheric Administration, *North Dakota’s Bakken oil and gas field leaking 275,000 tons of methane per year*, May 10, 2016, <http://www.noaa.gov/north-dakota’s-bakken-oil-and-gas-field-leaking-275000-tons-methane-year>, see also Jeff Tollefson, *Oil boom raises burning issues*, 495 NATURE 290, [http://www.nature.com/polopoly\\_fs/1.12632!/menu/main/topColumns/topLeftColumn/pdf/495290a.pdf](http://www.nature.com/polopoly_fs/1.12632!/menu/main/topColumns/topLeftColumn/pdf/495290a.pdf).

crude oils should be identified and included in the DEIR for Tesoro’s LARIC Project. As described above, the extraction of the crude in the region must be evaluated as a direct consequence of this Project. Tesoro’s activities in the Bakken region do not stay in North Dakota, but are inextricably part of the same Project, and have local and global impacts, including impacts in Los Angeles due to adding to the burden of climate change, and other impacts.<sup>257</sup> Without these emissions, the DEIR ignores SCAQMD’s guidance in determining whether the project falls under the threshold of significance for GHG.

G1-86.66  
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Furthermore, the inclusion of life cycle emissions must also extend to the foreseeable processing of Canadian tar sands under SCAQMD’s mandate. As is the case with Bakken crude oil, Canadian tar sands extraction and transport is a GHG-intensive process, which should be included in the DEIR.<sup>258</sup> According to a 2015 study, introduction of Canadian tar sands was found to cause about 20% more GHGs than domestic crude oil.<sup>259</sup> Because information indicating the life cycle emissions attributable to the Project is relevant for the significance threshold calculation, the DEIR errs in failing to include those emissions. Without the inclusion of these GHG emissions, the DEIR is inadequate because it cannot be determined whether the Project falls under the threshold of significance. The DEIR then errs in concluding that GHG emissions are not significant.

G1-86.67

In addition, as the DEIR mentions, AB 32 requires that all refineries include the GHG emissions from the burning of the oils they process in their environmental impact reports.<sup>260</sup> SCAQMD’s life cycle emission mandate would also require including the GHG emissions from burning of the oil even if AB 32 did not require it. The DEIR appears to include these emissions in its final calculation of GHG emissions in Table 5.2-6 and Table 5.2-8. However, it is unclear from the discussion in the DEIR or any of its subsequent appendices, exactly how the DEIR arrived at these numbers. Without data substantiating these numbers, the DEIR fails as an informational tool for the public.

G1-86.68

**d. By Relegating Discussion to Cumulative Impacts, the DEIR Fails to Analyze the Direct and Indirect Impacts of All GHG Emissions from the Project.**

The DEIR incorrectly concludes that because GHG emissions will both increase and decrease, but in its analysis, decrease overall, and because GHGs have global effect, GHG emissions are to be analyzed only as cumulative impacts. The DEIR relies on the SCAQMD’s significance threshold concludes that the cumulative impacts are insignificant.

G1-86.69

CEQA requires an EIR to consider both direct and indirect impacts of a proposed project. Indirect impacts are those that are “caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable.”<sup>261</sup> As described above, it is foreseeable that the crude stock will change. The DEIR fails to analyze the ways in which the change could impact

G1-86.70

<sup>257</sup> May Technical Report, § IV(C)(1).

<sup>258</sup> May Technical Report, § IV(C)(2).

<sup>259</sup> May Technical Report, § IV(C)(2).

<sup>260</sup> DEIR, at 5-26.

<sup>261</sup> CEQA Guidelines, § 15358 (a)(2).

GHG emissions. Increased emissions from the Project include, but are not limited to, GHG emissions from increased use of Bakken, as compared to the current baseline feedstock.<sup>262</sup>

G1-86.70  
cont'd.

**E. The Project Lacks An Adequate Analysis of Hazards.**

**1. The DEIR fails to adequately disclose, analyze, and mitigate project-related hazards and public safety risks.**

An EIR must provide sufficient information to evaluate all potentially significant impacts of a project, including public safety risks due to accidents, and it must state sufficient information to determine “how adverse [an] adverse impact will be.”<sup>263</sup> This information is critical to the public and agency decision makers as they evaluate the extent and severity of the Project’s impacts, specifically as they relate public safety. In this respect, the DEIR is inadequate and fails to meet CEQA requirements.

G1-86.71

**2. The DEIR does not disclose the LAR Project’s baseline crude slate mixes.**

The DEIR does not adequately disclose the LAR Project’s current or historic crude slate mixes. Rather than providing detailed information, including volume, geographic origin, transportation method, sulfur content, API gravity, TAN, metal content, and other important data about the crudes within the DEIR, Tesoro states that its crude oil slate decisions will not change. Without knowing the composition of its current and historic crude slates, each with their own specific chemical and physical compositions, the Project does not allow for an intelligent or accurate hazards analysis.<sup>264</sup>

G1-86.72

**3. A switch to cost-advantaged crudes will introduce new hazards that were not discussed in the DEIR.**

The DEIR states that the Project will not impact the types of crudes used at the refinery, yet plans to transition from the dwindling ANS and California crudes to more affordable North American mid-continent crudes, such as Bakken and Canadian crudes.<sup>265</sup> While these more abundant, cost-advantaged crudes can be blended to approximate ANS yields with the same API gravity, the DEIR does not take into account that these cost-advantaged crudes have different chemical and physical compositions that will increase the risk of hazards and impact refinery safety.<sup>266</sup> Even if Tesoro blends crudes to approximate ANS yields, the switch would still introduce new hazards not discussed in the DEIR.<sup>267</sup>

G1-86.73

<sup>262</sup> See *Richmond*, 184 Cal.App.4th at 89 (holding that failure to identify the possibility that the project would allow the refinery to change its crude stock raises concerns about appropriate baseline against which to compare impacts).

<sup>263</sup> See *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 831.

<sup>264</sup> Fox Neg. Dec. Report, at 19.

<sup>265</sup> See DEIR, at 4-2

<sup>266</sup> Fox Neg. Dec. Report, at 5.

<sup>267</sup> *Id.*

A switch to lower quality feedstock, including Bakken and Canadian crudes, necessarily implicates a greater risk of corrosion of refinery components.<sup>268</sup> Refining Bakken, in some instances, can lead to dangerous levels of hydrogen sulfide (H<sub>2</sub>S) gas, which is acutely hazardous and corrosive.<sup>269</sup> Because of this, refineries that process shale oil often must use scavenging agents, but these also lead to corrosion.<sup>270</sup> Canadian tar sands crudes also are highly corrosive because of their high sulfur content and high TANs, leading to the same hazards, and also contain many corrosive contaminants that must be removed during the refining process.<sup>271</sup> This greater risk of corrosion was identified as a root cause of the August 2012 fire at the Chevron Richmond Refinery that sent 15,000 residents to local hospitals.<sup>272</sup> By denying any shift to lower quality oil feedstocks, the DEIR fails to adequately discuss the resulting significant impacts of refining these more hazardous materials at the LAR.<sup>273</sup> As a result, the document precludes any meaningful analysis of the significant risks posed by this shift, including any identification or mitigation of the potential risks of catastrophic failure on par with what occurred at the Chevron Richmond Refinery in 2012 and any additional significant risks to public health.

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Additionally, Bakken crude is extremely volatile due to its large concentration of natural gas liquids (“NGLs”), which include methane, propane, butane, ethane, and pentane.<sup>274</sup> These components are susceptible to volatilize, burn, or explode when they come into contact with sparks in an accident, and can easily form fireballs and BLEVES.<sup>275</sup> Thus, the introduction of Bakken crude to the LARIC would greatly increase explosion hazards. These explosions can be fatal, as was the case at Lac-Megantic, Quebec in 2013, when a freight train transporting Bakken crude derailed, killing many people.<sup>276</sup> Additional accidents associated with the transport of Bakken crude have occurred in North Dakota and Alabama. Because of the immense flammability risk, the US Department of Transportation Pipeline and Hazardous Material Safety Administration requires additional testing and characterization for Bakken crudes, as well as additional handling procedures, but these measures were left out of DEIR analysis.<sup>277</sup>

G1-86.74

Because of the risks associated with lower-quality feedstocks, the types of crudes that will be processed and refined at the LAR need to be adequately disclosed.

<sup>268</sup> May Technical Report, §§ IV(A)-(B).

<sup>269</sup> May Technical Report, § IV(A)(4).

<sup>270</sup> May Technical Report, § IV(A)(4).

<sup>271</sup> May Technical Report, § IV(B).

<sup>272</sup> May Technical Report, § IV(A)(4).

<sup>273</sup> DEIR, at 2-20: “The changes being made as a result of this project will not allow the refinery to process a different slate of crude oil. As such, there will be no crude oil changes that make the refinery more prone to upset or potential leaks of hazardous or toxic substances . . .”

<sup>274</sup> Fox Neg. Dec. Report, at 17-18.

<sup>275</sup> *Id.* at 18.

<sup>276</sup> May Technical Report, § IV(A)(3).

<sup>277</sup> May Technical Report, § IV(A)(3).

**4. The waxiness of Bakken crude and the associated dispersants were not evaluated as a hazard in the DEIR.**

Bakken crude oil, which will make up a large portion of the LAR’s feedstock, causes transfer problems in marine vessels and refinery storage tanks due to its paraffinic content.<sup>278</sup> Due to this waxiness, multiple chemical dispersants must be used for smooth transfer and full throughput.<sup>279</sup> These chemical dispersants should have been identified in the DEIR to assess the impacts and hazards of their use.<sup>280</sup>

G1-86.75

**5. Fire hazards are significant, but many aspects of fire hazards were left out of the DEIR.**

The DEIR conducted a fire hazard analysis to determine whether accidents involving the modified storage tanks would result in significant impacts, but this analysis was inadequate. The DEIR selected a heat flux significance threshold of 5 kw/m<sup>2</sup>, at which point one would experience a serious injury from thermal radiation.<sup>281</sup> While the DEIR analyzed heat flux impacts, it failed to analyze other significant impacts of a fire, including explosions (BLEVES) and inhalation of smoke and toxics. Additionally, the DEIR did not evaluate fire hazards for on-site receptors, even though refinery workers would be the most exposed to risk. According to Dr. Fox’s report, any person located between the accident site up to the reported impact distance would experience a significant impact. At a heat flux of 5 kW/m<sup>2</sup>, a 10% injury would be experienced, which is significant.<sup>282</sup>

G1-86.76

Also, fire hazards from the new crude oil tanks would be significant. In an accident, the amount of crude oil involved would increase, because of their increased storage capacities and throughput. If an accident were to occur while the tanks were being filled, more than just the capacity of one tank could be spilled.<sup>283</sup> The DEIR, in its worst-case scenario analysis, however, only considers the maximum capacity of each tank, and thus, underestimates the associated fire impacts. For instance, multiple tanks could catch on fire at once, due to their close proximity to one another. These types of accidents are realistic and have occurred before. In 1990, a fire at the Stapleton IAP Denver, CO, tank farm burned multiple tanks for over fifty hours, and at the Pennzoil Refinery in Pennsylvania in 1995, burning liquid from one tank caused the ignition of flammable vapors in another tank.<sup>284</sup>

G1-86.77

Assuming the two 300,000 bbl tanks were involved in a pool fire, the blast zone would encompass Alameda Street, outside the Wilmington Operations boundary, and reach a public highway. Additionally, because of the close proximity of the tanks, a pool fire from one or both of these tanks could spread to others.<sup>285</sup> This, however, would not necessarily be the worst-case

G1-86.78

<sup>278</sup> May Technical Report, § IV(A)(1).

<sup>279</sup> May Technical Report, § IV(A)(1).

<sup>280</sup> May Technical Report, § IV(A)(1).

<sup>281</sup> Fox Neg. Dec. Report, at 48-49.

<sup>282</sup> *Id.*

<sup>283</sup> *Id.* at 49-50.

<sup>284</sup> *Id.* at 50.

<sup>285</sup> *Id.* at 51.

scenario – if the tanks were filled with Bakken crude oil, it is possible that a flash fire, rather than a pool fire could occur, which would be much more significant.<sup>286</sup>

G1-86.78  
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Additionally, the worst-case scenario calculations for the tanks assumed that all of the tanks would be filled with the same petroleum product. This, however, is misguided, since the tanks could be filled with different products. The hazard calculations then are inaccurate, as the distance to the chosen heat flux threshold depends on many factors, including the qualities of the specific crudes involved.<sup>287</sup> This piece was excluded. Lastly, the fire hazard analysis for the tanks is based on a wind speed of 20 mi/hour, however, in Long Beach, wind speeds can be much higher.<sup>288</sup> This could enable vapor clouds to travel long distances where they could then ignite.<sup>289</sup>

G1-86.79

**6. Fire hazards from pipeline accidents were not considered.**

The DEIR states that the purpose of the Project is to increase the rate of unloading from ships. To accommodate this increase, the Project seeks to replace a 12-inch diameter pipeline with a 24-inch diameter pipeline, which would allow the loading rate to increase from 5,000 bbl/hr to 15,000 bbl/hr.<sup>290</sup> Thus, with a larger pipeline, an accidental spill would be significantly larger, and vapor clouds formed from such a spill could travel long distances before igniting, causing more damage than just the spill.<sup>291</sup> While a pipeline accident could occur anywhere along its route, it would be most likely to occur near the Tank Farm. An accident at the Tank Farm resulting in a fire could have significant impacts on nearby residents, as the closest resident is located 2,000 feet southwest of the Wilmington operations.<sup>292</sup>

G1-86.80

**7. Ship accidents should also have been evaluated, as well as smoke and inhalation hazards.**

While the DEIR states that the throughput at the Marine Terminal would not increase, throughput could increase and ship accidents should have been evaluated. Further, smoke and inhalation hazards should have been assessed, as fires release toxic air contaminants and smoke that can cause significant health impacts.

G1-86.81

**8. The DEIR fails to adequately discuss flaring emissions, which will increase levels of particulate matter in the air.**

The DEIR should not have omitted baseline emissions data for flaring events. Instead of assuming that flaring events pose insignificant hazard risks because of their rarity, the DEIR

G1-86.82

<sup>286</sup> *Id.*

<sup>287</sup> *Id.* at 52.

<sup>288</sup> See *Id.*; DEIR, Appendix C at C-16.

<sup>289</sup> Fox Neg. Dec. Report, at 42.

<sup>290</sup> DEIR, at 4-26.

<sup>291</sup> Fox Neg. Dec. Report, at 53-54.

<sup>292</sup> *Id.*

should have provided flaring data based on their Potentials to Emit.<sup>293</sup> Data from the draft Title V engineering calculations show that the LAR flares would have huge Potentials to Emit, at thousands of pounds per hour, due to the LAR’s proposed connections of refinery processes to pressure relief devices or pressure safety valves that would be vented to existing refinery flares.<sup>294</sup> This is concerning because oil refineries, including Tesoro, are major sources of flaring emissions in the Los Angeles Basin, and contribute to increased particulate matter in the air, including PM10 and PM2.5.<sup>295</sup>

G1-86.82  
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**9. LPG rail loading and unloading will increase risks.**

The DEIR ignores the potentially catastrophic consequences of an accidental release of LPG from a tank car by focusing on the alleged improbability of one occurring.<sup>296</sup> Although the DEIR lists flash fires, torch fires, pool fires, and explosions, including BLEVES, it nevertheless determines that these potential impacts are not significant.<sup>297</sup>

However, “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project,” constitutes a significant effect on the environment.<sup>298</sup> Probability does not factor into the evaluation of this adverse change alone without consideration for the magnitude of potentially catastrophic harm; the correct inquiry is whether the potential for such an adverse change exists. In this case, the transport of increased amounts of highly flammable LPG poses such a hazard, as the proposed plan would increase the Wilmington facility’s receiving capacity by about 4,000 BPD, or ten additional rail cars per day.<sup>299</sup> It is remarkable that the DEIR does not even address first response or other emergency precautions in regards to controlling such accidental releases.

G1-86.83

Further, the DEIR fails to adequately assess the increased risk that LPG railcars will pose on California’s environmental justice communities. Communities in Wilmington, which already suffer disparate impacts, often face a total environmental health hazard that is in the worst twenty percent among all communities statewide, along with communities in Carson.<sup>300</sup> Further, most Wilmington residents face the risk of a direct impact from an oil train derailment, explosion, and fire, as most of live within the blast zone.<sup>301</sup> The DEIR must be revised to include such an analysis integral to the safety of community members.

G1-86.84

<sup>293</sup> May Technical Report, §V(A)(2); *see also* DEIR, at 4-52 (“The project is not expected to increase flaring at the Refinery . . . “while the number of pressure relief valves tied into the flare systems will increase with new installation of new or modified processing unites, this will not cause an increase in flaring.”).

<sup>294</sup> May Technical Report, § V(A)(2).

<sup>295</sup> May Technical Report, § V(A)(2).

<sup>296</sup> DEIR, at 4-58.

<sup>297</sup> *Id.*

<sup>298</sup> CEQA Guidelines, § 15382.

<sup>299</sup> DEIR, at 1-18.

<sup>300</sup> Matt Krogh, Greg Karras, Tyson Waldo & Eddie Scher, *Crude Injustice on the Rails: Race and the Disparate Risk from Oil Trains in California* 22 (2015).

<sup>301</sup> *Id.*

**F. The DEIR Fails to Identify or Mitigate Significant Impacts Resulting from the Project’s Change in Crude Slate.**

The DEIR fails to meet one of CEQA’s most pivotal purposes by neglecting to assess the significant impacts associated with the Project’s proposed modifications that will enable the Refinery to import, store, export, and refine advantaged crudes. It is indisputable that the quality and characteristics of crude slate processed at a refinery directly impact byproducts and contamination discharged. Yet the DEIR ignores both this fact and evidence indicating that the Refinery may change its crude slate. Significant impacts from a change in crude slate to incorporate Bakken and tar sands crude include increased energy consumption, air emissions, toxic air contaminants, flaring, and catastrophic incident risks. The DEIR’s failure to account for a crude slate change in assessing impacts is particularly deficient in light of the Refinery’s location in one of the most polluted air sheds in the nation. Any environmental review document for the Project must analyze the full scope of these impacts.

G1-86.85

In order to effectuate the fundamental purpose of CEQA, it is axiomatic that an EIR must meaningfully inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made.<sup>302</sup> Only with a genuine, good faith disclosure of a proposed project’s components can a lead agency analyze the full range of potential impacts of the project, and identify necessary mitigation measures prior to project approval.<sup>303</sup> Accordingly, an EIR must include changes in crude processed as part of environmental and impacts analysis.<sup>304</sup>

G1-86.86

CEQA provides, and the courts have instructed, that an environmental review document must address the impacts of reasonably foreseeable activities related to a proposed project.<sup>305</sup> A lead agency has a duty to “use its best efforts to find out and disclose all that it reasonably can.”<sup>306</sup> It is irrelevant whether it definitively has been established that a change in crude slate will occur. Rather, the duty to investigate and disclose significant impacts from a project is triggered when it is reasonably foreseeable that impacts may result from a project, otherwise, the environmental review document is legally defective.<sup>307</sup>

G1-86.87

<sup>302</sup> *Laurel Heights Improvement Ass’n v. Regents of University of California* (1993) 6 Cal. 4th 1112, 1123; CEQA Guidelines, § 15126.2(a) (“[a]n EIR shall identify and focus on the significant environmental effects of the proposed project”) (emphasis added).

<sup>303</sup> 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); CEQA Guidelines, § 15126.4.

<sup>304</sup> See *Richmond*, 184 Cal.App.4th at 89.

<sup>305</sup> CEQA Guidelines, § 15378 (a) (a “[p]roject means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment[.]”); see *Laurel Heights I*, 47 Cal.3d at 398-399.

<sup>306</sup> CEQA Guidelines, § 15144.

<sup>307</sup> *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Racho Cordova* (2007) 40 Cal.4th 412 (“The ultimate question under CEQA...is not whether an EIR establishes likely sources of water, but whether it adequately addresses the reasonably foreseeable impacts of supplying water to the project.”).



Here, there is ample evidence indicating that the Project enables the Refinery to receive, store, and process a new crude slate consisting of Bakken and also likely tar sands crude oil.<sup>308</sup> Accordingly, the SCAQMD was required, but failed to, evaluate the significant impacts of the crude slate change.

The impacts to air quality and other safety and environmental harms caused by a refinery's use of Bakken and tar sands crude are outlined in May's Technical Report.<sup>309</sup> The Report explains that incorporating Bakken into the Refinery has many significant impacts that must be evaluated in the DEIR, "including problems with processing waxy Bakken crude, corrosion problems, specific problems when blending Bakken crude with heavy crude oils, higher volatility that has caused explosions and fires, and higher levels of toxic components such as benzene."<sup>310</sup> "Bakken crude oil has been demonstrated as fatally volatile and explosive, as in the case of the tragic explosions at Lac Megantic in Canada, and in other instances."<sup>311</sup> Most recently, a crude oil railcar bearing Bakken crude oil exploded in Oregon along the Columbia River gorge, dangerously close to elementary school and homes.<sup>312</sup>

May also quoted a report by Dr. Phyllis J. Fox showing significant amounts of benzene in shale crudes including both Bakken and Canadian crudes, which also outlined methods for assessing these Toxic Air Contaminants in the crude oil: "The pollutants in the diluent blended with these DilBit crudes and in the light sweet shale crudes include significant amounts of hazardous air pollutants, such as benzene, a potent carcinogen."<sup>313</sup>

May's Technical Report also states that in some instances "Bakken crude refining can also increase levels of acutely hazardous and corrosive Hydrogen Sulfide in the refinery[,] a known "particularly aggressive corrosive agent."<sup>314</sup> The same is true of tar sands crude oil.<sup>315</sup> Indeed, sulfur corrosion was the cause of a severe explosion at the Chevron Richmond Refinery.<sup>316</sup> These issues must be evaluated through a full EIR to prevent severe safety risks associated with crude slate changes.

The Project is also likely to result in significant import and processing of Canadian tar sands crude oil. Because of its higher carbon content and need to remove these contaminants, tar sands crude requires significantly more energy to refine, leading to both direct and indirect increased emissions of greenhouse gases and ozone-precursors. These emissions have significant

G1-86.88

<sup>308</sup> See May Technical Report, §§ II(D), VI(A).

<sup>309</sup> See May Technical Report, §§ IV, VI(1).

<sup>310</sup> May Technical Report, § IV.

<sup>311</sup> May Technical Report, § IV(A)(3).

<sup>312</sup> May Technical Report, § IV(A)(3).

<sup>313</sup> May Technical Report, n.56.

<sup>314</sup> May Technical Report, § IV(A)(4).

<sup>315</sup> May Technical Report, § IV(C)(2).

<sup>316</sup> May Technical Report, §§ III(D), IV(A)(4).

direct, indirect, and cumulative impacts on air pollution and climate.<sup>317</sup> Tar sands crude also requires additional “cracking, coking, and [] use of hydrogen, all of which require more energy and increase criteria and toxic pollutant emissions.”<sup>318</sup> Evaluating the potentially significant increase in criteria, toxic, and GHG emissions due to introduction of Bakken and tar sands crude is required.

Additional emissions that may be caused “from transport, piping, tank loading, and in refinery operations from volatile diluents used with expanded tar sands crudes have not been identified, and should be, with emissions quantified.”<sup>319</sup> May’s Technical Report lists “volatile and toxic compounds such as BTEX VOCs (Benzene, Toluene, Ethylbenzene, and Xylene)[,]” which are ozone-precursors, explosive, and toxic air contaminants that are carcinogenic.<sup>320</sup>

As detailed throughout the May Technical Comments, other significant impacts, such as flaring and major accident risks, are also heavily impacted by the quality of crude oil processed at the facility.

For these reasons, the DEIR fundamentally violates CEQA’s requirements by failing to examine and disclose the significant impacts that may result from the Project’s enabling of a crude slate change. The DEIR must provide an inventory and evaluation of specific crude oils previously processed at the Wilmington and Carson refineries and those that may foreseeable be processed at the integrated Refinery in the future, and evaluate the significant environmental impacts associated with such a change.

G1-86.88  
cont’d.

**Conclusion**

We appreciate your consideration of these comments. Please do not hesitate to contact us if you have questions about these comments.

Sincerely,



Gladys Limon  
Shana Lazerow  
Roger Lin  
Communities for a Better Environment

*Counsel for Communities for a Better Environment*

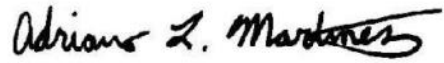
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<sup>317</sup> May Technical Report, § IV(C); *see also* Karras, Greg, “Combustion Emissions from Refining Lower Quality Oil: What is the Global Warming Potential,” *Environ. Sci. Technol.* 44, 9584-9589 (2010), for an analysis of the significant increases in GHG emissions caused by refining dirtier, heavier crudes from increased energy intensity needed to refine these oils and from direct emissions from the refining process.

<sup>318</sup> May Technical Report, § IV(B).

<sup>319</sup> May Technical Report, § IV(B).

<sup>320</sup> May Technical Report, § IV(B).



Adriano L. Martinez  
Yana Garcia  
Elizabeth Forsyth  
Earthjustice

*Counsel for East Yard Communities for Environmental Justice and Coalition for a Safe Environment*

**Response to Comment Letter No. G1-86**

**Communities for a Better Environment, Earthjustice, East Yards Communities for Environmental Justice, and Coalition for a Safe Environment**

**Comment G1-86.1**

We write to you today to submit comments on the Draft Environmental Impact Report (“DEIR”) for the Tesoro Refining and Marketing Company LLC Los Angeles Refinery Integration and Compliance Project (“Project” or “LARIC”), and associated permit applications before the South Coast Air Quality Management District (“SCAQMD”) for approval. Joining in these comments are Communities for a Better Environment (“CBE”), East Yard Communities for Environmental Justice (“EYCEJ”), the Coalition for a Safe Environment (“CFASE”), and Earthjustice. Overall, this is a deeply concerning project that will add additional environmental impacts in an already overburdened community. Given these problems, we suggest that the SCAQMD address all of the concerns stated in this letter and additional submissions. In addition, the SCAQMD should undertake efforts to make sure the Tesoro Refinery fully protects the community surrounding these facilities.

G1-86.1

**Response G1-86.1**

The comment is introductory to the comment letter and summarizes the parties who the comment letter is representing. No response is necessary under CEQA.

**Comment G1-86.2**

Commenters also attach a technical report prepared by Julia May. This report will be referred to as “May Technical Report” in these comments. We incorporate by reference the May Technical Report and all the comments in that attachment. In addition, we respectfully request that the SCAQMD respond to the entire contents of the May Technical Report in its response to comments, in addition to all the comments in this letter.

G1-86.2

**Response G1-86.2**

The SCAQMD acknowledges the receipt of the technical report prepared by Julia May. The technical report has been identified as Comment Letter 81 addressed separately in Responses G1-81.1 through G1-81.122.

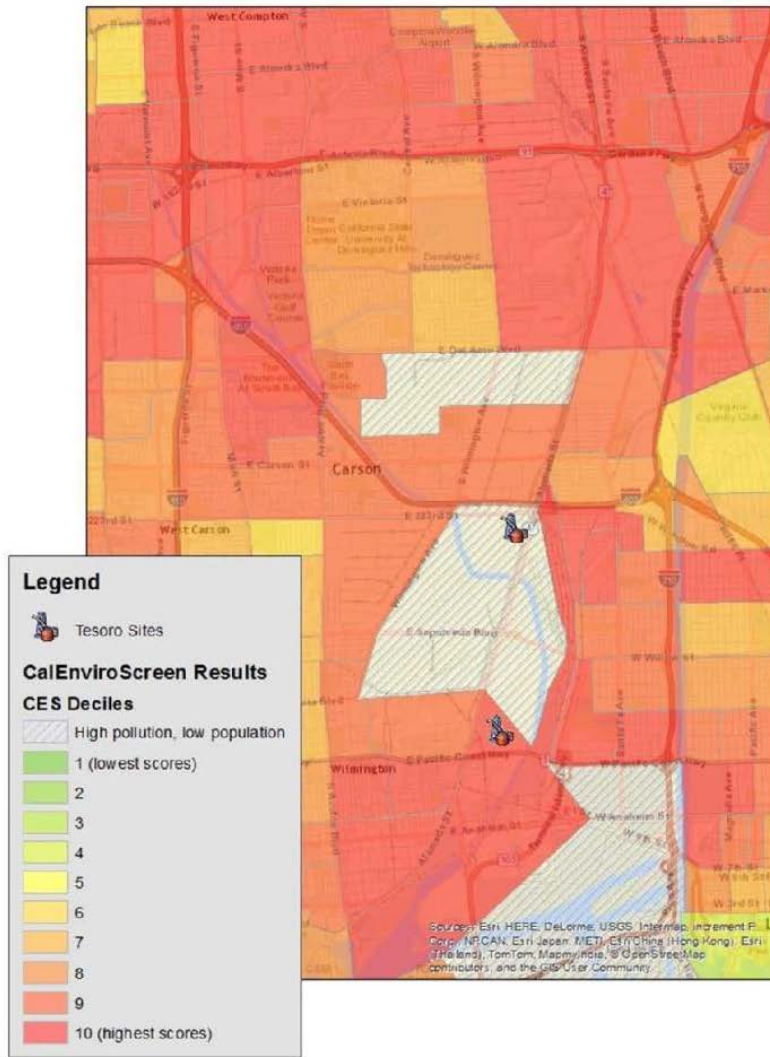
**Comment G1-86.3**

**I. COMMUNITY AND ENVIRONMENTAL SETTING.**

Noticeably absent from the entire DEIR is the true context for this project. This project is taking place in one of the most disproportionately impacted communities in all of California. The following map shows that both locations are either in an area designated by California as the top 25% of most disadvantaged communities (i.e. Wilmington location) or surrounded on all sides by areas designated in the top 25% of most disadvantaged communities (i.e. Carson location).

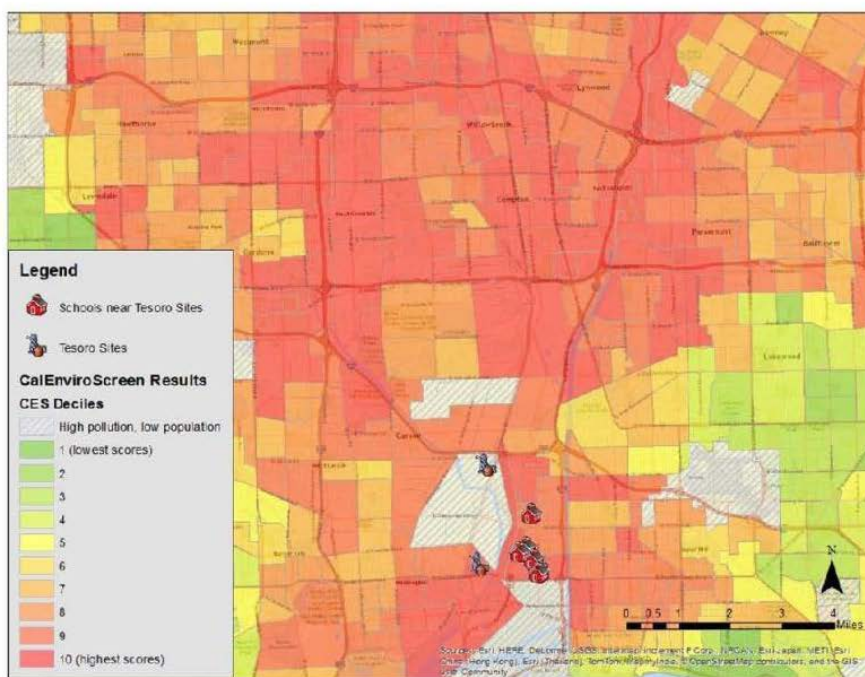
G1-86.3

APPENDIX G1: RESPONSE TO COMMENTS



G1-86.3  
cont'd.

In addition, many sensitive sites are located in close proximity to this project as shown by the following map.



G1-86.3  
cont'd.

In fact, the DEIR does not include meaningful analysis of environmental justice or even acknowledge the existence of the new CalEnviroScreen tool developed by California's Office of Environmental Health and Hazard Assessment (OEHHA). This environmental justice context should be provided for decisionmakers, and the DEIR is flawed for excluding this critical information.

### Response G1-86.3

The DEIR contained a full analysis of all environmental impacts as required by CEQA. OEHHA has indicated that the CalEnviroScreen tool was not developed to address CEQA analyses or impacts.<sup>298</sup> CalEnviroScreen is not directly applicable to analysis of impacts in accordance with CEQA because it compares the relative burdens on communities but does not provide an absolute measure of those burdens. For this same reason, the tool is not a substitute for a formal risk assessment determining health impacts. While the DEIR is not required to analyze environmental justice impacts specifically, the DEIR analysis of localized air quality impacts addresses the environmental justice concerns raised by the comment. See Master Response 14 for additional information regarding environmental justice.

### Comment G1-86.4

#### II. MAGNITUDE OF THE PROJECT.

As the May Technical Report establishes, this Project is unprecedented in scope. Moreover, its location in a dense urban area raises concerns over the health and safety of adjacent residents. Importantly, this Project merges two refineries to create the largest refinery on the west coast.<sup>1</sup> The Project also combines the two worst polluting facilities in California for causing disparate PM10 impacts.<sup>2</sup>

G1-86.4

<sup>298</sup> <http://oehha.ca.gov/calenviroscreen/how-use>.

**Top 10 Facilities Polluting Disproportionately in Communities of Color**

Rank	Facility Name	City
1	BP Carson Refinery	Carson
2	Tesoro Wilmington Refinery	Wilmington (Los Angeles)
3	Paramount Refinery	Paramount
4	ConocoPhillips Wilmington Refinery	Wilmington (Los Angeles)
5	ExxonMobil Torrance Refinery	Torrance
6	Chevron Richmond Refinery	Richmond
7	Malburg Generating Station (Vernon Power Plant)	Vernon
8	ConocoPhillips Carson Refinery	Carson
9	Valero Wilmington Refinery	Wilmington (Los Angeles)
10	California Portland Cement Company Colton Plant	Colton

G1-86.4  
cont'd.

<sup>1</sup> May Technical Report, § I

<sup>2</sup> May Technical Report, §VII

### Response G1-86.4

See Response G1-81.2 that addresses the issues of the proposed project scope raised in that comment letter. The proposed project objectives are provided in Section 2.2 of the DEIR. The proposed project description is provided in Section 2.7 of the DEIR.

The project does not involve the merger of the two facilities as claimed in the comment. In addition, the comment implies that the project is a significant expansion in operations and that it will increase PM10 emissions. As explained in Master Response 7, the proposed project is neither an expansion nor a merger. Tesoro acquired the Carson Refinery and began integrating the operations with its Wilmington Refinery in 2013. The proposed project involves the further integration of the facilities, and entails a large local emission reduction (see Section 2.2 of the DEIR), including PM10.

Response G1-81.97 specifically addresses the claim in the comment that Carson and Wilmington Operations have high PM emissions. To support this claim, the comment provides information from a seven-year old study that describes racial disparity in exposure to PM10 emissions at the facility level. It should be noted that the study cited to support the comment that the BP Carson Refinery (now Carson Operations) and the Wilmington Operations were the top and second worst polluters in the state, refers to pollution disparity impact (PDI) which is not the same as total emissions.<sup>299</sup> PDI is a way showing the extent to which a facility, based on location, may disproportionately expose people of color compared to non-Hispanic whites to PM10 emissions at the facility level based on the population already living within certain distances of the facilities in question. The higher the population density, the greater the PDI, which is one measure of environmental justice. Nonetheless, the PDI is not a measure of the amount of PM10 emissions from the Refinery. As explained Section 4.2.2.2. of the DEIR, the proposed project will result in local reductions of PM10 emissions largely attributed to the shutdown of the Wilmington Operations FCCU.

<sup>299</sup> The citation in the comment refers to: Pastor, M. Ph.D.; Morello-Frosch, R., Ph.D., MPH; Sadd, J., Ph.D.; Scoggins, J. M.S. 2009. Minding the Climate Gap What's at Stake if California's Climate Law isn't Done Right and Right Away. [https://dornsife.usc.edu/assets/sites/242/docs/mindingthegap\\_executive\\_summary.pdf](https://dornsife.usc.edu/assets/sites/242/docs/mindingthegap_executive_summary.pdf).

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.1 through G1-81.19 and Comments G1-81.97 through G1-81.99. The issues raised in the comments are responded to in detail in Responses G1-81.1 through G1-81.19 and Responses G1-81.97 through G1-81.99.

**Comment G1-86.5**

Even beyond the large pollution loads imposed on adjacent communities from these facilities, the Project entails storing, transporting and processing dangerous products, including Liquefied Petroleum Gas and other oil products. Thus, in addition to pollution and other impacts, these projects impose immense safety risk to residents in the project area. The DEIR and permit conditions do not adequately assess and mitigate the large risks that are imposed on adjacent communities.

G1-86.5

**Response G1-86.5**

The comment summarizes the previous comment made and claims that the proposed project includes not only pollution but also risk associated with storing, transporting, and processing LPG and other oil products. All impacts for the proposed project were analyzed in the DEIR, including potential hazards in Section 4.3.2.1. Feasible mitigation has been proposed where required (see Sections 4.2.3 and 4.3.3 of the DEIR) and is further explained in Master Response 9. The comment does not identify any additional feasible mitigation.

**Comment G1-86.6**

**III. THE DEIR DOES NOT DISCLOSE THE FULL SCOPE OF THE PROJECT AND FAILS AS AN INFORMATIONAL DOCUMENT.**

The Project Description is inadequate because it fails to disclose the full scope of the Project's nature and objectives, including enabling a shift to a different quality of crude oil feedstock at the integrated refinery. The description also obscures the inextricable link between this Project and Vancouver Energy, resulting in an improper piecemealed analysis. The incomplete Project description and undisclosed Project components result in wholesale omission or underestimation of significant and adverse impacts, including pollution emissions and elevated hazard risks. The DEIR is therefore fatally flawed and must be withdrawn.

G1-86.6

**Response G1-86.6**

The DEIR fully and accurately describes the proposed project in Section 2.7 and the proposed project objectives in Section 2.2. As described in Sections 2.5.3 and 2.5.4 of the DEIR and Master Response 4, the Refinery is currently processing various crude oils and the proposed project is not designed to, and will not in fact, facilitate a change in the slate of crude oils purchased by the Refinery or the crude oil blend processed at the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow the processing of a slightly heavier crude oil blend.<sup>300</sup> Responses G1-81.20, G1-81.22 through G1-81.24, and G1-78.94 explain in further

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<sup>300</sup> For clarity, the list of individual crude oils that can be or is purchased to be mixed together to be processed in the Refinery is called the "crude oil slate." The resultant proportional mix of crude oils is called the "crude oil blend."



detail that the proposed project will not result in a significant change in the crude oil blend processed by the Refinery and clarify that it is correct to say that Tesoro makes ongoing efforts, evidenced by its corporate statements, to provide “advantaged crude oil”, as that term is used by Tesoro (i.e., any economically advantaged crude oil capable of being processed at each of Tesoro’s refineries). Since the proposed project does not include any physical changes to the Refinery that would enable a significant change to the crude oil blend that is processed, no additional analysis is necessary under CEQA.

Section 4.1.2.5 of the DEIR, Master Response 8 and Response G1-81.25 explain in detail that the Vancouver Energy Project is not related to the proposed project and that statements made by Tesoro regarding sourcing “advantaged crude oils”, including Bakken crude oil, are typically made with regard to its West Coast System, not specifically the Los Angeles Refinery. The proposed project does not facilitate or encourage sourcing crude oil from any particular location. In other words, the improved offloading efficiency provides a benefit regardless of the types of crude oil transported by marine vessel. It should be noted that according to Tesoro approximately 80 percent of the crude oil processed at the Refinery is received by marine vessels.

**Comment G1-86.7**

**A. The DEIR Relies On an Inaccurate Project Description and Violates CEQA’s Information Disclosure Mandate Requiring a Comprehensive Description of the Entire Project That Allows the Public to Ascertain the Nature And General Magnitude of Environmental Impacts.**

In order for an environmental document to adequately evaluate the environmental impacts of a project, it must first provide a comprehensive description of the project itself. “An accurate project description is necessary for an intelligent evaluation of the potential environmental effects of a proposed activity.”<sup>3</sup> The description must not only be accurate, but also “stable and finite” to be “an informative and legally sufficient EIR.”<sup>4</sup> While extensive detail is not necessary, the law mandates that the project description should include detail sufficient to ascertain the nature and general magnitude of environmental impacts.<sup>5</sup> Thus, a deficient project description renders the analysis of significant environmental impacts inherently unreliable. As a result, courts have found that, even if an EIR is adequate in all other respects, the use of a “truncated project concept” violates CEQA and mandates the conclusion that the lead agency did not proceed in a manner required by law.<sup>6</sup>

G1-86.7

G1-86.7  
cont’d.

<sup>3</sup> *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal. App. 4th 713, 731 (internal citation and quotation omitted).

<sup>4</sup> *Id.* at 730 (internal citation and quotation omitted).

<sup>5</sup> See CEQA Guidelines, §15124 (requirements of an EIR).

<sup>6</sup> *San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal. App. 4th at 730.

**Response G1-86.7**

The DEIR fully and accurately describes the proposed project in Section 2.7. The comment is a summary of the comment's understanding of law regarding a project description in general. It does not comment on the proposed project itself, therefore no response is necessary under CEQA.

**Comment G1-86.8**

The DEIR’s Project Description discloses a narrow set of objectives limited to furthering the integration of the Carson and Wilmington Refinery operations through process modifications.<sup>7</sup> It states that the Project will “improv[e] process efficiency,” “[r]ecover[] and upgrad[e] distillate range material from FCCU feeds[,]” “[c]omply[] with federal, state, and local rules and regulations[,]” and “[i]mprov[e] efficiency of water-borne crude oil receipt and marine vessel unloading” by expanding barrel tank capacity.<sup>8</sup> The DEIR states that the Project will have a “small impact on crude oil and feedstock throughput . . . capability[,] increase[ing] approximately two percent or 6,000 barrels per day (bbl/day) as a result of the proposed project.”<sup>9</sup> These Project components, however, are actually critical pieces of an undisclosed broader purpose—to enable the Refinery to process cheaper North American Bakken and potentially Canadian Tar Sands Crude Oil, and effectuate Tesoro’s business plan to switch its crude oil stock in its west coast refineries. The DEIR’s seemingly benign project description, therefore, obscures a key purpose of the Project.

G1-86.8

The May Technical Report evaluates the DEIR’s factual representations and conclusions. May’s analysis outlines the discrepancies, inaccuracies, and omissions of the DEIR, and point to the much broader crude-switch Project purpose with significant impacts. May concludes that a switch to Bakken and Canadian Tar Sands Crude oil is enabled by the Project, including by providing tank expansions to accommodate the new crudes; connecting transport through piping; and through addition of extensive sulfur contamination removal equipment (hydrodesulfurization and hydrotreaters, discussed below) that can remove higher sulfur content from Canadian crude. While the DEIR identifies benefits of these activities (such as reducing ship port time), it fails to disclose the Project impacts that would occur due to the crude oil switch.

<sup>7</sup> DEIR, at 2-1 to 2-4.

<sup>8</sup> DEIR, at 2-3 to 2-4.

<sup>9</sup> DEIR, at 2-2.

**Response G1-86.8**

The comment summarizes portions of the DEIR and references Comment Letter 81, further claiming that the proposed project intends to change the crude oil processed by the Refinery to Bakken and heavy Canadian crude oil. The DEIR has fully described the proposed project and analyzed the impacts thereof. As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing a blend of various crude oils and the proposed project is not designed to, and will not in fact, facilitate a change in the slate of crude oils purchased by the Refinery or the crude oil blend processed at the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow the processing of a slightly heavier crude oil blend.

The comment suggests that certain project elements, including new and replacement storage tanks, piping modifications and hydrotreater modifications are evidence of a planned change in the crude oil blend processed by the Refinery. None of these elements of the project are designed to or would facilitate a change in the crude oil blend used by the Refinery.

Responses G1-78.123 and G1-81.39 explain that the new and replacement storage tanks are not evidence of a planned change in the crude oil blend or the sourcing of crude oils processed by the Refinery.

Response G1-81.90 explains the purpose of the pipeline modifications and clarifies that they are not evidence of a planned change in the crude oil blend processed by the Refinery.

Response G1-81.38 explains that the hydrotreater modifications, which are designed to increase sulfur removal from gasoline and distillate blendstocks, are not evidence of a planned change in the crude oil blend processed by the Refinery.

**Comment G1-86.9**

As concluded by May, the Project Description is further deficient in failing to disclose the true scale of the Project. The DEIR contradicts Tesoro’s public statements about the Refinery’s throughput capacity. The Refinery’s size is a basic and fundamental characteristic that implicates the purpose of the Project and its significant impacts. Accordingly, the DEIR cannot proceed until the basic facts of the Refinery’s size are effectively identified. Moreover, the DEIR mischaracterizes the underlying reason for Tesoro’s shutdown of the Wilmington FCCU. The DEIR inaccurately asserts that one purpose of the Project is to disable the FCCU to reduce emissions. The FCCU shutdown, however, is a preexisting requirement independent of Tesoro’s efforts to further integrate the Carson and Wilmington refineries. It is a binding commitment in which Tesoro agreed to replace the FCCU as a condition of obtaining government approval for its acquisition of the Carson refinery. Therefore, a key purpose for shutting down the FCCU is to comply with the acquisition requirements. The Project description is therefore deficient for these additional reasons.

Based on these and other reasons, as described below, the Project Description renders the DEIR woefully inadequate in light CEQA’s environmental review requirements.

G1-86.9

G1-86.9  
cont’d.

**Response G1-86.9**

The comment references and makes the same claims as Comment Letter 81, which has been responded to in Responses G1-81.1 through G1-81.122.

The capacity of the Refinery is addressed in Master Response 5 and Responses G1-81.21, G1-78.142, G1-78.187, and G1-78.208. These responses describe in detail that the rated capacity of the Refinery is based on crude oil capacities actually achieved by the Refinery in the past, rather than any increase resulting from the proposed project. Master Response 6 addresses the potential crude oil capacity increase of 6,000 bbl/day that was appropriately evaluated in the DEIR.

Master Response 13 explains that there are no agreements, requirements, or enforceable commitments that require Tesoro to shut down the Wilmington Operations FCCU. Tesoro’s acquisition of the Carson operations was fully evaluated by the Federal Trade Commission and the State of California, the appropriate agencies to conduct and approve such an acquisition. The evaluations did not include a requirement of the proposed project that includes the shutdown of the FCCU, nor were any conditions placed on the approval that would require the FCCU to be shutdown. The proposed project objective of shutting down the Wilmington Operations FCCU is accurately described in the DEIR (see Section 2.2), “Making process modifications that improve efficiency and enable shutdown of the Wilmington Operations FCCU . . . providing substantial emission reductions on-site and reducing carbon intensity.”

**Comment G1-86.10**

- a. **The project description fails to disclose Tesoro’s shift to a different quality crude feedstock for its Los Angeles and other West Coast refineries.**

CEQA requires that an environmental review document for a refinery project disclose whether proposed project modifications will enable the refinery to process different crude, if a crude slate change is reasonably foreseeable.<sup>10</sup> In *Communities for a Better Environment v. Richmond* (hereinafter “*Richmond*”),<sup>11</sup> petitioner argued that an EIR violated CEQA’s mandate where the refinery project EIR disclosed only equipment changes, but failed to disclose that such modifications would significantly increase Chevron’s ability to process lower quality, heavier crude, compared with the crude slate the refinery traditionally processed. The FEIR in *Richmond* dismissed the petitioner’s comments on the ground that the project would not alter the refinery’s design to process the advantaged crude. The court of appeal disagreed with the lead agency, holding that reasonably foreseeable consequences of a project, such as a crude slate switch, must be disclosed and evaluated in the EIR.<sup>12</sup> The DEIR here is similarly flawed and cannot pass muster under CEQA.

Tesoro is currently in the process of implementing a series of projects to carry out a business plan that allows a switch to refining what it known as “advantaged crude.” These crude oil feedstocks are more economically viable as a result of challenges in accessing and transporting them. Both tar sands and Bakken are examples of such “competitively priced,” cost-advantaged crudes because they are stranded, with no pipeline access and must be delivered, at least initially prior to any refining, by rail. Tesoro has been explicit in setting forth its West Coast strategy to access and refine these crudes by transporting them to Washington by rail, and then to the Los Angeles Refinery by ship.

Tesoro has expressed a clear priority to switch to refining Bakken and potentially Canadian Tar Sands at the Los Angeles Refinery, and the Project implements that plan by making modifications that enable processing of the different crude. There is ample evidence showing that the Project will enable the refinery to begin processing Bakken and potentially Canadian tar sands crude oil, as discussed below, yet the DEIR both omits and negates this information. Of course, unless the DEIR *first* discloses the extent of replacement of feedstock that the Project enables, it is impossible to provide any intelligent evaluation of the potential environmental effects and risks to community and worker health and safety resulting from refining advantaged crude in the Los Angeles refinery.<sup>13</sup> The DEIR’s omission of the enabled switch to crude oil feedstock and blend violates CEQA’s project description requirements and prohibits analysis of its significant impacts.<sup>14</sup>

G1-86.10

G1-86.10  
cont’d.

<sup>10</sup> *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal.App.4 70, 89.

<sup>11</sup> *Id.* at 83.

<sup>12</sup> The court thus ruled that the EIR was deficient because it failed to disclose the foreseeable crude switch. The California Attorney General and the Governor’s Office of Planning Research have maintained that an EIR fails to meet CEQA’s requirements where it obscures the project’s enabling of a

<sup>13</sup> See *Richmond*, 184 Cal.App.4 at 89.

<sup>14</sup> 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”).

**Response G1-86.10**

The DEIR fully analyzed the impacts of the proposed project. The proposed project differs from the Chevron Richmond project in the case cited in the comment, in that Chevron proposed modifications to the refinery processing units to allow the processing of different crude oil blends and externally-sourced gas oils containing higher levels of sulfur than those currently processed in order to continue producing competitive transportation fuels and lubricating oils. Chevron proposed hydrogen purity improvements to enable the refinery to process crude oil blends with higher sulfur content. See Sections 2.5.4.1 through 2.5.4.3 of the DEIR and Master

Response 4, which establish how the proposed project is distinguishable from the Chevron project.

As described in the DEIR (see page 2-52), “[c]onstruction of the [proposed] project will not affect where the Refinery obtains crude oil. The project is not designed to enable the Refinery to change its feedstock or crude oil blend. The Refinery will continue its practice of seeking cost-effective or “advantaged crude oils” that can be blended with other crude oils and feedstocks to create the necessary blends suitable for Refinery operations. As explained in Section 2.5.4.1, even if the Refinery brings in more North American crude oil, which would occur independent of the proposed project, the Refinery crude oil blend properties must remain within the existing operating envelope and therefore will not result in the need for more intensive processing such as additional heat or sulfur removal. Any shifts within the existing operating envelope, for example more or less sulfur, would have negligible impacts on operating emissions because the acceptable crude oil blends already vary, are tailored to complement the existing Refinery configuration, and the Refinery already operates at all ranges within the envelope.”

Unlike the Chevron Richmond project, the proposed project does not include improvements to enable the refinery to process higher sulfur crude oils. The Chevron Richmond project included a number of refinery modifications to handle increased sulfur including: (1) the construction of a new recycle hydrogen amine contactor in the FCCU Hydrotreater; (2) modifications to a fresh amine storage tank; (3) construction of a new rich amine storage tank; (4) construction of a new amine regenerator; (5) upgrades to the sour water processing system; (6) construction of a new acid gas scrubber; (7) construction of a new fresh caustic tank; (8) construction of a new spent caustic tank; (9) modifications to the existing sulfur recovery units; and, (10) installation of a new sulfur loading rack. All of these modifications at Chevron, as well as the construction of a new hydrogen plant, allowed the processing of high sulfur crude oils and gas oils. These types of modifications are not proposed as part of the proposed project (see Section 2.7 of the DEIR). Therefore, the proposed project differs from Chevron and the DEIR fully analyzed the potential impacts of the proposed project.<sup>301</sup>

The comment treats the term "advantaged crude" as a synonym for Bakken and heavy Canadian crude oil. Master Response 4 addresses this claim. Attachment C, the Declaration of Douglas Miller,<sup>302</sup> further describes the term "advantaged crude" as used and intended by Tesoro. Statements made by Tesoro regarding sourcing “advantaged crude oils”, including Bakken or heavy Canadian crude oil, are typically made with regard to its West Coast system<sup>303</sup>, which

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<sup>301</sup> *Communities for a Better Environment v. City of Richmond* (2010) 184 Cal. App. 4<sup>th</sup> 70; Chevron Refinery Modernization Project DEIR, Section 3.3.

<sup>302</sup> See Attachment C, Declaration of Douglas Miller, Vice President, California Value Chain Strategy of Tesoro Companies, Inc.

<sup>303</sup> The reference to the “West Coast system” that appears in Tesoro’s corporate presentations and statements is a term that is used with varying meanings based on the context of the presentation or statement. Analyst day and earning statements presentations are given to an audience that routinely participates in the presentations and is familiar with Tesoro’s corporate structure and financial performance, as such some of the references are not as explicit as would be to an uninformed audience. At times, it refers to Tesoro’s four west coast refineries, but it can also refer to those four refineries as well as Tesoro Logistics or distribution system to third-party clients on the west coast. Thus, awareness of the context surrounding the use of this phrase is always necessary to

includes the Kenai Refinery in Alaska, the Anacortes Refinery in Washington, and the two California refineries in Martinez and Los Angeles, not specifically the Los Angeles Refinery. And, “advantaged crude” refers to a crude oil that is attractive from a business point of view, whether because of price or efficiency in refining yield. As explained in Response G1-78.94, it is correct to say that Tesoro makes ongoing efforts to provide “advantaged crude oil”, as that term is used by Tesoro (i.e., any economically advantaged crude oil capable of being processed at each of Tesoro’s refineries). Providing “advantaged crude oil” to Tesoro refineries, including the Los Angeles Refinery, is occurring independent of the proposed project.

The comment’s reference to using Washington in the transport of “advantaged crudes” to the Refinery implicates implies a connection to the Vancouver Energy Project. As explained in Section 4.1.2.5 of the DEIR and Master Response 8, the Vancouver Energy Project is wholly independent from the proposed project and is undergoing separate environmental review by the Washington State EFSEC, which includes evaluation of transportation hazards. Additionally, as described in Master Response 8, the Final EIS has not yet been issued for the Vancouver Energy Project, and the project has not been approved. The Draft EIS for that project lists possible sources of the crude oil.<sup>304</sup> A majority of crude oil processed by the Refinery arrives via marine vessel. The improved offloading efficiency provides a benefit regardless of the types of crude oil transported by marine vessel. The Vancouver Energy Project does not depend on the proposed project, and the proposed project does not depend on the Vancouver Energy Project. Each project has separate independent purpose.

The comment claims that the proposed project intends to change the crude oil processed by the Refinery to Bakken and heavy Canadian crude oil. See Response G1-86.6 for a summary response to the issues raised regarding a change in the crude oil blend processed by the Refinery and references to other detailed responses that address the issues raised in the comment, and Master Response 4 for a complete description of these issues. All modifications and potential impacts associated with the proposed project have been fully analyzed in Chapter 4 of the DEIR.

Bakken and heavy Canadian crude oils were included in the blend processed by the Refinery in the baseline period. However, the assumption in the comment, that Bakken and heavy Canadian crude oils are chemically and physically different from other crude oils processed by the Refinery, is not accurate. The numerous responses containing detailed information that address different properties claimed to be associated with Bakken and heavy Canadian crude oil that could have potential emission or hazard impacts are listed in Table 78.94-1 of Response G1-78.94.

Because crude oils are blended prior to processing and the proposed project does not involve physical modifications to the Refinery processing equipment that would enable the Refinery to process a significantly different blend of crude oil, the properties of the individual crude oils that have been or will be processed by the Refinery do not need to be separately analyzed. Any pre-

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understand the speaker’s intended meaning, but the phrase is not used to refer only to the Los Angeles Refinery in isolation.

<sup>304</sup> Draft EIS for the Tesoro Savage Vancouver Energy Distribution Terminal Project available at <http://www.efsec.wa.gov/Tesoro%20Savage/SEPA%20-%20DEIS/DEIS%20PAGE.shtml>.

blending impacts were included as part of the new and replacement storage tanks evaluations (see Response G1-78.122). It should be noted that the emissions and hazards associated with storage and pipeline transfer impacts potentially related to the new and modified crude oil storage tanks were fully analyzed in Chapter 4 of the DEIR based on worst-case properties of crude oils that have been or will be processed by the Refinery which includes Bakken and heavy Canadian crude oil (see Response G1-78.157).

The comment also suggests that there would be additional community and worker health and safety risks associated with processing “advantaged crude oil” at the Refinery. As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing a blend of various crude oils and the proposed project is not designed to, and will not in fact, facilitate a change in the slate of crude oils purchased by the Refinery or the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow the processing of a slightly heavier crude oil blend.

### Comment G1-86.11

- b. Tesoro investor and public statements evidence that the Project’s purpose is to enable the Los Angeles refinery to process advantaged crudes as part of its West Coast crude slate switch plan.**

In contrast to the DEIR’s silence, Tesoro has consistently made known its plan to enable its West Coast refineries, including the Los Angeles Refinery, to process lower quality oil feedstock, including highly volatile crude from the Bakken shale play in North Dakota. May’s Technical Report details and assesses Tesoro’s public statements on the matter.<sup>15</sup> Tesoro unequivocally told its investors that the purpose of the Project is to obtain a competitive edge by integrating its business chain and placing “advantage crude oils in front of [the] refineries,” including Carson/Wilmington, by changing the crude oil supply and demand dynamics in the West Coast. In December 2015, it explained that:

“formalizing competitive advantage and fully integrating our value chain, that is really what the Los Angeles Integration and Compliance Project is about. And when we think about creating value, we are not just thinking about advantaged crude oils in front of our refineries, but we’re thinking about how that supply to the west coast of advantaged crude oils can change the shape of the crude oil supply/demand dynamics for the west coast. And that’s what we are trying to accomplish through Vancouver Energy.”<sup>16</sup>

Indeed, Tesoro and industry communications are replete with explanations about the direct connection of the LA Refinery integration project with its West Coast crude oil supply project—the Vancouver Energy Project in Washington—which it identifies as “the most efficient route to the West Coast for Bakken crude oil.”<sup>17</sup>

In 2013, industry literature reported that:

Tesoro’s “refining capacity[,] concentrated in California[,] . . . has not realized the benefit of the ongoing Mid-Continent discounts

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that many of its peers have. . . . That said, past and future investments as well as the addition of infrastructure should allow it to capture amounts of cost-advantaged feedstock similar to its peers. . . . [I]t has invested in rail facilities to move 50 mb/d of Bakken crude west to its Anacortes, Wash., refinery[.] [L]ight and heavy crude in the Mid-Continent will create an opportunity and economic incentive to rail both types of crude to its three California refineries, increasing their throughput of cost-advantaged crude. In fact, Tesoro already has plans in place to do so.” “Specifically, Tesoro can dramatically improve the performance of Carson by optimizing its crude slate with light crude from the Bakken. . . . Tesoro should gain further advantages from integrating Carson with the Wilmington refinery.”<sup>18</sup>

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cont’d.

While in 2013, Tesoro had not realized the cost benefit of Mid-Continent discounts that its industry “peers” had gained, by May 2016, Tesoro’s Chairperson and CEO reported that throughout its new distribution of Bakken crude to the West Coast, Tesoro “will be able to capture the refining value because of the *displacement of crudes that we run today with Bakken crude oil*, which we’ve clearly stated in the past is between \$3 to \$5 a barrel on average.”<sup>19</sup>

Between those years, Tesoro made headway in carrying out its plan to displace its west coast refineries’ crude slate with Bakken. At a Feb. 2014 Simmons Energy Conference, Tesoro’s presentation included the following slide showing its rail and shipping distribution from North Dakota to the west coast refineries, including the Los Angeles refinery:<sup>20</sup>



Tesoro stated that the Washington rail-to-ship project provides “[f]lexibility to deliver to all West Coast refineries,” and specified that the cost of rail to the state of Washington, and then by ship to California is “[c]ompetitive with direct rail cost to California.” Tesoro’s explanation of its “Advantaged Feedstock Opportunity” in Los Angeles consists of shifting crude oil feedstock from what was “currently up to 15% California Heavy” crude to “[p]otentially up to 50% California Heavy and Bakken” crude oil.<sup>21</sup> It then boasted that “Bakken crude oil yields 14% to 16% more gasoline and distillate than ANS.”<sup>22</sup> This evidence undermines the DEIR’s assertion that “[t]he Carson and Wilmington Operations current [sources of] crude oil and feedstock . . . are not expected to change as a result of the proposed project.”<sup>23</sup>

G1-86.11  
cont’d.

In July of 2014, Tesoro reported that it was “making good progress on the integration of the [Carson and Wilmington] facilities.”<sup>24</sup> It explained:

We are off the interim crude oil supply agreements and continue to focus on improving the optimization of the crude oil slate. We expect to continue to run Basrah and A[N]S but are continually increasing the variety of crude oil we run. . . . The Wilmington portion of the facility can now access the Carson inbound crude oil logistics network which improves our flexibility. During maintenance activity at the Anacortes refinery in the quarter, we were able to move some barrels of Bakken down to our



Los Angeles refinery and realized refinery values relative to A[N]S similar to those that we experienced at Anacortes.<sup>305</sup>

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cont'd.

In other words, Tesoro explained that it ended its oil supply contracts and was focused on increasing crude supply variety. The integration of the refineries allowed improved flexibility to do just that, providing as an example the Wilmington refinery's access to Bakken, which it successfully refined at a value similar to ANS crude. Again, this evidence shows that, contrary to the DEIR's project description and statements concerning crude slate, Tesoro's objective is to enable the LA refinery to process a different crude feedstock.

<sup>15</sup> May Technical Report, § II(B).

<sup>16</sup> Edited Transcript TSO - Tesoro Corporation 2015 Analyst and Investor Day, December 9, 2015, at 10.

<sup>17</sup> Tesoro Presentations webpage, weblink: Morgan Stanley Corporate Access Day, 5/12/16, Slideshow entitled: *Driven to Create Value, Morgan Stanley Refining Corporate Access Day, May 2016*, Slide 13 & 15, available at: <http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations>.

<sup>18</sup> See Julia May 2014 Expert Report, at 7-8; Morningstar report, *Tesoro aims to increase throughput of domestic crude over the next few years*, July 24, 2013, available at <http://analysisreport.morningstar.com/stock/archive?t=TSO&region=USA&culture=en-US&productcode=MLE&docId=604033>.

<sup>19</sup> Edited Transcript TSO - Q1 2016 Tesoro Corp Earnings Call May 05, 2016, p. 19 (emphasis added), available at <http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-transcriptsarchive>.

<sup>20</sup> Transformation through Distinctive Performance, Simmons Energy Conference, February 2014, Slide 15.

<sup>21</sup> Simmons Energy Conference, *Transformation through Distinctive Performance*, February 27, 2014, at 13, available at <http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations>.

<sup>22</sup> *Id.* at 16.

<sup>23</sup> DEIR, at 2-27.

<sup>24</sup> Edited Transcript TSO - Q2 2014 Tesoro Corp Earnings Call, July 31, 2014, p. 5, available at <http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations>.

<sup>25</sup> Edited Transcript TSO - Q2 2014 Tesoro Corp Earnings Call, July 31, 2014, at 5, available at <http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations>.

## Response G1-86.11

The comment references Comment letter 81 and the same references in Comments G1-81.22 through G1-81.24. See Responses G1-81.22 through G1-81.24 and Attachment C, the Declaration of Douglas Miller,<sup>305</sup> that explain the proper/accurate context of the various Tesoro corporate statements and slides. The claims in the comment alleging that Tesoro's corporate statements to investors reflect a different project objective, i.e. to change the crude oil blend processed by the Refinery, have taken those corporate statements out of context. There are no corporate statements that state or even imply that the proposed project is designed to facilitate a change in the crude oil blend processed by the Refinery. In making this claim, the comment pieces together unrelated statements and draws an inaccurate conclusion.

Corporate statements regarding crude oil access are unrelated to the proposed project. As stated in Response G1-78.94, it is correct to say that Tesoro makes ongoing efforts to provide "advantaged crude oil" to each of Tesoro's refineries (see Master Response 4 and Attachment C for a description of "advantaged crude oil" as defined by Tesoro). The activities to supply "advantaged crude oils" to Tesoro refineries are not enabled by the proposed project. Providing "advantaged crude oil" to Tesoro refineries, including the Los Angeles Refinery, is occurring, and will continue independent of the proposed project.

<sup>305</sup> See Attachment C, Declaration of Douglas Miller, Vice President, California Value Chain Strategy of Tesoro Companies, Inc.

There is no evidence to support the claim that integration of Carson and Wilmington Operations improved flexibility to increase crude oil supply variety. However, Tesoro's acquisition of the Carson Operations, resulted in opportunities to share crude oil and transportation fuels via systems that were already connected via third-party facilities. These systems are part of the existing setting.

Response G1-78.136 addresses the Tesoro statement regarding Bakken crude oil that was diverted to the Los Angeles Refinery during maintenance at the Anacortes Refinery. The comment is correct and confirms that Bakken crude oil has been processed at the Los Angeles Refinery.

### Comment G1-86.12

**c. The Project is inextricably related to the Tesoro Savage Vancouver Energy Terminal in Washington and Tesoro's objective to bring Bakken crude to its west coast refineries, with options for Canadian crude.**

The DEIR's Project Description improperly omits the Project's full scope and nature by failing to disclose its true relationship to the Vancouver Energy terminal and aim to carry out the latter's purpose.

The *Vancouver Energy Terminal* in Vancouver, Washington,<sup>26</sup> a joint venture by Tesoro/Savage on the Columbia River, is a crude-by-rail to oil tanker terminal. The Vancouver Energy website states that the terminal project's purpose is to accept midcontinent North American crude, including Bakken, and then transferred to vessels to be shipped to West Coast oil refineries.<sup>27</sup> The Draft Environmental Impact Statement (DEIS) for the Tesoro Savage terminal states that "[s]tarting in 2017, . . . the most likely sources would be northern mid-continent crude oil produced in North Dakota and Montana, and in Canada."<sup>28</sup>

Dr. Phyllis Fox's June 10, 2014 expert report on the Draft Negative Declaration for the Tesoro Storage Tank Replacement and Modification Project found that "[t]he CEO of Tesoro, Greg Goff, has indicated that the Los Angeles Refinery can take the entire shipment [from the Vancouver Terminal because] [t]here are 'no restrictions on how much [the LA Refinery] can take[.]'"<sup>29</sup> This evidence shows that Tesoro's intention is to enable the LA Refinery to access and process the Bakken and tar sands crude oil from the Vancouver Terminal.

The DEIR's statements denying that the proposed Vancouver Terminal is related "to the replacement of crude oil tanks or the Tesoro Refinery Integration and Compliance project" on the ground that the Vancouver project "could go forward with or without the" Integration Project, is inapposite.<sup>30</sup> The question here is whether the this Project enables it to process a different crude slate, which must be answered in the affirmative. Based on evidence in the record, it is also clear that Tesoro intends for the Vancouver Terminal to supply the Bakken and potentially Canadian Tar Sands crude to the LA refinery.

<sup>26</sup> Not to be confused with Vancouver Canada, which also has oil terminals on the West Coast.

<sup>27</sup> <https://www.vancouverenergyusa.com/>.

<sup>28</sup> Tesoro Savage DEIS, Fact Sheet, available at <http://www.efsec.wa.gov/Tesoro%20Savage/SEPA%20-%20DEIS/DEIS%20PAGE.shtml>.

<sup>29</sup> May Technical Report, Attachment 13, at 11 (hereinafter "Fox Neg. Dec. Report").

<sup>30</sup> DEIR, at 4-5.

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cont'd.

### Response G1-86.12

Master Response 8 and Responses G1-78.139 and G1-81.25 explain that the Vancouver Energy Project is an independent project undergoing separate environmental review and is unrelated to the proposed project.

The comment takes statements made by Tesoro's President and CEO, Greg Goff, out of context. The comment cited includes an inaccurate reference that implies the Los Angeles Refinery is associated with a statement made during Tesoro's First Quarter of 2014 conference call (see Comment Letter G1-81 Attachment 13, page 11). The actual statement made during the call is, "There is no restriction[s] on how much we choose to move to Vancouver, Washington and then supply our West Coast system." There is no reference to the Los Angeles Refinery, and the statement does not indicate that the Refinery can take an entire shipment from the Vancouver Energy Project when it is completed. The comment improperly inserts the words "Los Angeles Refinery" which are not actually in the statement. See Response G1-78.141 for further discussion of this statement.

It should be noted that statements made by Tesoro regarding sourcing "advantaged crude oils", including Bakken or heavy Canadian crude oil, are typically made with regard to its West Coast system, which includes the Kenai Refinery in Alaska, the Anacortes Refinery in Washington, and the two California refineries in Martinez and Los Angeles, not specifically the Los Angeles Refinery. Corporate statements regarding crude oil access are unrelated to the proposed project. There are no corporate statements that state or even imply that the proposed project is designed to facilitate a change in the crude oil blend processed by the Refinery. As stated in Response G1-78.94, it is correct to say that Tesoro makes ongoing efforts to provide "advantaged crude oil" to each of its U.S. refineries (see Master Response 4 and Attachment C for a description of "advantaged crude oil" as that term is used by Tesoro). Providing "advantaged crude oil" to Tesoro refineries, including the Los Angeles Refinery, is occurring and will continue independent of the proposed project.

The majority of crude oil processed by the Refinery arrives via marine vessel. The proposed project does not facilitate or encourage sourcing crude oil from any particular location. In other words, the improved offloading efficiency provides a benefit regardless of the types of crude oil transported by marine vessel.

As described in Sections 2.5.3 and 2.5.4 of the DEIR, the Refinery is currently processing a blend of various crude oils and the proposed project is not designed to, and will not in fact, facilitate a change in the slate of crude oils purchased by the Refinery or the crude oil blend processed at the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow the processing of a slightly heavier crude oil blend. As explained in Response G1-78.104, the Refinery receives the majority of its crude oil via marine vessel, and all waterborne crude oil deliveries would benefit from the increased offloading efficiency that the new and replacement storage tanks would provide.

Comment G1-86.13

**d. The LA Refinery is capable of refining a crude blend of Canadian and Bakken to approximate its current Alaska North Slope yields.**

The DEIR also argues that the LA Refinery is physically constrained from processing Bakken crude oil.<sup>31</sup> Not so. As the DEIR admits, the issue is not whether the LA Refinery can process Bakken crude oil and other light sweet crude *type* oils, but rather, whether these crude oils can be prepared into a “blend” that works with current refinery configurations. Tesoro’s own evidence shows that Bakken oil can indeed be blended for successful processing at the LA Refinery.<sup>32</sup> The DEIR, however, obscures this fact in violation of CEQA’s environmental review requirements.

The DEIR explains that “[t]here are limitations on the types of crude oil that can be processed in the [LA] Refinery due to the design limitations and capacities of the processing units.”<sup>33</sup> Accordingly, “[c]rude oil that is purchased is blended to meet criteria specific to Carson or Wilmington Operations . . . [and] complement specific refinery configurations.” As an example, because “the Carson Operations have been designed to run primarily Alaska North Slope (ANS) crude oil, which is in declining availability [,] the Carson Operations blend crude oils to have properties similar to ANS crude oil.”<sup>34</sup>

As explained in the May Technical Report, the oil industry has specifically identified a blend of cost-advantaged Bakken and Canadian crude oils to approximate and serve as a replacement to ANS crude oil.<sup>35</sup> May concluded that using such a blend at the LA Refinery would replace dwindling supplies of lighter, low sulfur ANS crude oil used in the range of 100,000 barrels per day (bpd).<sup>36</sup> Contrary to the DEIR’s assertions,<sup>37</sup> it is not necessary for the LA Refinery to undergo equipment and design modifications in order to refine Bakken and Canadian crude. Because the blend would approximate the current ANS API, the problems identified by the DEIR<sup>38</sup> are inapposite.

In fact, the evidence shows that Tesoro has already tested and ascertained that the LA Refinery *is* capable of processing Bakken in a manner that “complement[s] refinery

configurations” and provides “properties similar to ANS crude oil.”<sup>39</sup> “During maintenance activity at the Anacortes refinery in [2014], [Tesoro] . . . move[d] some barrels of Bakken down to [the] Los Angeles refinery and realized refinery values relative to A[N]S[.]”<sup>40</sup> The LA Refinery can and has already successfully refined Bakken, and the DEIR’s assertions to the contrary strain credulity.

The DEIR must be withdrawn and recirculated to reflect the Project’s enabling of processing of Bakken and Canadian crude, and to inform the public of its impacts. May’s Technical Comment concluded that the blend’s approximation of the ANS API gravity does not mean that no new impacts would result from the advantaged crude switch.<sup>41</sup> Rather, the new blend would introduce new environmental impacts due to other crude oil characteristics. For example, explosion hazards would increase from Bakken crude introduction, as would additional content of toxics, such as benzene, not investigated in the DEIR discussion. Further, increased sulfur mass from Canadian crudes would increase corrosion hazards and increase acutely hazardous sulfur gases, such as hydrogen sulfide. The DEIR ignores these significant impacts, and thus violates CEQA.

<sup>31</sup> DEIR, at 4-5 to -6.

<sup>32</sup> Edited Transcript TSO - Q2 2014 Tesoro Corp Earnings Call, July 31, 2014, p. 5 (During maintenance activity at the Anacortes refinery in [2014], [Tesoro] . . . move[d] some barrels of Bakken down to [the] Los Angeles refinery and realized refinery values relative to A[N]S[.]”).

<sup>33</sup> DEIR, at 2-16.

<sup>34</sup> *Id.*

<sup>35</sup> May Technical Report, § III(C) (citing The North American Crude Boom: How Changing Quality Will Impact Refiners, John R. Auers, Turner, Mason & Company, Platts Crude Marketing Conference, March 1, 2013, Houston, available at: [http://www.turnermason.com/wp-content/uploads/2013/05/North\\_American\\_Crude\\_Boom-platt-2013.pdf](http://www.turnermason.com/wp-content/uploads/2013/05/North_American_Crude_Boom-platt-2013.pdf)).

<sup>36</sup> May Technical Report, § III(C).

<sup>37</sup> DEIR, at 4-5.

<sup>38</sup> See DEIR, at 2-16

<sup>39</sup> DEIR, at 2-16.

<sup>40</sup> Edited Transcript TSO - Q2 2014 Tesoro Corp Earnings Call, July 31, 2014, at 5.

<sup>41</sup> May Technical Report, § III(C).

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**Response G1-86.13**

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing various crude oils and the proposed project is not designed to, and will not in fact, facilitate a change in the slate of crude oils purchased by the Refinery or the crude oil blend processed at the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow the processing of a slightly heavier crude oil blend. Response G1-78.107 explains that the proposed project will not enable the Refinery to process a crude oil blend containing a significant amount of Bakken crude oil as implied in the comment. In order to process any significant quantities of Bakken or heavy Canadian crude oil, these crude oils would need to be mixed with other crude oils into blends similar to current crude oil blends that are suitable for processing by the Refinery.

The comment inaccurately claims that the DEIR states the Refinery is constrained from processing Bakken crude oil. On page 4-6, the DEIR accurately states, "The Los Angeles Refinery has limited ability to process Bakken crude oil and other light sweet crude oils, and no modifications are being proposed in the Tesoro Refinery Integration and Compliance Project that would increase the ability of the Refinery to process Bakken crude oil." The fact that Bakken crude oil has already been included in the blend processed by the Refinery, does not contradict the DEIR, rather it supports the statements that crude oils, including Bakken crude oil, are blended to fit the existing operating envelope of the Refinery. Response G1-78.136 addresses the Tesoro statement regarding Bakken crude oil that was diverted to the Los Angeles Refinery during maintenance at the Anacortes Refinery. The comment is correct in that Bakken crude oil has been processed at the Los Angeles Refinery and that the Refinery can process Bakken and heavy Canadian crude oils in limited quantities, within the crude oil blend processed at the Refinery. The proposed project does not enable the processing of Bakken and heavy Canadian crude oils.

Response G1-78.150 specifically addresses the limitations on blending a mixture of Bakken and heavy Canadian crude oils to replace ANS crude oil. While it is true that some of the properties of a blend of 55 percent Bakken and 45 percent Western Canadian Select (WCS) or Cold Lake heavy Canadian crude oils will approximate an ANS crude oil look-alike, a closer evaluation of the blend properties and distillation cut quality reveals that a straight blend of Bakken and WCS or Cold Lake heavy Canadian crude oil is not suited for processing at the Refinery. This is shown in Table 78.150-2 of Response G1-78.150 where differences in nitrogen, sulfur, and metals content between the suggested Bakken and heavy Canadian crude oil blends and ANS would impact certain operation, throughput, and coke quality based on Tesoro's proprietary assay software program. Therefore, additional crude oils would need to be added to make a blend that would be suitable for processing at the Refinery. As a result of this necessary blending of crude oils to meet current and continuing Refinery constraints, there will be no additional emissions impacts caused by the proposed project other than those fully described and analyzed in the DEIR. In addition, any pre-blending impacts were included as part of the new and replacement storage tanks evaluations (see Response G1-78.122).

While the crude oil blend processed by the Refinery will not change significantly, it is important to note that the potential impacts of operating the new and replacement crude oil storage tanks

were thoroughly evaluated in Chapter 4 of the DEIR. Crude oil vapor pressure approaching the maximum allowable by SCAQMD Rule 463 (TVP limit of 11 psia) was used as the basis of the hazards analysis and emission calculations for VOCs and TACs for the new and replacement storage tanks and fugitive emissions in the DEIR. BTEX concentrations of crude oils in new and replacement storage tanks and fugitive emissions associated with the proposed project were based on a worst-case hybrid analysis of the toxic content of crude oils have been and will be processed at the Refinery, including Bakken and Canadian crude oil. The hybrid speciation was prepared by selecting the highest concentration of each toxic compound from the entire speciated data set of all the crude oils analyzed (see Response G1-78.157).

There have been previous volatility issues associated with the transport of Bakken crude oil. However, regulations have since been adopted that require a reduction in volatility of Bakken crude oil that is transported. For example, in December 2014, the Industrial Commission of North Dakota issued an order regarding conditioning of Bakken crude oil and limiting the RVP of crude oil provided for transport to 13.7 RVP. Thus, Bakken crude oil transported to the West Coast will be pipeline quality (i.e., qualified for safe transport) and will not have as high a vapor pressure as the Bakken crude oil produced at the wellhead. As with other U. S. crude oil production operations, the order adopted by the State of North Dakota will require that crude oil production facilities remove a significant portion of the light ends (ethane, propane, butane and pentane) prior to offering the crude oil for shipment to refineries for processing.

Because of Bakken crude oil's purported volatility, concerns were raised in the media as to whether Bakken crude oil was properly classified as a Class 3 hazardous material under U.S. DOT regulations. A Class 3 hazardous material is generally a flammable or combustible liquid that does not meet the regulatory classification requirements for other hazardous characteristics, such as toxicity, corrosivity, radioactivity or explosiveness. However, those concerns have since been resolved by repeated analysis and testing that demonstrates Bakken crude oil to be a Class 3 hazardous material, similar to other light sweet crude oils. After considering the information, the PHMSA Deputy Administrator testified to Congress that Bakken crude oil is accurately classified as a Hazard Class 3 Flammable Liquid.<sup>306</sup> This is consistent with the sampling and testing Tesoro has completed on Bakken crude oil. Therefore, Bakken crude oil is not classified as an explosive material.

The total sulfur content of the crude oil blend processed by the Refinery is not expected to change because the crude oil blend will not change significantly. Potential corrosion issues associated with various sulfur compounds are further described in Response G1-78.111.

The comment asserts the DEIR must be withdrawn or recirculated to reflect the proposed project's enabling of processing Bakken and heavy Canadian crude oil and their impacts. However, as explained above, the DEIR accurately discloses that the Refinery is currently processing a blend of various crude oil (including Bakken and heavy Canadian crude oil) and the proposed project does not enable a significant change to the crude oil blend. Therefore, the

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<sup>306</sup> Written statement of Timothy P. Butters Before the Subcommittees on Energy and Oversight Committee on Science, Space and Technology, U.S. House of Representatives at page 12 (Sept. 9, 2014).

DEIR does not need to be withdrawn or recirculated since no additional analysis is necessary under CEQA.

The comment references Comment Letter 81, raises the same issues as Comment G1-81.37. The issues raised in the comment are responded to in detail in Response G1-81.37.

**Comment G1-86.14**

**e. The DEIR improperly ignores tank permit changes that specifically facilitate crude slate changes.**

The Project seeks to modify and construct new crude storage tanks that provide for over 3.4 million barrels (bbls) of new storage, a 153 million bbl/year increase in throughput based on the tanks alone.<sup>42</sup> The increased storage capacity, as summarized by the May Technical Report, amounts to twice the size of the entire existing crude storage at Wilmington (1.7 million bbls).<sup>43</sup> May's technical analysis of the Project's storage tank component concludes that, contrary to the DEIR's statements, these modifications are not solely for faster ship offloading. May explains that the tank expansion also allows for an "increased throughput" that is itself "greater than the entire existing refinery currently processes."<sup>44</sup> This substantial volume of throughput would need to be transferred from the tanks to elsewhere, meaning that Tesoro will either use or sell — Project purposes that have not been disclosed or evaluated for impacts.<sup>45</sup>

G1-86.14

According to May's Technical Report, the changes sought by the Project's storage tank permit application may enable new storage capacity for advantaged crudes.<sup>46</sup> The high vapor pressure limits disclosed by the original 2014 Negative Declaration accommodated Bakken crude.<sup>47</sup> The DEIR omits the modified high vapor pressure limits, although the same tanks with the same new modifications are part of this Project, and may very well maintain the proposed high vapor pressure limit.<sup>48</sup> If so, it must be disclosed and evaluated in a revised DEIR.

While it may be true that the tank modifications may also allow faster ship unloading and decreased emissions, the DEIR cannot simply cloak one particular benefit of this Project component as the very purpose of the modifications. The DEIR would have the public believe that Tesoro is investing in tank modifications that increase storage capacity to twice the size of the entire existing crude storage at Wilmington for the sole purpose of having ships offload faster. CEQA does not allow for such a truncated and misleading analysis. The omission of the foreseeable potential impacts to increased sales or processing of higher throughput, and even a crude switch accommodation, from the tank modifications seriously undermines the purpose of the public participation provisions of CEQA and makes meaningful identification and assessment of the potentially significant environmental impacts of the Project impossible.<sup>49</sup>

G1-86.14  
cont'd.

Accordingly, the Project Description must be amended to reflect the storage tank modification's increased throughput and end uses and possible crude switch utility. A revised DEIR must disclose the current crude oil type baseline, and evaluate the vapor pressure, heating coils, other equipment and permit limits for tanks, regarding how they may accommodate a crude oil slate change, and the associated impacts.

<sup>42</sup> May Technical Report, § III(E).

<sup>43</sup> May Technical Report, § III(E).

<sup>44</sup> May Technical Report, § III(E).

<sup>45</sup> May Technical Report, § III(E).

<sup>46</sup> See May Technical Report, § III(E).

<sup>47</sup> May Technical Report, § III(E).

<sup>48</sup> May Technical Report, § III(E).

<sup>49</sup> See *Sierra Club v. State Bd. of Forestry* (1994) 7 Cal. 4th 1215, 1230 (1994).

**Response G1-86.14**

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.39. The issues raised in the comment are addressed in detail in Response G1-81.39.

The comment speculates that the new and replacement crude oil storage tanks will be used for other purposes, besides more efficient marine vessel offloading, due to the size and throughput of the proposed tanks. The storage tank capacity and throughput referenced in the comment is necessary to accommodate the offloading of marine vessels in one trip, rather than having the vessel partially offload and then wait at anchor until additional land-based storage is available. The comment erroneously assumes that increased storage capacity equals increased refinery throughput. This is not correct, as explained in Master Response 6, Response G1-78.180, and Response G1-81.39.

The comment also suggests that volume of crude oil storage capacity in the proposed project is significant in comparison to the existing crude oil storage capacity at the Refinery and the Carson Crude Terminal. Response G1-78.126 provides a detailed description of the existing tanks at the Refinery and the Carson Crude Terminal that are capable of storing high TVP crude oil based on the Refinery's current Title V permit. Specifically, there are 61 storage tanks at Carson Operations capable of storing crude oil with vapor pressures from 7 to 11 psi. At the Carson Crude Terminal, all 5 existing storage tanks are capable of storing crude oil with TVP up to 11 psi. There are 66 storage tanks at Wilmington Operations capable of storing crude oil with TVP from 7 to 11 psia TVP. The total existing crude oil storage capacity is 11.0 million barrels. Upon completion of the proposed project, the crude oil storage capacity will be 14.4 million barrels.

It should be noted that the emissions and hazards associated with the new and modified crude oil storage tanks were fully analyzed in Chapter 4 of the DEIR based on worst-case properties of crude oils that have been and will be processed by the Refinery (see Response G1-78.157). This includes using the vapor pressure approaching the maximum allowable by SCAQMD Rule 463 (TVP limit of 11 psia) as the basis of the emission calculations for VOCs and TACs for the new and replacement storage tanks and fugitive emissions in the DEIR.

There are no modifications included in the proposed project that would allow the Refinery to increase capacity, other than the 6,000 bbl/day fully analyzed in the DEIR. See Master Response 6 for additional information regarding this issue.

The comment asserts the project description must be amended to reflect the storage tank modification's increased throughput and end uses and possible crude oil switch utility. However, as explained above, the DEIR project description in Section 2.7 is accurate and the proposed new and modified storage tanks have been fully analyzed in Chapter 4 of the DEIR. The comment has no evidence to support claims of revision of the DEIR.

The comment references Comment Letter 81, raises the same issues as Comments G1-81.39 through 81.51. The issues raised in the comments are responded to in detail in Responses G1-81.39 through 81.51.



**Comment G1-86.15**

- f. The Project’s proposed new de-sulfurization equipment enables expanded imports of advantaged crude, and is not merely for the purpose of meeting federal low-sulfur fuel standards.**

As May’s Technical Report explains, the Project proposes to “add a significant amount of sulfur contamination removal equipment as part of the Project[,] contamination [which] comes into the refinery with the crude oil.”<sup>50</sup> The DEIR touts that the Project will reduce sulfur contamination, by way of modifications to hydrotreaters and other additions to Refinery equipment, for the purpose of complying with federal tier-three standards. May’s examination and other evidence, however, casts doubt on the ostensibly benevolent objective of this Project component, and rather points to a different purpose altogether, which the Project Description fails to disclose.

The DEIR explains that “hydrotreating units remove sulfur and nitrogen from process streams; sulfur in the form of hydrogen sulfide, and nitrogen in the form of ammonia, which are then converted into elemental sulfur and nitrogen in sulfur recovery units.”<sup>51</sup> May’s Technical Report explains that extensive sulfur removal equipment already exists at the Wilmington and Carson refineries, and outlines the Project’s proposal for new and expanded process units for this same purpose.<sup>52</sup> May concludes that “the large increase in desulfurization equipment appears out of proportion with what is needed to comply with federal Tier 3 standards,”<sup>53</sup> since Tesoro already complies with California’s low-sulfur fuel standards, and out-of-state sales that require Tier III compliance comprise a small fraction of Tesoro sales,

Accordingly, the Project’s increased hydrotreating cannot be solely for compliance.<sup>54</sup> Tesoro admits as much. After explaining that “the majority of the gasoline has [already] been 10 ppm in California for some time[,]” Tesoro’s Chairperson and CEO stated that the Project “does allow [it to] get to the full compliance with tier-three gasoline[,]” but “it is a *small* part of [the Integration Project].”<sup>55</sup>

Accordingly, as explained by May, a need for such increased sulfur removal processing in the refinery can be explained only if Tesoro brings in significantly more high-sulfur crude oil[,]”<sup>56</sup> which, as explained above, it specifically plans to do. For example, Canadian tar sands crude oil typically has very high sulfur levels. Based on the evidence, it appears that the Project’s de-sulfurization component allows for the additional processing of sulfur content, potentially from high sulfur crude oil. This objective must be disclosed in the Project Description, since the processing high-sulfur crude may cause refinery processing problems and severe safety hazards.<sup>57</sup> For example, sulfur compounds are corrosive and can attack refinery equipment, which can lead to explosions, such as happened in the Chevron Richmond refinery, which nearly killed 19 workers and sent 15,000 neighbors to the hospital. By failing to disclose the full scope of the de-sulfurization component, the DEIR’s Project Description fails to inform the public about the true nature of the activity proposed, and therefore must be rejected.

<sup>50</sup> May Technical Report, § III(D).

<sup>51</sup> DEIR, at 2-12.

<sup>52</sup> May Technical Report, § III(D).

<sup>53</sup> May Technical Report, § III(D).

<sup>54</sup> May Technical Report, § III(E).

<sup>55</sup> Edited Transcript TSO - Q1 2016 Tesoro Corp Earnings Call MAY 05, 2016, p. 15 (emphasis added), available at <http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-transcriptsarchive>.

<sup>56</sup> May Technical Report, § III(D).

<sup>57</sup> May Technical Report, § III(E).

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**Response G1-86.15**

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.38. The issues raised in the comment are addressed in detail in Response G1-81.38. Responses G1-78.138 and G1-78.142 further address the additional sulfur removal needed at the Refinery for Tier 3 compliance.

As described in Master Response 4, it is important to understand that since no modifications to the SRPs are included in the proposed project, the actual sulfur removal capacity of the Refinery will not change as a result of the proposed project. While there are proposed project elements that would increase hydrotreating of gasoline blending components, there will also be less gas oil requiring hydrotreating. As described in Section 4.1.2.3 of the DEIR, the proposed project will enable the Refinery to decrease, if not eliminate, its third-party gas oil purchases. These changes in demand for sulfur removal via hydrotreating essentially offset each other and the sulfur removal capacity remains within the capacity of the existing SRPs. The proposed project is not designed to, and the Refinery cannot accommodate, a change in the range of sulfur allowed in the crude oil blend processed by the Refinery as explained in Master Response 4.

The quote by Mr. Goff simply states that a part of the project involves Tier 3 compliance; contrary to the unsupported conclusion in the comment, it does not state that additional sulfur treatment is added beyond the need for Tier 3 compliance. The Refinery currently meets the Tier 3 gasoline sulfur content for most (80 to 90 percent) of the gasoline produced. However, after January 1, 2017, Tesoro's entire gasoline pool production average sulfur content will need to meet the Tier 3 requirement of 10 ppm. Therefore, modifications to the gasoline blending stream (naphtha) hydrotreating units are planned to meet this compliance requirement for additional sulfur removal (see Section 2.7.2 of the DEIR).

Even though hydrotreating unit modifications are part of the proposed project to comply with Tier 3 compliance for gasoline produced, there is no SRP modification in the proposed project to change the range of sulfur in the crude oil blend processed by the Refinery. Therefore, the claim made in the comment that the proposed project enables the Refinery to bring in significantly more high sulfur crude oil is not true.

Response G1-78.111 provides a detailed description of the root cause of the Chevron Richmond incident and measures Tesoro has put in place to ensure the type of failure involved in the Chevron Richmond incident will not occur at the Refinery.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.39 through 81.51. The issues raised in the comments are responded to in detail in Responses G1-81.39 through 81.51.

**Comment G1-86.16**

In sum, the DEIR fails to disclose a fundamental Project characteristic by omitting that the Project enables Tesoro's intended transition to process discounted, advantaged crudes at the Refinery. The DEIR's statements concluding that the Project will not impact the types of crudes used at the refinery are defied by the overwhelming evidence found in oil industry literature, investor reports, expert reports, and permitting documents, as discussed above and in May's Technical Report. That evidence shows that the Project will enable Tesoro to process advantaged crudes, including Bakken crude oil and tar sands, at the Refinery. The Project describes precisely the kinds of physical changes and operational shifts required to effect a shift in the types of crudes stored, delivered, processed, and refined there.<sup>58</sup> Omission of the changes in crude slate prevents the public from ascertaining the nature and general magnitude of environmental impacts.<sup>59</sup> The Project Description's use of a "truncated project concept" violates CEQA and mandates the conclusion that the lead agency has not proceeded in a manner required by law.

Because the DEIR relies on an inadequate project description, its examination of significant impacts associated with modifications that will allow the Refinery to process heavier crude is also untenable. The SCAQMD may not proceed with the Project approval based on the

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DEIR because it omits a significant component concerning crude slate, which has severe environmental and safety impacts. The DEIR's analysis of such significant environmental impacts demands further environmental review to determine what impacts may result from changes in crude quality at the Refinery. The planned crude slate modification is an integral part of the integration Project, and must be evaluated in the DEIR.

Moreover, the failure to disclose the type and chemical composition of the new crude oils and their resultant potential impacts is a "threshold issue" and "fundamental defect" in environmental review that violates CEQA.<sup>60</sup> Consequently, it is simply impossible for the DEIR to provide any accurate estimation of impacts. At a minimum, the DEIR should establish how the Project will affect the scope and degree of the Refinery's use of Bakken and tar sands crude and evaluate resulting impacts.<sup>61</sup> Until such adequate disclosure occurs, the Project Description is inaccurate, incomplete and renders the analysis of significant environmental impacts inherently unreliable.<sup>62</sup>

<sup>58</sup> *Id.*; see also Neg. Dec., at 1-1 ("The two new tanks are proposed to be permitted to store light and heavy crude oils of varying vapor pressures up to 11 pounds per square inch (psi) . . . .")

<sup>59</sup> See CEQA Guidelines, §15124 (requirements of an EIR).

<sup>60</sup> See *Richmond*, 184 Cal. App. 4th 70.

<sup>61</sup> *Id.*

<sup>62</sup> *San Joaquin Raptor/Wildlife Rescue Center*, 27 Cal.App.4th at 722 (the failure to include relevant information relating to a project's components precludes informed decision making, thwarting the goals of the EIR).

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### Response G1-86.16

The proposed project is not designed to, and will not in fact, facilitate a switch to a different blend of crude oils. In addition, as explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing a blend of various crude oils and will continue to do so with or without the proposed project. The proposed project is not designed to, and will not in fact, facilitate a change in the slate of crude oils purchased by the Refinery or the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow the processing of a slightly heavier crude oil blend.

Response G1-86.10 explains in detail that the proposed project does not include any modifications that would allow a change the crude oil blend processed by the Refinery, except as described in Section 2.5.4 of the DEIR.

As explained in Master Response 4, the Refinery processes a crude oil blend that is designed to fit within the operating constraints of the Refinery. The DEIR acknowledges that there is a permit description change that would allow the Refinery to process 6,000 bbl/day of additional crude oil capacity, the impacts of which were fully analyzed. The conclusions reached in the comment are not supported by facts.

**Comment G1-86.17**

**2. The Project Description is deficient because it fails to properly identify the size and capacity of the refinery.**

The Project Description is further inadequate because it presents contradictory information relating to the total crude oil capacity of the refinery. The refinery's size and capacity are basic and fundamental characteristics, and the contradictory information renders the Project Description and analysis of its significant impacts inadequate under CEQA.

An EIR is inadequate and misleading if its Project Description contains information that considerably differs from data reported under oath in an SEC Annual Report.<sup>63</sup> According to the Project Description, "[t]he total crude oil rate capacity for the Los Angeles Refinery is 363,000 bbl/day."<sup>64</sup> Tesoro's 2015 Annual Report, however, indicates that the Los Angeles Refinery's total crude oil capacity is 380,000 bbl/day.<sup>65</sup> The crude oil capacity discrepancy between that reported in the DEIR and Tesoro's SEC representations amounts to a considerable difference of 17,000 bbl/day, which has vast implications for the environment and community health and safety.

The DEIR's failure to account for the 17,000 bbl/day difference in crude oil capacity renders the Project Description inadequate for several reasons. The Project Description states that the refinery's crude oil capacity will increase by 6,000 bbl/day, or two percent, as a result of the Project.<sup>66</sup> Based on the inconsistent and scant data, it is left unknown whether this increase is on top of the 17,000 bbl/day increase reflected by Tesoro's 2015 Annual Report. If so, the Project Description fails to disclose a total crude oil capacity increase of 23,000 bbl/day – *three times* the amount identified in the DEIR as the crude oil capacity increase.

The unstated 17,000 bbl/day by itself represents a major increase of five percent in crude oil capacity. Oil refinery capacity is generally described in terms of the amount of crude oil processed in distillation units at the refinery's front-end. The refinery takes crude oil inputs, and separates its components in the distillation units. These components then undergo additional processing in cracking and coker units. Portions are alkylated, reformed, blended, and in the case of high-sulfur portions, hydrotreated. The DEIR does not identify the nature of the inputs—crude oil or other intermediate products—that compose the additional 17,000 bbl/day. Thus, it is impossible to determine which processes the inputs will have to undergo, and, more importantly, the environmental impacts resulting from such capacity increase.

The DEIR's failure to properly identify the true size and nature of the refinery not only renders the Project Description inadequate under CEQA, but also raises grave concerns as to the Project's significant and cumulative impacts. Because the DEIR contains unstable and shifting descriptions of the project, public participation is stultified.<sup>67</sup> "By giving such conflicting signals to decision makers and the public about the nature and scope of the activity being proposed, the Project description is fundamentally inadequate and misleading."<sup>68</sup> The DEIR therefore cannot proceed until the basic facts of refinery size are identified.

<sup>63</sup> See *Richmond*, 184 Cal.App. 4th at 83-84.

<sup>64</sup> DEIR, at 2-17.

<sup>65</sup> Tesoro Corporation, Annual Report, 5 (Form 10-K) (Feb. 25, 2016); see also *Los Angeles Refinery Fact Sheet*, Tesoro, <https://tsocorpsite.files.wordpress.com/2016/04/tesoro-los-angeles-fact-sheet.pdf>.

<sup>66</sup> DEIR, at 2-2.

<sup>67</sup> *San Joaquin Raptor Rescue Ctr v. County of Merced*, 149 Cal.App. 4th 645, 674 (Cal.App. 2007) (citing *County of Inyo v. City of Los Angeles*, 71 Cal.App.3d 185, 192 (Cal.App. 1977)).

<sup>68</sup> *Richmond*, 184 Cal.App. 4th at 84 (citing *San Joaquin Raptor Rescue Ctr*, 149 Cal.App. 4th at 655-656).

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cont'd.

**Response G1-86.17**

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.21 and other previous comments. The issues raised in the comment are addressed in detail in Response G1-81.21. Master Response 5 and Responses G1-78.142, G1-78.187, and G1-78.208 describe in detail that the rated capacity of the Refinery is based on crude oil capacities actually

achieved by the Refinery in the past, rather than any increase resulting from the proposed project. Master Response 6 describes the potential crude oil capacity increase of 6,000 bbl/day that was appropriately evaluated in the DEIR.

**Comment G1-86.18**

**3. The Project Description is deficient because it fails to disclose the underlying reason for the FCCU shutdown.**

The Project Description is inadequate because it fails to disclose the full scope of the Project's nature and objectives, such as compliance with preexisting binding commitments arising out of the government's approval of the Wilmington/Carson facility merger. The DEIR characterizes the Project, in part, as a pollution-reducing initiative that will allow for the retiring of the dirty, outdated, Wilmington FCCU. The stated purpose of the FCCU is pretextual, however, and the DEIR must be revised to disclose an accurate purpose for the FCCU shutdown.

On May 17, 2014, the California Attorney General's office announced its approval of Tesoro's acquisition of BP's Carson refinery. This approval came as a result of a nine-month investigation in which the Attorney General's office, along with other State and Federal agencies, reviewed the possible impacts of the merger. Two of the chief barriers impeding the merger were antitrust concerns, and the potential environmental impacts that the merger could cause.<sup>69</sup> In order to address these concerns, Tesoro entered into a "binding commitment" to shut down the Wilmington and Carson FCCUs, and replace them with a single DDU.<sup>70</sup> The Attorney General approved the merger subject to this condition. Hence, the shutdown of the Wilmington FCCU has a threshold purpose—compliance with the terms of the merger approval.

The Project Description dedicates a section to reciting the Attorney General's approval letter, yet it curiously omits mention on the requirements on which the merger approval was conditioned.<sup>71</sup> Instead, the DEIR describes Project's purpose as "more fully integrat[ing]" the Carson and Wilmington Operations, increasing efficiency through "process modifications that [will] enable shutting down the [Wilmington FCCU]."<sup>72</sup> Such a description of the Project is not only inadequate, but is vastly deceptive.

The DEIR's willful omission of Tesoro's "binding commitment" to shut down the FCCU obscures the Project's purposes, and renders the DEIR inadequate under CEQA.

<sup>69</sup> AG Letter to Tesoro, CA DOJ, *available at* [http://oag.ca.gov/system/files/attachments/press\\_releases/AG%20Letter%20to%20CEC%20%28Tesoro%29.pdf?](http://oag.ca.gov/system/files/attachments/press_releases/AG%20Letter%20to%20CEC%20%28Tesoro%29.pdf?)

<sup>70</sup> *Id.* at 2.

<sup>71</sup> DEIR, at 2-1.

<sup>72</sup> DEIR, at 2-1, 2-2.

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**Response G1-86.18**

The shutdown of the FCCU was not a condition of the acquisition of the BP Carson Refinery by Tesoro. See Master Response 13 and Responses G1-86.9 above and G1-81.92 that respond to the comment further.

**Comment G1-86.19**

**4. The Project Description is also deficient because it fails to disclose the full extent and nature of the Project’s unprecedented tanks expansion.**

The Project Description describes the construction of six new tanks at the Carson Crude Terminal with 500,000 bbls capacity, and replacing two existing 80,000 bbls crude oil tanks at the Wilmington Operations with two new 300,000 bbls tanks. According to the DEIR, the Project’s massive tank expansion will “[i]mprov[e] efficiency of water-borne crude oil receipt and marine vessel unloading[.]” and “will reduce vessel emissions at the Port of Long Beach.”<sup>73</sup> The DEIR claims that “[t]he tanks only affect the ability to offload a marine vessel in less time.”<sup>74</sup> Evidence suggests otherwise, however. May’s technical analysis points to a discrepancy between the DEIR’s narrow conclusion concerning the purpose of the tank expansion Project component, and the significant increase in new throughput capability enabled by the expansion. Evidence indicates that the tank expansion will not only enable importing of large volumes of “advantaged crudes,” but allow large scale exports, information which has been improperly withheld from the DEIR.

As examined in the May Technical Report, the Project tank expansion is extraordinary, adding not only 3.4 million barrels’ volume of crude oil storage, but also increasing throughput by almost 420,000 barrels/day.<sup>75</sup> The Report explains that, “[b]y comparison, the existing Tesoro LA refinery complex can process crude oil of at least 363,000 bbls/day, and in addition already has storage to accommodate its current daily crude throughput needs, so the new tanks would add new throughput capability greater than the entire existing refinery currently processes.”<sup>76</sup>

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**Response G1-86.19**

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.39 through G1-81.51. The issues raised in the comment are responded to in detail in Responses G1-86.14 above and G1-81.39 through G1-81.51.

**Comment G1-86.20**

Further, the new tanks “would accommodate the entire daily shipment from the Tesoro Savage terminal[.]”<sup>77</sup> meaning that the tank expansion will enable import of advantaged crude.

Moreover, “[s]ince the Tesoro Savage Vancouver facility is slated at 360,000 bpd . . . , the increased throughput permitted for the new tanks at about 420,000 bpd Tesoro could sell the excess crude to other LA refineries, or export it[.]”<sup>78</sup> This suggests that “[t]he Tesoro Project could open up *all* the Los Angeles refineries to these crude oils, and could become Tesoro’s export terminal.”<sup>79</sup> Tesoro’s own evidence shows that it has stated plans to open up its South Coast assets to third party transfers.<sup>80</sup> For example, the Refinery could sell Bakken or Canadian crude oil to other Los Angeles refineries, and even open up *all* the Los Angeles refineries to these crude oils, thus becoming Tesoro’s export hub.<sup>81</sup> Accordingly, the tank expansion has a much broader function and purpose than the innocuous one disclosed by the DEIR.

The Project Description must disclose the import and export capabilities allowed by the tank expansion, so that the significant impacts of such functions can be examined. Unless and until it does so, the DEIR will remain fundamentally flawed.

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<sup>73</sup> DEIR, at 2-39.

<sup>74</sup> DEIR, at 2-39.

<sup>75</sup> May Technical Report, § III(E).

<sup>76</sup> May Technical Report, § III(E).

<sup>77</sup> May Technical Report, § III(F).

<sup>78</sup> May Technical Report, § III(F).

<sup>79</sup> May Technical Report, § III(F).

<sup>80</sup> May Technical Report, § III(F).

<sup>81</sup> May Technical Report, § III(F).

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No facilities exist or are proposed to load crude oil onto marine vessels from the storage tanks at the Carson Crude Terminal. In general, the Refinery imports crude oil and produces transportation fuels such as gasoline, diesel, and jet fuel for consumption in the U.S. Marine Terminal 1 is connected to the Carson Crude Terminal via pipeline. Furthermore, Marine Terminal 1, the Refinery's large marine vessel unloading terminal, has no capabilities to load crude oil onto marine vessels. In order to load crude oil onto marine vessels, SCAQMD permits would be required to allow the installation of a marine vapor recovery system meeting the requirements of SCAQMD Rule 1142 and BACT. No such modifications are included in the proposed project to enable crude oil loading at Marine Terminal 1. Therefore, the capabilities for exporting crude oil from the marine terminals will not change with the proposed project.

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.52. The comment combines unrelated statements regarding Tesoro Logistics business strategy and the Vancouver Energy Project and concludes inaccurately that the new and replacement crude oil storage tanks will be used for third party business and export. The issues raised in the comment are responded to in detail in Response G1-81.52. Master Response 6 provides details explaining the size of the new and replacement storage tanks.

The comment speculates, without any supporting evidence, that the new and replacement storage tanks could be used to sell crude oils transferred from the Vancouver Energy Project to other Los Angeles refineries. As described in Master Response 8, the Final EIS has not yet been issued for the Vancouver Energy Project, nor has the project been approved. Additionally, as described in Section 4.1.2.5 of the DEIR, the Vancouver Energy Project is wholly independent from the proposed project and is undergoing separate environmental review by the Washington State EFSEC.

As further described below, it is not reasonable or foreseeable to assume that the proposed project's new and replacement storage tanks will be used to sell crude oils transferred from the Vancouver Energy Project to other Los Angeles refineries, as claimed in the comment. As described in Response G1-78.139, the Vancouver Energy Project is proposed to transport crude oil to any West Coast refinery, not just Tesoro refineries and not just the Los Angeles Refinery. As explained in Master Response 8, the source of the crude oil that is transported through the Vancouver Energy Project will be determined by the customers of that project. The Vancouver Energy Project is designed to transport the crude oils that customers purchase: the Vancouver Energy Project will not source the crude oil. Therefore, any crude oil transported from the Vancouver Energy Project by other Los Angeles refineries (at some future date, after the Vancouver Energy Project is permitted and constructed) would be transported directly to the refinery that purchased the crude oil. Using the proposed project's new and replacement storage tanks to distribute crude oil transported from the Vancouver Energy Project would involve double-handling the material, which would be inefficient and costly. The comment provided no evidence that the new and replacement storage tanks would be used in the manner described and it is not reasonable or foreseeable to assume that this would occur.

**Comment G1-86.21**

**IV. THE PROJECT IS PIECEMEALED.**

**A. The DEIR must include environmental review of the Vancouver Energy Terminal (“Tesoro Savage Terminal”) Project.**

The DEIR employs “piecemeal” environmental review by failing to consider the combined effects of the proposed Tesoro Savage Terminal Project with the Los Angeles Refinery (“LARIC”) Project. Specifically, the DEIR excludes any environmental impact analysis for the VET in its assessment of the LARIC even though the two projects are interdependent. CEQA prohibits this type of piecemealed review, requiring that an EIR describe the entirety of a project, including any reasonably foreseeable future actions that are part of it.<sup>82</sup> Illegally “chopping a large project into many little ones” creates a narrow view of a project and a “fallacy of division . . . that is, overlooking a project’s cumulative impact by separately focusing on isolated parts of the whole.”<sup>83</sup> Certainly, any permit-by-permit review, where those permits constitute a larger project, forecloses this essential focus on cumulative impacts, and also, impacts to already overburdened and vulnerable populations.

In *Laurel Heights I*, the Supreme Court established the minimal treatment for piecemealing: while an EIR need not include speculation about future environmental consequences of a project,

“the EIR must include an analysis of the environmental effects of future expansion or other action if: (1) it is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effect.”<sup>84</sup>

Under this standard, “the facts of each case will determine whether and to what extent an EIR must analyze future expansion or other action.”<sup>85</sup> A project proponent must analyze future expansion and other such action in an EIR if there is “telling evidence” that the agency has either made decisions or formulated reasonably definite proposals as to such future activities.<sup>86</sup> Further, there must be discussion “in at least general terms” of the future activity, even if the project is contingent on uncertain occurrences.<sup>87</sup>

SCAQMD’s piecemealed environmental review of the VET and LARIC Projects is supported by the facts of *Laurel Heights I* and *San Joaquin Raptor*.<sup>88</sup> In *Laurel Heights I*, the Supreme Court set aside an EIR for piecemealing the second phase of a multi-phased project. In that case, the University of California, San Francisco (“UCSF”) proposed a project to expand into a new building, of which only about one-third was initially available.<sup>89</sup> Because UCSF’s EIR failed to analyze the impacts of the project related to the remaining two-thirds of the building when its use was wholly foreseeable at the project’s inception, the Court rejected the EIR.<sup>90</sup> In *San Joaquin Raptor*, the court similarly rejected an EIR for a development project because it failed to discuss the impacts associated with a sewer system expansion, even though the project’s developer recognized the “necessity” of the sewer expansion for the overall project to proceed.<sup>91</sup>

In contrast, in *Richmond* and *Berkeley Jets*, the courts found that the EIRs under examination were not piecemealed, despite their exclusions of related projects.<sup>92</sup> In *Richmond*, the court of appeal found that an EIR for a refinery expansion project which did not fully analyze the potentially significant cumulative impact of a hydrogen pipeline project was not piecemealed, and found it to be separate from the overall expansion project.<sup>93</sup> The court reasoned that the expansion and pipeline projects were independent, performing entirely different functions.<sup>94</sup> The court focused on the stated project objectives in making its decision: while the

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expansion project's objective was to access a wider range of crude oil and other feedstocks, the pipeline project's objective was to transport excess hydrogen to other hydrogen consumers in the Bay Area.<sup>95</sup> The court ultimately found that because the expansion project did not "depend on" the pipeline project, the project was not piecemealed.<sup>96</sup> Similarly, the court in *Berkeley Jets* rejected an argument that an airport development plan should have included long-range plans for potential runway expansions because these future expansion plans were neither crucial elements nor foreseeable consequences of the development plan.<sup>97</sup>

As in *Laurel Heights I* and *San Joaquin Raptor*, where both EIRs were rejected because of their respective failures to analyze impacts of foreseeable or necessary aspects of their projects, the LARIC Project DEIR should be rejected because the VET is both a foreseeable and necessary component for the LARIC's success. One of the LARIC's most notable objectives is to "[i]mprove [the] efficiency of water-borne crude oil receipt and marine vessel unloading . . . by constructing six new 500,000 barrel tanks at the Carson Crude Terminal and replacing two existing 80,000 barrel crude oil tanks at the Wilmington Operations with two 300,000 barrel tanks."<sup>98</sup> In other words, it aims to add about 3.4 million barrels of crude oil storage, and allows about 420,000 BPD of increased throughput.<sup>99</sup> With its current feedstocks dwindling, it is foreseeable, if not certain, that this increase in storage and processing capacity will depend upon shipments from the Tesoro Savage Terminal.

As proposed, the Tesoro Savage Terminal Project entails the creation of a crude-by-rail to oil tanker terminal at the Port of Vancouver, Washington, which would "receive an average of 360,000 barrels of crude oil per day by rail . . . then load the oil onto marine vessels for transport" to allow increased importation of cost-advantaged North American crudes to various West Coast refineries.<sup>100</sup> The Tesoro Savage Terminal Project's DEIS notes that it is intended to serve the growing demand of West Coast refineries for mid-continent crude oil amidst the declining availability of the more expensive Californian and Alaskan oils that have historically been used by the LARIC.<sup>101</sup>

The Tesoro Savage Terminal Project's goal is consistent with Tesoro's statements to its investors, which laud the Tesoro Savage Terminal as an integral part of its plan to bring cost-advantaged crudes to its West Coast refineries.<sup>102</sup> While these crudes are more affordable, however, they come at a price: primarily from North Dakota, Montana, and Canada, these crudes are of lower quality than the crudes the LARIC currently processes, and thus, may result in

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## APPENDIX G1: RESPONSE TO COMMENTS

significant environmental impacts that necessitate assessment.<sup>103</sup> Without increased supply from the Tesoro Savage Terminal of affordable alternative crudes, it is not likely that the LARIC would attempt to expand its capacity or update its equipment to process dirtier crude – however, it is, and has been, doing just that.<sup>104</sup>

Thus, in contrast to the holdings in *Richmond* and *Berkeley Jets*, where the respective EIRs were not found to be piecemealed, here, the Tesoro Savage Terminal is a crucial functional element of the LARIC Project. The LARIC’s dependence upon the Tesoro Savage Terminal is even admitted in its investor reports, which state that its purpose is to remain competitive by increasing its processing of cost-advantaged crudes from the North American mid-continent through use of the Tesoro Savage Terminal.<sup>105</sup> The May Technical Report also includes many other places where the LARIC relies on the Tesoro Savage Terminal.<sup>106</sup>

In order for Tesoro to implement its “advantaged crude” strategy at the LARIC, approval of the Tesoro Savage Terminal Project is necessary, because the Tesoro Savage Terminal Project enables the importation of fracked Bakken oils and heavy Canadian tar sands. The LARIC’s profitability, success, and overall objectives hinge on the reliable and abundant supply of crude oil that will come from the Tesoro Savage Terminal. These projects are interrelated, wholly anticipate each other in order to achieve the company’s “advantaged crude” objective, and together create significant impacts on the environment. Together, the projects satisfy the two-part *Laurel Heights I* test, and are far removed from court decisions in *Richmond* and *Berkeley Jets* that did not find piecemealed projects on account of insufficient showings of “necessity.”

The DEIR errs in asserting that it does not need to include an impact analysis for the Tesoro Savage Terminal Project. The Project proponent contends that because the Terminal Savage Project is not approved, it is under independent review by the state of Washington, it will provide crude to other refineries, neither project needs the other to proceed, and the LAR has limited ability to process light Bakken crude, the Terminal Savage Project and LARIC Projects are independent of one another.<sup>107</sup> This reasoning is incorrect.<sup>108</sup>

First, courts have determined, for example, that “when a particular type of retail business planned for a proposed project will have unique or additional impacts, then disclosure of the type of business is necessary in order to accurately recognize and analyze the environmental effects that will result from the proposed project.”<sup>109</sup> Here, it is clear that rail and marine vessel transport of Bakken crude and Canadian tar sands will pose “unique or additional adverse effects” that reach beyond the effects of shipping other types of crudes, including heightened risks of combustion, corrosion, and environmental degradation.<sup>110</sup> Second, under CEQA, a single project is allowed to undergo separate agency approvals while still maintaining its status as a single project.<sup>111</sup> Thus, it should not matter that the Tesoro Savage Terminal Project will undergo independent approval by the state of Washington.

In an outlier case, *Citizens for East Shore Parks*, the court cited no authority to support its holding, and instead based its decision on an unfounded interpretation that the scope of CEQA review is limited to the parts of a project subject to lead agency approval. This case does not override or negate the clear relationship of the Project to the Tesoro Savage Terminal Project. Local supplies of crude oils are declining. How, and why, would the LARIC Project even occur were it not inextricably linked with a plan to increase supplies to the area? Those supplies must come from a source, and with the Project’s marine receipt expansion, those supplies will come from the Tesoro Savage Terminal.<sup>112</sup> The need for the Tesoro Savage Terminal Project was, therefore, wholly foreseeable at the inception of this Project and necessary for the LAR’s objectives.<sup>113</sup> Because the Tesoro Savage Terminal and LARIC Projects together implicate greater and significant environmental impacts from transporting and refining lower quality oil feedstocks at the LAR, the two projects are piecemealed, and thus, the DEIR is unacceptable under CEQA guidelines.

G1-86.21  
cont’d.

G1-86.21  
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## APPENDIX G1: RESPONSE TO COMMENTS

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<sup>82</sup> CEQA Guidelines, § 15378(a).

<sup>2</sup> See *Bozung v. Local Agency Formation Commission* (1975) 13 Cal.3d 263, 283-84.

<sup>84</sup> *Laurel Heights Improvement Association v. Regents of University of California* (1988) 47 Cal.3d 376, 395-96 (*Laurel Heights I*).

<sup>85</sup> *Id.* at 396.

<sup>86</sup> *Id.* at 397.

<sup>87</sup> *Id.* at 398.

<sup>88</sup> See *Laurel Heights I*, 47 Cal.3d 376; see also *San Joaquin Raptor*, 27 Cal.App.4th at 734.

<sup>89</sup> *Laurel Heights I*, 47 Cal.3d at 393.

<sup>90</sup> *Id.* at 397.

<sup>91</sup> See *San Joaquin Raptor*, 27 Cal.App.4th at 734.

<sup>92</sup> See *Richmond*, 184 Cal.App.4th 70; see also *Berkeley Keep Jets Over the Bay Comm. et. al. v. Board of Port Cnrs.* (2010) 91 Cal.App.4th 1344, 1361 (*Berkeley Jets*).

<sup>93</sup> See *Richmond*, 184 Cal.App.4th at 97.

<sup>94</sup> *Id.* at 101.

<sup>95</sup> *Id.*

<sup>96</sup> *Id.*

<sup>97</sup> See *Berkeley Jets*, 91 Cal.App.4th at 1362.

<sup>98</sup> DEIR, at 1-6, 1-7

<sup>99</sup> May Technical Report, § III(E).

<sup>100</sup> Tesoro Savage DEIS, Executive Summary (ES-2), available at [http://www.efsec.wa.gov/Tesoro%20Savage/SEPA%20-%20DEIS/DEIS%20Chapters/DEIS%20Ch%200b%20Exec\\_Summary.pdf](http://www.efsec.wa.gov/Tesoro%20Savage/SEPA%20-%20DEIS/DEIS%20Chapters/DEIS%20Ch%200b%20Exec_Summary.pdf)

<sup>101</sup> DEIR, McGovern Report at F-14.

<sup>102</sup> Tesoro Presentations webpage: Morgan Stanley Corporate Access Day, 5/12/16, Slideshow entitled: *Driven to Create Value, Morgan Stanley Refining Corporate Access Day, May 2016*, Slides 13 & 15, available at <http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations>.

<sup>103</sup> May Technical Report, § II(D).

<sup>104</sup> May Technical Report, §§ III(D-E).

<sup>105</sup> May Technical Report, §§ II(B).

<sup>106</sup> May Technical Report, §§ II(C).

<sup>107</sup> DEIR, at 4-5.

<sup>108</sup> *But compare Citizens for East Shore Parks v. California State Lands Commission* (2011) 202 Cal.App.4th 549 (The court upheld the certification of an EIR for a Chevron marine terminal, even though the EIR considered only the effects of the marine terminal while excluding the effects of the adjacent Chevron refinery) (*Citizens for East Shore Parks*).

<sup>109</sup> See *Bakersfield Citizens for Local Control v. City of Bakersfield* (2004) 124 Cal.App.4th 1184, 1213 (*Bakersfield*) (Due to the unique effects of 24-hour supercenters on urban development, the EIR was required to disclose information about its expected retail tenants); see also *American Canyon Community United for Responsible Growth v. City of American Canyon* (2006) 145 Cal.App.4th 1062, 1075 (same scenario as in *Bakersfield*).

<sup>110</sup> May Technical Report, § IV(A)(3).

<sup>111</sup> See *Orinda Association v. Board of Supervisors*, 182 Cal. App. 3d 1145, 1172 (1986) (The construction of new buildings and the demolition of older buildings were all part of the same development project, despite separate agency approvals); see also Cal. Code Regs., tit. 14, §15378(c).

<sup>112</sup> May Technical Report, § II(C).

<sup>113</sup> See Issuance of DEIS for Vancouver Energy Project in November 24, 2015, available at [http://www.efsec.wa.gov/Tesoro%20Savage/SEPA%20-%20DEIS/DEIS%20Chapters/20151124DEIS\\_CvtLtr.pdf](http://www.efsec.wa.gov/Tesoro%20Savage/SEPA%20-%20DEIS/DEIS%20Chapters/20151124DEIS_CvtLtr.pdf).

### Response G1-86.21

As explained in Section 4.1.2.5 of the DEIR and Master Response 8, the Vancouver Energy Project is wholly independent from the proposed project and is undergoing separate environmental review by the Washington State EFSEC. As such, CEQA does not apply to the Vancouver Energy Project.<sup>307</sup> Moreover, the proposed project does not depend on the Vancouver Energy Project, nor does Vancouver Energy Project depend on the proposed project. Each project has separate independent purpose.

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<sup>307</sup> PRC Section 21080(b)(4).

The Vancouver Energy Project is proposed to transport crude oil to any West Coast refinery, not just Tesoro refineries and not just the Los Angeles Refinery. As explained in Master Response 8, the source of the crude oil that is transported through the Vancouver Energy Project will be determined by the customers of that project. The Vancouver Energy Project is designed to transport the crude oils that customers purchase: the project will not source the crude oil.

The comment summarizes case law on piecemealing that is not applicable to the proposed project, because the Vancouver Energy Project is independent from the proposed project. The comment provides no evidence to support claims of piecemealing. Further, the comment does not explain why the two projects are related. The Vancouver Energy Project would not require modification to the crude oil storage tanks at the Refinery in order to deliver crude oil. As previously described, the Refinery can already receive crude oil via marine vessel from any source. Since the majority of crude oil processed by the Refinery is delivered via marine vessel, all marine deliveries will benefit from the new and replacement storage tanks.

The comment cites the McGovern Report (see Appendix F of the DEIR) as the source for its claim of, “. . . the declining availability of the more expensive Californian and Alaskan oils that have historically been used by LARIC.” While the McGovern Report notes the declining production from Alaska and California oil fields, it does not opine about the relative price of Alaska and California crude oil. As further explained below, California crude oil is competitively priced with other crude oils such that it is attractive for local refiners to purchase. The reference to LARIC in the comment is not appropriate. It should be noted that LARIC is the acronym that is used for the “Los Angeles Refinery Integration and Compliance” project, or the proposed project. It is not the acronym for the Los Angeles Refinery. While the Refinery has historically processed crude oil, LARIC has not, nor is the proposed project related to processing any particular type of crude oil.

Responses G1-81.59, G1-78.178, and G1-78.186 address Alaska and California crude oil production in detail. Production of Alaska crude oil continues to decline. However, California crude oil production has leveled and remains steady in recent years. As described in Master Response 4, any changes in the sources of crude oil processed by the Refinery would occur with or without the proposed project.

California crude oil is competitively priced with other crude oils such that it is attractive for local refiners to purchase (see Figure 78.178-2 and Declaration of Douglas Miller<sup>308</sup>). Therefore, the claim in the comment that California crude oil is "more expensive" is inaccurate and unsupported by evidence. As stated in the Declaration of Douglas Miller, California crude oil is delivered to the Refinery via pipeline, and is a relatively small portion of the total crude oil delivery to the Refinery. While California crude oil continues to be an available and attractive crude oil supply source for the Refinery, the majority of crude oil is delivered to the Refinery via marine vessel from other sources.

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<sup>308</sup> See Attachment C, Declaration of Douglas Miller, Vice President, California Value Chain Strategy of Tesoro Companies, Inc.

The comment includes the misleading statement that, “Without increased supply from the Tesoro Savage Terminal of affordable alternative crudes, it is not likely that the LARIC would attempt to expand its capacity or update its equipment to process dirtier crude . . .”, and that the proposed project would allow “about 420,000 bbl/day of increased throughput”. Master Responses 6 and 7 describe in detail that the proposed project will not increase the crude oil processing capacity of the Refinery beyond the 6,000 bbl/day increase associated with the permit description modification of the DCU H-100 heater described in the DEIR. As described in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the proposed project is not designed to facilitate a change in the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow processing of a slightly heavier crude oil blend.

The comment claims inaccurately that, "The LARIC's profitability, success, and overall objectives hinge on the reliable and abundant supply of crude oil that will come from the Tesoro Savage Terminal." There is no evidence to support this statement. As explained above, the proposed project does not depend on the Vancouver Energy Project, nor does Vancouver Energy Project depend on the proposed project. Each project has separate independent purpose. The proposed project's objectives and profitability are based on improving process efficiency through integration (see page 2-3 of the DEIR). The proposed project objectives are listed in Section 2.2 of the DEIR.

The comment references Comment Letter 81, raises the same issues as Comments G1-81.22 through G1-81.32. The issues raised in the comments are responded to in detail in Responses G1-81.22 through G1-81.32.

### Comment G1-86.22

**B. The DEIR should also include environmental review of other interrelated projects.**

In addition to analyzing the environmental impacts associated with the VET Project, the DEIR must also evaluate the environmental impacts associated with the following interrelated projects in order to provide an accurate environmental impact analysis:

- Los Angeles International Airport (“LAX”) Pipeline and Storage Tanks: Despite Tesoro Logistics’ 2015 purchase of “crude oil and refined product storage and [a sixteen mile] pipeline . . . from Tesoro, which includes “97 . . . storage tanks . . . with a capacity of 6.6

G1-86.22

## APPENDIX G1: RESPONSE TO COMMENTS

million barrels” to store and provide fuels for LAX,<sup>114</sup> the DEIR fails to investigate the impacts that the LAR Project may have on the LAX Project. These impacts must be evaluated.

- Expansion of the Pipeline at the Marine Terminal to the Storage Tanks: The DEIR fails to analyze the impacts related to its plan to expand its pipeline at the marine terminal from 12 to 42 inches, as was proposed in its 2014 Neg. Dec.<sup>115</sup>
- Tesoro Logistics Operations: The DEIR must also evaluate the cumulative impacts associated with other Tesoro Logistics operations, since Tesoro has identified future plans of synergism between the LARIC and Tesoro Logistics. In the past, Tesoro has sold many of its facilities to Tesoro Logistics for “gathering, moving, storing, and distributing petroleum inputs and products.”<sup>116</sup> The environmental impacts associated with any modifications that the LARIC Project will impose on the relationship between the two businesses must be evaluated.
- Offsite Hydrogen Baseline Sales and Sales of Hydrogen: The DEIR should include an evaluation of the baseline of hydrogen purchased from offsite companies and changes in sales of hydrogen from offsite companies, such as Air Products, to establish whether the Project will increase overall hydrogen use at the refinery.<sup>117</sup>
- San Pedro’s Butane Storage Tanks: Because the LARIC Project will require more LPG to be transported by rail, the DEIR must address the environmental impacts associated with San Pedro’s butane storage tanks, including details about the parties using the San Pedro products, the volume of the products transported, the methods of transportation, and explosion risks. While Tesoro asserts that it does not store butane at the San Pedro site, it has noted that it sells LPG products to third parties in the area.<sup>118</sup> The impacts of these sales must also be assessed.

By failing to analyze these projects in relation to this project, the DEIR has piecemealed the Project in violation of CEQA.

<sup>114</sup> May Technical Report, § VI(2).

<sup>115</sup> May Technical Report, § V(C).

<sup>116</sup> May Technical Report, § VI(2).

<sup>117</sup> May Technical Report, § VI(2).

<sup>118</sup> May Technical Report, § VI(2).

G1-86.22  
cont’d.

### Response G1-86.22

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.96 and G1-81.89 through G1-81.91. The issues raised in the comments are responded to in detail in Responses G1-81.96 and G1-81.89 through G1-81.91.

### Comment G1-86.23

#### V. THE DEIR FAILS TO ANALYZE A REASONABLE RANGE OF PROJECT ALTERNATIVES.

The DEIR fails to consider a reasonable range of alternatives. It distorts the “No Project” alternative and fails to consider alternatives that would meet project objectives while mitigating adverse environmental impacts. CEQA includes a substantive mandate that public agencies not

approve projects with significant environmental effects if “there are feasible alternatives or mitigation measures” that can substantially lessen or avoid those effects.<sup>119</sup>

<sup>119</sup> *Mountain Lion Foundation v. Fish and Game Commission* (1997) 16 Cal. 4th 105, 134.

G1-86.23

G1-86.23  
cont’d.

### Response G1-86.23

The comment does not provide support for its claims that the DEIR failed to consider a reasonable range of alternatives or that it failed to consider alternatives that would meet project objectives while mitigating one or more environmental impacts. Chapter 6 of the DEIR explains how SCAQMD identified its range of four alternatives (in addition to a No Project alternative) that would achieve most of the proposed project objectives (as the objectives of the proposed project are to further integrate the Tesoro Wilmington and Carson Operations). The comment's claim that the DEIR distorted the No Project alternative is explained in Response G1.86.26 below.

### Comment G1-86.24

The DEIR does not consider an alternative that makes only the changes necessary to achieve the “synergies [that] will benefit the environment by lowering greenhouse gases and emissions” as required by the settlement agreement with the Attorney General.<sup>120</sup> For example, significantly increasing tank throughput is not necessary to gain the benefits of more efficient marine vessel unloading.<sup>121</sup> Nonetheless, the DEIR project description includes an increase of 25.5 million bbl/year throughput in new tanks.<sup>122</sup>

G1-86.24

<sup>119</sup> *Mountain Lion Foundation v. Fish and Game Commission* (1997) 16 Cal. 4th 105, 134.

<sup>120</sup> Letter from Kamala Harris, Attorney General, to Robert Weisenmiller, CEC Chair, [https://oag.ca.gov/system/files/attachments/press\\_releases/AG%20Letter%20to%20CEC%20\(Tesoro\).pdf](https://oag.ca.gov/system/files/attachments/press_releases/AG%20Letter%20to%20CEC%20(Tesoro).pdf) (May 17, 2013).

<sup>121</sup> May Technical Report, § III(E).

<sup>122</sup> May Technical Report, § III(E).

### Response G1-86.24

The comment suggests that the DEIR should have considered an alternative that only furthers increasing synergies between the Wilmington and Carson sites to lower GHG emissions, to the exclusion of other articulated project goals. However, the DEIR established seven objectives for the proposed project, and CEQA requires consideration of alternatives “which would feasibly attain most of the basic objectives of the project.”<sup>309</sup> These objectives are listed in the DEIR on pages 2-3 to 2-4 in the Project Description chapter and again on pages 6-1 to 6-2 in the Project Alternatives chapter, and described in Response G1-81.121. Because the suggested alternative in the comment would only meet one or two objectives, the DEIR does not need to consider it. Moreover, the comment does not identify the impacts which the offered alternative would mitigate. SCAQMD appropriately analyzed project alternatives by describing “a range of reasonable alternatives to the project . . . which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project[.]”<sup>310</sup>

As described in Master Response 13, the comment incorrectly claims that the shutdown of the Wilmington Operations FCCU was a condition of approval for Tesoro's acquisition of the BP Carson Refinery and ARCO branded service stations, and therefore, the baseline for air quality

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<sup>309</sup> CEQA Guidelines, § 15126.6(a) (emphasis added); see also *Sierra Club v. County of Napa* (2004) 121 Cal.App.4th 1490, 1509 (An “EIR [i]s not required . . . to analyze the effects of an alternative that would not feasibly attain most of the basic objectives of the project.”)

<sup>310</sup> CEQA Guidelines, § 15126.6(a).

impacts should not include emissions from the Wilmington Operations FCCU. Consistent with applicable law, the District properly concluded that the baseline includes the existing operation of the Wilmington Operations FCCU. The Federal Trade Commission and the California Attorney General both reviewed Tesoro's proposed acquisition to ensure that the acquisition would not violate federal and state antitrust laws. After a nine-month review, on May 17, 2013, the agencies announced that they had resolved any potential antitrust concerns with the proposed acquisition.

During the antitrust review process, Tesoro submitted documents to the FTC and the California Attorney General stating that Tesoro intended to make certain modifications at the combined Refinery that would allow Tesoro to achieve specified “synergies” between the Wilmington and Carson Operations. Among other changes, Tesoro explained, Tesoro planned to replace some of the combined Refinery’s fluid catalytic cracking unit (“FCCU”) capacity with additional hydrotreater capacity.

In connection with her approval of the acquisition, the Attorney General entered into an agreement with Tesoro. In this agreement Tesoro agreed to maintain CARBOB capacity for three years, maintain the ARCO brand, and not eliminate jobs for a period of two years. Tesoro also agreed to provide an annual report on the actions taken to achieve the specified synergies, including actions designed to replace FCCU capacity with hydrotreater capacity.<sup>311</sup>

Thus, it is not accurate to say that the Attorney General required Tesoro to shut down the Wilmington Operations FCCU as a condition of approval. Rather, the Attorney General required Tesoro to provide an annual report on the implementation of Tesoro’s existing plans to modify the combined Refinery by, among other things, replacing FCCU capacity with hydrotreater capacity. Moreover, operation of the Wilmington Operations FCCU is part of the baseline environmental conditions and the proposed project enables the Wilmington Operations FCCU to be shutdown.

As explained in Section 4.2.2.2 and Table 4.2-4 of the DEIR and Master Response 13, emission reductions are appropriately credited to the proposed project. Further information about the purchase of the BP Carson Refinery by Tesoro can be found on Page 2-1 of the DEIR. Section 4.2.2.2 of the DEIR explains that the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project will result in local reductions in GHG emissions as discussed in Section 5.2 of the DEIR and as summarized in Table 5.2-8 (see page 5-26 of the DEIR).

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<sup>311</sup> See Attachment E, Kathleen Foote for Kamala Harris, letter to Robert Weisenmiller, May 17, 2013. In the letter, the Attorney General uses the term “distillate desulfurization unit” to refer to additional hydrotreating capacity. The letter notes that replacing FCCU capacity with “desulfurization” capacity will benefit the environment by reducing emissions and greenhouse gases.



Master Response 6 explains that the potential crude oil capacity increase of 6,000 bbl/day was appropriately evaluated in the DEIR and that the proposed tanks will reduce marine vessel emissions in the Port.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.39 through G1-81.51. The issues raised in the comments are addressed responded to in detail in Responses G1-81.39 through G1-81.51.

### Comment G1-86.25

Moreover, the DEIR does not include a crucial alternative that limits changes to the refinery's crude slate because DEIR project description fails to consider likely changes to the crude slate.<sup>123</sup> This has resulted in an "impermissibly truncated project description" causing a "severely distorted" range of alternatives.<sup>124</sup> Currently the DEIR claims no changes to the "crude operating envelope," however Canadian tar sands and fracked Bakken crude can be mixed to achieve a similar "operating envelope."<sup>125</sup> This will cause increased emissions of methane, benzene and toxics,<sup>126</sup> which can undo the emissions gains required by the settlement agreement. Limiting changes to the current baseline will address the true environmental impact caused by the likely switch to Canadian tar sands and fracked Bakken crude.

An alternative that includes explicit limitations to deviations from current crude baselines is feasible. In fact, the DEIR states that the modifications to the plants' operations will not affect the types of crude oil processed.<sup>127</sup> While this is misleading and modifications will allow changes to overall crude quality,<sup>128</sup> an alternative that explicitly limits deviations from current crude slate baselines does not interfere with the project's stated objectives.

G1-86.25

<sup>123</sup> May Technical Report, § III(C).

<sup>124</sup> See *County of Inyo v. City of Los Angeles* (1981) 124 Cal. App. 3d 1, 9.

<sup>125</sup> DEIR, at 4-2.

<sup>126</sup> May Technical Report, § IV.

<sup>127</sup> DEIR, at 4-2.

<sup>128</sup> Fox Neg. Dec. Report, at 12-13.

### Response G1-86.25

The comment states that the range of alternatives is also deficient because the project description does not recognize a changing crude oil slate. The Alternatives analysis in Chapter 6 of the DEIR analyzed a full range of alternatives. As explained in Master Response 4, the proposed project will not enable a change in the types of crude oils processed at the Refinery beyond what is occurring in the baseline. Accordingly, the DEIR does not need to analyze project alternatives that limited the Refinery to a particular crude oil slate.

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing a blend of various crude oils and the proposed project is not designed to facilitate a change in the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow processing of a slightly heavier crude oil blend. Master Response 4 also explains that sources of crude oils have and will continue to vary with or without the proposed project. Thus, analysis of the emissions impacts associated with increased use of any particular type of crude oil is not necessary as it is not a result of the proposed project. The comment has provided no evidence that the proposed project will allow changes to overall crude oil quality.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.37 and G1-81.53 through G1-81.67. The issues of various crude oil properties are addressed and responded to in detail in Responses G1-81.37 and G1-81.53 through G1-81.67.

It should be noted that the DEIR fully analyzed the maximum impacts associated with the new and replacement storage tanks. As explained in Response G1-78.157 the crude oil storage tanks and associated fugitive emissions were analyzed in the DEIR based on a worse-case hybrid analysis of crude oil properties currently and potentially processed at the Refinery, including Bakken and Canadian crude oil. Limiting the types of crude oils processed at the Refinery would not reduce any of the proposed project impacts that were found to be significant.

### Comment G1-86.26

Furthermore, the adverse impacts of the “No Project” alternative are distorted. The DEIR states that the “No Project” alternative “could be infeasible” because the refinery would be in violation of future federal Tier 3 gasoline requirements and local and state emissions requirements.<sup>129</sup> However, this implies that the proposed project is the only means of complying with these requirements, but the DEIR never states whether or not this is the case. CEQA guidelines do not always equate disapproval of a project with no development whatsoever. Instead, the EIR should “project[] what would reasonably be expected to occur in the foreseeable future if the project were not approved.”<sup>130</sup> Here, a reasonable expectation would be that Tesoro will make only the modifications needed to comply with federal, state and local emissions requirements. Including and describing this foreseeable outcome will inform decision-makers by outlining which components are actually needed to comply with emissions requirements.

G1-86.26

G1-86.26  
cont'd.

<sup>129</sup> DEIR, at 6-5.

<sup>130</sup> CEQA Guidelines, §15126.6(e)(2)

### Response G1-86.26

The No Project alternative assumed that the proposed project would not be carried out to any degree—no changes would be made at the Refinery—and thus none of the proposed objectives would be met. This is an appropriate description of the No Project alternative (see CEQA Guidelines § 15126.6(e)). The proposed project includes modifications to meet federal requirements, and the DEIR analyzed the impact of the No Project alternative and concluded that if the proposed project in its entirety were not carried out, the facility could be in violation of federal regulatory requirements unless it sells the non-compliant portion of its gasoline outside the U.S. This approach is consistent with CEQA Guidelines § 15126.6(e)(3)(A), which describes the approach to take when a project is the revision of an ongoing operation. In such a case, the “No Project” alternative “will be the continuation of the existing plan, policy or operation into the future.”

While not clear, the comment possibly suggests that the approach taken should have been the one provided for under CEQA Guideline § 15126.6(e)(3)(B) which says: “If disapproval of the project under consideration would result in predictable actions by others, such as the proposal of some other project, this “no project” consequence should be discussed. In certain instances, the no project alternative means “no build” wherein the existing environmental setting is maintained. However, where failure to proceed with the project will not result in preservation of existing environmental conditions, the analysis should identify the practical result of the project’s non-approval...” The comment suggests that the DEIR should have analyzed an alternative that

assumed only the modifications required to comply with state, federal, and local emissions requirements would be implemented. That the DEIR analyzed a No Project alternative, as required by CEQA, does not mean that the DEIR implied that the proposed project was the only means of accomplishing certain objectives, like the objective to comply with federal, state, and local rules and regulations. To the contrary, the DEIR recognizes that Alternative 3, Alternative 4, and Alternative 5 would achieve that regulatory compliance objective, but were not superior to the proposed project on other grounds (see pages 6-51 to 6-53 of the DEIR).

All options for meeting Tier 3 gasoline compliance involve substantial Refinery modifications. As suggested by the comment, a hypothetical No Project alternative with Tier 3 compliance was analyzed. Table 86.26-1 summarizes the emissions associated with two Tier 3 gasoline compliance alternatives and the proposed project. As shown in Table 86.26-1, the hypothetical No Project Alternative with Tier 3 Compliance elements and Alternative 3 would both result in CO emission increases only (due to compliance with market-based programs). Both the hypothetical No Project Alternative with Tier 3 Compliance elements and Alternative 3 are substantially equivalent to the No Project Alternative analyzed in the DEIR for operational impacts. However, the No Project Alternative with Tier 3 Compliance elements would have construction impacts that the No Project Alternative analyzed in the DEIR would not have. Additionally, none of the options; hypothetical No Project Alternative with Tier 3 Compliance elements, Alternative 3, or the No Project Alternative analyzed in the DEIR would meet all the project objectives stated in Section 2.2 of the DEIR.

The proposed project as analyzed in the DEIR would result in CO emission reductions and less than significant emission increases in other pollutants attributed to mobile sources. As explained in Master Response 6, the DEIR conservatively did not include the emission benefits from the reduction in ship anchorage emissions that would occur due to the efficiency improvements crude oil deliveries. The operational efficiency improvements of the proposed project and the reduction in carbon intensity of process activities would not be realized from implementation of the No Project Alternative, Alternative 3, or the hypothetical No Project Alternative with the Tier 3 Compliance elements. Therefore, none of the No Project Alternative or the hypothetical No Project Alternative with the Tier 3 Compliance elements or Alternative 3 would be the environmentally superior alternative.

Table 86.26-1

Comparison of Potential Projects to Comply with U.S. EPA Tier 3 Regulations

Alternative	Emissions (lb/day)					Emissions (metric ton/year)
	NOx	SOx	CO	PM10	VOC	CO <sub>2e</sub>
<b>No Project Alternative<sup>(a)</sup></b>	--	--	--	--	--	--
Total	--	--	--	--	--	--
<b>Hypothetical No Project Alternative with Tier 3 Compliance Elements<sup>(b)</sup></b>						
LHU Heater (Increased Utilization)	6.00	1.50	0.36	1.87	0.62	2,376.70
LHU Mods (Carson)	--	--	--	--	14.34	--
HTU 1 (Wilmington)	--	--	--	--	3.50	--
HTU 2 (Wilmington)	--	--	--	--	3.80	--
Mid Barrel Distillate Treater (Carson)	--	--	--	--	2.15	--
Total <sup>(c)</sup>	0.00	0.00	0.36	0.00	0.00	0.00
<b>Alternative 3<sup>(c)</sup></b>						
Gasoline Hydrotreater	17.49	14.39	74.67	16.00	14.93	52,253.89
Total <sup>(c)</sup>	0.00	0.00	74.67	0.00	0.00	0.00
<b>Proposed Project<sup>(d)</sup></b>						
Total	38.18	<0.01	-589.28	1.16	49.09	0.89

(a) Under the No Project Alternative as presented in the DEIR, the Wilmington Operations FCCU will continue to operate and no emission reduction will be achieved. No Tier 3 gasoline will be produced.

(b) Under the Hypothetical No Project Alternative with Tier 3 Compliance Elements, the Wilmington Operations FCCU will continue to operate and no emission reduction will be achieved. Emissions excerpted from DEIR Appendix B-3, pages B-3-45 and B-3-46. NOx, SOx, PM, and VOC emissions assume neutrality due to market-based credit trading programs. CO<sub>2e</sub> emissions calculated using GHG emissions reporting methodology and assume neutrality due to the AB32 Cap and Trade Program.

(c) Under Alternative 3, the Wilmington Operations FCCU will to operate and no emission reduction will be achieved. The emissions include criteria pollutant emissions from the heaters only; fugitive component VOC emissions from the reactors associated with the unit have not been included because estimates were not available. Emissions calculated based on a total heat input of 120 mmBtu/hr (see DEIR Section 6.3.3) and emissions factors of 0.0061 lb/mmBtu for NOx, 0.0050 lb/mmBtu for SOx, 0.0259 lb/mmBtu for CO, 0.0056 lb/mmBtu for PM, and 0.0052 lb/mmBtu for VOC by multiplying total heat input and the respective emission factor. NOx, SOx, PM, and VOC emissions assume neutrality due to market-based credit trading programs. CO<sub>2e</sub> emissions calculated using GHG emissions reporting methodology and assume neutrality due to the AB32 Cap and Trade Program.

(d) Emissions from DEIR Table 4.2-4. NOx, SOx, PM, and VOC emissions assume neutrality due to market-based credit trading programs. CO<sub>2e</sub> emissions assume neutrality due to the AB32 Cap and Trade Program. Remaining emissions increases are related to mobile sources not subject to market-based programs. The DEIR conservatively did not consider the emission reductions from fewer ship anchorage events that are expected to be -1,365 lb/day of NOx, -23 lb/day of SOx, -169 lb/day of CO, -51 lb/day of PM, and -248 lb/day of VOC, which will reduce the impacts of the proposed project.

(e) Regulation XIII compliance requires offsetting the project direct stationary source emissions increases. Indirect stationary source emissions increases comply with Regulation XIII – New Source Review

**Comment G1-86.27**

While an EIR is not expected to identify every single possible alternative to a proposed project, it is unacceptable for an EIR to fail to describe an alternative that accomplishes the goals of complying with the mandates imposed by law and by the Attorney General, and then distort the environmental impacts of the No Project Alternative. By failing to adequately describe the “No Project” alternative and failing to analyze an alternative that implements legal requirements without imposing the Project’s impacts, the DEIR’s analysis of project alternatives fails to meet CEQA’s requirements because it does not include the alternatives necessary for decision-makers to make a “reasoned choice.”<sup>131</sup>

<sup>131</sup> CEQA Guidelines, §15126.6(f)

G1-86.27

**Response G1-86.27**

As explained in Response G1-86.26 above, the No Project alternative accurately assumes the project will not be carried out. Also, the hypothetical No Project alternative with Tier 3 compliance elements and Alternative 3 were accurately analyzed.

**Comment G1-86.28**

**VI. THE DEIR FAILS TO IDENTIFY A LEGALLY SUFFICIENT BASELINE.**

The DEIR employs a misleading and wholly inaccurate baseline to measure air quality and other impacts. “The fundamental goal of an EIR is to inform decision makers and the public of any significant adverse effects a project is likely to have on the physical environment.”<sup>132</sup> Such effects cannot be known without first “delineat[ing] environmental conditions prevailing absent the project, defining a ‘baseline’ against which predicted effects can be described and quantified.”<sup>133</sup> “[B]aseline determination is [therefore] the first . . . step in the environmental review process[.]”<sup>134</sup> and critical to the entirety of an EIR. A baseline must “give the public and decision makers the most accurate picture practically possible of the project’s likely impacts”<sup>135</sup> 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.

Here, the DEIR both improperly underestimates the baseline for certain conditions, and inflates the baseline for others.

<sup>132</sup> *Neighbors for Smart Rail v. Exposition Metro Line Const. Authority* (2013) 57 Cal.4th 439, 447.

<sup>133</sup> *Id.*

<sup>134</sup> *Save our Peninsula Committee v. Monterey County Board of Supervisors* (2001) 87 Cal.App.4th 99, 125.

<sup>135</sup> *Neighbors for Smart Rail*, 57 Cal.4th at 449 (citing *Communities for a Better Environment v. SCAQMD* (2010) 48 Cal.4th 310).

G1-86.28

**Response G1-86.28**

The comment summarizes CEQA guidelines and case law and is a general comment that the DEIR incorrectly establishes the proposed project baseline.

No specific concerns regarding the baseline are identified in the comment. The baseline utilized for the proposed project is explained in Master Response 12.

### Comment G1-86.29

**A. The DEIR Fails to Identify Required Baselines for Crude Throughput.**

It cannot be disputed that the volume of crude throughput determines environmental impacts, yet, the DEIR's baseline for throughput is entirely unclear. The DEIR fails to disclose a certain throughput baseline, and appears to rely instead on fluctuations in operations, maximum capacities, and permitted levels of various operation components in discussing throughput.

G1-86.29

### Response G1-86.29

The proposed project does not change the crude oil capacity of the Refinery, other than the potential 6,000 bbl/day increase that was fully analyzed in the DEIR. See Master Response 6 that explains that the crude oil capacity is not expanding other than as analyzed in the DEIR. The volume of available crude oil storage capacity has no bearing on Refinery crude oil processing capacity, which is limited by other refining processes and limitations. In addition, since unit throughput does not necessarily impact emissions from process units, SCAQMD permits for refinery process units rarely involve throughput limitations (see Master Response 5). Therefore, throughput or production data was not relied on to evaluate the impacts of the proposed project.

The comment also suggests that the DEIR should provide data regarding baseline crude oil throughput to the Refinery. See Response G1-86.33 below for a description of this issue.

### Comment G1-86.30

Further, evidence regarding the total crude oil rate capacity and Refinery throughput is unclear and inconsistent, leaving the public without reliable information as to the existing throughput baseline. For example, the DEIR states that the "total crude oil rate capacity for the Los Angeles Refinery is 363,000 bbl/day[.]"<sup>136</sup> while Tesoro has publicly reported that its full capacity is 380,000 barrels per day.<sup>137</sup> Not only does the DEIR fail to establish an ascertainable baseline for overall refinery throughput, but the information provided as to Refinery throughput is not supported by data. Conclusions and baselines reflected in environmental documents must be based on actual data, and that data must be publicly accessible. The DEIR fails these requirements. May's technical analysis of the Refinery throughput raises whether the Refinery could be processing larger volumes than the DEIR has evaluated, including whether it already increased its throughput, even before receiving approval.<sup>138</sup>

G1-86.30

<sup>136</sup> DEIR, at 2-17.

<sup>137</sup> May Technical Report, § II(A) (quoting Los Angeles Refinery Fact Sheet 2016, Tesoro, <https://tsocorpsite.files.wordpress.com/2016/04/tesoro-los-angeles-fact-sheet.pdf> (emphasis added)).

<sup>138</sup> May Technical Report, § II(A).

### Response G1-86.30

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.21. The issues raised in the comment are addressed in detail in Response G1-81.21. Master Response 5 and Responses G1-78.142, G1-78.187, and G1-78.208 describe in detail that the rated capacity of the Refinery is based on crude oil capacities actually achieved by the Refinery in the past, rather than any increase resulting from the proposed project. Master Response 6

addresses the potential crude oil capacity increase of 6,000 bbl/day that was appropriately evaluated in the DEIR.

**Comment G1-86.31**

The DEIR also fails to establish a baseline for storage tank throughput, although the record and evidence shows its significant increase. May explains that the six largest new tanks “increase [ ] throughput . . . [by more] than 1.53 million bbl/year (or 419,000 bbls/day average),” increasing volume by 3.4 million bbls. The DEIR provides only the volume capacity for the Wilmington tanks, but not for the Carson facility. Moreover, the SCAQMD questioned whether a No. 51 Vacuum Distillation Unit heater may result in increased crude oil throughput, but the DEIR fails to evaluate the issue.<sup>139</sup> The DEIR states that “[t]here is no change proposed to crude oil throughput at the Carson Operations” and “no changes to the Crude Units are being made that would affect the crude oil throughput of the Wilmington Operations.”<sup>140</sup> As May explains, however, “[t]his conclusory statement fails to account for the large permitted throughput increases that were modeled in the DEIR[.]”<sup>141</sup> The increased tank throughput will result in undisclosed impacts, whether as a result of that throughput being exported or refined. If the latter, the overall Refinery input will further increase.

G1-86.31

<sup>139</sup> May Technical Report, § V(B)(1).

<sup>140</sup> DEIR, at 4-26 and 4-28.

<sup>141</sup> May Technical Report, § III(E).

**Response G1-86.31**

The comment suggests that baseline storage tank throughput data is required for existing tanks. For new storage tanks, a baseline throughput of zero and maximum proposed throughputs was analyzed. For storage tanks with increased utilization, the incremental usage was analyzed.<sup>312</sup> Tank throughputs were analyzed using appropriate baselines.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.39 through G1-81.51. The issues raised in the comments are addressed in detail in Responses G1-81.39 through G1-81.51. The tank throughputs that are evaluated in the DEIR are conservative (large) estimates of throughput that may be needed to offload the largest marine vessels that dock at the Carson Crude Terminal. As part of its Title V permitting program, the SCAQMD imposes throughput limitations on tanks that store petroleum products. The permit holder is required to maintain throughputs below the permitted level. Therefore, the throughputs analyzed in the DEIR conservatively evaluate the maximum throughput that is required to quickly offload VLCCs plus a “compliance margin” to ensure that the actual unloading rate always remains below the allowable level, which is still below the permitted level. The comment provides no evidence of the claim that increased tank throughput will result in undisclosed impacts.

Response G1-78.126 provides a detailed description of the existing tanks at the Refinery and the Carson Crude Terminal that are capable of storing high TVP crude oil based on the Refinery’s current Title V permit.

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<sup>312</sup> The project increment, incremental increase, or incremental change is derived from the comparison of the post-project peak activity to the pre-project actual achieved baseline activity.

The comment references an SCAQMD permit engineer’s question regarding the No. 51 Vacuum Unit heater. As shown in Figures 2-8 and 2-10 of the DEIR, the Carson Operations No. 51 Vacuum Unit does not accept crude oil feed, whereas the Wilmington DCU does accept crude oil feed. Therefore, no modification to the DEIR was required, once the clarification was made to the SCAQMD permit engineer.

Master Response 6 explains that the proposed project will not increase crude oil processing capacity beyond the 6,000 bbl/day analyzed in the DEIR.

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.80. The issues raised in the comment are addressed in detail in Response G1-81.80.

**Comment G1-86.32**

Because evidence shows that the Project will result in an increased throughput, at the very least as to storage tank and overall refinery throughput, the DEIR must identify the pre-Project throughputs and establish baselines against which the increased throughputs can be examined to determine any significant impacts from the increase.

}] G1-86.32

**Response G1-86.32**

The DEIR has properly analyzed the impacts from the 6,000 bbl/day increase in Refinery capacity. See Master Responses 5 and 6 that further address this issue.

The comment erroneously assumes that increased storage capacity equals increased Refinery throughput. This is not correct, as explained in Master Response 6, Response G1-78.180, and Response G1-81.39.

**Comment G1-86.33**

**B. The DEIR Fails to Identify Critical Baseline Information Relating to the Refinery’s Current Crude Slate.**

Substantial evidence, as discussed above, shows that the Project proposes to make numerous process and equipment modifications that newly enable the processing of “advantaged crude” feedstock at the Refinery, consistent with Tesoro’s publicly stated business plans. It is well-known that the type of crude oil feedstock processed at a refinery directly affects the

}] G1-86.33

amount and composition of resulting emissions and other environmental impacts.<sup>142</sup> Because the Project’s change in crude slate is likely to result in significant impacts, the DEIR must establish a crude slate baseline against which impacts can be measured.

}] G1-86.33  
cont’d.

<sup>142</sup> May Technical Report, § III(A).

**Response G1-86.33**

The comment assumes that the proposed project will facilitate a change to a new crude oil slate. That assumption is incorrect. The proposed project is independent of any plan to purchase specific crude oils. Moreover, regardless of the specific crude oils Tesoro will purchase in the future, the proposed project will not result in a change in process emissions - other than disclosed



and analyzed in the DEIR - because the proposed project does not significantly change the operating envelope for the crude oil blends that are processed at the Refinery. That is, based on the Refinery's unique configuration of equipment, the crude oil blends processed at the Refinery after construction of the proposed project will be substantially the same as the crude oil blends that the Refinery currently processes.

Since the proposed project does not include any physical changes to the Refinery that would enable a significant change to the crude oil blend that is processed, no additional analysis is necessary under CEQA.

Further, Master Response 2 explains that Tesoro's crude oil slate is trade secret, confidential business information and further, as described above, the DEIR did not rely on any of this information in the required analysis pursuant to CEQA. Therefore, the suggested information is not necessary to evaluate proposed project impacts and need not be provided.

For additional non-proprietary information regarding the crude oil baseline and properties, see Response G1-78.94 and the McGovern Report in Appendix F of the DEIR. The geographic source location of crude oil does not define its properties, but a wide range of crude oil properties have been analyzed in the DEIR, including the hydrid speciation for TACs in tanks and worst-case allowable emissions in Refinery units.

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.33 through G1-81.34. The issues raised in the comments are addressed in detail in Response G1-81.33 through G1-81.34.

### Comment G1-86.34

The court in *Richmond* established that an "EIR fails as an informational document [where] the [] project description is inconsistent and obscure as to whether the Project enables the Refinery to process heavier crude[.]"<sup>143</sup> The DEIR must "properly establish, analyze, and consider an environmental baseline" of crude slate.<sup>144</sup> Here, however, the DEIR never discloses the characteristics of the current baseline oil feedstock at the Carson and Wilmington facilities, and much less compares pre- and post-Project crude quality. As in *Richmond*, the failure to do so is fatal to the DEIR.

As detailed in the May Technical Report, the DEIR fails to disclose exact specifications of the change in crude quality, information that is integral to this project.<sup>145</sup> Although the DEIR insists on its maintenance of throughput limits, it fails to properly acknowledge the inevitable changes in air emissions, hazard risks, and other significant impacts from refining a lower quality oil feedstock. As May explains:

[E]ven if [the new advantage crude slate is blended to] match[] ANS exactly in API gravity, the switch would still introduce new impacts not evaluated in the DEIR, due to other crude oil characteristics. For example, explosion hazards would increase from Bakken crude introduction, additional content of toxics such as benzene that was not investigated in the DEIR discussion, and increased introduction of waxy residue which can cause processing difficulties requiring more maintenance. Further, increased sulfur mass from Canadian crudes would increase corrosion hazardous and increase acutely hazardous sulfur gases (for example hydrogen sulfide).<sup>146</sup>

In short, Refinery modifications that enable processing of Bakken and potentially Canadian crudes have major impacts that must be analyzed, unless permit conditions explicitly preclude use of these crudes.

G1-86.34

<sup>143</sup> *Richmond*, 184 Cal.App.4th at 89.

<sup>144</sup> *Id.*

<sup>145</sup> May Technical Report, § III(B).

<sup>146</sup> May Technical Report, § III(C).

As explained in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery purchases a variety of crude oils and blends them to meet the specifications of the Refinery’s operating envelope. The proposed project is not designed to facilitate a change in the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow processing of a slightly heavier crude oil blend. Therefore, the comment’s comparison of the proposed project to the Chevron Richmond Project is misplaced.

The proposed project differs from the Chevron Richmond project in that Chevron proposed modifications to the refinery processing units to allow the processing of different crude oil blends and externally-sourced gas oils containing higher levels of sulfur than those currently processed in order to continue producing competitive transportation fuels and lubricating oils. Chevron proposed hydrogen purity improvements to enable the refinery to process crude oil blends with higher sulfur content. See Sections 2.5.4.1 through 2.5.4.3 and 2.7 of the DEIR and Master Response 4 which explain how the proposed project is distinguishable from the Chevron project.

Unlike the Chevron Richmond project, the proposed project does not involve the physical modification of any Crude, DCU, Hydrogen, or Sulfur Recovery units that would enable the Refinery to process a different crude oil blend. See Master Response 4 and Responses G1-78.20-G1-78.21 for further information regarding the Chevron Richmond Project, its ensuing litigation, and why its decision is not applicable to the proposed project.

The comment references Comment Letter 81, raises the same issues as Comment G1-81.35 through G1-81.37, and repeats Comment G1-86.13. The issues raised in the comments are responded to in detail in Responses G1-81.35 through G1-81.37 and G1-86.13.

The proposed project does not include Refinery modifications that enable the Refinery to process a different crude oil blend and the DEIR appropriately analyzed the potential impacts of the proposed project.

**Comment G1-86.35**

Instead of determining the required crude slate baseline, the DEIR impermissibly provides general information regarding the full range of possible crude that could be used at the Refinery, including outliers.<sup>147</sup> While, as the May Technical Report explains, some of this information can be obtained through research,<sup>148</sup> “decision makers and general public should not be forced to . . . ferret out the fundamental baseline assumptions that are being used for purposes

of the environmental analysis[.]”<sup>149</sup> Rather, “[a]n EIR must include detail sufficient to enable those who did not participate in its preparation to understand and to consider meaningfully the issues raised by the proposed project.”<sup>150</sup>

<sup>147</sup> May Technical Report, § II(D); *see, e.g.*, DEIR, at 2-2.

<sup>148</sup> May Technical Report, § III(B).

<sup>149</sup> *San Joaquin Raptor Rescue Center* 149 Cal.App.4th at 659, as modified (Apr. 11, 2007).

<sup>150</sup> *Id.* (quoting *Laurel Heights Improvement Assn. v. Regents of University of California* (1988) 47 Cal.3d 376, 405).

G1-86.35

G1-86.35  
cont’d.

**Response G1-86.35**

See Response G1-86.33 above for a response to the comment.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.26 through G1-81.32 and G1-81.35 through G1-81.36. The issues raised in the comments are addressed in detail in Responses G1-81.26 through G1-81.32 and G1-81.35 through G1-81.36.

**Comment G1-86.36**

When crude slate changes are at issue, the DEIR must divulge data as to crude slate currently processed at the Refinery, otherwise, a “conclusion that the future crude slate would be ‘similar to that which is currently processed’ is meaningless.”<sup>151</sup> The DEIR must provide “objective quantification of the continuing mix that [the] Refinery was designed to process[.]” and examine whether it “is heavier than [the] mix [the] Refinery is currently processing.”<sup>152</sup> As May concludes in her technical report, “[t]his will require documentation of the baselines of the individual Wilmington and Carson crude and intermediate product inputs from before the purchase of BP Carson by Tesoro, to the present.”<sup>153</sup>

G1-86.36

<sup>151</sup> *Richmond*, 184 Cal.App.4th at 85.

<sup>152</sup> *Id.*

<sup>153</sup> May Technical Report, § II(A).

**Response G1-86.36**

See Responses G1-86.29 and G1-86.34 above for a response to the comment.

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.21. The issues raised in the comment are addressed in detail in Response G1-81.21.

**Comment G1-86.37**

Specifically, the DEIR should disclose a “specific baseline for the both the Carson and Wilmington refinery, including the last 5 years’ domestic and imported crudes, volumes, geographic origin, transportation method, sulfur content, API gravity, TAN, metal content, other important data such as benzene content, special handling issues due to volatility or waxiness, etc.”<sup>154</sup> The DEIR must further evaluate impacts of the planned and foreseeable changes in the crude slate as part of the overall Project.

G1-86.37

Unless and until the DEIR is revised to provide the proper crude slate baseline and examination of crude slate modifications, it will remain deficient as an informational document and also impair a significant impacts analysis.

<sup>154</sup> May Technical Report, § III(B).

**Response G1-86.37**

See Response G1-86.29 above for a response to the comment.

Response G1-86.13 also responds to crude oil properties and while the crude oil blend processed by the Refinery will not change significantly, it is important to note that the potential impacts of operating the new and replacement crude oil storage tanks were thoroughly evaluated in Chapter 4 of the DEIR. Crude oil vapor pressure approaching the maximum allowable by SCAQMD Rule 463 (TVP limit of 11 psia) was used as the basis of the hazards analysis and emission

calculations for VOCs and TACs for the new and replacement storage tanks and fugitive emissions in the DEIR. BTEX concentrations of crude oils in new and replacement storage tanks fugitive emissions associated with the proposed project were based on a worst-case hybrid analysis of the toxic content of crude oils have been and will be processed at the Refinery, including Bakken and Canadian crude oil. The hybrid speciation was prepared by selecting the highest concentration of each toxic compound from the entire speciated data set of all the crude oils analyzed (see Response G1-78.157). Table 81.4-1 in Response G1-81.4 lists additional responses that provide more details on the potential crude oil characteristic impact issues.

It should be noted that geographic location of the source of crude oil does not define crude oil properties. Crude oil properties can have a wide range and high degree of variation within a region, which is why crude oils are mixed to create a blend that will fit within the operating envelope of the Refinery.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.35 through G1-81.36. The issues raised in the comments are addressed in detail in Response G1-81.35 through G1-81.36.

### Comment G1-86.38

#### C. The DEIR Fails to Ascertain the Refinery Sulfur Baseline.

The DEIR also fails to include a baseline for sulfur in the refinery, percent of sulfur in crude oil sulfur and the desulfurization capacity. Such a baseline is necessary because evidence shows that the Project could “introduce a larger mass of sulfur into the refinery compared to the past baseline,”<sup>155</sup> which requires impacts evaluation.

The May Technical Report explains that the Project has the potential to result in “increases in desulfurization processes within the refinery due to higher sulfur content, as well as additional cracking, coking, and additional use of hydrogen, all of which require more energy and increase criteria and toxic pollutant emissions.”<sup>156</sup> Further, if “Canadian crude replaces a crude at the Tesoro refinery average shown in the previous estimation of about 1.5% sulfur, the Canadian crude would increase the percent sulfur up to 3.5 or more percent sulfur for that number of barrels.”<sup>157</sup> “It would also increase the desulfurization processing needed, the processing in the Sulfur Recover Unit, and the energy use and resultant emissions of those processes.”<sup>158</sup> Accordingly, “a specific crude oil sulfur baseline is needed, and the potential for that to change, because this impacts the amount of desulfurization downstream.”<sup>159</sup>

The DEIR must provide a refinery sulfur baseline, as outlined by the May Technical Report, in order to inform decision makers and the public of any significant adverse effects the Project will likely to have.

<sup>155</sup> May Technical Report, § IV(C)(2).

<sup>156</sup> May Technical Report, § IV(B).

<sup>157</sup> May Technical Report, § IV(C)(2).

<sup>158</sup> May Technical Report, § IV(C)(2).

<sup>159</sup> May Technical Report, § IV(C)(2).

G1-86.38

G1-86.38  
cont'd.

### Response G1-86.38

The comment claims that the proposed project includes modifications that would enable a higher sulfur crude oil blend to be processed by the Refinery. As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing various crude oils and the proposed project is not designed to

facilitate a change in the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow processing of a slightly heavier crude oil blend. The assumption that the proposed project will introduce “a larger mass of sulfur into the refinery” is inaccurate and not supported with evidence.

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.59 through G1-81.63 and G1-81.66 through G1-81.67. The issues raised in the comment are addressed in detail in Responses G1-81.59 through G1-81.63 and G1-81.66 through G1-81.67. As explained in Response G1-81.65, heavy Canadian crude oil has been blended and processed in limited quantities at the Refinery. An increase in sulfur content of the crude oil blend cannot be accommodated at the Refinery without modifications to the SRPs as described in Section 2.5.4.1 of the DEIR (see also Master Response 4). While it is true that to process a higher sulfur content crude oil additional sulfur recovery capacity is required, as described in Master Response 4, the Refinery operates near capacity in the existing SRPs and the proposed project does not modify the SRP capacity. Therefore, the Refinery is restricted to the current operating envelope and must maintain the crude oil blend currently processed at the Refinery.

See Response G1-78.111 for further information regarding sulfur in the crude oil blend that can be processed at the Refinery. Similarly, as explained in Response G1-78.172, based on Tesoro’s Master Crude Oil Assays, several Middle Eastern crude oils currently processed by the Refinery, have sulfur contents of approximately three percent, which is in the range of heavy Canadian crude oils processed by the Refinery of 3.7 and 3.8 percent sulfur. As with heavy Canadian crude oil, these crude oils are mixed into the crude oil blend processed by the Refinery to make a blend that will fit into the operating envelope for the Refinery. The suggested impacts in the comment associated with processing a heavier blend of crude oil; additional cracking, coking and hydrogen use, will not occur.

Additionally, as explained in Section 2.5.4.1 of the DEIR, total sulfur is one of the critical parameters that is evaluated to determine whether a crude oil blend will fit into the operating envelope for the Refinery. As such, sulfur species that exist in the crude oil blends processed by the Refinery will not change as a result of the proposed project. Therefore, the information sought by the comment was not relied upon to determine the potential impacts of the proposed project and need not be provided.

### Comment G1-86.39

#### D. Inclusion of FCCU Shutdown Emission Reductions in the Baseline Violates CEQA.

The DEIR’s air emissions baseline is flawed because it improperly includes emissions from the Wilmington FCCU,<sup>160</sup> and thereby artificially inflates the baseline. Because the FCCU shutdown was a condition of approval prior to, and independent from, this Project, the baseline should reflect the environmental conditions as they will exist without the FCCU in operation. The pre-Project air quality baseline should therefore remove the FCCU emissions in order to provide the public with an accurate measurement of significant impacts resulting from this Project.<sup>161</sup>

G1-86.39

<sup>160</sup> DEIR, at 4-16.

<sup>161</sup> CEQA Guidelines, § 15125(a).

**Response G1-86.39**

As described in Master Response 13, the comment incorrectly claims that the shutdown of the Wilmington Operations FCCU was a condition of approval for Tesoro's acquisition of the BP Carson Refinery and ARCO branded service stations, and therefore, the baseline for air quality impacts should not include emissions from the Wilmington Operations FCCU. Consistent with applicable law, the District properly concluded that the baseline includes the existing operation of the Wilmington Operations FCCU. The Federal Trade Commission and the California Attorney General both reviewed Tesoro's proposed acquisition to ensure that the acquisition would not violate federal and state antitrust laws. After a nine-month review, on May 17, 2013, the agencies announced that they had resolved any potential antitrust concerns with the proposed acquisition.

During the antitrust review process, Tesoro submitted documents to the FTC and the California Attorney General stating that Tesoro intended to make certain modifications at the combined Refinery that would allow Tesoro to achieve specified “synergies” between the Wilmington and Carson Operations. Among other changes, Tesoro explained, Tesoro planned to replace some of the combined Refinery’s fluid catalytic cracking unit (“FCCU”) capacity with additional hydrotreater capacity.

In connection with her approval of the acquisition, the Attorney General entered into an agreement with Tesoro. In this agreement Tesoro agreed to maintain CARBOB capacity for three years, maintain the ARCO brand, and not eliminate jobs for a period of two years. Tesoro also agreed to provide an annual report on the actions taken to achieve the specified synergies, including actions designed to replace FCCU capacity with hydrotreater capacity.<sup>313</sup>

Thus, it is not accurate to say that the Attorney General required Tesoro to shut down the Wilmington Operations FCCU as a condition of approval. Rather, the Attorney General required Tesoro to provide an annual report on the implementation of Tesoro’s existing plans to modify the combined Refinery by, among other things, replacing FCCU capacity with hydrotreater capacity. Moreover, operation of the Wilmington Operations FCCU is part of the baseline environmental conditions and the proposed project enables the Wilmington Operations FCCU to be shutdown.

As explained in Section 4.2.2.2 and Table 4.2-4 of the DEIR and Master Response 13, emission reductions are appropriately credited to the proposed project. Further information about the purchase of the BP Carson Refinery by Tesoro can be found on Page 2-1 of the DEIR. Section 4.2.2.2 of the DEIR explains that the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NOx, SOx, PM10, and PM2.5 emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project will result in local reductions in GHG emissions as

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<sup>313</sup> See Attachment E, Kathleen Foote for Kamala Harris, letter to Robert Weisenmiller, May 17, 2013. In the letter, the Attorney General uses the term “distillate desulfurization unit” to refer to additional hydrotreating capacity. The letter notes that replacing FCCU capacity with “desulfurization” capacity will benefit the environment by reducing emissions and greenhouse gases.

discussed in Section 5.2 of the DEIR and as summarized in Table 5.2-8 (see page 5-26 of the DEIR).

**Comment G1-86.40**

While CEQA provides that the baseline is *normally* “the physical environmental conditions in the vicinity . . . as they exist at the time the notice of preparation is published[.]”<sup>162</sup> environmental review must depart from the general baseline rule when circumstances require in order to provide an accurate measurement of a project’s likely impacts. The State Supreme Court instructed in *Neighbors for Smart Rail* (“*Neighbors*”) that a baseline reflecting expected future conditions should be employed if a baseline reflecting current conditions “would be uninformative or misleading to decision makers and the public.”<sup>163</sup> A lead agency may therefore define a baseline consisting of expected future environmental conditions if there is substantial evidence showing that it provides “a more accurate picture of a proposed project’s likely impacts[.]”<sup>164</sup>

In *Neighbors*, the SCAQMD argued that the Court should recognize an exception to the existing conditions baseline rule where “factual conditions [exist] in which use of an existing conditions baseline would arguably mask potentially significant project impacts that would be

G1-86.40

## APPENDIX G1: RESPONSE TO COMMENTS

revealed by using a future conditions baseline.”<sup>165</sup> The Court agreed. The AQMD provided the following example of such factual conditions, which the Court reviewed and concurred with.<sup>166</sup>

[A]n existing industrial facility currently emits an air pollutant in the amount of 1,000 pounds per day. By the year 2020, if no new project is undertaken at the facility, emissions of the pollutant are projected to fall to 500 pounds per day *due to enforcement of regulations already adopted* and to turnover in the facility’s vehicle fleet. The operator proposes to use the facility for a new project that will emit 750 pounds per day of the pollutant upon implementation and through at least 2020. An analysis comparing the project’s emissions to existing emissions would conclude the project would reduce pollution and thus have no significant adverse impact, while an analysis using a baseline of *projected year 2020 conditions* would show the project is likely to increase emissions by 250 pounds per day, a (presumably significant) 50 percent increase over baseline conditions.<sup>167</sup>

The factual circumstances concerning the Wilmington refinery FCCU are precisely those where use of an existing conditions baseline would mask potentially significant Project impacts, and therefore where use of a future conditions baseline is necessary to reveal the impacts and fulfill CEQA’s mandate.

The FCCU shutdown is a binding requirement that already existed prior to the Project proposal. The replacement of the Wilmington FCCU was a precondition to the Tesoro-BP acquisition, and thus not a part of the Integration Project. Indeed, government approval of the acquisition was conditioned on the unit’s shutdown. Crediting the LARIC Project for the Wilmington FCCU’s shutdown creates the type of distortion of baseline measurements that *Neighbors* warned against as “uninformative or misleading to decision makers and the public.”

On May 17, 2013, the California Attorney General’s office (“AG”) announced in a letter to the Chairman of the California Energy Commission (“CEC”) the approval of the Tesoro acquisition of BP’s Carson operations.<sup>168</sup> This approval came as a result of a nine-month investigation led by the California Department of Justice and other State agencies. During that process, the State identified as primary concerns preventing the approval of the acquisition based on its impact on market competition and the environment.<sup>169</sup> While the AG’s competition concerns were addressed after a thorough investigation on market conditions,<sup>170</sup> the acquisition’s environmental impact concerns continued to present an obstacle to approval. As identified in the

AG’s letter to the CEC, the acquisition’s approval was conditioned on certain concessions agreed to by Tesoro, including the shutdown of the Wilmington FCCU.<sup>171</sup> Replacement of the FCCU was a “binding commitment” upon Tesoro used to satisfy environmental impact concerns associated with the acquisition.<sup>172</sup> This precondition is also recognized in an April 8, 2013 letter cited by the AG, in which Governor Brown stresses upon Tesoro the importance of shutting down the FCCU units “should the acquisition proceed.”<sup>173</sup>

<sup>162</sup> *Id.*

<sup>163</sup> *Neighbors for Smart Rail v. Exposition Metro Line Const. Authority* (2013) 57 Cal.4th 439, 455.

<sup>164</sup> *Id.* at 453.

<sup>165</sup> *Id.* at 453, n.5.

<sup>166</sup> *Id.*

<sup>167</sup> *Id.* (emphasis added).

<sup>168</sup> AG Letter to Tesoro, CA DOJ, *available at*

[http://oag.ca.gov/system/files/attachments/press\\_releases/AG%20Letter%20to%20CEC%20%28Tesoro%29.pdf?](http://oag.ca.gov/system/files/attachments/press_releases/AG%20Letter%20to%20CEC%20%28Tesoro%29.pdf?)

<sup>169</sup> *Id.*

<sup>170</sup> *Id.*

<sup>171</sup> *Id.* at 2.

<sup>172</sup> *Id.*

<sup>173</sup> *Id.*

G1-86.40  
cont’d.

G1-86.40  
cont’d.



**Response G1-86.40**

As the Supreme Court explained in the case cited in the comment, CEQA Guidelines “clearly establish that the norm for an EIR is analysis against a baseline of existing conditions[,]” and use of a future conditions baseline would only be “justified by unusual aspects of the project” warranting a departure from CEQA’s norm. The court wrote: “[t]o comply fully with CEQA’s informational mandate, the Expo Authority should have analyzed the project’s effects on existing traffic congestion and air quality conditions.”<sup>314</sup> The comment has not identified circumstances that would support this departure.

As described in Master Response 13, the comment incorrectly claims that the shutdown of the Wilmington Operations FCCU was a condition of approval for Tesoro’s acquisition of the BP Carson Refinery and ARCO branded service stations, and therefore, the baseline for air quality impacts should not include emissions from the Wilmington Operations FCCU. Consistent with applicable law, the District properly concluded that the baseline includes the existing operation of the Wilmington Operations FCCU. For that reason, the shutdown of the Wilmington Operations FCCU is also properly excluded from the No Project alternative in Chapter 6 of the DEIR (see page 6-5).

The Federal Trade Commission and the California Attorney General both reviewed Tesoro’s proposed acquisition to ensure that the acquisition would not violate federal and state antitrust laws. After a nine-month review, on May 17, 2013, the agencies announced that they had resolved any potential antitrust concerns with the proposed acquisition.

During the antitrust review process, Tesoro submitted documents to the FTC and the California Attorney General stating that Tesoro intended to make certain modifications at the combined Refinery that would allow Tesoro to achieve specified “synergies” between the Wilmington and Carson Operations. Among other changes, Tesoro explained, Tesoro planned to replace some of the combined Refinery’s fluid catalytic cracking unit (“FCCU”) capacity with additional hydrotreater capacity.

In connection with her approval of the acquisition, the Attorney General entered into an agreement with Tesoro. In this agreement Tesoro agreed to maintain CARBOB capacity for three years, maintain the ARCO brand, and not eliminate jobs for a period of two years. Tesoro also agreed to provide an annual report on the actions taken to achieve the specified synergies, including actions designed to replace FCCU capacity with hydrotreater capacity.<sup>315</sup>

Thus, it is not accurate to say that the Attorney General required Tesoro to shut down the Wilmington Operations FCCU as a condition of approval. Rather, the Attorney General required Tesoro to provide an annual report on the implementation of Tesoro’s existing plans to modify the combined Refinery by, among other things, replacing FCCU capacity with hydrotreater

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<sup>314</sup> *Neighbors for Smart Rail v. Exposition Metro Line Const. Authority* (2013) 57 Cal.4th 439, 451, 454.

<sup>315</sup> See Attachment E, Kathleen Foote for Kamala Harris, letter to Robert Weisenmiller, May 17, 2013. In the letter, the Attorney General uses the term “distillate desulfurization unit” to refer to additional hydrotreating capacity. The letter notes that replacing FCCU capacity with “desulfurization” capacity will benefit the environment by reducing emissions and greenhouse gases.

capacity. Moreover, operation of the Wilmington Operations FCCU is part of the baseline environmental conditions and the proposed project enables the Wilmington Operations FCCU to be shutdown.

As explained in Section 4.2.2.2 and Table 4.2-4 of the DEIR and Master Response 13, emission reductions are appropriately credited to the proposed project. Further information about the purchase of the BP Carson Refinery by Tesoro can be found on Page 2-1 of the DEIR. Section 4.2.2.2 of the DEIR explains that the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project will result in local reductions in GHG emissions as discussed in Section 5.2 of the DEIR and as summarized in Table 5.2-8 (see page 5-26 of the DEIR).

The emissions impact analysis in the DEIR provides the public and decision makers with a clear understanding of the emissions increases or reductions resulting from the proposed project and including a portion of the proposed project in the baseline, as suggested by the comment, would distort that analysis.

As such, the DEIR correctly determined the applicable baseline within its discretion and the circumstances of the proposed project did not warrant invocation of the future baseline exception described in *Neighbors for Smart Rail v. Exposition Metro Line Const. Authority*. See Response G1-78.210 for a summary of how Wilmington Operations FCCU emissions were calculated and Master Response 12 for a further description of the appropriate baseline as utilized by the proposed project.

**Comment G1-86.41**

Further, the DEIR itself shows that the current LARIC Project was not an inevitable component or requirement for the acquisition, but rather a subsequent, voluntary measure Tesoro chose to pursue to “more fully integrate” operations.<sup>174</sup> At the time the acquisition was approved, pipeline connections between the Wilmington and Carson operations already allowed the “transfer of crude oil, feedstocks, and refined products between the two Operations.”<sup>175</sup> The requirement to shutdown the Wilmington FCCU became effective at the time of acquisition, and would be required even in the absence of the current Integration Project. To interpret the AG’s conditional approval otherwise would render the established preconditions illusory.



G1-86.41

<sup>174</sup> See DEIR, at 2-1 (Stating that “[t]he proposed project would greatly enhance the integration of overall Refinery operations.” This supports the understanding that the Integration Project was not implicitly required for the acquisition to be feasible at the time of the AG’s approval, but is rather a subsequent, independent project).

<sup>175</sup> *Id.* at 2-1.

**Response G1-86.41**

Page 2-1 of the DEIR referred to in the comment correctly states that the proposed project is being undertaken in order to more fully integrate Refinery operations. As described in Master Response 13, the comment incorrectly claims that the shutdown of the Wilmington Operations FCCU was a condition of approval for Tesoro’s acquisition of the BP Carson Refinery and ARCO branded service stations, and therefore, the baseline for air quality impacts should not include emissions from the Wilmington Operations FCCU. Consistent with applicable law, the District properly

concluded that the baseline includes the existing operation of the Wilmington FCCU. The Federal Trade Commission and the California Attorney General both reviewed Tesoro's proposed acquisition to ensure that the acquisition would not violate federal and state antitrust laws. After a nine-month review, on May 17, 2013, the agencies announced that they had resolved any potential antitrust concerns with the proposed acquisition.

During the antitrust review process, Tesoro submitted documents to the FTC and the California Attorney General stating that Tesoro intended to make certain modifications at the combined Refinery that would allow Tesoro to achieve specified “synergies” between the Wilmington and Carson Operations. Among other changes, Tesoro explained, Tesoro planned to replace some of the combined Refinery’s fluid catalytic cracking unit (“FCCU”) capacity with additional hydrotreater capacity.

In connection with her approval of the acquisition, the Attorney General entered into an agreement with Tesoro. In this agreement Tesoro agreed to maintain CARBOB capacity for three years, maintain the ARCO brand, and not eliminate jobs for a period of two years. Tesoro also agreed to provide an annual report on the actions taken to achieve the specified synergies, including actions designed to replace FCCU capacity with hydrotreater capacity.<sup>316</sup>

Thus, it is not accurate to say that the Attorney General required Tesoro to shut down the Wilmington Operations FCCU as a condition of approval. Rather, the Attorney General required Tesoro to provide an annual report on the implementation of Tesoro’s existing plans to modify the combined Refinery by, among other things, replacing FCCU capacity with hydrotreater capacity. Moreover, operation of the Wilmington Operations FCCU is part of the baseline environmental conditions and the proposed project enables the Wilmington Operations FCCU to be shutdown.

As explained in Section 4.2.2.2 and Table 4.2-4 of the DEIR and Master Response 13, emission reductions are appropriately credited to the proposed project. Further information about the purchase of the BP Carson Refinery by Tesoro can be found on Page 2-1 of the DEIR. Section 4.2.2.2 of the DEIR explains that the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project will result in local reductions in GHG emissions as discussed in Section 5.2 of the DEIR and as summarized in Table 5.2-8 (see page 5-26 of the DEIR).

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<sup>316</sup> See Attachment E, Kathleen Foote for Kamala Harris, letter to Robert Weisenmiller, May 17, 2013. In the letter, the Attorney General uses the term “distillate desulfurization unit” to refer to additional hydrotreating capacity. The letter notes that replacing FCCU capacity with “desulfurization” capacity will benefit the environment by reducing emissions and greenhouse gases.

**Comment G1-86.42**

The Supreme Court’s holding and illustration in *Neighbors* could not be more analogous to this instance and must be followed here. Because the Wilmington FCCU shutdown is a preexisting requirement, “if no new project is undertaken at the facility, emissions of the [FCCU] pollutant are projected to . . . [be eliminated] due to enforcement of [the acquisition shutdown condition].”<sup>176</sup> However, Tesoro now “proposes to use the facility for a new project that will emit” additional pollutants.<sup>177</sup> “An analysis comparing the [P]roject’s emissions to existing emissions would conclude the [P]roject would reduce pollution and thus have no significant adverse impact,”<sup>178</sup> which is similar to the outcome reached in the DEIR where the DEIR projected generally less than significant emissions increases. The DEIR in fact relies on the shutdown of the Wilmington FCCU unit in order to obtain a finding of no significant impact. However, “an analysis using a baseline of projected [] conditions would show the project is likely to increase emissions . . . over baseline conditions.”<sup>179</sup>

G1-86.42

The DEIR’s conclusion that the Project will not cause significant emissions impacts relies on an underlying baseline that incorporates FCCU emissions. Because the shutdown of the FCCU is required to happen even without the Project, and its emissions will be eliminated from environmental impacts, the DEIR’s conclusion is misleading and false. The DEIR’s inclusion of the FCCU emissions in the air quality baseline artificially and improperly inflates the baseline

emissions, allowing it to overlook significant impacts resulting from the Project. The DEIR’s baseline thus fails to include relevant information, precluding informed decisionmaking and denying the public the most accurate picture practically possible of the project’s likely impacts. Inclusion of FCCU emissions in the air quality baseline thus thwarts CEQA’s statutory goals<sup>180</sup> and is in grave error.

G1-86.42  
cont’d.

For these reasons, the DEIR must be revised to correct the air emissions baseline to reflect the FCCU shutdown and resulting future environmental conditions.

<sup>176</sup> See *Neighbor*, 57 Cal.4th 453, n.5.

<sup>177</sup> *Id.*

<sup>178</sup> *Id.*

<sup>179</sup> *Id.*

<sup>180</sup> *Kings County Farm Bureau v. City of Hanford*, 221 Cal.App.3d 692, 714 (Cal. Ct. App., 1990).

**Response G1-86.42**

As explained in Responses G1-86.39 through G1-86.41, the official evaluation of Tesoro's acquisition of the Carson operations did not include the shutdown of the FCCU, nor were any conditions placed on the approval that would require the FCCU to be shutdown contrary to the comment’s assertions. See Master Response 13 for a further description.

The Supreme Court did not require the application of a future baseline in *Neighbors for Smart Rail v. Exposition Metro Line Const. Authority*, and the circumstances that would have permitted use of the future baseline exception discussed in that case are not presented by the proposed project. The comment’s comparison to the hypothetical example in *Smart Rail* is not analogous to the proposed project because the shutdown of the Wilmington Operations FCCU is not “a pre-existing requirement.” The *Smart Rail* hypothetical assumed that “regulations already adopted” would guarantee emissions reductions below a new project’s emissions levels; however, the shutdown of the Wilmington FCCU is not akin to an emissions-reducing regulation already adopted prior to a project. It is instead a part of the proposed project that will not occur absent the project. Because shutdown of the Wilmington Operations FCCU and its associated emission reductions would not occur in the absence of the proposed project, it was proper for the DEIR to use a standard existing conditions baseline that did not include future emission reductions from the shutdown of the Wilmington Operations FCCU.

**Comment G1-86.43**

**VII. THE DEIR'S IMPACTS ANALYSES ARE SEVERELY FLAWED.**

**A. Volatile Organic Compound Emissions for Project Operation are Significant.**

The DEIR claims that because the Project will purchase emission reduction credits (ERCs) offsetting Project emissions of volatile organic compound emissions (VOCs), operation of the Project will result in less than significant increases of VOCs and therefore no mitigation is required. Because the DEIR estimates this Project will have operational VOC emissions of 401.15 pounds per day (lb/day) —more than 7 times greater than the South Coast air basin's 55 lb/day significance threshold, this Project plainly has significant VOC emissions. SCAQMD must therefore revise the DEIR to find that air emissions will be significant and propose enforceable mitigation measures.

G1-86.43

**Response G1-86.43**

The comment inaccurately claims that the DEIR states that the proposed project will purchase ERCs to offset proposed project VOC emissions. As explained on page 4-17 and 4-18 of the DEIR, the DEIR notes that SCAQMD Regulation XIII emissions offsetting is required for 317.33 lb/day of VOC emissions and not the 401.15 lb/day of VOC emissions as claimed in the comment. The Refinery already holds ERCs which were mostly generated from prior equipment shutdowns from Tesoro's Refinery and Logistics operations, and the Refinery intends to use these ERCs for the proposed project instead of purchasing credits from the market.

As explained in Master Response 6 and the DEIR, there will be increases in fugitive VOC emissions associated with the new and replacement crude oil storage tanks, but overall VOC emissions resulting from the proposed project will be less than significant and, as such, no mitigation is required (see DEIR at Table 4.2-4, page 4-18, pages 4-22 through 4-23, and supporting data in Appendix B3, see page B-3-7 and Table 6). In order to obtain necessary permits for the proposed project, a New Source Review analysis is required. New Source Review requires VOC offsetting as a condition of obtaining a permit pursuant to SCAQMD Regulation XIII (see page 4-18 of the DEIR) and offsets must be surrendered prior to the approval and issuance of a permit. Without such offsetting, the proposed project permits cannot be obtained. Therefore, this offsetting is properly categorized as part of the proposed project and the DEIR analysis accurately accounts for the offsets required.

**Comment G1-86.44**

An EIR must “separately identify and analyze the significance of the impacts [of the project] before proposing mitigation measures.”<sup>181</sup> In *Lotus*, Caltrans approved an EIR for a highway construction project through a stand of old growth redwoods. The project would result in tree removal and potential damage to the structural root zones of the trees, but Caltrans determined that this potential damage would not be significant because the project included certain measures designed to reduce or eliminate the damage to the redwoods, including “restorative planting and replanting, invasive plant removal, and use of an arborist and of specialized equipment.”<sup>182</sup> The Court of Appeal, in ordering that the EIR be set aside, explained that Caltrans’ failure to “separately identify and analyze the significance of the impacts to the root zones of old growth redwood trees before proposing mitigation measures is not merely a harmless procedural failing.”<sup>183</sup> Instead, Caltrans was required to first identify “the potential environmental consequences arising from the project” and then thoughtfully analyze “the sufficiency of measures to mitigate those consequences” and adopt an enforceable monitoring program to ensure that the mitigation measures are carried out.<sup>184</sup>

G1-86.44

The DEIR suffers from the same deficiency as in the *Lotus* case. SCAQMD has set a significance threshold of 55 lb/day of VOC operational emissions.<sup>185</sup> Thus, any project emitting over 55 lb/day has significant emissions that must be mitigated under CEQA.<sup>186</sup> This DEIR has stated operational emissions of 401.15 lb/day.<sup>187</sup> Its VOC emissions are therefore significant under CEQA.

The EIR, however, erroneously concludes that VOC emissions are not significant because the Project will offset these emissions by retiring emission reduction credits.<sup>188</sup> Emission reduction credits are created when a facility voluntarily reduces its air emissions in excess of reductions required by law. These credits, once created, are “banked” to be retired later by the same facility in order to permit new emissions, or can be sold to other facilities for use.<sup>189</sup> Again, just like in *Lotus*, the use of emission reduction credits to offset an increase in emissions is not a project component, but rather akin to a potential mitigation measure.<sup>190</sup> The DEIR should thus conclude that the emissions from this Project are significant, and separately propose enforceable and monitorable mitigation measures.

G1-86.44  
cont’d.

<sup>181</sup> *Lotus v. Dept. of Transportation* (2014) 223 Cal.App.4th 645, 658 (hereafter *Lotus*).

<sup>182</sup> *Lotus*, 223 Cal.App.4th at 656, n.8.

<sup>183</sup> *Id.* at 658.

<sup>184</sup> *Id.*

<sup>185</sup> DEIR 4-8, Table 4.2-1 [“Mass Daily Thresholds”].

<sup>186</sup> See CEQA Guidelines, § 15064.7(a).

<sup>187</sup> DEIR, at 4-16 - 4-17, Table 4.2-4.

<sup>188</sup> DEIR, at 4-36; DEIR, at 4-16 - 4-17, Table 4.2-4.

<sup>189</sup> SCAQMD Rule 1309.

<sup>190</sup> CEQA Guidelines, § 15370(e).

**Response G1-86.44**

*Lotus v. Department of Transportation*<sup>317</sup> does not present an analogous situation to the proposed project. As explained in Response G1-86.43, the VOC emissions are less than significant as a result of offsets required pursuant to SCAQMD’s New Source Review Regulation XIII. Under that regulation, Tesoro must obtain offsets before it can obtain permits for the proposed project. Therefore, unlike the measures that the *Lotus* court found that were improperly included in the project, the offsetting is an integral part of the proposed project itself and is not considered a mitigation measure.<sup>318</sup> See Table 4.2-4 of the DEIR, page 4-18, pages 4-22 through 4-23, and

<sup>317</sup> *Lotus v. Department of Transportation* (2014) 223 Cal. App. 4<sup>th</sup>.

<sup>318</sup> *Environmental Council of Sacramento v. City of Sacramento (Alleghany Properties, Inc.)* (2006) 142 CA4th 1018.

Appendix B3 page B-3-7 and Table 6, and Response G1-78.223 for additional description of this issue.

**Comment G1-86.45**

Failure to properly analyze the significance of the VOC emissions of this Project means that SCAQMD has failed to evaluate whether “other more effective measures than those proposed should be considered.”<sup>191</sup> CEQA requires that “[w]here several measures are available to mitigate an impact, each should be discussed and the basis for selecting a particular measure should be identified.”<sup>192</sup> But here, by inappropriately including offsets as part of the Project, SCAQMD has failed to discuss why offsets were chosen in favor of other on-site mitigation. On-site mitigation could include shutdown of additional equipment at the refinery, or installation of control technology to reduce operational emissions from the new components. These options should be disclosed as potential mitigation measures, and their effectiveness discussed.

G1-86.45

<sup>191</sup> *Lotus, supra*, 223 Cal.App.4th at 656.

<sup>192</sup> CEQA Guidelines, §15126.4(a)(B).

**Response G1-86.45**

As explained in Responses G1-86.43 and G1-86.44, without the VOC offsets at issue, the permits required for the proposed project cannot be issued. Therefore, this offsetting is an integral part of the proposed project itself and is not considered a mitigation measure. See Table 4.2-4 of the DEIR, page 4-18, pages 4-22 through 4-23, and supporting data in Appendix B3, see page B-3-7, and Table 6, and Response G1-78.223 for additional description of this issue. Additionally, as described in Responses G1-78.212 through G1-78.222, the DEIR accurately and correctly calculated the potential increase in VOC emissions from the proposed project. Based on these calculations combined with the offsets required pursuant to SCAQMD Regulation XIII, the overall VOC emissions resulting from the proposed project will be less than significant as described in the DEIR and Master Response 6 and, as such, no mitigation is required.

**Comment G1-86.46**

Under CEQA, mitigation measures must be enforceable and effective, and there must be a mitigation monitoring and reporting program in place to ensure compliance.<sup>193</sup> There is no evidence in the EIR of what emission reduction credits Tesoro plans to use to offset emissions, and that these credits are valid. We submitted a Public Records Act request for information on the credits on May 9, but SCAQMD failed to provide records before the comment deadline.<sup>194</sup> As the Ninth Circuit has pointed out—EPA has never validated the emission credits in the ERC bank, so there is no guarantee that the credits used for this project are valid.<sup>195</sup> To the extent Tesoro proposes to use emission reduction credits as mitigation measures, the credits proposed to be used should be disclosed and their validity analyzed.

G1-86.46

<sup>193</sup> *Federation of Hillside and Canyon Assns. v. City of Los Angeles* (2000) 83 Cal.App.4th 1252, 1261; CEQA Guidelines, at §§ 15126.4(a)(2), 15097; *Gray v. County of Madera* (2008) 167 Cal.App.4th 1099, 1115-17.

<sup>194</sup> See Public Records Act Request (May 9, 2016).

<sup>195</sup> *Communities for a Better Environment v. U.S. E.P.A.* (9th Cir. 2015) 609 Fed.Appx. 461, 462.

**Response G1-86.46**

As explained in Response G1-86.45, no mitigation is required for VOC emission impacts because they are less than significant. See Table 4.2-4, page 4-18, pages 4-22 through 4-23, and supporting data in Appendix B3 page B-3-7 and Table 6 of the DEIR, Master Response 6, and Response G1-78.223 for additional description of this issue. Further, as explained in Responses G1-86.43 through G1-86.45, the VOC offsets raised by the comment are not considered mitigation measures. Without the VOC offsetting at issue, the permits required for the proposed project cannot be issued. Therefore, the offsetting is an integral part of the proposed project itself and is not being utilized as mitigation measures as asserted in the comment.

As explained on pages 4-17 and 4-18 of the DEIR, the DEIR notes that SCAQMD Regulation XIII emissions offsetting is required. The Refinery already holds valid ERCs which were mostly generated from previous equipment shutdowns from Tesoro’s Refinery and Logistics operations, and the Refinery intends to use these ERCs for the proposed project instead of purchasing ERCs from the market. The Refinery does not plan to use offsets from the SCAQMD’s internal bank, which was involved in the Ninth Circuit case cited in the comment. Each ERC issued by the SCAQMD is subject to public and U.S. EPA review as well as extensive engineering analysis to ensure they are valid. The SCAQMD will ensure any ERCs used comply with all applicable rules and regulations. The proposed permit includes evaluation of the applications received that are subject to offsets. On August 24, 2016, SCAQMD staff provided all the information requested through the public records request submitted by Earthjustice (dated May 9, 2016). The requested information was not relied upon for the analysis in the DEIR and, therefore, did not need to be provided prior to the close of the public comment period.

**Comment G1-86.47**

But more importantly, there is no evidence that the use of emission reduction credits will effectively mitigate the harm to the local community from exposure to increased VOC emissions onsite from this Project. Emission reduction credits could have been generated from any location within the South Coast Air Quality Management District—a 10,743 square mile area,<sup>196</sup> and the emission reductions could have occurred decades ago.<sup>197</sup> The Wilmington/Carson area, home to predominantly low income communities of color, is already overburdened by pollution, due to being home to the largest concentration of refineries in the state, proximity to the Port of Los Angeles, and presence of heavy diesel truck and rail traffic.<sup>198</sup> This Project’s significant addition of VOC emissions is likely to only exacerbate the pollution burden of these communities, and lead to increased health conditions such as asthma and other respiratory ailments.<sup>199</sup> The DEIR contains no demonstration of how the use of offsets would somehow reduce this localized increase in exposure to VOCs to less than significant, and how the use of offsets would be superior mitigation to other on-site measures.

G1-86.47

<sup>196</sup> See <http://www.aqmd.gov/home/about>.

<sup>197</sup> See generally, SCAQMD Rule 1309; see also Rule 1303(b)(3) [limiting Tesoro to obtaining new emission reduction credits originating in zone 1, which includes the coastal portions of SCAQMD, including Catalina Island].

<sup>198</sup> See The Increasing Burden of Oil Refineries and Fossil Fuels in Wilmington, California, available at [http://www.cbecal.org/wp-content/uploads/2012/05/wilmington\\_refineries\\_report.pdf](http://www.cbecal.org/wp-content/uploads/2012/05/wilmington_refineries_report.pdf); Morello-Frosch, et al., *Integrating Environmental Justice and the Precautionary Principle in Research and Policy Making: The Case of Ambient Air Toxics Exposures and Health Risks among Schoolchildren in Los Angeles*, 584 *Annals of the American Academy of Political and Social Science* 47 (Nov. 2002), attached as Exhibit A.

<sup>199</sup> See, e.g., Ware, et al., *Respiratory and Irritant Health Effects of Ambient Volatile Organic Compounds*, 137-12 *Am. J. of Epidemiology* 1287 (June 15, 1993) [correlating exposure to VOCs with increased rates of asthma and chronic lower respiratory symptoms], attached as Exhibit B; Curtis, et al., *Adverse Health Effects of Outdoor Air Pollutants*, 32 *Environment International* 815 (2006) [meta analysis linking exposure to outdoor air pollution, including exposure to VOCs, to many types of health problems], attached as Exhibit C.



**Response G1-86.47**

Responses G1-86.43 through G1-86.46 explain that while fugitive VOC emissions associated with the new and replacement crude oil storage tanks will increase, the overall increase in operational VOC emissions associated with the proposed project was found to be less than significant. Therefore, no mitigation is required. See Table 4.2-4, page 4-18, pages 4-22 through 4-23, and supporting data in Appendix B3 page B-3-7 and Table 6 of the DEIR, and Master Response 6.

In order to obtain necessary permits for the proposed project, a New Source Review analysis is required. As explained in Response G1-78.223, New Source Review requires VOC offsetting as a condition of obtaining a permit pursuant to SCAQMD Regulation XIII. Without such offsetting, the proposed project permits cannot be issued. Therefore, the required offsetting is properly categorized as an integral part of the proposed project, not as a mitigation measure.

As explained on pages 4-17 and 4-18 of the DEIR, the DEIR notes that Regulation XIII emissions offsetting is required. The Refinery already holds ERCs which were mostly generated from previous equipment shutdowns from Tesoro's Refinery and Logistics operations, and the Refinery intends to use these ERCs for the proposed project instead of purchasing ERCs from the market. Therefore, the local impact from VOC is less than significant.

The proposed project has been fully analyzed for health risks (see Section 4.2.2.5 of the DEIR). As explained in Master Response 3, the proposed project's contribution from emissions, including VOC emissions, to local health effects will be less than significant. A detailed response regarding potential health impacts associated with the proposed project can be found in Master Responses 3 and 14 which describe the localized impacts to the surrounding communities.

**Comment G1-86.48**

**B. Early Compliance with the NOx RECLAIM Shave and Retention of RTCs Does Not Equate to Emissions Reductions.**

The DEIR proposes to mitigate the significant construction impacts by early compliance with installation of Selective Catalytic Reduction (SCR) on three units. Importantly, we are deeply disappointed that the SCAQMD has a NOx RECLAIM program that means refineries could delay installation of SCRs for many years when “[t]hese change-outs would not require additional approvals and would not require major construction.”<sup>200</sup> But beyond this flaw in the NOx RECLAIM program, the DEIR cannot rely on these “early” compliance projects for the NOx RECLAIM to claim credit for mitigation. Importantly, there is nothing in the DEIR that commits to retiring any credits associated with this project. Thus, Tesoro could simply sell any credits generated or use the credits for other emissions, which would provide no NOx benefits to the region. Overall, if this strategy is being used to mitigate the significant construction impacts, there must be a surrender of the RTCs to make any reductions associated with the new SCRs enforceable.

<sup>200</sup> DEIR, at 4-40.

G1-86.48

**Response G1-86.48**

The comment suggests that the Refinery cannot rely on early investments in reduction of NOx emissions from stationary sources to offset proposed project construction emissions. No evidence is provided to support the claim in the comment. It is true that these NOx emission reductions will achieve part of the overall reductions needed for the Refinery to meet RECLAIM NOx requirements that will be phased in over the next six years, until 2022. However, the Refinery will implement certain stationary source NOx reductions before the reductions are required for RECLAIM compliance, in order to coincide with and offset emissions from peak construction activity for the proposed project. Construction emissions are temporary, only occurring during construction of the proposed project. Early implementation of NOx controls from Refinery stationary sources will result in local NOx emission reductions to offset local construction emissions from the Refinery during the peak proposed project construction period. Without this enforceable requirement, there is no guarantee that the concurrent emission reductions will occur. In addition, the early implementation of NOx controls will not result in generation of NOx RTCs but will result in the Refinery buying less RTCs from the RECLAIM market since the Refinery is short on NOx RTCs due to prior NOx RTC reductions required by RECLAIM. Therefore, there will be no generation or selling of any RTCs as claimed in the comment.

**Comment G1-86.49**

Also, the DEIR misleads decision-makers in assuming that the FCCU that will be shut down in Wilmington will actually achieve emissions reductions. This is nothing more than sleight of hand. Tesoro plans to keep 491.63 of NOx RECLAIM Trading Credits (RTCs) to be used for its operations. Thus, characterizing the closing of the FCCU as an actual emission reduction project is misleading because Tesoro plans to keep these reductions to allow it to continue to emit NOx or increase its NOx emissions. This violates CEQA informational disclosure requirement. If Tesoro intends to rely on the reductions, it must retire any RTCs associated with the shutdown of the FCCU in Wilmington permanently.

G1-86.49

**Response G1-86.49**

The DEIR properly takes into account the potential sale or use of ERCs or RTCs. For example, as shown in the DEIR, the proposed project will eliminate 529.81 lb/day of NOx emissions from equipment at the Refinery (see Table 4.2-4 of the DEIR, page 4-17). However, from a regional perspective, the proposed project's impact will be "neutral," rather than beneficial because Tesoro will retain 491.63 lb/day in RECLAIM trading credits. See page 4-18 of the DEIR for further description on the NOx emission impacts.

As a result of NSR or Cap-and-Trade programs that exist for NOx, SOx, PM10, PM2.5, and GHG, the DEIR reflects that the proposed project will be regionally neutral.

### Comment G1-86.50

#### C. The Air Quality Cumulative Impact Analysis is Flawed.

The DEIR falsely concludes that there is a not a significant cumulative impact related to operations of this project, in addition to other projects in the vicinity.<sup>201</sup> The DEIR comes to this conclusion based on two false assumptions. First, the DEIR assumes that the Southern California International Gateway (SCIG) Project will result in major emissions reductions in the project area.<sup>202</sup> Second, the DEIR relies on the false assumption that unless there are significant direct project impacts, there cannot be cumulative operational impacts from a Project. These assumptions are not supported in the DEIR and contradict CEQA's mandates.

G1-86.50

<sup>201</sup> DEIR, at 5-19.

<sup>202</sup> DEIR, at 5-18, Table 5.2-2 [Finding the SCIG project results in a reduction of 316 lbs/day VOC, 2,905

### Response G1-86.50

The comment is a summary of the specific comments to follow in this section of Comment Letter 86 that are responded to in more detail in Responses G1-86.51 through G1-86.54. The DEIR (see Section 4.2.2.2 and pages 5-18 to 5-19) and Master Response 16 explain that the operational air quality impacts were correctly determined to be less than significant. The SCAQMD's methodology for determining cumulative impact analyses was correctly applied to support its finding that the operational air quality impacts of the proposed project are not cumulatively considerable.

### Comment G1-86.51

The DEIR cannot rely on reductions from the SCIG project. The SCIG project is a near-dock intermodal railyard proposed to be built in Los Angeles adjacent to west Long Beach. The project was an immensely important environmental justice and health case that garnered significant opposition. Importantly, several entities filed lawsuits challenging the SCIG project, including the SCAQMD itself.<sup>203</sup> The SCAQMD and others challenging the project prevailed in that litigation, and they have received a favorable decision by the Superior Court.<sup>204</sup> In fact one of the critical issues in which the SCAQMD prevailed was whether the EIR could assume reductions in operations at another railyard based on opening this wholly new railyard. The SCAQMD also prevailed on several other issues related to the air quality analysis. This agency flatly critiqued the validity of the emissions reductions estimates in the SCIG project, so these reductions cannot be relied upon in the DEIR. Moreover, the strength of the SCAQMD's arguments were further bolstered in the strong court opinion showing the SCIG EIR is unlawful.

G1-86.51

<sup>203</sup> Petition of SCAQMD challenging SCIG Project, attached as Exhibit D. For context of the legal arguments and the critiques of the air quality analysis and the assumptions that formed this analysis, these comments include Attachments E and F, which are the Opening and Reply Briefs filed by SCAQMD in that case.

<sup>204</sup> Decision in SCIG Case, attached as Exhibit G.

### Response G1-86.51

The Southern California International Gateway ("SCIG") Project is included in the DEIR on Table 5.2-2, page 5-18, as one of the projects that has the potential for operational activities that could overlap with the proposed project operational activities. The comment is correct that a superior court recently set aside certification of the EIR for the SCIG project, and accordingly the emission reductions associated with the SCIG project should not be considered in the environmental analysis of the proposed project. However, the invalidation of the SCIG EIR does not alter the analysis or conclusions in the DEIR because the SCIG emission reductions were not considered in the determination of cumulative impacts from the proposed project.

## APPENDIX G1: RESPONSE TO COMMENTS

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Moreover, the DEIR disclosed the fact that the SCIG emission reductions listed in the DEIR were tentative and annotated the references to SCIG with a disclaimer that the SCIG environmental analysis “has been challenged and is being litigated” or is “subject to revision pending outcome of ongoing litigation” (see pages 5-17, 5-18, 5-20, and 5-23 of the DEIR). In the FEIR, references to SCIG emission calculations and other data in Chapter 5 have been removed.

The conclusion in the DEIR that the operational emission impacts of the proposed project are not cumulatively significant did not rely upon the emission reductions reported in the SCIG EIR. The emissions from the cumulative projects were listed in Tables 5.2-1 and 5.2.-2 of the DEIR for informational purposes. But the emissions are not summed in order to determine cumulative impacts. As explained in Master Response 16, consistent with SCAQMD’s policy, the operational emissions of the proposed project are below significance thresholds for all pollutants and thus, are not considered cumulatively considerable. Accordingly, the removal of the SCIG project does not affect the cumulative impacts emissions findings of the DEIR for the proposed project.

Additionally, as provided in the DEIR (see Table 4.2-4 and page 5-19), the overall regional change in emissions associated with implementing the proposed project is a reduction in emissions of CO and a less than significant increase in VOC, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. The ground level concentrations of criteria pollutants of concern will be below the SCAQMD’s CEQA significance thresholds at all offsite receptors. As such, the proposed project’s criteria pollutant emissions are not cumulatively considerable and do not contribute to cumulative operational emission impacts. This determination is based upon SCAQMD’s CEQA significance thresholds and policies and does not rely upon any reductions from the SCIG Project.

### Comment G1-86.52

Even beyond the dramatic underestimation of pollution that these comments and the May Technical Report have identified, using the emissions estimates in the DEIR, there will be increases in VOCs, NO<sub>x</sub>, PM<sub>10</sub> and PM<sub>2.5</sub> associated with this Project.<sup>205</sup> Without the unsubstantiated SCIG reductions, Table 5-2-2 emissions add up to: 646.97 lbs/day of VOCs,

G1-86.52

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825.15 lbs/day of CO, 832.01 lbs/day of NOx, 3.63 lbs/day of SOx, 340.46 of PM10, and 51.37 lbs/day of PM2.5.

**Table 12: Cumulative Operational Emissions (lbs/day) are significant with the SCIG subtracted**

	VOC	CO	NOx	SOx	PM10	PM2.5
6 ILWU Local 13 Dispatch Hall(b)	19.9	--	26.9	--	16.9	1.5
8 Valero Cogen(c)	33.4	201.8	0	0	95.8	20.6
9 WesPac(d)	-27	-266	-40	<1	-33	-30
10 LAUSD Span K-8 School(e)	8.76	--	--	--	--	--
12 Warren E&P(f)	19	14.4	20.5	--	3.7	4.3
15 Sepulveda/Panama Project(g)	339.1	546.9	521.6	2.82	203.9	32.4
16 Shell Revitalization Project(h)	50.83	0	0	0	0	0
21 Phillips 66 Crude Oil Storage(i)	166.8	109.1	249.4	0.3	18.9	12.8
22 Carson Facility E10 Project(j)	0	0	0	0	0	0
23 Carousel Tract(k)	30	200	50	0.48	32	9.1
32 CSULB Foundation Retail Project(l)	4.89	18.95	3.61	0.03	2.26	0.67
34 Tesoro LPG Recovery Unit	0.46	0	0	0	0	0
35 Tesoro Dehexanizer Unit	0.68	0	0	0	0	0
40 Tesoro Storage Tank 956	0.15	0	0	0	0	0
<b>Total</b>	<b>646.97</b>	<b>825.15</b>	<b>832.01</b>	<b>3.63</b>	<b>340.46</b>	<b>51.37</b>
<b>Operational Significance Thresholds</b>	55	550	55	150	150	55
<b>Significant?</b>	<b>Yes</b>	<b>Yes</b>	<b>Yes</b>	<b>No</b>	<b>Yes</b>	<b>No</b>

G1-86.52  
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When combining the Project emissions with the additional emissions from the projects identified in Table 5.2-2 on page 5-18, there will be a significant increase cumulatively in emissions.

Because the evidence clearly shows the cumulative impacts – even using the underestimated emissions estimates in the DEIR – exceed SCAQMD significance thresholds, there is no basis for the DEIR’s conclusion that no significant increase in cumulative air quality emissions exists.

<sup>205</sup> See generally DEIR section 4.2.

**Response G1-86.52**

The DEIR correctly calculates that the overall regional change in emissions associated with implementing the proposed project is a reduction in emissions of CO and a less than significant increase in VOC, NOx, SOx, PM10, and PM2.5 emissions and the ground level concentrations of criteria pollutants of concern will be below the SCAQMD’s CEQA significance thresholds at all offsite receptors. See Section 4.2.2.2, page 5-19, and Table 4.2-4 of the DEIR for further description of these emission calculations. As such, according to SCAQMD methodology, the proposed project’s criteria pollutant emissions are not cumulatively considerable and do not contribute to cumulative operational emission impacts. See Master Response 16 for further description of the proposed project’s cumulative impact analysis. Response G1-86.51 above explains the DEIR’s treatment of the SCIG Project, and how its emission reductions were not considered in the DEIR’s cumulative impacts determination.

The chart (Table 12) provided in the comment letter is not an accurate representation of the information in the DEIR. The emissions from the cumulative projects were listed in the DEIR in Tables 5.2-1 and 5.2.-2 for informational purposes. But, the emissions are not summed (as Table 12 would suggest) in order to determine cumulative impacts. As explained in Master Response 16, consistent with SCAQMD’s policy, the operational emissions of the proposed project are below significance thresholds for all pollutants and thus, are not considered cumulatively

considerable. Accordingly, the removal of the SCIG project does not affect the cumulative impacts emissions findings of the DEIR for the proposed project.

**Comment G1-86.53**

Further, the Project cannot shield itself from identifying a significant cumulative air quality impact by relying on the SCAQMD policy that generally allows projects to conclude no significant cumulative air impact when direct project emissions are below significance thresholds. This SCAQMD policy undermines CEQA’s requirement to look at the incremental effects of a project when viewed in connection with the effect of past projects, other current projects, and probably future projects.<sup>206</sup> This SCAQMD policy renders the cumulative impacts analysis meaningless, which is not supported by the CEQA Guidelines and CEQA itself. This is particularly the case here where the DEIR itself shows other projects adding significant pollution levels in the project vicinity. Including the additional pollution from the Project makes this significant impact even greater, requiring disclosure and a significance determination under CEQA.

G1-86.53

G1-86.53  
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<sup>206</sup> CEQA Guidelines, §§ 15064(h)(1), 15065(a)(3).

**Response G1-86.53**

As explained in Master Response 16, the SCAQMD’s methodology is appropriate when addressing air quality impacts because project-specific air emissions are already evaluated in the SCAQMD’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. This approach to cumulative air quality impacts analysis was found to be consistent with CEQA Guidelines § 15064.7 and ultimately upheld by the Court in *Citizens for Responsible Equitable Environmental Development v City of Chula Vista* (2011) 197 Cal. App.4th 327, 334. This method was also approved by the court in *Rialto Citizens for Responsible Growth v. City of Rialto* (2012) 208 Cal.App.4th 899, 928.

**Comment G1-86.54**

Because there is clearly a significant cumulative air quality impact from operation of this project, the EIR must be recirculated.

G1-86.54

**Response G1-86.54**

As explained in Responses G1-86.51 to G1-86.53, the DEIR accurately concludes that the overall regional change in emissions associated with implementing the proposed project will be less than significant. See DEIR page 5-19 and Table 4.2-4, for further description of these emission calculations. Utilizing those findings, the DEIR correctly applies SCAQMD methodology regarding cumulative impact analyses, which supports the determination that the proposed project’s criteria pollutant emissions are not cumulatively considerable and do not contribute to cumulative operational emission impacts. See Master Response 16 for further description of the SCAQMD’s methodology regarding cumulative impact analyses. The comment does not provide any evidence that triggers recirculation of the DEIR.

**Comment G1-86.55**

**D. The Project’s Climate Change and Greenhouse Gas Emissions Impacts are Underestimated.**

The DEIR inadequately and inaccurately analyzes the GHG impacts from the Project. As described above, the DEIR fails to admit the likelihood that the facility will shift its operations to process Bakken or tar sands crude oil. This omission precludes an adequate assessment of potentially significant environmental impacts, including the potential increase of GHGs. It precludes meaningful mitigation, and the only alternative that would address its impacts is the No Project Alternative. Further, the DEIR claims beneficial GHG impacts of the Project, despite the fact that, even if the Project were exactly as described, Tesoro anticipates trading GHG allowances for the emissions reductions, resulting in no cumulative benefit at all. The DEIR is extremely deceptive in describing the Project as having climate change benefits, directly undermining its informational purpose. In addition, the DEIR errs in relegating analysis of GHGs solely to the cumulative impacts analysis. The Project’s direct and indirect impacts must be analyzed, independently of cumulative impacts.

G1-86.55

**Response G1-86.55**

The proposed project will not facilitate any changes in the crude oil slate delivered to the Refinery as explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, nor will the proposed project significantly change the basic crude oil operating envelope, or acceptable ranges of basic crude oil properties (API gravity and sulfur content) specific to the Refinery. See Sections 2.5.4.1 and 2.5.4.2 of the DEIR for a description of the “operating envelope.” As a result, there will be no associated potential impacts of processing various crude oils at the Refinery, such as an increase in GHGs as claimed in the comment. See Sections 2.5.3 and 2.5.4 and the McGovern Report in Appendix F of the DEIR, Master Response 4, and Response G1-78.94 for further information regarding crude oil slate, baseline, and properties.

Additionally, while the proposed project will result in a local GHG emission reduction, the DEIR conservatively states that because GHG emissions are part of the AB 32 Cap-and-Trade Program, an individual project’s GHG emission reductions will not have an impact on the overall Cap-and-Trade pool of allowances. See Section 5.2.2.3 of the DEIR for a description of the proposed project’s GHG emissions and AB 32 Cap-and-Trade Program pool of allowance reduction.

Lastly, the DEIR correctly analyzed the proposed project’s GHG emissions on a cumulative basis as explained in Master Response 16, “[D]ue to the complex physical, chemical, and atmospheric mechanisms involved in global climate change, it is likely impossible to identify the specific impact, if any, to global climate change from one project’s incremental increase in GHG emissions. As such, the project’s GHG emissions and the resulting significance of potential impacts are more properly assessed on a cumulative basis.” See pages 4-7 and 5-21 of the DEIR for further description of this issue.

**Comment G1-86.56**

**1. The DEIR Fails to Describe and Analyze Significant Climate Change Implications of this Project.**

The DEIR recognizes that climate change is an important problem for our future although it is mildly stated compared to the severe threats.<sup>207</sup> GHGs, especially combustion of fossil fuels for energy, transportation, and manufacturing, are the main contributors to global warming that causes rapid changes in the way a number different types of ecosystems typically function. Climate change, due to GHG emissions, also creates disastrous health effects. For example, higher temperatures lead to increased formation of ground-level ozone, projected to undermine smog reduction progress made in Southern California. Ozone is a well-known lung irritant and a major trigger of respiratory problems like asthma attacks. Local changes in temperature and rainfall also alters the distribution of some waterborne illnesses and diseases. For example, warmer freshwater makes it easier for pathogens to grow and contaminate drinking water.<sup>208</sup> Climate change also threatens California’s agriculture and water supplies, causes extreme weather events, sea level rise, and threatens catastrophic change worldwide.

In the face of these severe global and local effects, the DEIR fails to admit a climate change impact that is significant and unavoidable. The DEIR concludes that “the proposed project is expected to result in local GHG emission reduction of approximately 66,139 metric tons per year, providing a net GHG emission reduction from the Refinery, thus, reducing the Refinery’s contribution to global climate change.”<sup>209</sup> This conclusion is incorrect on at least two bases. First, as described above, the DEIR fails to admit the likelihood that the facility will shift its operations to process a different crude slate, including more Bakken or tar sands crude oil. In addition to being fatal to the Project Description, and pervasively throughout the DEIR, the DEIR’s failure to account for this potential shift is a serious flaw in its cumulative impact analysis. Second, while asserting that the Project reduces GHGs, the DEIR admits that, under the AB 32 regulatory scheme, the Project does not reduce GHG emission, but rather must be assumed to be neutral.<sup>210</sup> It is not clear, based on the DEIR, whether Tesoro intends to claim reductions from the Project as credits under the AB 32 trading program. This lack of clarity renders the DEIR incomplete and deceptive. Moreover, in calculating the GHG emissions for the Project, the DEIR fails to include the life-cycle emissions of the crudes the Refinery processes daily. By failing to include these emissions, the Project inaccurately reports the emissions of the Refinery. Additionally, the DEIR only considers the cumulative impacts of GHG emission and does not include any direct or indirect analysis for GHG emission. All these deficiencies create an inadequate analysis of GHGs.

<sup>207</sup> DEIR, at 5-22.

<sup>208</sup> *Id.*

<sup>209</sup> *Id.* at 5-26.

<sup>210</sup> *Id.* at 5-26.

G1-86.56

G1-86.56  
cont’d.

**Response G1-86.56**

As explained in Response G1-86.55, the basic crude oil operating envelope will not be significantly changed by the proposed project. Moreover, the decisions with respect to sourcing the crude oil slate are made independently of the proposed project. As such, the life-cycle emissions of the Refinery’s crude oil slate (including any potential for increases in GHG at the source of any crude oil) are not influenced by the proposed project and none of the additional impacts described by the comment are reasonably foreseeably caused directly or indirectly as a result of the proposed project. See Sections 2.5.4.1 and 2.5.4.2 of the DEIR for a description of the “operating envelope” and Master Response 4 for further discussion as to why any change in the source of crude oil is not a result of the proposed project. See also Sections 2.5.3 and 2.5.4 and the McGovern report in Appendix F of the DEIR, Master Response 4, and Response G1-78.94 for further information regarding crude oil slate, baseline, and properties.



As explained in Response G1-81.65, the source of crude oil is determined by multiple factors as described in the Declaration of Douglas Miller (see Attachment C). The proposed project does not affect the method for sourcing crude oil. Lifecycle (“well to wheel”) GHG impacts resulting from the extraction and transport of Bakken crude oil is beyond the scope of the DEIR. The DEIR accounts for direct GHG emissions associated with stationary sources, the transport of LPG by rail and material transport by truck within the State of California (see Table 5.2-6 of the DEIR) and GHG emissions associated with indirect sources including stationary sources and increased utilities (see Table 5.2-7 of the DEIR), as required by CEQA Guidelines § 15358. On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. While the lifecycle emissions are to be considered “to the extent information is available,”<sup>319</sup> predicting the GHG emissions from the sources of crude oil purchased by Tesoro is not reasonably achievable because the source of crude oil varies widely as shown in Master Response 4 Table G0-2.4-1. Moreover, the decisions with respect to sourcing the crude oil slate are made independent of the proposed project. In December 2009, the California Natural Resources Agency removed the term “lifecycle” from the CEQA Guidelines Appendix F guidance on analysis and mitigation of energy impacts from proposed projects in conjunction with its rulemaking pertaining to analysis and mitigation of GHG impacts.<sup>320</sup> Therefore, lifecycle impacts need not be analyzed.

Additionally, as explained in Response G1-86.55, with respect to GHG emission reductions, the DEIR conservatively states that because GHG emissions are part of the AB 32 Cap-and-Trade Program, an individual project’s GHG emission reductions will not necessarily have an impact on the overall Cap and Trade pool of allowances. The Cap and Trade Program is designed to reduce the overall GHG emissions in California, so an individual project should not be directly credited with all of its specific emission reductions when reductions occur at one site, some increases may occur at other sites. Thus, the DEIR quantifies the local reduction of GHG emissions from the proposed project but presents a neutral overall regional impact of the proposed project because of the Cap and Trade Program. See Section 5.2.2.3 of the DEIR for further description of the proposed project’s GHG emissions.

As explained in Response G1-86.55, the DEIR properly analyzed the proposed project’s GHG emissions on a cumulative basis as described in Master Response 16, as “it is likely impossible to identify the specific impact, if any, to global climate change from one project’s incremental increase in GHG emissions.” See pages 4-7 and 5-21 of the DEIR for further description of this issue.

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<sup>319</sup> SCAQMD Board Letter, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 8, 2008, [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2).

<sup>320</sup> California Natural Resources Agency, 2009. Final Statement of Reasons for Regulatory Action for the Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gases Emissions Pursuant to SB97, December 2009, [http://resources.ca.gov/ceqa/docs/Final\\_Statement\\_of\\_Reasons.pdf](http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf).

**Comment G1-86.57**

**a. The DEIR Fails to Analyze a Switch to Heavier and Dirtier Crude Slate due to the Project.**

First, the DEIR fails to include the composition of the Refinery’s crude slate to determine its current baseline of GHG emissions.<sup>211</sup> According to the DEIR, the crude slate processed by the Refinery is business confidential information and therefore cannot be disclosed by the Refinery.<sup>212</sup> However, this undisclosed data from the Refinery “does not meet the “informational” goals of CEQA.”<sup>213</sup> In *Richmond*, the California Appellate Court invalidated an EIR that relied in part on expert testimony using undisclosed, proprietary industry data from Chevron.<sup>214</sup> Similarly, here, the DEIR relies on an expert report to determine that the crude slate will not change.<sup>215</sup> However, this determination is based on analyzing crude slate data unavailable to the public in the DEIR. Withholding the crude slate data prevents “the information necessary for an informed decision from reaching the decisionmakers and the public.”<sup>216</sup> The DEIR needs to disclose its current crude slate as well as its anticipated change due to the Project in order to comply with CEQA.

G1-86.57

<sup>211</sup> May Technical Report, § I.

<sup>212</sup> DEIR, at F-7 (McGovern Report, Appendix F).

<sup>213</sup> See *Richmond*, 184 Cal.App.4th 70, 88.

<sup>214</sup> *Id.*

<sup>215</sup> DEIR, at F-7 (McGovern Report, Appendix F).

<sup>216</sup> *Richmond*, 184 Cal.App.4th at p. 88.

**Response G1-86.57**

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing a blend of various crude oils and will continue to do so with or without the proposed project. The proposed project is not designed to facilitate a change in the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow processing of a slightly heavier crude oil blend. Unlike the Chevron Richmond project, the proposed project does not involve the physical modification of any Crude, DCU, or Sulfur Recovery Units that would accommodate such changes in crude oil. As such, the basic crude oil operating envelope, or acceptable ranges of basic crude oil properties (API gravity and sulfur content) specific to the Refinery, will not be significantly changed by the proposed project. See Sections 2.5.4.1 and 2.5.4.2 of the DEIR for a description of the “operating envelope.” As a result, the comment’s comparison of the proposed project to the Chevron Richmond Project is incorrect. See Master Response 4 and Responses G1-78.20 and G1-78.21 for further information regarding the Chevron Richmond Project, its ensuing litigation, and why its decision is not applicable to the proposed project. Additionally, see Sections 2.5.3 and 2.5.4 and the McGovern Report in Appendix F of the DEIR, Master Response 4, and Response G1-78.94 for further information regarding crude oil slate, baseline, and properties.

Since any crude oil processed by the Refinery will be blended to meet the crude oil operating envelope, the crude oil slate information was not relied upon in the DEIR to determine the potential impacts of the proposed project. Additionally, disclosure of more detailed information about crude oil throughput, sources, and crude oil composition data is trade secret information as explained in Master Response 2 and not required under CEQA. See Master Response 2 and Response G1-78.208 for a description regarding disclosure of crude oil baseline data.

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.1 through G1-81.19. The issues raised in the comments are addressed in detail in Responses G1-81.1 through G1-81.19.

**Comment G1-86.58**

Second, the DEIR claims that despite the changes made to the Refinery, the proposed facility will only process a crude slate similar to the crude slate currently processed.<sup>217</sup> However, the Project will very likely lead to the processing of a different crude slate that will result in higher GHG emissions.<sup>218</sup> Many of the improvements to the Refinery will allow the processing of a different crude slate. For example, the increased storage and new storage tanks will allow for

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the handling of Canadian tar sands and Bakken crude.<sup>219</sup> The Project also plans to expand its sulfur treatment operations allowing for the processing of crude oil higher in sulfur such as Canadian tar sands.<sup>220</sup> In addition, the DEIR admits the facility will most likely be switching away from the Alaskan North Slope crude oil due to its lack of availability.<sup>221</sup>

G1-86.58  
cont'd.

<sup>217</sup> DEIR, at 1-18.

<sup>218</sup> May Technical Report, § IV(C)(2).

<sup>219</sup> May Technical Report, § IV(C).

<sup>220</sup> May Technical Report, § IV(C)(2).

<sup>221</sup> DEIR, at 2-16.

**Response G1-86.58**

Again, as described in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the proposed project does not involve the physical modification of any Crude, DCU, or Sulfur Recovery Units that would accommodate such changes in crude oil, contrary to assertions in the comment. As such, the basic crude oil operating envelope, or acceptable ranges of basic crude oil properties (API gravity and sulfur content) specific to the Refinery will not be significantly changed by the proposed project. See Sections 2.5.3 and 2.5.4 and the McGovern Report in Appendix F of the DEIR, Master Response 4, and Response G1-78.94 for further information regarding crude oil slate, baseline, properties, and changes; Response G1-78.111 for further information regarding sulfur in the crude oil blend to be processed at the Refinery; and Sections 2.5.4.1 and 2.5.4.2 of the DEIR for a description of the “operating envelope.” Similarly, as explained in Master Response 8, replacing and adding storage tanks will not cause any change in the slate of crude oils purchased by Tesoro. Further, as explained in Response G1-78.172, based on Tesoro’s Master Crude Oil Assays, several Middle Eastern crude oils currently processed by the Refinery, have sulfur contents of approximately three percent, which is in the range of heavy Canadian crude oils processed by the Refinery of 3.7 and 3.8 percent sulfur. As such, irrespective of the crude oil types purchased and handled at the Refinery, there will be no associated potential impacts of processing these various crude oils, such as an increase in GHGs as claimed in the comment.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.64 through G1-81.67. The issues raised in the comments are addressed in detail in Responses G1-81.64 through G1-81.67.

**Comment G1-86.59**

Tesoro has informed its investors that it will be supplying more advantaged crude oil to the West Coast.<sup>222</sup> Tesoro is currently undertaking a joint project with Savage to construct a crude-by-rail to oil tanker marine terminal in Vancouver, Washington to export advantaged crude oil to the West Coast.<sup>223</sup> With the construction of the Washington marine terminal, Tesoro will increase its capacity to import heavy crude from Canada and light crude from the Bakken oil fields in North Dakota.<sup>224</sup> The May Technical report finds that extraction and transport of both these crudes increase greenhouse gases.<sup>225</sup> Tesoro has expressed its intentions of using the marine terminal to ship crude oil from mid-continent North America (most likely Bakken crude) to West Coast oil refineries.<sup>226</sup> The Project will allow the Refinery to accept these new sources of oil including Canadian tar sands and the crude from the Bakken oil fields.<sup>227</sup> In addition, with this Project, the Refinery has the potential to process up to 50% California heavy and Bakken crude oil, up from 15%.<sup>228</sup>

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<sup>222</sup> Morgan Stanley Corporate Access Day, Tesoro Corporation, 15 (May 12, 2016), available at <http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations>.

<sup>223</sup> <https://www.vancouverenergyusa.com/>.

<sup>224</sup> Tesoro Investment Thesis, July 24, 2013, available at <http://analysisreport.morningstar.com/stock/archive?t=TSO&region=USA&culture=en-US&productcode=MLE&docId=604033>.

<sup>225</sup> May Technical Report, § IV.

<sup>226</sup> May Technical Report, § II(C).

<sup>227</sup> May Technical Report, § II(C).

<sup>228</sup> Simmons Energy Conference, *Transformation through Distinctive Performance*, February 27, 2014, available at <http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-presentations>.

**Response G1-86.59**

As explained in Master Response 8, the Vancouver Energy Project is wholly independent from the proposed project, and is undergoing separate environmental review by the Washington State EFSEC. As such CEQA does not require analysis of its impacts (CEQA Guidelines Section 15277). Additionally, the Refinery has limited ability to process Bakken crude oil and other light sweet crude oils or heavy Canadian or other heavy crude oils, and the ability to process these oils will not change as a result of the proposed project even if the Vancouver Energy Project makes Bakken crude oil more available on the West Coast. No modifications are included in the proposed project that would significantly increase the ability of the Refinery to process a different crude oil blend beyond that analyzed in the DEIR. See Sections 2.5.3 and 2.5.4 and the McGovern Report in Appendix F of the DEIR, Master Response 4, and Response G1-78.94 for further description of the limitations on the Refinery’s ability to process a different crude oil blend.

Similarly, as explained in Master Response 4, issues pertaining to the production of heavy Canadian crude oil (e.g., water consumption, earth moving, ecosystem disturbance, etc.) are not germane to the proposed project in that these production activities are not a result of the proposed project and will occur independently of the proposed project. As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing a blend of various crude oils and will continue to do so with or without the proposed project. The proposed project is not designed to facilitate a change in the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow processing of a slightly heavier crude oil blend. As explained in Master Response 6, the proposed project would not result in an increase in crude oil capacity beyond the 6,000 bbl/day increase analyzed in the DEIR or result in additional extraction of crude oil in Canada or at any location in the world, or increase the quantity of crude oil

purchased from Canada. Because heavy Canadian crude oil is within the range of crude oils currently received and blended at the Refinery, refining such crude oils does not create additional hazardous waste, increase corrosion, increase the generation of GHG emissions, or increase demand for energy. See Master Response 4 regarding the production of heavy Canadian crude oil and Master Response 6 regarding the Refinery’s crude oil capacity.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.25 and G1-81.64 through G1-81.67. The issues raised in the comments are addressed in detail in Responses G1-81.25 and G1-81.64 through G1-81.67.

**Comment G1-86.60**

Despite this evidence, the DEIR then states that the Refinery will continue to use a similar crude slate by mixing the dirtier crude oils with cleaner crude oils from around the world.<sup>229</sup> However, the DEIR assumes the composition of the crude slate will remain relatively similar but does not include any data as evidence. As in *Richmond*, the DEIR “does not provide any objective quantification” as to the crude slate being used and the crude that will be used.<sup>230</sup> In order to act as a proper informational instrument under CEQA, the DEIR needs to provide more than conclusory statements.

Even if the characteristics of the crude slate were similar, the sources of the crude oil would not be. For example, the characteristics of Alaskan North Slope oil can be approximated by blending Canadian tar sands and Bakken crude.<sup>231</sup> Although the characteristics such as sulfur content and API gravity would be similar, the GHG impacts from this switch would not be. And

despite these indications of switching the crude slate at the Refinery, the DEIR does not analyze the GHG emissions from this likely switch.

G1-86.60  
G1-86.60  
cont’d.

<sup>229</sup> DEIR, at 1-18.

<sup>230</sup> *Richmond*, 184 Cal.App.4th at 87.

<sup>231</sup> May Technical Report, § III(C).

**Response G1-86.60**

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the proposed project is not designed to facilitate a change in the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow processing of a slightly heavier crude oil blend.. This fact has been independently verified by a third-party refinery expert that reviewed the proposed project elements on behalf of the SCAQMD. See Sections 2.5.3 and 2.5.4 and the McGovern Report in Appendix F of the DEIR, Master Response 4, and Response G1-78.94 for additional information regarding crude oil slate, baseline, and properties. See also Sections 2.5.4.1 and 2.5.4.2 of the DEIR for a description of the “operating envelope.” This evidence all provides a factual basis to support the DEIR because it shows that no physical changes are being made. It is more accurate than forecasting future crude oil purchases that are distorted by market impacts and other conditions.

Further, the comment’s comparison of the proposed project to the Chevron Richmond Project is inaccurate. Unlike the Chevron Richmond project, the proposed project does not involve the physical modification of any Crude, DCU, or Sulfur Recovery Units that would accommodate such changes in crude oil. See Master Response 4 and Responses G1-78.20 and G1-78.21 for further information regarding the Chevron Richmond Project, its ensuing litigation, and why its

decision is not applicable to the proposed project. Because there will be no change in the crude oil blend processed by the Refinery, there will be no associated potential impacts from processing these various crude oils, such as an increase in GHGs as claimed in the comment. Moreover, the decisions with respect to sourcing the crude oil processed by the Refinery are made independent of the proposed project.

The comment references Comment Letter 81 and raises the same issues as Comment G1-81.37. The issues raised in the comment are addressed in detail in Response G1-81.37.

### Comment G1-86.61

The DEIR fails to analyze the impact of GHG emissions from the change in the crude slate. Increased emissions from the Project include, but are not limited to, GHG emissions from increased use of Bakken crude, as compared to the current baseline feedstock. However, this impact cannot be adequately analyzed since the baseline is not provided in the DEIR.<sup>232</sup> In addition, changing the crude stock to include Canadian tar sands and Bakken crude can increase GHG emissions at the refinery itself. The climate change impacts of refining are correlated to the quality of the feedstock refined and changing the feedstock would therefore change the climate change impacts.<sup>233</sup> Generally, heavier crude oils have higher GHG emission intensities based over the life cycle of the oil.<sup>234</sup> Crude oils higher in sulfur and heavier crude oil are more GHG intensive because they require additional energy to crack, coke and de-sulfurize.<sup>235</sup> Based on the world oil prices and evidence from Tesoro's statements, a switch to heavier and more GHG-intensive crude is reasonably foreseeable and therefore should be included in the DEIR. Under CEQA, an EIR must analyze the environmental impacts of future expansion or other actions if this other action is a reasonably foreseeable consequence of the initial project.<sup>236</sup> Thus, the DEIR does not comply with CEQA because it is "inconsistent and obscure" as to whether the Project will process a different crude slate and the resulting GHG emission impact is not included in the DEIR.<sup>237</sup>

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<sup>232</sup> See *Richmond*, 184 Cal.App.4th at 89 (holding that failure to identify the possibility that the project would allow the refinery to change its crude stock raises concerns about appropriate baseline against which to compare impacts).

<sup>233</sup> See generally Karras, Greg, "Combustion Emissions from Refining Lower Quality Oil: What is the Global Warming Potential," *Environ. Sci. Technol.* 44, 9584-9589 (2010), for an analysis of the significant increases in GHG emissions caused by refining dirtier, heavier crudes from increased energy intensity needed to refine these oils and from direct emissions from the refining process.

<sup>234</sup> CARNEGIE ENDOWMENT FOR INTERNATIONAL PEACE, KNOW YOUR OIL: CREATING A GLOBAL OIL-CLIMATE INDEX, [http://carnegieendowment.org/files/OCI\\_TwoPager.pdf](http://carnegieendowment.org/files/OCI_TwoPager.pdf).

<sup>235</sup> May Technical Report, § IV(C)(2).

<sup>236</sup> *Laurel Heights Improvement Assn.* 47 Cal.3d at 396.

<sup>237</sup> See *Richmond*, 184 Cal.App.4th at 89.

### Response G1-86.61

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing a blend of various crude oils and will continue to do so with or without the proposed project. The proposed project is not designed to facilitate a change in the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions allow a slightly heavier crude oil blend. The basic crude oil operating envelope; or acceptable ranges of basic crude oil properties (API gravity and sulfur content) specific to the Refinery will not be significantly changed by the proposed project. See Sections 2.5.4.1 and 2.5.4.2 of the DEIR for a description of the "operating envelope." As explained in Master Response 4, heavy Canadian crude oil is within the range of crude oils currently received and blended at the Refinery; and in fact, is processed frequently by the Refinery. Therefore, refining heavy Canadian crude oils does not create additional hazardous

waste, increase corrosion, increase the generation of GHG emissions, or increase demand for energy. As such, a change in the Refinery's crude oil operating envelope is not a reasonably foreseeable consequence of the proposed project as claimed in the comment.

With respect to emissions from process equipment, the DEIR disclosed the properties of the crude oil blend that the Refinery is currently processing. The DEIR also disclosed the origin of crude oils purchased by the Refinery generally, by country of origin. A list of specific crude oil delivered to the Refinery is not necessary. That information has no bearing on process emissions or any other impact, because the proposed project is independent of any plans to purchase particular crude oil in the future. Further, disclosure of more detailed information about crude oil throughput, sources, and crude oil composition data is trade secret information as described in Master Response 2. CEQA prohibits the District from disclosing this information. See Master Response 2 and Response G1-78.208 for a description regarding disclosure of crude oil baseline data.

The proposed project will result in local reductions of GHG as summarized in Table 5.2-8 on page 5-26. The cumulative impact of GHG emissions is described in Section 5.2.2.

As explained in Response G1-81.65, the source of crude oil is determined by multiple factors as described in the Declaration of Douglas Miller (see Attachment C). The proposed project does not affect the method for sourcing crude oil. Lifecycle ("well to wheel") GHG impacts resulting from the extraction and transport of Bakken crude oil is beyond the scope of the DEIR. The DEIR accounts for direct GHG emissions associated with stationary sources, the transport of LPG by rail and material transport by truck within the State of California (see Table 5.2-6 of the DEIR) and GHG emissions associated with indirect sources including stationary sources and increased utilities (see Table 5.2-7 of the DEIR), as required by CEQA Guidelines § 15358. In December 2009, the California Natural Resources Agency removed the term "lifecycle" from the CEQA Guidelines Appendix F guidance on analysis and mitigation of energy impacts from proposed projects in conjunction with its rulemaking pertaining to analysis and mitigation of GHG impacts.<sup>321</sup> Therefore, lifecycle impacts need not be analyzed. Additionally, as described further in Response G1-86.56, SCAQMD guidance requires that lifecycle emissions be considered "to the extent information is available."<sup>322</sup> However, predicting the GHG emissions from the sources of crude oil purchased by Tesoro is not reasonably achievable because the source of crude oil varies widely as shown in Master Response 4 Table G0-2.4-1. Moreover, the decisions with respect to sourcing the crude oil slate are made independent of the proposed project.

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<sup>321</sup> California Natural Resources Agency, 2009. Final Statement of Reasons for Regulatory Action for the Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gases Emissions Pursuant to SB97, December 2009, [http://resources.ca.gov/ceqa/docs/Final\\_Statement\\_of\\_Reasons.pdf](http://resources.ca.gov/ceqa/docs/Final_Statement_of_Reasons.pdf).

<sup>322</sup> SCAQMD Board Letter, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 8, 2008, [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2).

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.66 through G1-81.67. The issues raised in the comments are addressed in detail in Responses G1-81.66 through G1-81.67.

### Comment G1-86.62

**b. Because Tesoro Intends to Claim Credits, Rather Than Allowing GHG Emission Reductions to Improve the Environment, DEIR Assertions that the Project Has GHG Emission Benefits are Deceptive.**

The DEIR continuously reiterates the beneficial GHG impacts of the Project.<sup>238</sup> However, these benefits are misleading and do not accurately describe the impacts of the Project. If the Project were exactly as described, Tesoro anticipates securing GHG credits under the new Cap and Trade Program for the emissions reductions, resulting in no air quality benefit at all.<sup>239</sup> The DEIR is extremely deceptive in describing the Project as having climate change benefits, directly undermining its informational purpose.

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<sup>238</sup> DEIR, at 1-5.

<sup>239</sup> *Id.* at 5-26.

### Response G1-86.62

The comment cites page 1-5 of the DEIR in claiming that the DEIR improperly claimed credit for beneficial GHG impacts. However, page 1-5 of the Executive Summary of the DEIR identifies potential controversial topics and presents the summary of the project description with no description of GHG impacts. Additionally, the comment cites page 5-26 of the DEIR to support the claim that Tesoro anticipated securing GHG credits under the AB32 Cap-and-Trade Program. However, the description in Section 5.2.2.3.2 presents the local GHG emission reductions from the proposed project but concludes that the reduction is in fact neutral because the Refinery is in the AB32 Cap-and-Trade Program. It is the Cap-and-Trade Program that reduces GHG emissions through a structured decline in the emissions cap, not individual projects. Tesoro will not secure GHG credits by the emission reductions associated with the proposed project because the GHG Cap-and-Trade program is not designed to provide emission sources with GHG credits associated with emission reductions.

### Comment G1-86.63

Under the Cap and Trade Program of AB 32, the state allocates a certain amount of allowances for the entire state and then apportions these allowances to all the facilities that emit GHG.<sup>240</sup> No polluter is allowed to emit GHGs without an allowance. Before apportioning the allowances, the state keeps four percent of the allowances in reserve and then holds ten percent to sell in an auction where companies may buy allowances to make up for their additional emissions.<sup>241</sup> Once these allowances have been withheld, the state then calculates how many free allowances each facility is given using a complex formula that takes into account the facility's previous output.<sup>242</sup> If a facility produces fewer emissions than the amount of free allowances allotted, the facility could bank the allowances to use in years where its emissions exceed the allowances allotted by the state.<sup>243</sup> Additionally, it could sell the allowances on the secondary market to other facilities that need allowances.<sup>244</sup>

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<sup>240</sup> Cal. Code Regs., tit., 17 § 95841.

<sup>241</sup> Cal. Code Regs., tit., 17 § 95870 (a)-(b).

<sup>242</sup> Cal. Code Regs., tit., 17 § 95891(b).

<sup>243</sup> Cal. Code Regs., tit., 17 § 95922(a).

<sup>244</sup> ENVIRONMENTAL DEFENSE FUND, CARBON MARKET CALIFORNIA 11, [http://www.edf.org/sites/default/files/content/ca-cap-and-trade\\_1yr\\_22\\_web.pdf](http://www.edf.org/sites/default/files/content/ca-cap-and-trade_1yr_22_web.pdf).



### Response G1-86.63

The comment summarizes the AB32 Cap-and-Trade Program and does not include any comment with respect to the proposed project or the DEIR. It should be noted that the complexity-weighted barrel method employed for issuing free allowances to the refinery sector is such that refineries will have insufficient free allowances to offset the annual facility GHG emissions and will require purchases of allowances to meet their compliance obligation.

### Comment G1-86.64

The DEIR claims that the Project will lead to a net reduction of GHGs, thereby potentially falling under its allotted allowances.<sup>245</sup> In fact, the DEIR continuously states the Project will improve air quality. However, in assessing the cumulative impacts, the DEIR then states that the reductions in GHG emissions will then be reintroduced to the AB 32 Cap and Trade Allowance Program.<sup>246</sup> This could mean that Tesoro is banking these allowances under the cap and trade program. Alternatively, Tesoro could sell its excess allowances to other facilities in the secondary market under AB 32. By doing so, the Project would simply be shifting its GHG impacts to another facility. This shifting would reduce the GHG emissions from the facility but not from the atmosphere. Therefore, whether Tesoro intends to bank or sell its allowances, the Project's GHG impacts will not be positive; at best they would be neutral. By obscuring the climate impacts of the allowance program, the DEIR becomes deceptive and inaccurately reports its GHG emissions and its impacts.

<sup>245</sup> DEIR, at 5-26.

<sup>246</sup> *Id.* at 5-26, Table 5.2-8.

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### Response G1-86.64

As explained in Response G1-86.62, although the proposed project will result in a local GHG emission reduction, the DEIR presents the proposed project as neutral because an individual project's GHG emission reductions will not have an impact on the overall Cap and Trade pool of allowances. See DEIR Section 5.2.3 for further description of the proposed project's GHG emissions. As such, the DEIR does not obscure or inaccurately report the climate impacts of the AB32 Cap-and-Trade program in conjunction with the proposed project as claimed in the comment.

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**c. Although Information is Available, the DEIR Fails to Include Life Cycle GHG Emissions from the Project.**

Although the South Coast Air Quality Management District ("SCAQMD") requires life cycle analysis when information is available, the DEIR fails to provide a life cycle analysis of the GHG impacts from extracting and burning the oil related to this Project. According to the DEIR, the Project would result in a "net GHG emission reduction" of approximately 66,139 metric tons per year, mainly due to the closure of the FCCU unit in Wilmington.<sup>247</sup> However, this calculation of GHG emissions fails to include the life cycle emissions of the crude oil

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processed in the refinery. Thus the DEIR erroneously concludes that there are no significant GHG impacts.<sup>248</sup>

The SCAQMD created a threshold of significance in order to determine when GHG emissions from a project become significant. When acting as lead agency for industrial projects, SCAQMD relies on a threshold of 10,000 metrics tons per year over existing conditions.<sup>249</sup> In adopting this interim threshold, the SCAQMD board mandated that in “determining whether or not GHG emissions from affected projects are significant, project emissions will include direct, indirect, and, to the extent information is available, life cycle emissions during construction and operation.”<sup>250</sup> While the DEIR relies on SCAQMD’s threshold of significance, the document entirely ignores the need to include life cycle emissions during operation when determining whether GHG impacts may be significant.

<sup>247</sup> *Id.* at 5-26.

<sup>248</sup> *Id.* at 5-26.

<sup>249</sup> SCAQMD Board Approval of Interim GHG Threshold, 5, [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2).

<sup>250</sup> *Id.*

G1-86.65  
cont’d.

## Response G1-86.65

No modifications are being proposed in the proposed project that would increase the ability of the Refinery to receive a different crude oil slate or process a different crude oil blend. See Sections 2.5.3 and 2.5.4 and the McGovern Report in Appendix F of the DEIR, Master Response 4, and Response G1-78.94 for further description of the limitations on the Refinery’s ability to process a different crude oil blend. As such, there will be no associated potential impacts of processing various crude oils at the Refinery, such as an increase in GHGs.

On December 5, 2008, the SCAQMD Governing Board adopted the staff proposal for an interim GHG significance threshold for projects where the SCAQMD is lead agency. While the lifecycle emissions are to be considered “to the extent information is available,”<sup>323</sup> predicting the GHG emissions from the sources of crude oil purchased by Tesoro is not reasonably achievable because the source of crude oil varies widely as shown in Master Response 4 Table G0-2.4-1. Moreover, the decisions with respect to sourcing the crude oil slate are made independent of the proposed project.<sup>324</sup> As such, the life-cycle emissions of the Refinery’s crude oil slate (including the potential for increases in GHG emissions at the source of any crude oil) are not influenced by the proposed project and are not a reasonably foreseeable impact caused directly or indirectly as a result of the proposed project. Additionally, the specifics of the operations at each oil production field vary by operator and are not affected by the proposed project. Nor is this information publicly available. Further, in December 2009, the California Natural Resources Agency removed the term “lifecycle” from the CEQA Guidelines Appendix F guidance on analysis and mitigation of energy impacts from proposed projects in conjunction with its rulemaking pertaining to analysis and mitigation of GHG impacts.<sup>325</sup> Therefore, lifecycle impacts need not be analyzed.

<sup>323</sup> SCAQMD Board Letter, Interim CEQA GHG Significance Threshold for Stationary Sources, Rules and Plans, December 8, 2008, [http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-\(ghg\)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2](http://www.aqmd.gov/docs/default-source/ceqa/handbook/greenhouse-gases-(ghg)-ceqa-significance-thresholds/ghgboardsynopsis.pdf?sfvrsn=2).

<sup>324</sup> See Attachment C, Declaration of Douglas Miller, Vice President, California Value Chain Strategy of Tesoro Companies, Inc.

<sup>325</sup> California Natural Resources Agency, 2009. Final Statement of Reasons for Regulatory Action for the Amendments to the State CEQA Guidelines Addressing Analysis and Mitigation of Greenhouse Gases

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The DEIR does not provide a rationale for excluding life cycle emissions analysis in the GHG impact. As evidenced in the DEIR and Tesoro’s investment reports, Tesoro has extensive knowledge of Bakken crude oil and its total import for processing in the Refinery.<sup>251</sup> Tesoro plans to bring Bakken crude through Washington to Los Angeles.<sup>252</sup> Tesoro is also purchasing crude oil storage and transport facilities *within* the Bakken extraction region, specifically to bring to West Coast refineries.<sup>253</sup> Furthermore, Tesoro recently announced its plans for *added* capacity to pump 65,000 bpd of crude oil out of the Bakken oil field, and to store and transport this crude for West Coast use.<sup>254</sup> Extensive studies have been conducted regarding GHG emissions associated with extraction and transport of Bakken crude oil.<sup>255</sup> Additional data has also been collected specific to Bakken extraction impacts, including studies by NOAA, showing significantly higher methane leakages of field gases, and reports in the scientific journal, *Nature*.<sup>256</sup> Since the data is available to include in the DEIR, the life cycle emissions of these

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crude oils should be identified and included in the DEIR for Tesoro’s LARIC Project. As described above, the extraction of the crude in the region must be evaluated as a direct consequence of this Project. Tesoro’s activities in the Bakken region do not stay in North Dakota, but are inextricably part of the same Project, and have local and global impacts, including impacts in Los Angeles due to adding to the burden of climate change, and other impacts.<sup>257</sup> Without these emissions, the DEIR ignores SCAQMD’s guidance in determining whether the project falls under the threshold of significance for GHG.

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cont’d.

<sup>251</sup> May Technical Report, § II(B).

<sup>252</sup> May Technical Report, § II(B).

<sup>253</sup> Elizabeth Alford, *Tesoro Buys Bakken Midstream Assets*, BAKKEN SHALE, December 22, 2105, <http://bakkenshale.com/bsp-news/news/tesoro-buys-bakken-midstream-assets>.

<sup>254</sup> Jessica Holdman, *Tesoro plans to purchase Bakken pipeline, storage*, BISMARCK TRIBUNE, Dec. 17, 2015, <http://tsocorp.com/customers-and-suppliers/wholesale/terminals/> (Acquisitions include the 97-mile BakkenLink crude oil pipeline, which connects to several third-party gathering systems, a 28-mile gathering system in the core of the Bakken, “where most of the drilling in today’s low price environment is being done,” a 154,000 bpd rail loading and a 657,000 bbl storage facility in Fryburg.)

<sup>255</sup> See Energy Intensity and Greenhouse Gas Emissions from Crude Oil Production in the Bakken Formation: Input Data and Analysis Methods, Argonne National Laboratory, September 2015, <https://greet.es.anl.gov/publication-bakken-oil>.

<sup>256</sup> See National Oceanic and Atmospheric Administration, *North Dakota’s Bakken oil and gas field leaking 275,000 tons of methane per year*, May 10, 2016, <http://www.noaa.gov/north-dakota’s-bakken-oil-and-gas-field-leaking-275000-tons-methane-year>; see also Jeff Tollefson, *Oil boom raises burning issues*, 495 NATURE 290, [http://www.nature.com/polopoly\\_fs/1.12632!/menu/main/topColumns/topLeftColumn/pdf/495290a.pdf](http://www.nature.com/polopoly_fs/1.12632!/menu/main/topColumns/topLeftColumn/pdf/495290a.pdf).

<sup>257</sup> May Technical Report, § IV(C)(1).

**Response G1-86.66**

The comment is repetitive of Comment G1-86.65. See Response G1-86.65, which addresses the issues raised in the comment.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.22 through G1-81.24 and G1-81.64 through G1-81.65. The issues raised in the comments are addressed in detail in Responses G1-81.22 through G1-81.24 and G1-81.64 through G1-81.65.

**Comment G1-86.67**

Furthermore, the inclusion of life cycle emissions must also extend to the foreseeable processing of Canadian tar sands under SCAQMD’s mandate. As is the case with Bakken crude oil, Canadian tar sands extraction and transport is a GHG-intensive process, which should be included in the DEIR.<sup>258</sup> According to a 2015 study, introduction of Canadian tar sands was found to cause about 20% more GHGs than domestic crude oil.<sup>259</sup> Because information indicating the life cycle emissions attributable to the Project is relevant for the significance threshold calculation, the DEIR errs in failing to include those emissions. Without the inclusion of these GHG emissions, the DEIR is inadequate because it cannot be determined whether the Project falls under the threshold of significance. The DEIR then errs in concluding that GHG emissions are not significant.

G1-86.67

<sup>258</sup> May Technical Report, § IV(C)(2).

<sup>259</sup> May Technical Report, § IV(C)(2).

### Response G1-86.67

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the proposed project will not facilitate any change in the types of crude oils that can be blended to be processed at the Refinery, except for the 6,000 bbl (get specific language- global change) and thus will not have any significant environmental impacts due to any change in crude oils, including with respect to GHGs. See Sections 2.5.3 and 2.5.4 and the McGovern Report in Appendix F of the DEIR, Master Response 4, and Response G1-78.94 for further description of the limitations on the Refinery’s ability to process a different crude oil blend.

Additionally, as explained in Master Response 4, issues pertaining to the mining of heavy Canadian crude oil, such as water consumption, earth moving, ecosystem disturbance, etc., are not germane to the proposed project in that these mining activities will occur independently of the proposed project. Since the proposed project does not cause an increase in use of heavy Canadian crude oil, none of the alleged impacts will be caused. As explained in Master Response 6, the proposed project would not result in an increase in crude oil capacity beyond the 6,000 bbl/day increase analyzed in the DEIR or result in additional extraction of crude oil in Canada or at any location in the world, or increase the quantity of crude oil purchased from Canada. Because Canadian crude oil is within the range of crude oils currently received and blended at the Refinery, continuing to refine such crude oils does not create additional hazardous waste, increase corrosion, increase the generation of GHG emissions, or increase demand for energy.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.66 through G1-81.67. The issues raised in the comments are addressed in detail in Responses G1-81.66 through G1-81.67.

### Comment G1-86.68

In addition, as the DEIR mentions, AB 32 requires that all refineries include the GHG emissions from the burning of the oils they process in their environmental impact reports.<sup>260</sup> SCAQMD’s life cycle emission mandate would also require including the GHG emissions from burning of the oil even if AB 32 did not require it. The DEIR appears to include these emissions in its final calculation of GHG emissions in Table 5.2-6 and Table 5.2-8. However, it is unclear from the discussion in the DEIR or any of its subsequent appendices, exactly how the DEIR arrived at these numbers. Without data substantiating these numbers, the DEIR fails as an informational tool for the public.

<sup>260</sup> DEIR, at 5-26.

G1-86.68

### Response G1-86.68

The comment misinterprets the statements made in the DEIR, which state, “Beginning in 2015, refineries are obligated to provide allowances for transportation fuels produced. Therefore, mobile source GHG emissions are included in the AB32 Cap and Trade Program.” These DEIR

statements do not state, “AB32 requires that all refineries include the GHG emissions from the burning of the oils they process in their environmental impact reports.” AB32 and the associated regulations do not address environmental impact reports. On the contrary, AB32 regulations address calculating and reporting GHG emissions, cap and trade program requirements, and low carbon fuel standards.

GHG emissions presented in Tables 5.2-6 and 5.2-8 are GHG emissions associated with stationary and mobile sources (e.g., locomotive emissions) from the proposed project and the supporting calculations are included in Appendices B-3 and B-5. As explained in Section 2.2 of the DEIR, the proposed project is designed to “[i]mprov[e] process efficiency through integration while maintaining the overall production capability of transportation fuels.” No increase in the GHG emissions from the combustion of the produced transportation fuels would occur that is not offset through AB32 program.

**Comment G1-86.69**

- d. By Relegating Discussion to Cumulative Impacts, the DEIR Fails to Analyze the Direct and Indirect Impacts of All GHG Emissions from the Project.**

The DEIR incorrectly concludes that because GHG emissions will both increase and decrease, but in its analysis, decrease overall, and because GHGs have global effect, GHG emissions are to be analyzed only as cumulative impacts. The DEIR relies on the SCAQMD’s significance threshold concludes that the cumulative impacts are insignificant.

G1-86.69

**Response G1-86.69**

The DEIR correctly analyzed the proposed project’s GHG emissions on a cumulative basis as explained in Master Response 16, “[D]ue to the complex physical, chemical, and atmospheric mechanisms involved in global climate change, it is likely impossible to identify the specific impact, if any, to global climate change from one project’s incremental increase in GHG emissions. As such, the project’s GHG emissions and the resulting significance of potential impacts are more properly assessed on a cumulative basis.” See pages 4-7 and 5-21 of the DEIR for further discussion of this issue. The comment does not present any authority calling for a different approach.

**Comment G1-86.70**

CEQA requires an EIR to consider both direct and indirect impacts of a proposed project. Indirect impacts are those that are “caused by the project and are later in time or farther removed in distance, but are still reasonably foreseeable.”<sup>261</sup> As described above, it is foreseeable that the crude stock will change. The DEIR fails to analyze the ways in which the change could impact

GHG emissions. Increased emissions from the Project include, but are not limited to, GHG emissions from increased use of Bakken, as compared to the current baseline feedstock.<sup>262</sup>

<sup>261</sup> CEQA Guidelines, § 15358 (a)(2).

<sup>262</sup> See *Richmond*, 184 Cal.App.4th at 89 (holding that failure to identify the possibility that the project would allow the refinery to change its crude stock raises concerns about appropriate baseline against which to compare impacts).

G1-86.70

G1-86.70  
cont’d.

### Response G1-86.70

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4 and Response G1-78.94, the Refinery is currently processing a blend of various crude oils and will continue to do so with or without the proposed project. The proposed project will not result in a substantial change in the crude oil blend processed by the Refinery. The potential impacts of any change in the crude oil blend have been fully analyzed in the DEIR as explained in Response G1-78.94. The proposed project does not have the potential to enable any significant change in the types of crude oils that can be processed at the Refinery, and thus will not have any significant environmental impacts due to any change in crude oils, including GHGs. Similarly, as described in Master Response 4 and Responses G1-78.20 and G1-78.21, the Chevron Richmond Project, cited in the footnotes, is inapplicable to the proposed project, as unlike the Chevron Richmond Project, the proposed project does not involve the physical modification of any Crude, DCU, or Sulfur Recovery units that would accommodate such changes in crude oil. See Master Response 4 and Responses G1-78.20 and G1-78.21 for further information regarding the Chevron Richmond Project, its ensuing litigation, and why its decision is not applicable to the proposed project. As such, the citation in the comment to and reliance upon the *Richmond* case is incorrect/inappropriate.

### Comment G1-86.71

**E. The Project Lacks An Adequate Analysis of Hazards.**

**1. The DEIR fails to adequately disclose, analyze, and mitigate project-related hazards and public safety risks.**

An EIR must provide sufficient information to evaluate all potentially significant impacts of a project, including public safety risks due to accidents, and it must state sufficient information to determine “how adverse [an] adverse impact will be.”<sup>263</sup> This information is critical to the public and agency decision makers as they evaluate the extent and severity of the Project’s impacts, specifically as they relate public safety. In this respect, the DEIR is inadequate and fails to meet CEQA requirements.

<sup>263</sup> See *Santiago County Water District v. County of Orange* (1981) 118 Cal.App.3d 818, 831.

G1-86.71

### Response G1-86.71

The FEIR presented the existing setting for hazards and evaluated the potential hazards of the proposed project in Sections 3.3 and 4.3, respectively, of the FEIR. As explained in Section 4.3.3 of the FEIR, potentially significant “worst-case” off-site hazard impacts associated with the proposed modifications to the Naphtha Isomerization Unit, the proposed new crude oil storage tanks, SARP, and Interconnecting Pipelines may occur and mitigation was imposed. Therefore, sufficient information on hazard impacts was presented in the DEIR and the comment does not provide evidence to the contrary.

### Comment G1-86.72

**2. The DEIR does not disclose the LAR Project’s baseline crude slate mixes.**

The DEIR does not adequately disclose the LAR Project’s current or historic crude slate mixes. Rather than providing detailed information, including volume, geographic origin, transportation method, sulfur content, API gravity, TAN, metal content, and other important data about the crudes within the DEIR, Tesoro states that its crude oil slate decisions will not change. Without knowing the composition of its current and historic crude slates, each with their own specific chemical and physical compositions, the Project does not allow for an intelligent or accurate hazards analysis.<sup>264</sup>

G1-86.72

<sup>264</sup> Fox Neg. Dec. Report, at 19.

### Response G1-86.72

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4 and Response G1-78.94, the proposed project is not designed to and will not facilitate a crude oil blend switch, nor does it facilitate the use of any particular crude oil. Because any crude oil processed by the Refinery will be blended to meet the oil operating envelope as described in DEIR Sections 2.5.4.1 and 2.5.4.2, the crude oil baseline information requested in the comment was not relied upon in the DEIR to determine the potential impacts of the proposed project. Further, disclosure of more detailed information about crude oil capacity, sources, and crude oil composition data is trade secret information as explained in Master Response 2 and Response G1-78.208 and CEQA prohibits its disclosure.

As described in Response G1-86.71, the DEIR presented the existing setting for hazards and evaluated the potential hazards of the proposed project in Sections 3.3 and 4.3, respectively, of the FEIR. As explained in Section 4.3.3 of the FEIR, potentially significant “worst-case” off-site hazard impacts associated with the proposed modifications to the Naphtha Isomerization Unit, the proposed new crude oil storage tanks, SARP, and Interconnecting Pipelines may occur and mitigation was imposed.

### Comment G1-86.73

**3. A switch to cost-advantaged crudes will introduce new hazards that were not discussed in the DEIR.**

The DEIR states that the Project will not impact the types of crudes used at the refinery, yet plans to transition from the dwindling ANS and California crudes to more affordable North American mid-continent crudes, such as Bakken and Canadian crudes.<sup>265</sup> While these more abundant, cost-advantaged crudes can be blended to approximate ANS yields with the same API gravity, the DEIR does not take into account that these cost-advantaged crudes have different chemical and physical compositions that will increase the risk of hazards and impact refinery safety.<sup>266</sup> Even if Tesoro blends crudes to approximate ANS yields, the switch would still introduce new hazards not discussed in the DEIR.<sup>267</sup>

G1-86.73

A switch to lower quality feedstock, including Bakken and Canadian crudes, necessarily implicates a greater risk of corrosion of refinery components.<sup>268</sup> Refining Bakken, in some instances, can lead to dangerous levels of hydrogen sulfide (H<sub>2</sub>S) gas, which is acutely hazardous and corrosive.<sup>269</sup> Because of this, refineries that process shale oil often must use scavenging agents, but these also lead to corrosion.<sup>270</sup> Canadian tar sands crudes also are highly corrosive because of their high sulfur content and high TANs, leading to the same hazards, and also contain many corrosive contaminants that must be removed during the refining process.<sup>271</sup> This greater risk of corrosion was identified as a root cause of the August 2012 fire at the Chevron Richmond Refinery that sent 15,000 residents to local hospitals.<sup>272</sup> By denying any shift to lower quality oil feedstocks, the DEIR fails to adequately discuss the resulting significant impacts of refining these more hazardous materials at the LAR.<sup>273</sup> As a result, the document precludes any meaningful analysis of the significant risks posed by this shift, including any identification or mitigation of the potential risks of catastrophic failure on par with what occurred at the Chevron Richmond Refinery in 2012 and any additional significant risks to public health.

G1-86.73  
cont'd.

<sup>265</sup> See DEIR, at 4-2.

<sup>266</sup> Fox Neg. Dec. Report, at 5.

<sup>267</sup> *Id.*

<sup>268</sup> May Technical Report, §§ IV(A)-(B).

<sup>269</sup> May Technical Report, § IV(A)(4).

<sup>270</sup> May Technical Report, § IV(A)(4).

<sup>271</sup> May Technical Report, § IV(B).

<sup>272</sup> May Technical Report, § IV(A)(4).

<sup>273</sup> DEIR, at 2-20: "The changes being made as a result of this project will not allow the refinery to process a different slate of crude oil. As such, there will be no crude oil changes that make the refinery more prone to upset or potential leaks of hazardous or toxic substances . . ."

### Response G1-86.73

The comment incorrectly references page 4-2 of the DEIR as referring to a planned shift from ANS and California crude oils. The DEIR makes no such claim, but rather discloses that the DCU H-100 heater permit revision could result in a crude oil capacity increase of up to 6,000 bbl/day or to process a slightly heavier crude oil blend.

The issues raised in the comment were previously addressed in Response G1-86.10. As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4 and Response G1-78.94, the proposed project is not designed to and will not facilitate a crude oil blend switch, nor does it support or facilitate the purchase of any particular crude oil. These references further explain the limitations on the Refinery's ability to process a different crude oil blend. Therefore, sulfur species that exist in the crude oil blends processed by the Refinery will not change as a result of the proposed project.

Additionally, as explained in Response G1-78.111, the Refinery does not consider only the total sulfur in the crude oil blend to be processed. It also considers sulfur reactivity and corrosivity and Refinery operating constraints. Operating limits are set on the allowable content of sulfur compounds in the feed to each Refinery unit. These limits are set based on sulfur removal capacity, product specifications, sulfur reactivity and corrosivity, and the Refinery operating permits. The limits for each unit are set for proper corrosion control within each process unit. Whenever the Refinery considers purchasing crude oil that has not been previously processed, an evaluation is performed to ensure that any new crude oil will be blended in a way that does not impact safety, environmental requirements, unit reliability, or product specifications. This evaluation includes specific corrosion mechanisms, such as sulfidic corrosion, that caused the Chevron Richmond incident. However, the Refinery cannot process a significant change in crude oil blend regardless of the implementation of the proposed project.



The comment references Comment Letter 81 and raises the same issues as Comments G1-81.53 through G1-81.63. The issues raised in the comments are addressed in detail in Responses G1-81.53 through G1-81.63.

### Comment G1-86.74

Additionally, Bakken crude is extremely volatile due to its large concentration of natural gas liquids (“NGLs”), which include methane, propane, butane, ethane, and pentane.<sup>274</sup> These components are susceptible to volatilize, burn, or explode when they come into contact with sparks in an accident, and can easily form fireballs and BLEVES.<sup>275</sup> Thus, the introduction of Bakken crude to the LARIC would greatly increase explosion hazards. These explosions can be fatal, as was the case at Lac-Megantic, Quebec in 2013, when a freight train transporting Bakken crude derailed, killing many people.<sup>276</sup> Additional accidents associated with the transport of Bakken crude have occurred in North Dakota and Alabama. Because of the immense flammability risk, the US Department of Transportation Pipeline and Hazardous Material Safety Administration requires additional testing and characterization for Bakken crudes, as well as additional handling procedures, but these measures were left out of DEIR analysis.<sup>277</sup>

G1-86.74

Because of the risks associated with lower-quality feedstocks, the types of crudes that will be processed and refined at the LAR need to be adequately disclosed.

<sup>274</sup> Fox Neg. Dec. Report, at 17-18.

<sup>275</sup> *Id.* at 18.

<sup>276</sup> May Technical Report, § IV(A)(3).

<sup>277</sup> May Technical Report, § IV(A)(3).

### Response G1-86.74

As described in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4 and Response G1-78.94, the proposed project is not designed to and will not facilitate a crude oil blend switch, nor does it support or facilitate the purchase of any particular crude oil. These references further describe the limitations on the Refinery’s ability to process a different crude oil blend. Bakken and heavy Canadian crude oils are already received, blended, and processed by the Refinery, so any challenges related to refining heavy Canadian and light Bakken crude oils are part of the existing setting. Therefore, refining such crude oils does not create additional hazardous waste, increase corrosion, increase the generation of GHG emissions, or increase demand for energy beyond the existing setting. Moreover, as explained in Responses G1-81.57 and G1-78.160, and G1-78.161, Bakken crude oil is considered by U.S. DOT to be a Class 3 flammable liquid, not explosive, and North Dakota has issued an order regarding conditioning of Bakken crude oil and limiting the RVP of crude oil provided for transport to 13.7 RVP, to reduce risks of flammability.

Additionally, because any crude oil processed by the Refinery will be blended to meet the crude oil operating envelope, the crude oil slate baseline information requested in the comment was not relied upon in the DEIR to determine the potential impacts of the proposed project. Further, disclosure of more detailed information about crude oil capacity, sources of crude oil, and crude oil composition data is trade secret information as described in Master Response 2 and not required under CEQA. See Master Response 2 and Response G1-78.208 for a discussion regarding disclosure of crude oil baseline data.

### Comment G1-86.75

**4. The waxiness of Bakken crude and the associated dispersants were not evaluated as a hazard in the DEIR.**

Bakken crude oil, which will make up a large portion of the LAR's feedstock, causes transfer problems in marine vessels and refinery storage tanks due to its paraffinic content.<sup>278</sup> Due to this waxiness, multiple chemical dispersants must be used for smooth transfer and full throughput.<sup>279</sup> These chemical dispersants should have been identified in the DEIR to assess the impacts and hazards of their use.<sup>280</sup>

<sup>278</sup> May Technical Report, § IV(A)(1).

<sup>279</sup> May Technical Report, § IV(A)(1).

<sup>280</sup> May Technical Report, § IV(A)(1).

G1-86.75

### Response G1-86.75

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4 and Response G1-78.94, the proposed project is not designed to and will not facilitate a crude oil blend switch. Additionally, crude oils with various properties, including Bakken crude oil, are blended at the Refinery today.

As described in Response G1-78.162, Bakken crude oil is not known to have waxy formation issues as asserted in the comment. Tesoro's experience has been that waxy formations only occurred in Bakken crude oil during extremely cold winter temperatures, which would not occur in California. Even during periods of extremely cold weather, formation of waxes did not cause any Refinery operating problems or environmental impacts. Additionally, as described in Response G1-78.219, because Bakken crude oil is not known to create waxy deposits, use of additional dispersants is not expected. See Response G1-78.219 for additional information regarding dispersants.

The comment references Comment Letter 81 and raises the same issues as Comments G1-81.54 through G1-81.55. The issues raised in the comments are addressed in detail in Responses G1-81.54 through G1-81.55.

### Comment G1-86.76

**5. Fire hazards are significant, but many aspects of fire hazards were left out of the DEIR.**

The DEIR conducted a fire hazard analysis to determine whether accidents involving the modified storage tanks would result in significant impacts, but this analysis was inadequate. The DEIR selected a heat flux significance threshold of 5 kw/m<sup>2</sup>, at which point one would experience a serious injury from thermal radiation.<sup>281</sup> While the DEIR analyzed heat flux impacts, it failed to analyze other significant impacts of a fire, including explosions (BLEVES) and inhalation of smoke and toxics. Additionally, the DEIR did not evaluate fire hazards for on-site receptors, even though refinery workers would be the most exposed to risk. According to Dr. Fox's report, any person located between the accident site up to the reported impact distance would experience a significant impact. At a heat flux of 5 kW/m<sup>2</sup>, a 10% injury would be experienced, which is significant.<sup>282</sup>

<sup>281</sup> Fox Neg. Dec. Report, at 48-49.

<sup>282</sup> *Id.*

G1-86.76

**Response G1-86.76**

As described in Table 4.3-1 on page 4-46 and Table 3-1 on page C-15 of the DEIR, the radiant heat exposure endpoint hazard criteria is 1,600 Btu/(hr-ft<sup>2</sup>) based on U.S. EPA 40 CFR 68, and not 5 kw/m<sup>2</sup> claimed in the comment. Further, as described on page 4-53 of the DEIR, secondary effects which include smoke are considered speculative and are not required to be analyzed. The DEIR evaluates potential off-site impacts and potential public residential exposure and on-site worker's exposure is regulated by federal and CalOSHA requirements.

As explained in Response G1-78.229, a BLEVE can only occur when the pressure in the vessel exceeds the capacity of the vessel to contain that pressure. Due to this over-pressure requirement and the requirement that the temperature in the vessel corresponds to an elevated temperature at the failure pressure to cause a BLEVE, a vessel failure could only be due to a BLEVE if it is isolated from the other pipes and vessels nearby. In other words, a vessel must be shut in for a BLEVE to occur. Crude oil is stored in atmospheric (or near-atmospheric) storage tanks, not pressurized tanks. Therefore, if a crude oil storage tank failed, it would fail at low pressure and the primary result would be a pool fire. A BLEVE cannot occur in an atmospheric or near-atmospheric, non-pressurized tank such as a crude oil storage tank, regardless of the tank contents. As such, an analysis of BLEVEs is not relevant with respect to the modified storage tanks as claimed in the comment. The DEIR evaluated the only setting in which a BLEVE could occur with respect to the proposed project, an LPG rail-car. See Response G1-78.229 regarding BLEVEs.

**Comment G1-86.77**

Also, fire hazards from the new crude oil tanks would be significant. In an accident, the amount of crude oil involved would increase, because of their increased storage capacities and throughput. If an accident were to occur while the tanks were being filled, more than just the capacity of one tank could be spilled.<sup>283</sup> The DEIR, in its worst-case scenario analysis, however, only considers the maximum capacity of each tank, and thus, underestimates the associated fire impacts. For instance, multiple tanks could catch on fire at once, due to their close proximity to one another. These types of accidents are realistic and have occurred before. In 1990, a fire at the Stapleton IAP Denver, CO, tank farm burned multiple tanks for over fifty hours, and at the Pennzoil Refinery in Pennsylvania in 1995, burning liquid from one tank caused the ignition of flammable vapors in another tank.<sup>284</sup>

G1-86.77

<sup>283</sup> *Id.* at 49-50.

<sup>284</sup> *Id.* at 50.

**Response G1-86.77**

As explained in Responses G1-78.228 and G1-78.331, any release from an atmospheric or near-atmospheric, non-pressurized storage tank is expected to form a pool that will be captured in the bermed containment area, which per regulatory requirements must adequately contain the volume of the storage tank plus additional capacity to accommodate storm water. Typically, each tank has its own individual bermed containment area. Therefore, a spill from a tank would be contained within the bermed containment area. The worst-case hazard scenario involves a release, ignition of vapor, and a resulting pool fire. As the vapors from the pool are dispersed, the vapors become too diluted to burn. Pool fires were analyzed in the DEIR for the proposed storage tanks using the properties of the lightest crude oil permitted to be stored in the tanks. As

described in Response G1-78.227, vapor cloud explosions are not expected to cause nearby tankage or units to become involved in a release scenario because the potential overpressure wave would be insufficient to cause damage to adjacent structures and equipment. Vapor cloud explosions were evaluated and determined to have a smaller impact than the pool fire. See Master Response 9 for further discussion of the DEIR’s hazard impact analysis.

Additionally, as explained in Response G1-81.94, with any incident, the cause(s) of the incident are investigated and industry organizations (such as API) improve design standards and agencies modify regulations. Therefore, the findings/lessons learned from past incidents are been incorporated into design standards used today to reduce the potential for upsets to occur.

The Stapleton International Airport incident is distinctly different from the proposed new crude oil storage tanks. Most notably, the Stapleton International Airport incident involved the overfilling of a jet fuel storage tank, not a crude oil storage tank. In addition, the Stapleton International Airport incident involved several events of failure such as the lack of storage tank fail safe control valves, and the location of the control building that was within the containment area which prevented response personnel from accessing emergency shutoff switches. Both of these root causes contributed to the spread of fire onto other tanks.

The Pennzoil Refinery incident is also distinctly different from the proposed new crude oil storage tanks. Most notably, the Pennzoil Refinery incident involved waste liquid storage tanks, not crude oil storage tanks. In addition, the Pennzoil Refinery incident involved several events of failure such as the waste liquid storage tanks did not have secondary containment and were not designed with emergency vents to prevent catastrophic failure. Both of these root causes contributed to the spread of fire onto the adjacent waste storage tank. The proposed new crude oil storage tanks will have individual containment areas and meet the latest safety design standards including any emergency vent as necessary.

**Comment G1-86.78**

Assuming the two 300,000 bbl tanks were involved in a pool fire, the blast zone would encompass Alameda Street, outside the Wilmington Operations boundary, and reach a public highway. Additionally, because of the close proximity of the tanks, a pool fire from one or both of these tanks could spread to others.<sup>285</sup> This, however, would not necessarily be the worst-case scenario – if the tanks were filled with Bakken crude oil, it is possible that a flash fire, rather than a pool fire could occur, which would be much more significant.<sup>286</sup>

<sup>285</sup> *Id.* at 51.

<sup>286</sup> *Id.*

G1-86.78

G1-86.78  
cont’d.

**Response G1-86.78**

As explained in Response G1-86.77, any release from an atmospheric or near-atmospheric, non-pressurized storage tank is expected to form a pool that will be captured in the bermed containment area, which must adequately contain the volume of the storage tank plus additional capacity to accommodate storm water. As the vapors from the pool are dispersed, the vapors become too diluted to burn. Pool fires were determined to be the worst-case consequence for storage tanks and were analyzed in the DEIR using the highest permitted vapor pressure of the

crude oil to be stored in the tanks, which would include Bakken crude oil. Additionally, vapor cloud explosions are not expected to cause nearby tankage or units to become involved in a release scenario because the potential overpressure wave would be insufficient to cause damage to adjacent structures and equipment. See Response G1-78.228 and G1-78.331 regarding tank pool fires and required containment as well as Response G1-78.227 regarding vapor cloud explosions. See also Master Response 9 for further description of the DEIR’s hazard impact analysis.

**Comment G1-86.79**

Additionally, the worst-case scenario calculations for the tanks assumed that all of the tanks would be filled with the same petroleum product. This, however, is misguided, since the tanks could be filled with different products. The hazard calculations then are inaccurate, as the distance to the chosen heat flux threshold depends on many factors, including the qualities of the specific crudes involved.<sup>287</sup> This piece was excluded. Lastly, the fire hazard analysis for the tanks is based on a wind speed of 20 mi/hour, however, in Long Beach, wind speeds can be much higher.<sup>288</sup> This could enable vapor clouds to travel long distances where they could then ignite.<sup>289</sup>

G1-86.79

<sup>287</sup> *Id.* at 52.

<sup>288</sup> See *Id.*; DEIR, Appendix C at C-16.

<sup>289</sup> Fox Neg. Dec. Report, at 42.

**Response G1-86.79**

Pool fires were analyzed in the DEIR for the proposed storage tanks using the worst-case qualities of crude oil permitted to be stored in the tanks (see Response G1-78.157). Therefore, this analysis represented the worst-case scenario of all the crude oil types that may be stored in the tanks. Additionally, vapor cloud explosions are not expected to cause nearby tankage or units to become involved in a release scenario because the potential overpressure wave would be insufficient to cause damage to adjacent structures and equipment. See Response G1-78.228 and G1-78.331 regarding tank pool fires and required containment as well as Response G1-78.227 regarding vapor cloud explosions. See also, Master Response 9 for further description of the DEIR’s hazard impact analysis.

The U.S. EPA has provided limited guidance on the appropriate wind speed. The most relevant guidance is in regards to siting of LNG facilities in 49 CFR 193.2057(b), which states “In calculating exclusion distances, the wind speed producing the maximum exclusion distances shall be used except for wind speeds that occur less than 5 percent of the time based on recorded data for the area.” The wind speed data for the Carson/Wilmington area indicates that the wind speed exceeds 20 miles per hour less than 0.05 percent of the time and the highest wind speed that occurred five percent of the time was only approximately eight miles per hour.<sup>326</sup> Therefore, the DEIR conservatively used 20 miles per hour in the hazard analysis.

Vapor clouds dilute with increased travel distances. As a vapor cloud gets diluted below its lower explosive limit, which the lowest concentration of vapor capable of producing a flash of fire in presence of an ignition source, an explosion cannot occur even if a source of ignition is

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<sup>326</sup> National Oceanic and Atmospheric Administration’s weather station data from Long Beach Airport from 2006 through 2016.

present. A vapor clouds explosion is more likely to occur near the source where the vapor cloud is more concentrated.

### Comment G1-86.80

**6. Fire hazards from pipeline accidents were not considered.**

The DEIR states that the purpose of the Project is to increase the rate of unloading from ships. To accommodate this increase, the Project seeks to replace a 12-inch diameter pipeline with a 24-inch diameter pipeline, which would allow the loading rate to increase from 5,000 bbl/hr to 15,000 bbl/hr.<sup>290</sup> Thus, with a larger pipeline, an accidental spill would be significantly larger, and vapor clouds formed from such a spill could travel long distances before igniting, causing more damage than just the spill.<sup>291</sup> While a pipeline accident could occur anywhere along its route, it would be most likely to occur near the Tank Farm. An accident at the Tank Farm resulting in a fire could have significant impacts on nearby residents, as the closest resident is located 2,000 feet southwest of the Wilmington operations.<sup>292</sup>

G1-86.80

<sup>290</sup> DEIR, at 4-26.

<sup>291</sup> Fox Neg. Dec. Report, at 53-54.

<sup>292</sup> *Id.*

### Response G1-86.80

As explained in Master Response 9, the potential worst-case hazard associated with the new Interconnecting Pipelines would be a flash fire from an above ground pipeline that could extend up to approximately 380 feet (see Table 4.3-2 and Figure 4.3-3 of the DEIR), which is less than the approximately 2,000 feet to the nearest residential area. Additionally, as explained in Response G1-78.232, the analysis evaluated the flammable properties of materials, temperatures, pressures, line sizes, etc. to determine the worst-case impacts from a release. The replacement of the 12-inch pipeline occurs in the central portion of the Wilmington Operations as shown on Figure 2-14 of the DEIR. No evidence is provided to support the claim that a pipeline incident is most likely to occur in the Tank Farm. The Worst Case Consequence Analysis identified the vulnerability zone along the entire pipeline route (see Figure 4.3-3 of the DEIR). Therefore, the pipeline route within the Tank Farm was analyzed. Further, Responses G1-78.227 and G1-78.228 explain why vapor cloud explosions will not occur in an unconfined area such as a tank berm. Vapor cloud explosions will not occur in the pipeways of the Refinery, that are also unconfined. The analysis in the DEIR Section 4.3.2.3 includes a flash fire hazard from the interconnecting pipeline as the worst-case hazard associated with the pipelines.

Additionally, with respect to the pipeline locations, it was concluded that the pipelines that would be above ground would be limited to the Refinery property and fire impacts would be limited to the Refinery property (see Figure 4.3-3 and Appendix C of the DEIR). The Interconnecting Pipelines would be underground off-site where the pipelines cross under Sepulveda Boulevard and Alameda Street. The closest residential land uses to the proposed new pipelines would be approximately one-half mile away. The maximum hazard zone of any of the pipelines would be 380 feet and would not extend to the residential areas. Therefore, the potential hazard impacts associated with the proposed Interconnecting Pipelines are expected to occur primarily on the Refinery properties or off-site industrial areas immediately adjacent to those pipelines. See Figure 4.3-3. See also Master Response 9 for further description of this issue.

### Comment G1-86.81

7. **Ship accidents should also have been evaluated, as well as smoke and inhalation hazards.**

While the DEIR states that the throughput at the Marine Terminal would not increase, throughput could increase and ship accidents should have been evaluated. Further, smoke and inhalation hazards should have been assessed, as fires release toxic air contaminants and smoke that can cause significant health impacts.

G1-86.81

### Response G1-86.81

See Response G1-81.117 regarding the hazards at the marine terminals. The DEIR has fully analyzed the project related impacts at the marine terminal (see pages 4-26 through 4-29 of the DEIR) and no change in the size of the marine vessels delivering crude oil will occur with the proposed project. Overall, the comment contains no substantial evidence that any such impacts will occur as a result of the proposed project or that the DEIR is insufficient. As such, no further response is required. See CEQA Guidelines § 15384(a) regarding the substantial evidence requirement.

See Response G1-86.76 regarding secondary effects which include smoke are considered speculative and are not required to be analyzed.

### Comment G1-86.82

8. **The DEIR fails to adequately discuss flaring emissions, which will increase levels of particulate matter in the air.**

The DEIR should not have omitted baseline emissions data for flaring events. Instead of assuming that flaring events pose insignificant hazard risks because of their rarity, the DEIR should have provided flaring data based on their Potentials to Emit.<sup>293</sup> Data from the draft Title V engineering calculations show that the LAR flares would have huge Potentials to Emit, at thousands of pounds per hour, due to the LAR's proposed connections of refinery processes to pressure relief devices or pressure safety valves that would be vented to existing refinery flares.<sup>294</sup> This is concerning because oil refineries, including Tesoro, are major sources of flaring emissions in the Los Angeles Basin, and contribute to increased particulate matter in the air, including PM10 and PM2.5.<sup>295</sup>

G1-86.82

G1-86.82  
cont'd.

<sup>293</sup> May Technical Report, §V(A)(2); *see also* DEIR, at 4-52 (“The project is not expected to increase flaring at the Refinery . . . while the number of pressure relief valves tied into the flare systems will increase with new installation of new or modified processing unites, this will not cause an increase in flaring.”).

<sup>294</sup> May Technical Report, § V(A)(2).

<sup>295</sup> May Technical Report, § V(A)(2).

### Response G1-86.82

The comment refers to comments made in Comment Letter 81 and raises the same issues as Comments G1-81.70 through G1-81.76. Responses G1-81.70 through G1-81.76 specifically address the issues raised in the comment.

The proposed project will not increase flaring emissions. Part of the piping associated with unit modifications includes installation of new pressure relief valves that will tie into the various existing Refinery flare gas recovery systems and flares. Master Response 15 explains the

operation of the flare gas recovery system and flares. Under normal operating conditions, pressure relief valves would vent to the flare gas recovery systems. The pressure relief valves allow gases to vent to the flares, which are safety equipment, during emergency conditions when the flare gas recovery system capacity is exceeded. There will be no routine venting to the flare system or the flare gas recovery systems from any of the modifications. As explained in Master Response 15 and Response G1-78.207, the number of pressure relief valves tied in to the flare systems is not indicative of flaring emissions. The proposed project will not increase flaring with the installation of new or modified process units because flaring from normal operations is prohibited by SCAQMD Rule 1118.

As explained in Master Response 15 and Response G1-78.207, the amount (hours) of flaring and emissions from flaring have decreased since the additional requirements in SCAQMD Rule 1118 were implemented.

### Comment G1-86.83

#### 9. LPG rail loading and unloading will increase risks.

The DEIR ignores the potentially catastrophic consequences of an accidental release of LPG from a tank car by focusing on the alleged improbability of one occurring.<sup>296</sup> Although the DEIR lists flash fires, torch fires, pool fires, and explosions, including BLEVES, it nevertheless determines that these potential impacts are not significant.<sup>297</sup>

However, “a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project,” constitutes a significant effect on the environment.<sup>298</sup> Probability does not factor into the evaluation of this adverse change alone without consideration for the magnitude of potentially catastrophic harm; the correct inquiry is whether the potential for such an adverse change exists. In this case, the transport of increased amounts of highly flammable LPG poses such a hazard, as the proposed plan would increase the Wilmington facility’s receiving capacity by about 4,000 BPD, or ten additional rail cars per day.<sup>299</sup> It is remarkable that the DEIR does not even address first response or other emergency precautions in regards to controlling such accidental releases.

G1-86.83

<sup>296</sup> DEIR, at 4-58.

<sup>297</sup> *Id.*

<sup>298</sup> CEQA Guidelines, § 15382.

<sup>299</sup> DEIR, at 1-18.

### Response G1-86.83

The DEIR includes an extensive Worst-Case Consequence Analysis for the proposed project, which is included in Appendix C of the FEIR and summarized in Section 3.3 (see pages 3-18 through 3-36 of the FEIR) and Section 4.3 (see pages 4-45 through 4-68 of the FEIR). The analysis for all hazards looks at the potential impacts, not the frequency or likelihood of the hazard. Therefore, if a hazard’s impacts alone were considered significant, it was addressed as significant in the DEIR regardless of the actual frequency or likelihood of that hazard occurring. As such, the potential worst-case hazards were properly evaluated. The delivery of LPG by railcar is an existing activity and would continue with or without the proposed project. The proposed project adds ten railcars to existing trains delivering LPG to the Refinery. Therefore, the consequence of a railcar release is the same as the existing conditions (see Table 4.3-2 and Figure 4.3-1) and no additional analysis is required. See Master Response 9 for additional description of the DEIR’s hazards impact review.



As described in Response G1-78.233, the absence of frequency in the significance determination provides a conservative approach to evaluating the proposed project's impacts. An analogy is the lottery. The likelihood of winning is very low, so a significance determination based on the chance of winning would be that winning is not significant. However, if the lottery is won, the winner most definitely has a significant life changing event. In the case of hazards, worst-case impacts are analyzed in the DEIR regardless of the likelihood of occurrence.

**Comment G1-86.84**

Further, the DEIR fails to adequately assess the increased risk that LPG railcars will pose on California's environmental justice communities. Communities in Wilmington, which already suffer disparate impacts, often face a total environmental health hazard that is in the worst twenty percent among all communities statewide, along with communities in Carson.<sup>300</sup> Further, most Wilmington residents face the risk of a direct impact from an oil train derailment, explosion, and fire, as most of live within the blast zone.<sup>301</sup> The DEIR must be revised to include such an analysis integral to the safety of community members.

G1-86.84

<sup>300</sup> Matt Krogh, Greg Karras, Tyson Waldo & Eddie Scher, *Crude Injustice on the Rails: Race and the Disparate Risk from Oil Trains in California* 22 (2015).

<sup>301</sup> *Id.*

**Response G1-86.84**

As explained in Master Response 14, while environmental justice is not an environmental factor required to be examined pursuant to CEQA, the SCAQMD has many programs to address environmental justice. As such, even though the DEIR is not required to analyze environmental justice impacts specifically, its analysis of localized air quality, noise, and traffic impacts address the environmental justice concerns raised by the comments.

The DEIR's analysis of environmental justice concerns ultimately concluded that the proposed project will permanently reduce localized emissions of air contaminants in the surrounding communities, and therefore will reduce existing impacts that communities around the facility are currently experiencing. With respect to LPG transport, see Response G1-86.83.

**Comment G1-86.85**

**F. The DEIR Fails to Identify or Mitigate Significant Impacts Resulting from the Project's Change in Crude Slate.**

The DEIR fails to meet one of CEQA's most pivotal purposes by neglecting to assess the significant impacts associated with the Project's proposed modifications that will enable the Refinery to import, store, export, and refine advantaged crudes. It is indisputable that the quality and characteristics of crude slate processed at a refinery directly impact byproducts and contamination discharged. Yet the DEIR ignores both this fact and evidence indicating that the Refinery may change its crude slate. Significant impacts from a change in crude slate to incorporate Bakken and tar sands crude include increased energy consumption, air emissions, toxic air contaminants, flaring, and catastrophic incident risks. The DEIR's failure to account for a crude slate change in assessing impacts is particularly deficient in light of the Refinery's location in one of the most polluted air sheds in the nation. Any environmental review document for the Project must analyze the full scope of these impacts.

G1-86.85

### Response G1-86.85

The potential impacts of any change in the crude oil slate or blends processed have been fully analyzed in the DEIR as described in Response G1-78.94. The basic crude oil operating envelope, or acceptable ranges of basic crude oil properties (API gravity and sulfur content) specific to the Refinery will not be significantly changed by the proposed project (see DEIR Sections 2.5.4.1 and 2.5.4.2 for a description of the “operating envelope”). The proposed project will not change the operating envelope except as described and analyzed in the DEIR. Additionally, as explained in Master Response 4 and Responses G1-78.94 and G1-78.122, crude oils with various properties, are blended at the Refinery today. Therefore, refining such crude oils does not create additional hazardous waste, does not increase corrosion, does not increase flaring, does not increase catastrophic incident risks, does not increase the generation of emissions of criteria pollutants, GHGs, or TACs and does not increase demand for energy beyond the existing setting. See Sections 2.5.3 and 2.5.4 and the McGovern Report in Appendix F of the DEIR, Master Response 4, and Response G1-78.94 for further information regarding crude oil slate, baseline, and properties.

In general, the Refinery imports crude oil and produces transportation fuels such as gasoline, diesel, and jet fuel for consumption in the U.S. Marine Terminal 1 is connected to the Carson Crude Terminal via pipeline. No facilities exist or are proposed to load crude oil onto marine vessels from the storage tanks at the Carson Crude Terminal. Furthermore, Marine Terminal 1, the Refinery’s large marine vessel unloading terminal, has no capabilities to load crude oil onto marine vessels. In order to load crude oil onto marine vessels, SCAQMD permits would be required to allow the installation of a marine vapor recovery system meeting the requirements of SCAQMD Rule 1142 and BACT. No such modifications are included in the proposed project to enable crude oil loading at Marine Terminal 1. Therefore, the capabilities for exporting crude oil from the marine terminals will not change with the proposed project.

### Comment G1-86.86

In order to effectuate the fundamental purpose of CEQA, it is axiomatic that an EIR must meaningfully inform the public and its responsible officials of the environmental consequences of their decisions *before* they are made.<sup>302</sup> Only with a genuine, good faith disclosure of a proposed project’s components can a lead agency analyze the full range of potential impacts of the project, and identify necessary mitigation measures prior to project approval.<sup>303</sup> Accordingly, an EIR must include changes in crude processed as part of environmental and impacts analysis.<sup>304</sup>

G1-86.86

<sup>302</sup> *Laurel Heights Improvement Ass’n v. Regents of University of California* (1993) 6 Cal. 4th 1112, 1123; CEQA Guidelines, § 15126.2(a) (“[a]n EIR *shall* identify and focus on the significant environmental effects of the proposed project”) (emphasis added).

<sup>303</sup> 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); CEQA Guidelines, § 15126.4.

<sup>304</sup> *See Richmond*, 184 Cal.App.4th at 89.

### Response G1-86.86

The comment provides a summary of the law regarding when impacts must be addressed in an EIR. While the comment does not include any comment with respect to the proposed project or

the DEIR, one clarification must be made with respect to the citation in the comment to CEQA and the *Laurel Heights I* case.

The comment takes these sources out of context to assert that “an environmental review document must address the impacts of reasonably foreseeable activities related to the project.” The court in *Laurel Heights I* articulated a two prong test. Under *Laurel Heights I*, an EIR must consider a future expansion of the proposed project if: (1) the future expansion or action is a reasonably foreseeable consequence of the initial project; and (2) the future expansion or action will be significant in that it will likely change the scope or nature of the initial project or its environmental effects. The comment here focuses solely on the first prong. The comment suggests any impact “related” to the project must be analyzed. But, CEQA requires both that the impact be a “consequence” or “result” of the project, and that any resulting impacts be significant.

Moreover, in any event, any change in crude oil slate is not a reasonably foreseeable consequence of the proposed project.

**Comment G1-86.87**

CEQA provides, and the courts have instructed, that an environmental review document must address the impacts of reasonably foreseeable activities related to a proposed project.<sup>305</sup> A lead agency has a duty to “use its best efforts to find out and disclose all that it reasonably can.”<sup>306</sup> It is irrelevant whether it definitively has been established that a change in crude slate will occur. Rather, the duty to investigate and disclose significant impacts from a project is triggered when it is reasonably foreseeable that impacts may result from a project, otherwise, the environmental review document is legally defective.<sup>307</sup>

G1-86.87

<sup>305</sup> CEQA Guidelines, § 15378 (a) (“[p]roject means the whole of an action, which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment[.]”). *see Laurel Heights I*, 47 Cal.3d at 398-399.

<sup>306</sup> CEQA Guidelines, § 15144.

<sup>307</sup> *Vineyard Area Citizens for Responsible Growth, Inc. v. City of Racho Cordova* (2007) 40 Cal.4th 412 (“The ultimate question under CEQA...is not whether an EIR establishes likely sources of water, but whether it adequately addresses the reasonably foreseeable impacts of supplying water to the project.”).

**Response G1-86.87**

The comment merely recites CEQA case law and does not require a response.

**Comment G1-86.88**

Here, there is ample evidence indicating that the Project enables the Refinery to receive, store, and process a new crude slate consisting of Bakken and also likely tar sands crude oil.<sup>308</sup> Accordingly, the SCAQMD was required, but failed to, evaluate the significant impacts of the crude slate change.

The impacts to air quality and other safety and environmental harms caused by a refinery's use of Bakken and tar sands crude are outlined in May's Technical Report.<sup>309</sup> The Report explains that incorporating Bakken into the Refinery has many significant impacts that must be evaluated in the DEIR, "including problems with processing waxy Bakken crude, corrosion problems, specific problems when blending Bakken crude with heavy crude oils, higher volatility that has caused explosions and fires, and higher levels of toxic components such as benzene."<sup>310</sup> "Bakken crude oil has been demonstrated as fatally volatile and explosive, as in the case of the tragic explosions at Lac Megantic in Canada, and in other instances."<sup>311</sup> Most recently, a crude oil railcar bearing Bakken crude oil exploded in Oregon along the Columbia River gorge, dangerously close to elementary school and homes.<sup>312</sup>

May also quoted a report by Dr. Phyllis J. Fox showing significant amounts of benzene in shale crudes including both Bakken and Candian crudes, which also outlined methods for assessing these Toxic Air Contaminants in the crude oil : "The pollutants in the diluent blended with these DilBit crudes and in the light sweet shale crudes include significant amounts of hazardous air pollutants, such as benzene, a potent carcinogen."<sup>313</sup>

May's Technical Report also states that in some instances "Bakken crude refining can also increase levels of acutely hazardous and corrosive Hydrogen Sulfide in the refinery[.]" a known "particularly aggressive corrosive agent."<sup>314</sup> The same is true of tar sands crude oil.<sup>315</sup> Indeed, sulfur corrosion was the cause of a severe explosion at the Chevron Richmond Refinery.<sup>316</sup> These issues must be evaluated through a full EIR to prevent severe safety risks associated with crude slate changes.

The Project is also likely to result in significant import and processing of Canadian tar sands crude oil. Because of its higher carbon content and need to remove these contaminants, tar sands crude requires significantly more energy to refine, leading to both direct and indirect increased emissions of greenhouse gases and ozone-precursors. These emissions have significant

direct, indirect, and cumulative impacts on air pollution and climate.<sup>317</sup> Tar sands crude also requires additional "cracking, coking, and [] use of hydrogen, all of which require more energy and increase criteria and toxic pollutant emissions."<sup>318</sup> Evaluating the potentially significant increase in criteria, toxic, and GHG emissions due to introduction of Bakken and tar sands crude is required.

Additional emissions that may be caused "from transport, piping, tank loading, and in refinery operations from volatile diluents used with expanded tar sands crudes have not been identified, and should be, with emissions quantified."<sup>319</sup> May's Technical Report lists "volatile and toxic compounds such as BTEX VOCs (Benzene, Toluene, Ethylbenzene, and Xylene)[.]" which are ozone-precursors, explosive, and toxic air contaminants that are carcinogenic.<sup>320</sup>

As detailed throughout the May Technical Comments, other significant impacts, such as flaring and major accident risks, are also heavily impacted by the quality of crude oil processed at the facility.

For these reasons, the DEIR fundamentally violates CEQA's requirements by failing to examine and disclose the significant impacts that may result from the Project's enabling of a crude slate change. The DEIR must provide an inventory and evaluation of specific crude oils previously processed at the Wilmington and Carson refineries and those that may foreseeable be processed at the integrated Refinery in the future, and evaluate the significant environmental impacts associated with such a change.

G1-86.88

G1-86.88  
cont'd.

<sup>308</sup> See May Technical Report, §§ II(D), VI(A).

<sup>309</sup> See May Technical Report, §§ IV, VI(1).

<sup>310</sup> May Technical Report, § IV.

<sup>311</sup> May Technical Report, § IV(A)(3).

<sup>312</sup> May Technical Report, § IV(A)(3).

<sup>313</sup> May Technical Report, n.56.

<sup>314</sup> May Technical Report, § IV(A)(4).

<sup>315</sup> May Technical Report, § IV(C)(2).

<sup>316</sup> May Technical Report, §§ III(D), IV(A)(4).

<sup>317</sup> May Technical Report, § IV(C); see also Karras, Greg, "Combustion Emissions from Refining Lower Quality Oil: What is the Global Warming Potential," *Environ. Sci. Technol.* 44, 9584-9589 (2010), for an analysis of the significant increases in GHG emissions caused by refining dirtier, heavier crudes from increased energy intensity needed to refine these oils and from direct emissions from the refining process.

<sup>318</sup> May Technical Report, § IV(B).

<sup>319</sup> May Technical Report, § IV(B).

<sup>320</sup> May Technical Report, § IV(B).

### Response G1-86.88

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing a blend of various crude oils and will continue to do so with or without the proposed project. The proposed project will not result in a substantial change in the crude oil blend processed by the Refinery. The basic crude oil operating envelope, or acceptable ranges of basic crude oil properties (API gravity and sulfur content) specific to the Refinery will not be significantly changed by the proposed project (see DEIR Sections 2.5.4.1 and 2.5.4.2 for a description of the "operating envelope"). As such, the proposed project is not designed to facilitate a crude oil blend switch. Additionally, as explained in Master Response 4 and Responses G1-78.94 and G1-78.122, crude oils with various properties are blended at the Refinery today. Therefore, refining such crude oils does not create additional impacts. Based on the information presented, contrary to the assertions in the comment, any change in crude oil slate is not a reasonably foreseeable consequence of the proposed project that must be analyzed under CEQA.

Specifically, both heavy Canadian and Bakken crude oils are already received and processed by the Refinery, so any challenges related to refining heavy Canadian and light Bakken crude oils are part of the existing setting. Therefore, refining such crude oils does not create additional environmental impacts. See Master Response 4 for additional information.

Additionally, because the proposed project will not facilitate a change in the slate of crude oils purchased by the Refinery or the crude oil blend processed at the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow the processing of a slightly heavier crude oil blend, the sulfur species that exist in the crude oil blends processed by the Refinery will not change as a result of the proposed project. As explained in Response 78.111, the Refinery does not consider only the total sulfur in the crude oil blend to be processed. It also considers sulfur reactivity and corrosivity and Refinery operating constraints. Operating limits are set on the allowable content of sulfur compounds in the feed to each Refinery unit. These limits are set based on sulfur removal capacity, product specifications, sulfur reactivity and corrosivity, and the Refinery operating permits. The limits for each unit are set for proper corrosion control within each process unit. Whenever the Refinery considers processing crude oil that has not been previously processed, an evaluation is performed to ensure that any new crude oil will be processed in a way that does not impact safety, environmental requirements, unit reliability, or

product specifications. This evaluation includes specific corrosion mechanisms, such as sulfidic corrosion, that caused the Chevron Richmond incident referred to in the comment.

In general, the incident that occurred in 2012 at the Chevron Richmond Refinery is not relevant to the proposed project. The Refinery has evaluated similar processes for the potential issues that caused the Chevron incident and confirmed that those conditions do not exist at the Refinery. See Response G1-78.111 for additional information regarding why the 2012 Richmond incident is inapplicable to the proposed project.

Further, with respect to the concerns in the comment regarding hydrogen sulfide (H<sub>2</sub>S), Chapter 4 of the DEIR appropriately evaluated potential impacts from H<sub>2</sub>S. H<sub>2</sub>S is a gas at ambient temperature. Therefore, H<sub>2</sub>S tends to separate from the liquid crude oil at the crude oil production wellhead and concentrate in the gases that are removed during the crude oil production process. H<sub>2</sub>S concentrations in crude oils delivered to the Refinery are typically quite low, usually less than 5 ppm, the lower detection limit of the laboratory method used to determine H<sub>2</sub>S in crude oil. See Response G1-78.111 for additional information regarding H<sub>2</sub>S.

Lastly, with respect to the assertion in the comment that the current and project crude oil slates should be disclosed, because any crude oil processed by the Refinery will be blended to meet the oil operating envelope, the specific crude oil slate baseline information is not necessary to determine the potential impacts of the proposed project. And, the proposed project is independent of any future change in the Refinery's crude oil slate. Additionally, disclosure of more detailed information about crude oil capacity, sources, and crude oil composition data is trade secret information as explained in Master Response 2 and not required under CEQA. See Master Response 2 and Response G1-78.208 for a discussion regarding disclosure of crude oil baseline data.

The comment also references Comment Letter 81 and raises the same issues as Comments G1-81.26 through G1-81.32, G1-81.38, G1-81.53 through G1-81.67, G1-81.74, and G1-81.95 through G1-81.96. The issues raised in the comments are addressed in detail in Responses G1-81.26 through G1-81.32, G1-81.38, G1-81.53 through G1-81.67, G1-81.74, and G1-81.95 through G1-81.96.

Comment Letter No. G1-87

JUN 10 2016 3:22PM 3106390721 SAVCO

NO. 1200 P. 1

To Ms. Jillian Wong  
c/o Office of Planning, Rule Development  
and Area Sources/CEQA)  
Mr. Danny Luoung  
Senior Enforcement Manager  
South Coast Air Quality Management District

Re: Comments Opposing Approval of both Draft and Environmental Impact Report (DEIR)  
And the Title V Permit for Tesoro Los Angeles Refinery Integration and Compliance Report (LARIC)

Dear Ms. Wong and Mr. Luong,

This letter is to oppose the Draft Environmental Impact Report (DEIR) and the Title V Permit for the Tesoro LARIC Project, including construction of massive new storage tanks to hold millions of barrels of crude oil, increase crude oil going through the refinery, add a dozen of 22 large refinery heaters, import Liquefied Petroleum Gas by rail to the refinery, and more.

G1-87.1

The DEIR and the Title V Permit (which sets the permit limits) are inaccurate. They ignore Tesoro's own published plans to bring dangerous N. Dakota Bakken crude oil by rail to the Tesoro Savage Vancouver Washington ship terminal, then by ship to the Los Angeles refinery. This crude oil is particularly explosive. A Bakken crude oil rail accident blew up an entire town in 2013, killing many people. Just last Saturday another crude oil train carrying this material exploded, requiring evacuation of an elementary school, and spilling oil into the Columbia River. Bakken crude also contains high levels of volatile and toxic air contaminants and the DEIR should evaluate this threat. Tesoro's Project could also bring extreme Canadian tar sands crude oil to the LA refinery through the same Tesoro Savage ship terminal. These two crude oils cause increased greenhouse gases and harms the air, land, and water during extraction, and add explosion risks in storage and in refineries.

G1-87.2

The DEIRE and Title V permit also failed to count air emissions from flaring during startup, shutdown, and maintenance, other air emissions increases, and failed to set permit conditions that would prevent these increase emissions.

G1-87.3

Our community already suffer from too much air pollution and dangers of petroleum storage, pipelines and reefing, WE wat to stop the expansion of oil refineries, to start building our safe, health, and clean energy future, and to have a fair public process.

As a single mother who pays for our own health insurance, unexpected copayments to Doctor's and Urgent Care facilities due to asthma is a burden on my finances and stressful to myself and children. \$30 for Albuterol, \$50 for Budesonide, \$80 for a mobile inhaler all adds up. They are 18 months apart and often get sick together. I should not have to hesitate signing my children up for outdoor extracurricular activities because our air quality is horrendous! WE HAVE ENOUGH HAZARDS in our community! Enough IS Enough!

G1-87.4

*Ardenia S. Riojas*

**Response to Comment Letter No. G1-87**

**Andenia S Riojas**

**Comment G1-87.1**

This letter is to oppose the Draft Environmental Impact Report (DEIR) and the Title V Permit for the Tesoro LARIC Project, including construction of massive new storage tanks to hold millions of barrels of crude oil, increase crude oil going through the refinery, add a dozen of 22 large refinery heaters, import Liquefied Petroleum Gas by rail to the refinery, and more.

G1-87.1

**Response G1-87.1**

The comment regarding opposition to the proposed project does not raise issues related to the proposed project or the DEIR. The comment is noted and no response is necessary under CEQA.

Although the proposed project includes adding new storage tanks, this component of the proposed project would not increase the crude oil throughput capacity at the Refinery. Instead, the new crude oil storage tanks would allow the Refinery to reduce transportation emissions associated with marine vessels that deliver crude oil. As explained in the DEIR (see pages 4-26 through 4-29) and Master Response 6, increasing the crude oil storage capacity at the Refinery will reduce the amount of time that marine vessels spend at the Port and the associated emissions.

Master Response 6 explains that the volume of available crude oil storage capacity has no bearing on Refinery crude oil processing capacity. The proposed project would not create a new or larger refinery or result in a substantial increase of crude oil throughput capacity. It would further integrate the Refinery's Carson and Wilmington Operations.

Sections 2.7.1.3 and 4.1.2.1 of the FEIR describe the potential 6,000 bbl/day crude oil capacity increase that could be accommodated with the DCU H-100 heater permit revision. The potential impacts of this crude oil capacity increase are fully analyzed in Chapter 4 of the DEIR. Master Response 7 further explains that the proposed project is not an expansion of the Refinery.

Master Response 15 and Response G1-78.207 address the new connections of pressure relief valves to the flare gas recovery system, which do not increase flaring.

The comment refers to increased use of 22 Refinery heaters and boilers. Response G1-81.79 addresses heaters and boilers. The DEIR fully analyzed proposed project impacts, including increased use of and modifications to numerous process heaters. As indicated in Section 4.1.2 of the DEIR, in addition to direct impacts, the proposed project may have indirect impacts on downstream equipment, including Refinery heaters, by causing increased utilization from operational changes, even though the equipment is not part of the proposed project. That is downstream equipment that will not be modified in any way, will operate within existing permit limits and no permit modification would be required. The anticipated indirect operational changes are described in Section 4.1.2 and are included as part of the analysis of operational



impacts in Section 4.2.2.2. Even though there is potential for increased operation of the various Refinery heaters, overall the proposed project will result in localized emission reduction benefits.

The Refinery currently receives LPG railcar deliveries. The proposed project will not increase the number of deliveries. The additional ten railcars associated with the proposed project will be added to existing trains. The potential hazards associated with rail transport were analyzed in Section 4.3.2.5.2 of the FEIR. The Worst-Case Consequence Analysis for the proposed project carefully evaluated the proposed modifications to existing equipment and proposed new units (see Appendix C of the FEIR).

**Comment G1-87.2**

The DEIR and the Title V Permit (which sets the permit limits) are inaccurate. They ignore Tesoro's own published plans to bring dangerous N. Dakota Bakken crude oil by rail to the Tesoro Savage Vancouver Washington ship terminal, then by ship to the Los Angeles refinery. This crude oil is particularly explosive. A Bakken crude oil rail accident blew up an entire town in 2013, killing many people. Just last Saturday another crude oil train carrying this material exploded, requiring evacuation of an elementary school, and spilling oil into the Columbia River. Bakken crude also contains high levels of volatile and toxic air contaminants and the DEIR should evaluate this threat. Tesoro's Project could also bring extreme Canadian tar sands crude oil to the LA refinery through the same Tesoro Savage ship terminal. These two crude oils cause increased greenhouse gases and harms the air, land, and water during extraction, and add explosion risks in storage and in refineries.

G1-87.2

**Response G1-87.2**

As described in Section 4.1.2.5 of the DEIR and Master Response 8, the Vancouver Energy Project is wholly independent from the proposed project and is undergoing separate environmental review by the Washington State EFSEC, which includes evaluation of transportation hazards. Additionally, as explained in Master Response 8, the Final EIS has not yet been issued for the Vancouver Energy Project, and the project has not been approved.

As explained in detail in Sections 2.5.3 and 2.5.4 and Appendix F of the DEIR, Master Response 4, and Response G1-78.94, the Refinery is currently processing a blend of various crude oils and will continue to do so with or without the proposed project. The proposed project is not designed to facilitate a change in the crude oil blend processed by the Refinery, except to the extent that the DCU H-100 heater permit revisions may allow processing of a slightly heavier crude oil blend.

The DEIR analyzed the potential increase in crude oil processing of up to 6,000 bbl/day associated with the modification of the DCU H-100 heater permit description. The increase in crude oil processing rate is not related to any specific crude oil source. Master Response 4 explains that the Refinery's sources of crude oils have and will continue to vary with or without the proposed project. By using worst-case crude oil properties (see Response G1-78.157), the DEIR fully analyzed the potential impacts associated with storing various crude oils in the new and replacement storage tanks and with transferring various crude oils via the associated piping. There would be no additional impacts, beyond those analyzed in the DEIR, for the new and replacement storage tanks if different light or heavy crude oil is processed at the Refinery (see Section 4.2.2.2 of the FEIR). The proposed project does not facilitate or encourage sourcing

crude oil from any particular location. In other words, the improved offloading efficiency provides a benefit regardless of the type of crude oil transported by marine vessel.

Light and heavy crude oil is currently delivered, stored, and processed at the Refinery and will continue to be delivered, stored, and processed with or without the proposed project. The impact analysis in the DEIR accounts for the variety of crude oils that have been and will be handled by the Refinery. For example, the TAC concentrations of crude oils in storage tanks associated with the proposed project were based on a worst-case hybrid analysis of the toxic content of the crude oils currently and potentially processed at the Refinery, including Bakken and heavy Canadian crude oil. The hybrid TAC speciation was prepared by selecting the highest concentration of each toxic compound from the entire speciated data set of all the crude oils analyzed.

There have been previous volatility issues associated with the transport of Bakken crude oil. However, regulations have since been adopted that require a reduction in volatility of Bakken crude oil that is transported. For example, in December 2014, the Industrial Commission of North Dakota issued an order regarding conditioning of Bakken crude oil and limiting the RVP of crude oil provided for transport to 13.7 RVP. Thus, Bakken crude oil transported to the West Coast will be pipeline quality (i.e., qualified for safe transport) and will not have as high a vapor pressure as the Bakken crude oil produced at the wellhead. As with other U. S. crude oil production operations, the order adopted by the State of North Dakota will require that crude oil production facilities remove a significant portion of the light ends (ethane, propane, butane and pentane) prior to offering the crude oil for shipment to refineries for processing.

Because of Bakken crude oil's purported volatility, concerns were raised in the media as to whether Bakken crude oil was properly classified as a Class 3 hazardous material under U.S. DOT regulations. A Class 3 hazardous material is generally a flammable or combustible liquid that does not meet the regulatory classification requirements for other hazardous characteristics, such as toxicity, corrosivity, radioactivity or explosiveness. However, those concerns have since been resolved by repeated analysis and testing that demonstrates Bakken crude oil to be a Class 3 hazardous material, similar to other light sweet crude oils. After considering the information, the PHMSA Deputy Administrator testified to Congress that Bakken crude oil is accurately classified as a Hazard Class 3 Flammable Liquid.<sup>327</sup> This is consistent with the sampling and testing Tesoro has completed on Bakken crude oil. Therefore, Bakken crude oil has properties similar to other light crude oils, and is not classified as explosive.

The Refinery did not process large amounts of Bakken or Canadian heavy crude oil in the baseline period. This observation, however, is not relevant to the analysis in the DEIR. As explained in subsequent responses, which are listed in Table 78-94.1, Bakken and heavy Canadian crude oils are similar to other light and heavy crude oils currently processed by the Refinery. As described in Master Response 4 and Response G1-78.150, in the future, as now, any Bakken or heavy Canadian crude oils processed would have to be combined with other crude oils to create a crude oil blend that matches the Refinery's processing capabilities and permit limitations. This is what has occurred with Bakken, heavy Canadian, and many other heavy and

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<sup>327</sup> Written statement of Timothy P. Butters Before the Subcommittees on Energy and Oversight Committee on Science, Space and Technology, U.S. House of Representatives at page 12 (Sept. 9, 2014).

light crude oils that were utilized in the baseline period, and is what will continue after implementation of the proposed project. Any increased use of Bakken or heavy Canadian crude oils at the Refinery would not be caused by the proposed project. The proposed project's impacts were analyzed in detail using worst-case assumptions (e.g., the maximum vapor pressure of crude oil allowable by SCAQMD rules), which accounts for any impacts from increased use of Bakken or heavy Canadian crude oil. Response G1-78.111 specifically addresses crude oil corrosivity. Responses G1-81.65 and G1-81.67 address greenhouse gases and crude oil production.

The comment also refers to derailment of a train carrying Bakken crude oil in Mosier, Oregon and another unidentifiable derailment. As explained in Response G1-81.57, there are no proposed project modifications to bring crude oil by rail to the Refinery. Thus the Mosier derailment and other derailments are not relevant to the DEIR analysis or the proposed project. Responses G1-81.65 and G1-81.67 explain that the DEIR does not need to analyze the environmental impacts from crude oil production because the proposed project will not cause any changes to that industry.

The FEIR fully analyzed the potential impacts of the proposed project with respect to greenhouse gas emissions in Section 5.2.2.3 and hazards in Section 4.3.2.

**Comment G1-87.3**

The DEIRE and Title V permit also failed to count air emissions from flaring during startup, shutdown, and maintenance, other air emissions increases, and failed to set permit conditions that would prevent these increase emissions.



G1-87.3

**Response G1-87.3**

Startup and shutdown emissions, as well as emergency flaring, are discussed in detail in Master Response 15.

As explained in Master Response 15, the Refinery strives for startups, shutdowns, and maintenance without flaring. In any event, there are no new process units associated with the proposed project that would be expected to flare during startup or shutdown. No additional permit conditions are needed to control startup and shutdown emissions.

Emission changes as a result of the proposed project have been fully analyzed and are discussed in Section 4.2 of the DEIR. An emissions summary can be found on pages 4-16 in Table 4.2-4. Further, the Title V permit limits will be equal to or more restrictive than emissions analyzed in the DEIR.

The comment also refers to "other air emission increases" that were not accounted for in the DEIR and the Title V permit. The comment lacks specificity. Without further detail regarding these other air emissions, a specific response cannot be provided.

**Comment G1-87.4**

Our community already suffer from too much air pollution and dangers of petroleum storage, pipelines and reefing, WE wat to stop the expansion of oil refineries, to start building our safe, health, and clean energy future, and to have a fair public process.

As a single mother who pays for our own health insurance, unexpected copayments to Doctor's and Urgent Care facillties due to asthma is a burden on my finances and stressful to myself and children. \$30 for Albuterol, \$50 for Budesonide, \$80 for a mobile inhaler all adds up. They are 18 months apart and often get sick together. I should not have to hesitate signing my children up for outdoor extracurricular activities because our air quality is horrendous! WE HAVE ENOUGH HAZARDS In our community! Enough IS Enough!

G1-87.4

**Response G1-87.4**

The proposed project's local health effects have been analyzed and are discussed in Master Response 3. Potential hazard impacts, including those related to material storage and pipelines, are explained in Master Response 9. The proposed project is not an expansion of the Refinery. See Response G1-87.1 and Master Responses 6 and 7 for a detailed description of the potential 6,000 bbl/day crude oil capacity increase associated with the proposed project.

The proposed project has complied with the public process required by CEQA Guidelines § 15087. As explained in detail in Master Response 1, the DEIR was circulated for an extended length of time. The public comment period closed on June 10, 2016, after two extensions. A 94-day public review and comment period (March 8, 2016 through June 10, 2016) was provided, which exceeds CEQA requirements. A public hearing on the Title V permit and public meeting on the DEIR was held on May 17, 2016. Copies of the DEIR were made available in neighborhood public libraries. Notices were published and distributed for the original public comment period, the two extensions, and the public hearing on the Title V permit and public meeting on the DEIR.

In addition, Tesoro independently offered and provided community outreach to over 100 entities including public agencies, community organizations, neighborhood organizations, business associations, and other interested parties to explain the scope of the proposed project and the potential environmental effects of the proposed project. The community meetings were held on April 4, 11, and 14, 2016 in Carson, Wilmington, and Long Beach, respectively. Tesoro has identified that a total of 277 people attended the meetings.

The SCAQMD recognizes the comment regarding burdens associated with unexpected medical expenses; however, the comment does not raise issues related to the DEIR or the proposed project. The comment is noted and no response is necessary under CEQA.

Comment Letter No. G1-88

4243640104

Jun.10.2016 04:11 PM Linda Bassett

4243640104

PAGE. 1/ 3

Date 6/10/16

Jillian Wong  
Program Supervisor, CEQA  
AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765

RE: my input on the Tesoro Integration Project.

Dear Ms. Wong,

My name is Maricela Peralta-Cantón and I live in San Pedro.

I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.

I would like my opinion be considered in your decision about the project. I reject the Tesoro merger, I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-88.1

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

G1-88.2

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-88.3

Please add my comment about this project. If possible, I would like to know that you received my comments.

Thank you,

Maricela Peralta-Cantón

**Response to Comment Letter No. G1-88**

**Marciela Peralta-Canton**

**Comment G1-88.1**

My name is Marciela Peralta-Canton and I live at San Pedro.

I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.

I would like my opinion be considered in your decision about the project. I reject the Tesoro merger. I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-88.1

**Response G1-88.1**

The comment regarding the rejection of the proposed project does not raise issues related to the proposed project or the DEIR. The comment is noted and no response is necessary under CEQA.

As explained in Master Response 7, the proposed project is not a merger. Tesoro acquired the Carson Operations from BP in 2013. The Carson and Wilmington Operations have already merged. The pre-existing Carson and Wilmington Operations have been operating as one Refinery since the acquisition. As explained in Section 2.1 of the DEIR, the proposed project is designed to better integrate the Carson and Wilmington Operations, which will improve processing efficiency and reduce emissions.

The proposed project includes constructing new and replacement storage tanks, but this component of the proposed project does not increase crude oil capacity at the Refinery. The new and replacement storage tanks are proposed to provide sufficient crude oil storage capacity to allow crude oil tankers to offload more quickly at the Wilmington Operations Long Beach Marine Terminal and in one visit to the dock at Marine Terminal 1. This increase in crude oil storage capacity means that marine vessels will spend less time maneuvering, at dock, and/or anchored offshore because of improved offloading efficiency (i.e., quicker offloading and the elimination of or reduction of demurrage costs and the need for anchorage while waiting for available storage tank space to finish offloading). The DEIR did not take credit for emission reductions from marine vessel operations. However, annual emission reductions from improved marine vessel offloading efficiency were estimated and can be found in Master Response 6. Based on this analysis, daily marine vessel emissions would not increase and annual emissions would be substantially reduced.

With respect to offloading emission control, the new and replacement crude oil storage tanks are connected to the marine terminals, and the marine vessels unload directly into the crude oil receiving tanks. Because the new and replacement crude oil storage tanks will be permitted and constructed to comply with BACT, there are no associated unloading racks or unloading

emissions other than fugitive emissions associated with the piping used to transfer crude oil from the marine terminals. Therefore, offloading emissions will be controlled to the maximum extent possible and there will be no additional, unutilized opportunity to reduce emissions through an offloading capture method.

Master Response 6 explains that the volume of available crude oil storage capacity has no bearing on Refinery crude oil processing capacity. The proposed project would not create a new or larger refinery or result in an increase of crude oil throughput capacity; except to the extent that the DCU H-100 heater permit revision may allow the processing of 6,000 bbl/day; it would further integrate the Refinery's Carson and Wilmington Operations.

Sections 2.7.1.3 and 4.1.2.1 of the FEIR describe the 6,000 bbl/day potential crude oil capacity increase that could be accommodated with the DCU H-100 heater permit revision. The potential impacts of this crude oil capacity increase are fully analyzed in Chapter 4 of the DEIR. Master Response 7 further explains that the proposed project is not an expansion of the Refinery.

As explained in Master Response 4, the proposed project is not designed to facilitate a crude oil blend switch and the Refinery will not process different crude oil as a result of the proposed project beyond what was analyzed in the DEIR. Thus, because the new and replacement storage tanks are being installed to store crude oil for processing at the Refinery—not for third party sale and use—the tanks likewise will not store crude oil of a different type than that currently being processed at the Refinery. Additionally, as explained in Master Response 9, the DEIR fully analyzes any potential hazard impacts related to the increase in storage tanks.

**Comment G1-88.2**

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

G1-88.2

**Response G1-88.2**

The proposed project has complied with the public process required by CEQA Guidelines § 15087. As explained in detail in Master Response 1, the DEIR was circulated for an extended length of time. The public comment period closed on June 10, 2016, after two extensions. A 94-day public review and comment period (March 8, 2016 through June 10, 2016) was provided, which exceeds CEQA requirements. A public hearing on the Title V permit and public meeting on the DEIR was held on May 17, 2016. Copies of the DEIR were made available in neighborhood public libraries. Notices were published and distributed for the original public comment period, the two extensions, and the public hearing on the Title V permit and public meeting on the DEIR.

In addition, Tesoro independently offered and provided community outreach to over 100 entities including public agencies, community organizations, neighborhood organizations, business

associations, and other interested parties to explain the scope of the proposed project and the potential environmental effects of the proposed project. The community meetings were held on April 4, 11, and 14, 2016 in Carson, Wilmington, and Long Beach, respectively. Tesoro has identified that a total of 277 people attended the meetings.

The proposed project has been fully analyzed for potential hazard impacts, including those associated with pipelines, storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising). Section 4.3 of the DEIR found that hazards associated with the Naphtha Isomerization Unit, new crude oil storage tanks, the SARP, and interconnecting pipelines are potentially significant due to hazards associated with worst-case release scenarios. A Worst-Case Consequence Analysis was presented in Appendix C and discussed in Section 4.3 of the DEIR. See Master Response 9 for additional information regarding the hazards analyses of pipelines and storage tanks, including impacts associated with earthquakes.

### Comment G1-88.3

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-88.3

### Response G1-88.3

As explained in Response G1-88.2, notice was provided to the community through the mail and in the newspaper. The proposed project was also discussed at public hearings and meetings.

As explained in Section 4.2.2.2 of the DEIR, upon completion, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are discussed in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in local overall reductions in GHG emissions, as discussed in Section 5.2 of the FEIR and summarized in Table 5.2-8 (see page 5-26).

As explained in Master Response 3, the DEIR fully analyzed and disclosed the proposed project's potential health impacts from all pollutants. The proposed project's potential cancer and non-cancer human health impacts, including asthma and other respiratory illnesses, were analyzed in the DEIR, and determined to be less than significant. The estimated cancer risk due to the operation of the proposed project was found to be less than the SCAQMD's cancer risk significance threshold of ten in one million (see Section 4.2.2.5 of the FEIR). The non-cancer chronic and acute hazard indices were found to be below the SCAQMD's non-cancer chronic and acute hazard index threshold of 1.0. Therefore, the proposed project is not expected to cause a significant adverse health impact. Master Response 14 explains the potential localized impacts to the surrounding community.



Comment Letter No. G1-89

Jun.10.2016 04:11 PM Linda Bassett

4243640104

PAGE. 2/ 3

Date \_\_\_\_\_

Jillian Wong  
Program Supervisor, CEQA  
AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765

RE: my input on the Tesoro Integration Project.

Dear Ms. Wong,

My name is Corciana Villa Bazo and I live at Wilmington.

I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.

I would like my opinion be considered in your decision about the project. I reject the Tesoro merger. I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-89.1

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

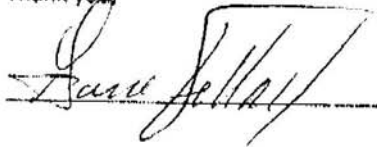
G1-89.2

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-89.3

Please add my comment about this project. If possible, I would like to know that you received my comments.

Thank you,



**Response to Comment Letter No. G1-89**

**Georgina Villahaze**

**Comment G1-89.1**

My name is Georgina Villahaze and I live at Wilmington.  
I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.  
I would like my opinion be considered in your decision about the project. I reject the Tesoro merger. I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-89.1

**Response G1-89.1**

The comment regarding the rejection of the proposed project does not raise issues related to the proposed project or the DEIR. The comment is noted and no response is necessary under CEQA.

As explained in Master Response 7, the proposed project is not a merger. Tesoro acquired the Carson Operations from BP in 2013. The Carson and Wilmington Operations have already merged. The pre-existing Carson and Wilmington Operations have been operating as one Refinery since the acquisition. As explained in Section 2.1 of the DEIR, the proposed project is designed to better integrate the Carson and Wilmington Operations, which will improve processing efficiency and reduce emissions.

The proposed project includes constructing new and replacement storage tanks, but this component of the proposed project does not increase crude oil capacity at the Refinery. The new and replacement storage tanks are proposed to provide sufficient crude oil storage capacity to allow crude oil tankers to offload more quickly at the Wilmington Operations Long Beach Marine Terminal and in one visit to the dock at Marine Terminal 1. This increase in crude oil storage capacity means that marine vessels will spend less time maneuvering or at dock or anchor in the Port because of improved offloading efficiency (i.e., quicker offloading and the elimination of or reduction of demurrage costs and the need for anchorage while waiting for available storage tank space to finish offloading). The DEIR did not take credit for emission reductions from marine vessel operations. However, annual emission reductions from improved marine vessel offloading efficiency were estimated and can be found in Master Response 6. Based on this analysis, daily marine vessel emissions would not increase and annual emissions would be substantially reduced.

With respect to offloading emission control, the new and replacement crude oil storage tanks are connected to the marine terminals, and the marine vessels unload directly into the crude oil receiving tanks. Because the new and replacement crude oil storage tanks will be permitted and constructed to comply with BACT, there are no associated unloading racks or unloading

emissions other than fugitive emissions associated with the piping used to transfer crude oil from the marine terminals. Therefore, offloading emissions will be controlled to the maximum extent possible and there will be no additional, unutilized opportunity to reduce emissions through an offloading capture method.

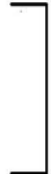
Master Response 6 explains that the volume of available crude oil storage capacity has no bearing on Refinery crude oil processing capacity. The proposed project would not create a new or larger refinery or result in an increase of crude oil throughput capacity, except to the extent that the DCU H-100 heater permit revision will increase the capacity of that unit by 6,000 bbl/day; the proposed project would further integrate the Refinery's Carson and Wilmington Operations.

Sections 2.7.1.3 and 4.1.2.1 of the FEIR describe the 6,000 bbl/day potential crude oil capacity increase that could be accommodated with the proposed DCU H-100 heater permit revision. The potential impacts of this crude oil capacity increase are fully analyzed in Chapter 4 of the DEIR. Master Response 7 further explains that the proposed project is not an expansion of the Refinery.

As explained in Master Response 4, the proposed project is not designed to facilitate a crude oil blend switch and the Refinery will not process different crude oil as a result of the proposed project beyond what was analyzed in the DEIR, except to the extent that the DCU H-100 heater permit revisions may allow the processing of a slightly heavier crude oil blend. Thus, because the new and replacement storage tanks are being installed to store crude oil for processing at the Refinery—not for third party sale and use—the tanks likewise will not store crude oil of a different type than that currently being processed at the Refinery. Additionally, as explained in Master Response 9, the DEIR fully analyzes any potential hazard impacts related to the increase in storage tanks.

**Comment G1-89.2**

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.



G1-89.2

**Response G1-89.2**

The proposed project has complied with the public process required by CEQA Guidelines § 15087. As explained in detail in Master Response 1, the DEIR was circulated for an extended length of time. The public comment period closed on June 10, 2016, after two extensions. A 94-day public review and comment period (March 8, 2016 through June 10, 2016) was provided, which exceeds CEQA requirements. A public hearing on the Title V permit and public meeting on the DEIR was held on May 17, 2016. Copies of the DEIR were made available in neighborhood public libraries. Notices were published and distributed for the original public comment period, the two extensions, and the public hearing on the Title V permit and public meeting on the DEIR.

In addition, Tesoro independently offered and provided community outreach to over 100 entities including public agencies, community organizations, neighborhood organizations, business associations, and other interested parties to explain the scope of the proposed project and the potential environmental effects of the proposed project. The community meetings were held on April 4, 11, and 14, 2016 in Carson, Wilmington, and Long Beach, respectively. Tesoro has identified that a total of 277 people attended the meetings.

The proposed project has been fully analyzed for potential hazard impacts, including those associated with pipelines, storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising). Section 4.3 of the DEIR found that hazards associated with the Naphtha Isomerization Unit, new crude oil storage tanks, the SARP, and interconnecting pipelines are potentially significant due to hazards associated with worst-case release scenarios. A Worst-Case Consequence Analysis was presented in Appendix C and discussed in Section 4.3 of the DEIR. See Master Response 9 for additional information regarding the hazards analyses of pipelines and storage tanks, including impacts associated with earthquakes.

**Comment G1-89.3**

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-89.3

**Response G1-89.3**

As explained in Response G1-89.2, notice was provided to the community through the mail and in the newspaper. The proposed project was also discussed at public hearings and meetings.

As explained in Section 4.2.2.2 of the DEIR, upon completion, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NOx, SOx, PM10, and PM2.5 emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are discussed in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in local overall reductions in GHG emissions, as discussed in Section 5.2 of the FEIR and summarized in Table 5.2-8 (see page 5-26).

As explained in Master Response 3, the DEIR fully analyzed and disclosed the proposed project's potential health impacts from all pollutants. The proposed project's potential cancer and non-cancer human health impacts, including asthma and other respiratory illnesses, were analyzed in the DEIR, and determined to be less than significant. The estimated cancer risk due to the operation of the proposed project was found to be less than the SCAQMD's cancer risk significance threshold of ten in one million (see Section 4.2.2.5 of the FEIR). The non-cancer chronic and acute hazard indices were found to be below the SCAQMD's non-cancer chronic and acute hazard index threshold of 1.0. Therefore, the proposed project is not expected to cause a

## APPENDIX G1: RESPONSE TO COMMENTS

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significant adverse health impact. Master Response 14 explains the potential localized impacts to the surrounding community.

Comment Letter No. G1-90

**Citizen Public Hearing Comments, Questions, and Concerns  
Regarding Draft EIR for  
Tesoro Refining & Marketing LLC**

**Proposal to Combine and Upgrade  
Carson & Wilmington Refinery Facilities via:**

**Tesoro Los Angeles Refinery Integration and Compliance  
(LARIC) Project**

SCAQMD COORDINATOR:

Ms. Jilian Wong, PhD.

Office of Planning, Rule Development, and Area Sources/CEQA

The South Coast Air Quality Management District

21865 Copley Drive

Diamond Bar, CA 91765-4178

Citizen Hearing Comments and Questions

Respectfully Submitted by:

Genghmun Eng ("Citizen")

5215 Lenore Street

Torrance, CA 90503

6 June 2016

Question/Concern 1:

Will the new Tesoro Los Angeles Refinery Integration and Compliance (LARIC) Project be created to operate in compliance with the new 2019 Federal 40CFR Section 63, requirements of Paragraphs 63.670 and 63.671, regarding Flares and Flare Monitoring? If not, why not? Citizen believes this should be a requirement for LARIC to be properly protective of the Public Health and Safety.

G1-90.1

Question/Concern 2:

The new LARIC Project is a potential emitter of hydrogen cyanide (H-CN). H-CN should also be added to the Draft EIR "Toxic Air Contaminants (TAC)" list, and its expected emissions examined accordingly and added to the Draft EIR. While 40CFR63\_Subpart YY, [National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards] notes that: "Other hydrogen cyanide, potassium cyanide, or sodium cyanide byproducts, impurities, wastes, and trace contaminants are not considered to be Cyanide Chemicals Products", it also notes that: "*Raw hydrogen cyanide* means hydrogen cyanide that has not been through the refining process. Raw hydrogen cyanide usually has a hydrogen cyanide concentration less than 10 percent." Thus LARIC emissions of H-CN are: "*Raw hydrogen cyanide*". How will LARIC emissions of H-CN be controlled, and what calculations, demonstrations, and evaluations will be done to show that allowing such emissions are properly protective of the Public Health and Safety? Continuous CEMS in-stack monitoring of H-CN is needed to quantify the amount of exposure to the public.

G1-90.2

Question/Concern 3:

40CFR63\_Subpart-YY notes that: "For process vent hydrogen cyanide emissions that are vented to a control device other than a flare during startup, shutdown, and malfunction, the design evaluation must include documentation that the control device being used achieves the required control efficiency during the reasonably expected maximum flow rate and emission rate during startup, shutdown, and malfunction." What additional limits and monitoring will be placed on "hydrogen cyanide emissions that are vented to a control device that is a flare unit"? How is the proposed LARIC Project achieving these results? How is it demonstrated that proposed SCAQMD requirements for H-CN and H-CN emissions are in the interests of Public Health and Safety. A separate HRA for H-CN should be done for all potential H-CN release points in the LARIC Project.

G1-90.3

Question/Concern 4:

The LARIC EIR states: "The NOP/IS (Draft EIR Notice of Preparation / Initial Study) concluded that the proposed project would not create significant adverse environmental impacts to the following areas: aesthetics,.. geology and soils, ..population and housing, ... and recreation." Citizen is concerned that without further mitigations and requirements being levied on the LARIC Project, that it will instead will have an ongoing and severe impact on the Quality-of-Life of residents and workers in nearby and outlying communities as follows:

4.1: Aesthetics: Refinery Emissions that the SCAQMD may deem are "acceptably hazardous" for decades to come after LARIC completion, including decades of dust generation; refinery odors, especially H<sub>2</sub>S; carbon monoxide; and H-CN; each still reduces the Quality-of-Life, aside of their specific provable health hazards. Dust, smell, and ongoing toxic chemical emissions are not Aestheic. The SCAQMD has an opportunity to require significantly improvements in these metrics, instead of using the minimal standard of "no worse than before".

G1-90.4

4.2: Geology and Soils: It is not clear that the laying of massive new pipe structures will not create a significant future adverse impact to regions where pipelines were not present. An improvement in the potential to lessen geology and soils contamination in one location does not offset the potential contamination of a new area that previously did not have such structures.

4.3: Population and Housing: See (4.1) above. The long-term health impacts on the nearby and outlying communities is already well known.

4.4: Recreation: See (4.1) and (4.3) above. Dust, smell, and ongoing toxic chemical emissions make it difficult or hazardous for children to play outside, significantly impacting recreation, as children are often the most susceptible to these dust, smell, and ongoing toxic chemical emissions.

Citizen asks: Why is the SCAQMD not levying tougher standards on dust, smell, and ongoing toxic chemical emissions associated with the LARIC Project completion, so as to substantially improve the Quality-of-Life of residents and workers in nearby and outlying communities in the above areas?

Citizen further notes that the Draft EIR on Page 1-19 categorically states: "The Tesoro Los Angeles Refinery handles hazardous materials with the potential to impact people, property, or the environment. An accidental release of hazardous materials at a facility can occur due to natural events, such as earthquakes, and non-natural events, such as mechanical failure or human error. Potential existing hazards from the Refinery are those associated with accidental releases of toxic/flammable gas, toxic/flammable liquefied gas, and flammable liquids. Potential hazards at a refinery include toxic gas clouds, fires, vapor cloud explosions, thermal radiation, and overpressure. Risks are also associated with transportation, including truck transport, rail transport, and pipeline transport.". This directly countermands the above "NOPS/IS" statement, and supports Citizen's concerns.

G1-90.4  
cont'd.

Question/Concern 5.

Draft EIR Page 1-7 notes: "Tesoro proposes to achieve this objective by constructing six new 500,000 barrel tanks at the Carson Crude Terminal and replacing two existing 80,000 barrel crude oil tanks at the Wilmington Operations with two 300,000 barrel tanks", which replaces 160,000 barrels crude oil storage with:

$$(6 \times 500,000) \text{ barrels} + (2 \times 300,000) \text{ barrels} = 3,600,000 \text{ barrels}$$

This is a 22.5X increase in the amount of crude oil storage. The environmental impact of a potential storage tank leak, in addition to risk of fire and explosion, and impact of earthquakes appear to Citizen to be at least 22.5X larger. Citizen asks that this 22.5X increase in storage be deemed a "significant adverse environmental impact", and handled by the SCAQMD in their risk management planning as such, as well as creating a much larger EPA OCA (Offsite Consequence Analysis), which should also be completed, and integrated into this Draft EIR document.

G1-90.5

Question/Concern 6:

The Draft EIR Page 1-7 notes that: "the existing 12-inch diameter piping will be replaced with 24-inch diameter piping". The larger diameter piping increases the risk of larger spills and leaks. Citizen maintains that given the present amount of oil leak sensors placed along the existing piping, in order to have an equivalent risk per unit volume of oil, the new pipeline should have 4X more sensors per unit length integrated into the new pipeline. Citizen recommends that the SCAQMD also add improved monitoring and more sensitive leak detection as new pipeline requirements, to be further protective of the Public Health and Safety. The type of materials, pipeline maximum operating pressure, expected corrosion resistance, corrosion resistance of pipeline joining materials, and expected average lifetime with standard deviations of these pipeline components, needs to be analyzed/disclosed in the Draft EIR.

G1-90.6

Question/Concern 7:

What pipeline mitigations and design differences are planned for these pipelines, as a function of whether they will be handling hydrogen (Page 1-9), *residuum*, gas oil, diesel, gasoline, naphtha, transmix, or LPG (Page 1-8)? What maximum allowed level of impurities will be allowed in each of these materials, and how do those maximum levels affect the expected pipeline maximum operating pressure, expected corrosion resistance, corrosion resistance of pipeline joining materials, and the expected average lifetime and standard deviation on lifetime, for these pipeline components?

G1-90.7

Question/Concern 8:

The Draft EIR Page 1-15 notes: "Up to 15 new pipelines are expected to transport gasoline and gasoline blending components, crude oil, gas oil, butylene, propylene, and liquid petroleum gases...The pipe bundle will require a 54-inch bore.." In order to be properly protective of the Public Health, the 54-inch bore should itself be laid

G1-90.8



APPENDIX G1: RESPONSE TO COMMENTS

<p>with a large diameter pipe as a "pipe bundle enclosure", to provide secondary containment for leaks. Leak detectors optimized for each of the various components should also be placed at intervals along this 54-inch bore, within this large diameter pipe, housing the "pipe bundle".</p>	G1-90.8 cont'd.
<p>Question/Concern 9: The Draft EIR Page 1-10 notes: "In addition, facilities will be added to remove impurities such as sulfur, nitrogen compounds, and organic acids from distillates in order to make on-specification products." It is impurity removal process from distillates that often results in a significant impact of the ongoing Refinery operations to the environment, both in: (8.1) expected air quality impacts from these operations, and (8.2) potential for unexpected environmental impacts when there are processing anomalies. The Draft EIR should contain a thorough discussion of both (8.1) and (8.2) above.</p>	G1-90.9
<p>Question/Concern 10: The Draft EIR Page 1-10 notes: "An FCCU cracks or converts heavy hydrocarbons into lighter, gasoline and distillate range hydrocarbons in the presence of fine particles of catalyst that are circulated throughout the process." What limits on PM-2.5 will be required of the completed and operational LARIC Project facility? How does the SCAQMD justify this particulate burden on the nearby and outlying communities? Will the SCAQMD require year-to-year improvements in the PM-2.5 emissions from the completed LARIC Project facility? If not, why not, in the interest of improving Public Health and Safety?</p>	G1-90.10
<p>Question/Concern 11: The Draft EIR Page 1-20 notes that: "Construction activities associated with the modifications to the Refinery would result in emissions of CO, VOC, NOx, SOx, PM10, and PM2.5." What hourly levels of these emissions will be allowed? If not so regulated, why not, in the interest of improving Public Health and Safety?</p>	G1-90.11
<p>Question/Concern 12: Draft EIR Page 1-11 notes a DCU change from: "'design heat release' basis (252 mmBtu/hr) to.. 'maximum heat release' basis (302.4 mmBtu/hr)" which allows "process more feed through the DCU." When the DCU is used in this "process more feed" mode, it looks like operation of the DCU at 120% above its "design" capacity. The DCU reliability, and Failure Modes and Effects analyses needs to be done for using this older equipment in this higher stress mode, as part of the Draft EIR.</p>	G1-90.12
<p>Question/Concern 13: The Draft EIR Page 1-11 notes: "Mass emissions of CO, NOx, SOx, particulate matter less than ten microns in diameter (PM10), and volatile organic compounds (VOC) will be restricted in the revised permit." A side-by-side comparison of what the present permit and revised permit values are expected needs to be included in the Draft EIR. Also, Citizen believes that the SCAQMD needs to add in a PM-2.5 requirement to the new revised permit in order to be properly protective of the Public Health and Safety. Proposed PM-2.5 levels, and why those levels are properly protective also needs to be included in the Draft EIR. Furthermore, the Draft EIR should add requirements for continuous monitoring both at the stack source of PM-10 and PM-2.5, with results automatically linked to the SCAQMD, and with the SCAQMD establishing a web-site to allow Citizen tracking of the data.</p>	G1-90.13
<p>Question/Concern 14: The Draft EIR Page 1-12 notes: "One new 50,000 bbl/day Wet Jet Treater will be installed at Carson Operations". Will this new unit be required to use recycled water? If not, why not? Given the water use restrictions imposed on everybody else due to the drought, proper management of our water resources is critical to the continued viability of the human population in the South Bay. An analysis of the expected changes in fresh, potable, recycled, and gray water use, and where this water will come from, is also needed as part of this Draft EIR.</p>	G1-90.14

Question/Concern 15:

The Draft EIR Page 1-20 further notes that: "The Carson Operations discharged an average of 4.07 million gallons per day of wastewater during 2012 and 2013 to the sewer system. The Carson Operation's current Industrial Wastewater Discharge Permit allows discharge of up to 5.25 million gallons per day to the LACSD sewer system. The Wilmington Operations discharged an average of 2.88 million gallons per day of wastewater based on a 2012/2013 average. The Wilmington Operation's current Industrial Wastewater Discharge Permit allows discharge of 3.24 million gallons per day."

Additional language is needed in the Draft EIR to mandate an increasingly larger fraction of recycled and gray water use, as input into these operations, instead fresh potable water use. Using units of Mgp/d (millions of gallons per day) and Mgp/y (millions of gallons per year), the numerical sum of the above cited permit values is:  $(5.25+3.24) = 8.49$  Mgp/d – 3101 Mgp/y.

G1-90.15

Citizen is concerned that the prior permits were granted under optimistic assumptions of water availability and optimistic assumptions on potential environmental impacts. Since the LARIC Project is a new project, Citizen requests that new permit language also be added to require planning and adjudication to reduce the final total LARIC discharge value, such as a 50% reduction from the current cited individual permit level values, to be properly protective of the future Public Health and Safety.

Question/Concern 16:

The Draft EIR Page 1-20 notes that: "The LACSD [Los Angeles County Sanitation District] places limitations on wastewater parameters such as oil and grease contents, pH levels, temperature, heavy metals, organic compounds and other constituents. Wastewater that complies with the LACSD permit requirements is discharged to the sewer. Wastewater that does not comply is returned to the wastewater treatment system for further treatment. The Carson Operations is also permitted to discharge stormwater commingled with treated process water to Dominguez Channel."

In order to be properly protective of the Public Health and Safety, the Draft EIR should have language added that "discharge stormwater commingled with treated process water" to alter the pH levels, or dilute the concentrations of "heavy metals, organic compounds and other constituents" shall be prohibited as part of any "further treatment", as such alteration and dilutions would not be properly protective of the Public Health and Safety. Instead, the Draft EIR should mandate that "Wastewater that does not comply is returned to the wastewater treatment system for **additional removal of contaminants**" in order to be properly protective of the Public Health and Safety.

G1-90.16

Question/Concern 17:

The Draft EIR Page 1-39 notes that: "The proposed project is expected to increase water demand by about 191,275 gpd which is less than the significance threshold of 262,820 gpd. The incremental increase in water use from the proposed project is expected to be produced by the privately-owned wells (i.e., from the available 2.82 billion gallons per year of adjudicated water rights). The existing water supply can meet the water demand of the proposed project and the daily water use associated with the proposed project is less than 262,820 gpd. Therefore, the proposed project water supply impacts are expected to be less than significant." Using the 2820 Mgp/y value, the 191,275 gpd level increase corresponds to about 70 Mgp/y (2.5% of total), while the above cited "significance threshold" of 262,820 gpd for an increase is about 96 Mgp/y (3.4% of total). Citizen claims that both 2.5% and 3.4% are comparably significant values.

Given the present drought in California, and the expectation that climate change will continue to present Californians with persistent ongoing continuous or periodic droughts, Citizen disputes the present conclusion: "Therefore, the proposed project water supply impacts are expected to be less than significant". Instead, Citizen asks that the project be considered under the alternative condition that: "Therefore, the proposed project water supply impacts are expected to be significant", and that the Draft EIR include additional analyses, recommendations, and requirements to lower the present estimated water demand of the project, by requiring additional conservation measures, on-site wastewater treatment, on-site recycling and wastewater reclamation, to allow reclaimed water use in lieu of additional "water demand".

G1-90.17

These additional Draft EIR requirements would allow the project to lower both "water demand", and "wastewater discharge". Citizen recommends new planned final permits reduce the final total LARIC water demand levels and water discharge both by 50% from the current cited individual permit level values, to be properly protective of the future Public Health and Safety.

G1-90.17  
cont'd.

Question/Concern 18:

The Draft EIR Page 1-20 notes that: "The average amount of solid waste generated by the Tesoro Carson and Wilmington Operations during 2012/2013 was an average of 39,099 tons per year of solid waste during 2012/2013." It further notes that some waste may go to Class III landfills, creating an ongoing leaching and water contamination hazard, and some may go to transformation (i.e., refuse to energy) facilities, creating a likely additional air contamination load. Since, the EPA levies a "cradle to grave" responsibility on Waste Producers for the potential long-term environmental impacts of their waste generated, the SCAQMD and Draft EIR should require periodic waste testing and waste assessment, to determine the full and long-term environmental impacts of solid waste generated from these and the new proposed LARIC projects.

G1-90.18

Question/Concern 19:

The Draft EIR Pages C-17 and C-20 note that a Flash Fire: "Flash fires are the result of a release, formation of a flammable vapor cloud and ignition of the cloud. Flash fire hazard zones are defined by the maximum extent of the LFL portion of the vapor cloud. For example, a release from the line feeding the Carson light hydrotreater unit (LHU) stabilizer column could result in a flash fire. In this release scenario, the flash fire is the maximum hazard. For the LHU, this scenario is the worstcase scenario because it goes further than the other scenarios chosen for the LHU, so it is used to define the vulnerability zone for the LHU. An example hazard footprint and vulnerability zone associated with this "worst-case" event is illustrated in Figure 4-1."

Wikipedia notes under the heading "Flash Fires" that: "Flash fires may occur in environments where fuel, typically flammable gas or dust, is mixed with air in concentrations suitable for combustion. In a flash fire, the flame spreads at subsonic velocity, so the overpressure damage is usually negligible and the bulk of the damage comes from the thermal radiation and secondary fires."

G1-90.19

Citizen notes that these secondary fires can create and propagate damage far longer than the initial Flash Fire, and these impacts need to be made part of the worst-case scenario assessment presented, and added to the Draft EIR, to fully assess the potential impact of this scenario.

Citizen further notes that the Figure 4-1 example used a wind-direction and velocity that apparently minimizes the offsite extent of this scenario. For completeness, an alternative Figure 4-1a example should be developed that maximizes the likely offsite extent of this Flash Fire scenario involving the LHU line, with additional impacts from likely secondary fires, as noted above, also included.

Question/Concern 20:

The Draft EIR Appendix C report, entitled: "Worst-Case Consequence Analysis for the Tesoro Los Angeles Refinery", which contains the above referenced pages C-17 through C-20, states: "a release from the line feeding the Carson light hydrotreater unit (LHU) stabilizer column could result in a flash fire. In this release scenario, the flash fire is the maximum hazard.". A careful reading is that this Appendix C report has covered ONLY the maximum LHU hazard.

G1-90.20

Additional sections need to be added to this analysis, with each section identifying the maximum hazard and a worst-case hazard for each of the other units in the completed LARIC Project, including the effects of secondary fires, explosions, dust releases, and the on-site and off-site damage that their propagation can create.

Question/Concern 20:

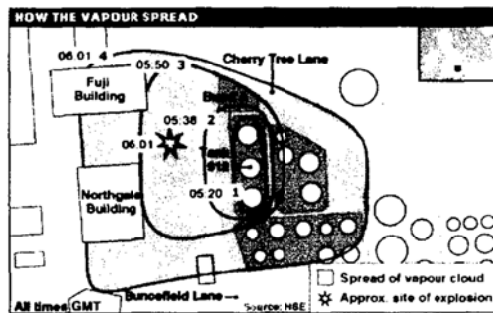
The Draft EIR Page C-26, Figure 4-6, identifies a "Vulnerability Zone for New 500,000 bbl. Storage Tanks", for the proposed group of 6 new such tanks, enabling storage of 3,000,000 bbl. of crude oil within a small spatial region. This Figure 4-6 "Vulnerability Zone" is only 5X larger than the geometric footprint of the tanks themselves. Citizen considers this Appendix C determination to be a potentially significant underestimate of the hazards and risks this tank group can present.

As an example, the vulnerability and subsequent explosion zone for the massive 12/11/2005 Buncefield UK Oil Storage Facility fire was determined to significantly exceed Appendix C value of 5X, as determined post-catastrophe, and summarized in the graphic below. This graphic shows >50X extent of the vulnerability zone, and highlights the need a further detailed study of the new 3,000,000 bbl. crude oil storage risk.

**Massive Buncefield UK Oil Storage Fire**

12/11/2005 – 12/15/2005

The overflow from the tank led to the rapid formation of a rich fuel and air vapour. It thickened to about 2m (6.6ft) and started spreading in all directions:



<http://news.bbc.co.uk/2/hi/4525504.stm>

- 1) Fuel cascaded down the tank and formed a rich fuel/air mix, which collected in bund A (the area surrounding the tank bounded by a low wall designed to prevent leaked liquid spreading).
- 2) CCTV footage showed vapour flowing out of bund A from 0538. The cloud was initially about 1m deep, but thickened to 2m.
- 3) By 0550 vapour started flowing off the site, near the junction of Cherry Tree Lane and Buncefield Lane.
- 4) Between 0550 and 0600 the rate at which fuel was being pumped into tank 912 gradually increased from 550 cubic metres (1,805 cubic feet) an hour to around 890 cubic metres (2,920 cubic feet) an hour.
- 5) At 0601, with the vapour cloud cloaked over a large area and reaching buildings next to the site, the first explosion occurred.

Further explosions followed and a large fire took hold, eventually engulfing 20 large storage tanks. Emergency services declared a major emergency at 0608 and a huge firefighting effort began, peaking with 25 fire engines, 20 support vehicles and 180 firefighters on site before the blaze was finally extinguished on 15 December.

G1-90.20  
cont'd.

Signed under penalty of perjury:

Genghmun Eng  
Genghmun Eng

6 June 2016  
Date

## Response to Comment Letter No. G1-90

### Genghmun Eng

#### Comment G1-90.1

Question/Concern 1:

Will the new Tesoro Los Angeles Refinery Integration and Compliance (LARIC) Project be created to operate in compliance with the new 2019 Federal 40CFR Section 63, requirements of Paragraphs 63.670 and 63.671, regarding Flares and Flare Monitoring? If not, why not? Citizen believes this should be a requirement for LARIC to be properly protective of the Public Health and Safety.

G1-90.1

#### Response G1-90.1

The Refinery will be subject to and expected to comply with all applicable requirements in 40 CFR 63.670 and 63.671 when they become effective in 2019. The proposed project will not add any new flares at the Refinery. However, the proposed project includes installation of new pressure relief valves that will tie into the various existing Refinery flare gas recovery systems and flares. Under normal operating conditions, pressure relief valves would vent to the flare gas recovery systems. The pressure relief valves allow gases to vent to the flares, which are safety equipment, during emergency conditions when the flare gas recovery system capacity is exceeded (see page 2-37 through 2-38, and 2-44 through 2-46 of the DEIR).

#### Comment G1-90.2

Question/Concern 2:

The new LARIC Project is a potential emitter of hydrogen cyanide (H-CN). H-CN should also be added to the Draft EIR "Toxic Air Contaminants (TAC)" list, and its expected emissions examined accordingly and added to the Draft EIR. While 40CFR63\_Subpart YY, [National Emission Standards for Hazardous Air Pollutants for Source Categories: Generic Maximum Achievable Control Technology Standards] notes that: "Other hydrogen cyanide, potassium cyanide, or sodium cyanide byproducts, impurities, wastes, and trace contaminants are not considered to be Cyanide Chemicals Products", it also notes that: "*Raw hydrogen cyanide* means hydrogen cyanide that has not been through the refining process. Raw hydrogen cyanide usually has a hydrogen cyanide concentration less than 10 percent." Thus LARIC emissions of H-CN are: "*Raw hydrogen cyanide*". How will LARIC emissions of H-CN be controlled, and what calculations, demonstrations, and evaluations will be done to show that allowing such emissions are properly protective of the Public Health and Safety? Continuous CEMS in-stack monitoring of H-CN is needed to quantify the amount of exposure to the public.

G1-90.2

#### Response G1-90.2

The OEHHA has determined that HCN is not a carcinogen.<sup>328</sup> However, HCN can contribute to chronic and acute risks, which are evaluated in the HRA. The results of the HRA were determined to be less than significant with the maximum chronic hazard index of 0.105 and maximum acute hazard index of 0.052 (see FEIR Section 4.2.2.5). The contribution of HCN to the incremental chronic risk and acute risk is less than 0.01. The project-specific HRA that

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<sup>328</sup> Office of Environmental Health Hazard Assessment, Guidance Manual for Preparation of Health Risk Assessments, February 2015, page A-7; Available at: <http://oehha.ca.gov/media/downloads/crn/2015gmapendices.pdf>.

conservatively analyzed emission increases, but not emission reductions, from the proposed project determined that any health risks resulting from the proposed project will be less than significant.

As shown on page B-4-10 of the DEIR, HCN is listed as a TAC and is evaluated in the DEIR. There are three sources in the proposed project that have HCN emissions based on TAC speciation developed by Tesoro and its predecessors. They are the H-300 and H-301 heaters at Wilmington Operations and FCCU at Carson Operations. However, the DEIR mistakenly left out the HCN analysis from the FCCU at Carson Operations.

To correct the mistake and address the comment, the projected emissions increase of HCN associated with the Carson Operations FCCU was calculated to be 1.36 lb/hr or 11,930 lb/yr, using an emission factor from a source test (see FEIR Appendix B-3 Table A-10). The proposed modification to H-300 and H-301 heaters includes converting to natural gas from Refinery fuel gas, which creates a change in the TAC emission profile that results in a reduction of HCN emissions.

As explained in Section 4.2.2.5, a conservative project-specific HRA evaluated only the emission increases from the proposed project, and evaluated those emission increases as worst-case, maximum increases. The HRA does not include health risk reductions from the reduction in emissions from the proposed project (e.g., the HCN reduction from the shutdown of the Wilmington Operations FCCU was not included). The HRA has been revised to include the HCN emissions increase associated with the Carson Operations FCCU.

The comment also claims that a CEMS for HCN is needed to quantify the exposure to the public. However, U.S. EPA has only established a method for HCN source testing. U.S. EPA does not have a CEMS performance specification that establishes requirements for HCN CEMS.

U.S. EPA discussed HCN emissions from FCCUs in the published Federal Register on December 1, 2015.<sup>329</sup> U.S. EPA stated that for HCN emissions from an FCCU, “the only proven control technique is the use of complete combustion as defined by a CO level of 500 ppmv or less. We are not establishing a more stringent CO level because, once complete combustion is achieved, (i.e., CO concentration drop below 500 ppmv), no further reduction in HCN emissions are achieved.” Therefore, U.S. EPA is requiring a one-time source test for the FCCUs in the Federal Register cited above. Since the Refinery’s FCCU has an existing CO CEMS and is subject to both a CO limit of 500 ppmv and a HCN source test, a HCN CEMS is not needed to quantify HCN emissions.

The comment also cites 40 CFR 63 Subpart YY for the definition of HCN. The Refinery is not subject to the provisions of this regulation because the Refinery is not an affected source as specified under 40 CFR 63.1100.

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<sup>329</sup> Federal Register Vol. 80, No. 230, Tuesday, December 1, 2015, page 75204.

**Comment G1-90.3**

Question/Concern 3:

40CFR63\_Subpart-YY notes that: "For process vent hydrogen cyanide emissions that are vented to a control device other than a flare during startup, shutdown, and malfunction, the design evaluation must include documentation that the control device being used achieves the required control efficiency during the reasonably expected maximum flow rate and emission rate during startup, shutdown, and malfunction." What additional limits and monitoring will be placed on "hydrogen cyanide emissions that are vented to a control device that is a flare unit"? How is the proposed LARIC Project achieving these results? How is it demonstrated that proposed SCAQMD requirements for H-CN and H-CN emissions are in the interests of Public Health and Safety. A separate HRA for H-CN should be done for all potential H-CN release points in the LARIC Project.

G1-90.3

**Response G1-90.3**

As explained in Response G1-90.2, HCN is evaluated in the DEIR HRA, and the proposed project is not subject to 40 CFR 63 Subpart YY.

**Comment G1-90.4**

Question/Concern 4:

The LARIC EIR states: "The NOP/IS (Draft EIR Notice of Preparation / Initial Study) concluded that the proposed project would not create significant adverse environmental impacts to the following areas: aesthetics, geology and soils, population and housing, and recreation." Citizen is concerned that without further mitigations and requirements being levied on the LARIC Project, that it will instead will have an ongoing and severe impact on the Quality-of-Life of residents and workers in nearby and outlying communities as follows:

4.1: Aesthetics: Refinery Emissions that the SCAQMD may deem are "acceptably hazardous" for decades to come after LARIC completion, including decades of dust generation; refinery odors, especially H<sub>2</sub>S; carbon monoxide; and H-CN; each still reduces the Quality-of-Life, aside of their specific provable health hazards. Dust, smell, and ongoing toxic chemical emissions are not Aesthetic. The SCAQMD has an opportunity to require significantly improvements in these metrics, instead of using the minimal standard of "no worse than before".

G1-90.4

4.2: Geology and Soils: It is not clear that the laying of massive new pipe structures will not create a significant future adverse impact to regions where pipelines were not present. An improvement in the potential to lessen geology and soils contamination in one location does not offset the potential contamination of a new area that previously did not have such structures.

4.3: Population and Housing: See (4.1) above. The long-term health impacts on the nearby and outlying communities is already well known.

4.4: Recreation: See (4.1) and (4.3) above. Dust, smell, and ongoing toxic chemical emissions make it difficult or hazardous for children to play outside, significantly impacting recreation, as children are often the most susceptible to these dust, smell, and ongoing toxic chemical emissions.

Citizen asks: Why is the SCAQMD not levying tougher standards on dust, smell, and ongoing toxic chemical emissions associated with the LARIC Project completion, so as to substantially improve the Quality-of-Life of residents and workers in nearby and outlying communities in the above areas?

G1-90.4  
cont'd.

Citizen further notes that the Draft EIR on Page 1-19 categorically states: "The Tesoro Los Angeles Refinery handles hazardous materials with the potential to impact people, property, or the environment. An accidental release of hazardous materials at a facility can occur due to natural events, such as earthquakes, and non-natural events, such as mechanical failure or human error. Potential existing hazards from the Refinery are those associated with accidental releases of toxic/flammable gas, toxic/flammable liquefied gas, and flammable liquids. Potential hazards at a refinery include toxic gas clouds, fires, vapor cloud explosions, thermal radiation, and overpressure. Risks are also associated with transportation, including truck transport, rail transport, and pipeline transport." This directly countermands the above "NOPS/IS" statement, and supports Citizen's concerns.

#### **Response G1-90.4**

The potential aesthetics (page A-40 of the DEIR), geology and soils (page A-63 of the DEIR), population and housing (page A-90 of the DEIR), and recreation (page A-95 of the DEIR) impacts of the proposed project were all analyzed in the NOP/IS for the proposed project. The comment provides no evidence that the proposed project will cause a significant adverse impact to aesthetics, geology and soils, population and housing, and recreation. Further, no comments were received on the NOP/IS that indicated the potential for a significant impact or that further analysis was required. Since they were determined to have no potentially significant adverse impacts, no further evaluation was required in the DEIR.

The comments regarding dust and CO are related to air quality. As explained in Section 4.2.2.2 of the DEIR, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are discussed in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in local overall reductions in GHG emissions, as discussed in Section 5.2 of the FEIR and summarized in Table 5.2-8 (see page 5-26).

The comments regarding hydrogen sulfide, HCN, and other TACs are related to health risk impacts. As explained in Master Response 3, the DEIR fully analyzed and disclosed the proposed project's potential health impacts from all pollutants. The proposed project's potential cancer and non-cancer human health impacts, including asthma and other respiratory illnesses, were analyzed in the DEIR, and determined to be less than significant. The estimated cancer risk due to the operation of the proposed project was found to be less than the SCAQMD's cancer risk significance threshold of ten in one million (see Section 4.2.2.5 of the FEIR). The non-cancer chronic and acute hazard indices were found to be below the SCAQMD's non-cancer chronic and acute hazard index threshold of 1.0. Therefore, the proposed project is not expected to cause a significant adverse health impact.

The comments regarding spills and contamination from spills are related to hazard impacts. Section 3.3.6 of the DEIR describes existing Refinery safety systems at the Tesoro Refinery. As explained in Section 4.3 and Appendix C of the FEIR and Master Response 9, the proposed project has been fully analyzed for hazard impacts based on a worst-case consequence analysis. This includes proposed project equipment, including pipelines and storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising). The DEIR found that hazards associated with the Naphtha Isomerization Unit, new crude oil storage tanks, the SARP, and interconnecting pipelines are potentially significant based on worst-case release scenarios. See Master Response 9 for additional information regarding the hazards analyses of the potential impacts for releases from pipelines and storage tanks due to earthquakes.

The hazard analysis takes a worst-case approach by assuming that the entire contents of a tank or other equipment would rapidly be released, and that no safety measures are implemented that could reduce the severity of an accidental release. It is expected that hazard impacts would be



less than analyzed because the Refinery has safety measures in place and specified employees are trained regarding safety measures. Further, the DEIR imposes measures to mitigate hazard impacts (see Section 4.3.3 of the DEIR). Finally, as described in Section 3.3.7 of the DEIR, the Refinery is subject to many laws and regulations that address safety and emergency responses in the event of an accident. Nonetheless, the DEIR conservatively concluded that hazard impacts would remain significant.

The proposed project does not introduce any potentially odor-causing chemicals that are not already used in the Refinery. All new and modified equipment will comply with Best Available Control Technology (BACT) for air pollutant emissions control. See Master Response 11 for an explanation of odors associated with proposed project.

### Comment G1-90.5

Question/Concern 5.

Draft EIR Page 1-7 notes: "Tesoro proposes to achieve this objective by constructing six new 500,000 barrel tanks at the Carson Crude Terminal and replacing two existing 80,000 barrel crude oil tanks at the Wilmington Operations with two 300,000 barrel tanks", which replaces 160,000 barrels crude oil storage with:

$$(6 \times 500,000) \text{ barrels} + (2 \times 300,000) \text{ barrels} = 3,600,000 \text{ barrels}$$

This is a 22.5X increase in the amount of crude oil storage. The environmental impact of a potential storage tank leak, in addition to risk of fire and explosion, and impact of earthquakes appear to Citizen to be at least 22.5X larger. Citizen asks that this 22.5X increase in storage be deemed a "significant adverse environmental impact", and handled by the SCAQMD in their risk management planning as such, as well as creating a much larger EPA OCA (Offsite Consequence Analysis), which should also be completed, and integrated into this Draft EIR document.

G1-90.5

### Response G1-90.5

As explained in Response G1-90.4, the proposed project has been fully analyzed for hazard impacts based on a worst-case consequence analysis. This includes proposed project equipment, including pipelines and storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising).

See Response G1-78.126 for a description of the overall change in crude oil storage capacity at the Refinery from 11.0 million barrels to 14.4 million barrels. Based on the comprehensive evaluation of storage tank capacity available for light crude oil storage described in Response G1-78.126, the proposed increased capacity is approximately 30 percent. Therefore, the proposed new storage tanks do not represent a 22.5 time increase in storage capacity as claimed in the comment. The air quality and hazard impacts (which included a worst-case Consequence Analysis in Sections 4.2 and 4.3 of the DEIR for crude oil tanks were analyzed based on the proposed project scope. Therefore, no additional analysis is needed. Note that the comment referenced U.S. EPA OCA. The DEIR analyzed a worst-case consequence analysis following CEQA guidelines.

**Comment G1-90.6**

Question/Concern 6:

The Draft EIR Page 1-7 notes that: "the existing 12-inch diameter piping will be replaced with 24-inch diameter piping". The larger diameter piping increases the risk of larger spills and leaks. Citizen maintains that given the present amount of oil leak sensors placed along the existing piping, in order to have an equivalent risk per unit volume of oil, the new pipeline should have 4X more sensors per unit length integrated into the new pipeline. Citizen recommends that the SCAQMD also add improved monitoring and more sensitive leak detection as new pipeline requirements, to be further protective of the Public Health and Safety. The type of materials, pipeline maximum operating pressure, expected corrosion resistance, corrosion resistance of pipeline joining materials, and expected average lifetime with standard deviations of these pipeline components, needs to be analyzed/disclosed in the Draft EIR.

G1-90.6

**Response G1-90.6**

As described on page 3-32 of the DEIR, the proposed 24-inch diameter piping is an aboveground line that will be subject to Spill Prevention, Control, and Countermeasure (SPCC) rule requirements which includes periodic inspection and testing. In accordance with SPCC, for aboveground piping, the Refinery generally uses visual inspection and non-destructive testing as the method of release detection in lieu of leak sensors. Therefore, there is no need to install four times more leak sensors as suggested in the comment.

The design standards used for the proposed project Interconnecting Piping meet and exceed current pipeline standards (see Section 2.7.3.1 of the DEIR for a description of the design standards). Furthermore, leak detection is further described on page 4-56 of the DEIR, "Underground interconnecting piping that will be installed between Wilmington and Carson Operations will employ state of the art corrosion control and leak detection equipment that meets the requirements of the U.S. DOT and recommended engineering practices. Leak prevention measures include cathodic protection and corrosion-resistant coatings and/or wrapping for corrosion control. Leak detection measures include flow meters accurate to 0.1 percent for lines 6 inch and smaller and 0.15 percent for the 10 inch and 12 inch lines along with automatic isolation valves at both ends of the underground interconnecting pipelines." Therefore, since the proposed leak detection is state of the art, there is no need to install four times more leak sensors as suggested in the comment.

The proposed project Interconnecting Piping will utilize API-5L steel pipes that operates significantly below the allowable stress (e.g., pressure) limit as compared with Federal 49 CFR 195 requirements. The Interconnecting Piping will be welded and will have no joining material. As described above, Interconnecting Piping will have corrosion resistant coatings and state of the art cathodic protection which exceed Federal 49 CFR 195 requirements. Lifetime of the Interconnecting Piping is expected to exceed 50 years.

Hazards associated with existing pipelines were described in Section 3.3.4 of the DEIR and potential hazards associated with proposed pipelines were analyzed in the Section 4.3.2.3 of the DEIR.

**Comment G1-90.7**

Question/Concern 7:

What pipeline mitigations and design differences are planned for these pipelines, as a function of whether they will be handling hydrogen (Page 1-9), *residuum*, gas oil, diesel, gasoline, naphtha, transmix, or LPG (Page 1-8)? What maximum allowed level of impurities will be allowed in each of these materials, and how do those maximum levels affect the expected pipeline maximum operating pressure, expected corrosion resistance, corrosion resistance of pipeline joining materials, and the expected average lifetime and standard deviation on lifetime, for these pipeline components?

G1-90.7

**Response G1-90.7**

As described in Response G1-90.6, the design standards used for the proposed project Interconnecting Piping meet and exceed current pipeline standards (see Section 2.7.3.1 of the DEIR for a description of the design standards). The design standards accounted for the different types of materials the pipes will be carrying and designed to ensure pipes will operate significantly below the allowable stress limit exceeding Federal 49 CFR 195 requirements. Furthermore, as described in Response G1-90.6, Interconnecting Piping will have corrosion resistant coatings and state of the art cathodic protection which exceed Federal 49 CFR 195 requirements. Therefore, any impurities suggested by the comment will have no impact on the piping as the design standards exceed current pipeline standards for material stress levels, piping coating applications, and cathodic protection. Hazards associated with existing pipelines were described in Section 3.3.4 of the DEIR and potential hazards associated with proposed pipelines were analyzed in the Section 4.3.2.3 of the DEIR.

**Comment G1-90.8**

Question/Concern 8:

The Draft EIR Page 1-15 notes: "Up to 15 new pipelines are expected to transport gasoline and gasoline blending components, crude oil, gas oil, butylene, propylene, and liquid petroleum gases...The pipe bundle will require a 54-inch bore..." In order to be properly protective of the Public Health, the 54-inch bore should itself be laid with a large diameter pipe as a "pipe bundle enclosure", to provide secondary containment for leaks. Leak detectors optimized for each of the various components should also be placed at intervals along this 54-inch bore, within this large diameter pipe, housing the "pipe bundle".

G1-90.8

G1-90.8  
cont'd.

**Response G1-90.8**

Design considerations for the bore and bundled piping did not include casing for a number of reasons. First, casing the piping, whether made of steel or plastic, would jeopardize cathodic protection of the pipe. Casing prevents electrons from the cathodic protection from coming into contact with the pipe surface because of the air gap between the pipe and the casing. The cathodic protection is a fundamental design element to protect the pipeline from corrosion and required by U.S. DOT regulations. Second, the proposed pipe bundle of up to 15 new pipelines is expected to be about 33 inches in diameter. At this bundle diameter, a casing size of roughly 48 inches in diameter is required in order to avoid the potential scraping of the corrosion resistant coatings on the pipe bundle. A 48-inch diameter casing would require a bore diameter of almost 6 feet (72 inches) for installation. A bore of this diameter versus the proposed 54-inch diameter bore would greatly increase the risk of a loss of bore integrity during drilling and casing pulling activities as such risks increase with the size of the bore hole and thus this option (casing the

bundle) was considered infeasible for the project. Section 4.3.2.3 of the DEIR describes the design basis of the proposed underground bundled piping which exceeds federal requirements for pipeline design and is designed to eliminate the risk of failure.

**Comment G1-90.9**

Question/Concern 9:

The Draft EIR Page 1-10 notes: "In addition, facilities will be added to remove impurities such as sulfur, nitrogen compounds, and organic acids from distillates in order to make on-specification products." It is impurity removal process from distillates that often results in a significant impact of the ongoing Refinery operations to the environment, both in: (8.1) expected air quality impacts from these operations, and (8.2) potential for unexpected environmental impacts when there are processing anomalies. The Draft EIR should contain a thorough discussion of both (8.1) and (8.2) above.

G1-90.9

**Response G1-90.9**

The quote cited in the comment refers to facilities or equipment that are described in more detail in the proposed project description in Sections 2.7.1, 2.7.2, and 2.7.3 of the DEIR. The impacts of these portions of the proposed project on air quality and other environmental impacts were fully analyzed in Section 4 of the DEIR. A risk analysis of possible upsets has been completed and is included in Section 4.3 of the DEIR. The comment is not specific and does not provide evidence of "unexpected environmental impacts when there are processing anomalies."

**Comment G1-90.10**

Question/Concern 10:

The Draft EIR Page 1-10 notes: "An FCCU cracks or converts heavy hydrocarbons into lighter, gasoline and distillate range hydrocarbons in the presence of fine particles of catalyst that are circulated throughout the process." What limits on PM-2.5 will be required of the completed and operational LARIC Project facility? How does the SCAQMD justify this particulate burden on the nearby and outlying communities? Will the SCAQMD require year-to-year improvements in the PM-2.5 emissions from the completed LARIC Project facility? If not, why not, in the interest of improving Public Health and Safety?

G1-90.10

**Response G1-90.10**

The quote from the DEIR cited in the comment is a brief description of an FCCU. This description was included to describe the nature of operations of the Wilmington Operations FCCU. The Wilmington Operations FCCU will be shut down as a part of the proposed project, resulting in emissions reductions (see Table 4.2-4 of the DEIR). Additionally, Section 4.2.2.4 of the DEIR summarizes the local ambient air quality impacts and concludes that increased emissions associated with the proposed project are less than significant. The air quality analysis in the DEIR is conservative, and does not include the reductions that will be achieved with shutdown of the Wilmington Operations FCCU, a significant source of PM emissions.

Each new or modified heater in the proposed project is expected to have a limit on PM when Tesoro submits a permit application and a draft Title V permit is issued. Tesoro has submitted permit applications for only a portion of the proposed project including two heaters. For example, the limits on PM are imposed on the DCU H-100 heater to ensure that PM emissions do not increase from recent levels. These limits are addressed in Responses G1-79.4 and G1-79.10.

Since PM<sub>2.5</sub> is a subset of PM<sub>10</sub>, the proposed DCU H-100 permit limit on PM<sub>10</sub> will also restrict PM<sub>2.5</sub>. Furthermore, there is no requirement in SCAQMD Regulation XIII that requires annual PM improvements. PM limits are established in the Title V permit at the time of permit issuance for new heater construction or modification.

SCAQMD permits have enforceable limits on PM<sub>10</sub> emissions from stationary sources. SCAQMD does not have PM<sub>2.5</sub> emission limits on facilities. The 2016 AQMP is the regional air quality planning document that looks at PM<sub>2.5</sub> reductions to meet NAAQS, and also provide public health benefits.<sup>330</sup> Moreover, CEQA does not provide authority to require “year-to-year improvements” where there is no significant adverse impacts.

**Comment G1-90.11**

Question/Concern 11:

The Draft EIR Page 1-20 notes that: "Construction activities associated with the modifications to the Refinery would result in emissions of CO, VOC, NO<sub>x</sub>, SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>." What hourly levels of these emissions will be allowed? If not so regulated, why not, in the interest of improving Public Health and Safety?

G1-90.11

**Response G1-90.11**

A comparison of construction emissions to SCAQMD’s daily significance thresholds is shown in Table 4.2-2 on page 4-10 of the DEIR. Hourly construction emissions are analyzed in Section 4.2.2.1.2 of the DEIR to determine compliance with air quality standards. As shown in Table 4.2-3 of the DEIR, modeled ground level concentrations of criteria pollutants are less than the thresholds, except for the NO<sub>x</sub> 1-hour standards, which were considered significant. As explained in the Section 4.2.2.1 of the DEIR, construction emissions are significant for VOC and NO<sub>x</sub> and all feasible mitigation measures have been imposed.

**Comment G1-90.12**

Question/Concern 12:

Draft EIR Page 1-11 notes a DCU change from: "'design heat release' basis (252 mmBtu/hr) to.. 'maximum heat release' basis (302.4 mmBtu/hr)" which allows "process more feed through the DCU." When the DCU is used in this "process more feed" mode, it looks like operation of the DCU at 120% above its "design" capacity. The DCU reliability, and Failure Modes and Effects analyses needs to be done for using this older equipment in this higher stress mode, as part of the Draft EIR.

G1-90.12

**Response G1-90.12**

The comment confuses the operation of the DCU H-100 heater with the operation of the unit as a whole. The issue raised in the comment has been addressed in Response G1-79.1. There will be no physical change to the DCU H-100 heater. Rather, the description of the heater in Tesoro’s Title V Permit will be changed from the heat release guaranteed by the manufacturer (252 mmBtu/hr) to the actual maximum heat release (302.4 mmBtu/hr). The DEIR made the conservative assumption that the change in permit description would allow Tesoro to increase the maximum operation of the DCU H-100 heater from 252 mmBtu/hr to 302.4 mmBtu/hr, despite

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<sup>330</sup> <http://www.aqmd.gov/home/library/clean-air-plans/air-quality-mgt-plan>.

the fact that Tesoro has operated the DCU H-100 heater above 252 mmBtu/hr in the past. In order to ensure that this assumed increase in operations would not result in any increase in emissions, the SCAQMD imposed a new permit condition that limits daily emissions of criteria pollutants from the DCU H-100 heater to levels that would be generated if the unit were never operated above 252 mmBtu/hr. As the DCU H-100 heater will continue to operate within its maximum heat release capacity, not at 120% of its rated capacity, no evaluation of “Failure Modes and Effects” is necessary.

**Comment G1-90.13**

Question/Concern 13:

The Draft EIR Page 1-11 notes: "Mass emissions of CO, NOx, SOx, particulate matter less than ten microns in diameter (PM10), and volatile organic compounds (VOC) will be restricted in the revised permit." A side-by-side comparison of what the present permit and revised permit values are expected needs to be included in the Draft EIR. Also, Citizen believes that the SCAQMD needs to add in a PM-2.5 requirement to the new revised permit in order to be properly protective of the Public Health and Safety. Proposed PM-2.5 levels, and why those levels are properly protective also needs to be included in the Draft EIR. Furthermore, the Draft EIR should add requirements for continuous monitoring both at the stack source of PM-10 and PM-2.5, with results automatically linked to the SCAQMD, and with the SCAQMD establishing a web-site to allow Citizen tracking of the data.

G1-90.13

**Response G1-90.13**

The quote cited in the comment is for the DCU H-100 heater. It is important to note that an EIR is a CEQA document. Any permits that are issued based on an EIR must be consistent with that EIR. Notably, CEQA calculations are evaluated based on the difference between baseline actual emissions and post-project PTE. Therefore, an evaluation of pre-project permitted PTE to post-project permitted PTE is beyond the scope of the EIR; because CEQA requires analysis of changes in the physical environment.

The draft Title V permit for the DCU H-100 heater was circulated for public comment as part of the permitting process. All proposed project PTEs are included in the draft Title V permit see file name Tesoro ID 800434 AN567439.pdf, pages 64, 81, and 82).

Limits on PM are imposed on the DCU H-100 heater in the draft Title V permit to ensure that PM emissions do not increase from recent levels as explained in more detail in Responses G1-79.4 and G1-79.10; as indicated in these responses, localized increases in PM emissions remain below CEQA significance thresholds. As described in Response G1-90.10, since PM2.5 is a subset of PM10, the proposed PM10 limit for DCU H-100 heater will also restrict PM2.5. Additionally, since there will be no physical change to the DCU H-100 heater, no change in the ratio of PM10 to PM2.5 emissions are expected.

There is no PM10 or PM2.5 CEMS available for a process heater stack that is approved by the SCAQMD. For PM emissions, periodic source testing satisfies the applicable periodic monitoring requirements of local rules, including SCAQMD Rule 3004(a)(4)(c) regarding periodic monitoring requirements (see Response G1-79.9). Periodic source testing will be required by the draft Title V permit, and results of source tests are available from the SCAQMD.

**Comment G1-90.14**

Question/Concern 14:

The Draft EIR Page 1-12 notes: "One new 50,000 bbl/day Wet Jet Treater will be installed at Carson Operations". Will this new unit be required to use recycled water? If not, why not? Given the water use restrictions imposed on everybody else due to the drought, proper management of our water resources is critical to the continued viability of the human population in the South Bay. An analysis of the expected changes in fresh, potable, recycled, and gray water use, and where this water will come from, is also needed as part of this Draft EIR.

G1-90.14

**Response G1-90.14**

The total water demand from the proposed project is less than the SCAQMD's significance threshold. Therefore, no mitigation is required. As explained in Section 4.4.2.1.2 of the DEIR, the incremental increase in water demand for the proposed project is expected to be supplied by Tesoro's privately-owned wells. Additionally, the Refinery uses a significant amount of recycled water as shown in Table 3.4-1 of the DEIR.

**Comment G1-90.15**

Question/Concern 15:

The Draft EIR Page 1-20 further notes that: "The Carson Operations discharged an average of 4.07 million gallons per day of wastewater during 2012 and 2013 to the sewer system. The Carson Operation's current Industrial Wastewater Discharge Permit allows discharge of up to 5.25 million gallons per day to the LACSD sewer system. The Wilmington Operations discharged an average of 2.88 million gallons per day of wastewater based on a 2012/2013 average. The Wilmington Operation's current Industrial Wastewater Discharge Permit allows discharge of 3.24 million gallons per day."

Additional language is needed in the Draft EIR to mandate an increasingly larger fraction of recycled and gray water use, as input into these operations, instead fresh potable water use. Using units of Mgp/d (millions of gallons per day) and Mgpy (millions of gallons per year), the numerical sum of the above cited permit values is:  $(5.25+3.24) = 8.49$  Mgp/d – 3101 Mgpy.

Citizen is concerned that the prior permits were granted under optimistic assumptions of water availability and optimistic assumptions on potential environmental impacts. Since the LARIC Project is a new project, Citizen requests that new permit language also be added to require planning and adjudication to reduce the final total LARIC discharge value, such as a 50% reduction from the current cited individual permit level values, to be properly protective of the future Public Health and Safety.

G1-90.15

**Response G1-90.15**

As explained on pages 4-74 and 4-75 of the DEIR, the proposed project is expected to reduce overall wastewater generated by an estimated 55.1 gallons per minute (79,334 gallons per day). This reduction is due to the shutdown of the Wilmington Operations FCCU. This decrease more than offsets the increase from other operations of the proposed project. The Refinery is an existing facility with current permitted discharge limitations. The Refinery will continue to meet the existing wastewater discharge limits after the proposed project is constructed and no modifications to current industrial wastewater discharge permits is required as a result of the proposed project. Since there is no significant impact associated with wastewater discharge, no mitigation measures are required.

Response G1-90.14 addresses water demand from the proposed project.

**Comment G1-90.16**

Question/Concern 16:

The Draft EIR Page 1-20 notes that: "The LACSD [Los Angeles County Sanitation District] places limitations on wastewater parameters such as oil and grease contents, pH levels, temperature, heavy metals, organic compounds and other constituents. Wastewater that complies with the LACSD permit requirements is discharged to the sewer. Wastewater that does not comply is returned to the wastewater treatment system for further treatment. The Carson Operations is also permitted to discharge stormwater commingled with treated process water to Dominguez Channel."

In order to be properly protective of the Public Health and Safety, the Draft EIR should have language added that "discharge stormwater commingled with treated process water" to alter the pH levels, or dilute the concentrations of "heavy metals, organic compounds and other constituents" shall be prohibited as part of any "further treatment", as such alteration and dilutions would not be properly protective of the Public Health and Safety. Instead, the Draft EIR should mandate that "Wastewater that does not comply is returned to the wastewater treatment system for additional removal of contaminants" in order to be properly protective of the Public Health and Safety.

G1-90.16

**Response G1-90.16**

As explained in Section 3.4.3.2 of the DEIR, storm water from the Refinery is regulated by the National Pollutant Discharge Elimination System (NPDES) permit issued by the Regional Boards with oversight by the State Water Resources Control Board (SWRCB). The NPDES permit has stringent limits and controls water pollution by regulating discharge points including points where storm water commingled with treated process water that discharge pollutants to the Dominguez Channel. The proposed project is not expected to have operational discharges to the Dominguez Channel, and will comply with all applicable storm water discharge requirements. The discharge point allowing storm water commingled with treated process water to be discharged is regulated by the ND PES permit and is not a treatment or dilution method. Therefore, the comment to prohibit the discharge of storm water commingled with treated process water is not related to the proposed project and is not necessary.

As explained on page 1-20 of the DEIR, wastewater discharge that does not comply with existing Los Angeles County Sanitation District (LACSD) permit limitations is returned to the wastewater treatment system for further treatment. Therefore, the DEIR does not need to further mandate this action as suggested in the comment since the Refinery is already subject to the LACSD permit. As discussed in Response G1-90.15, the Refinery will continue to meet the existing wastewater discharge limits after the proposed project is constructed and no modifications to current industrial wastewater discharge permits is required as a result of the proposed project. Since there is no significant impact associated with wastewater discharge, no mitigation measures are required.



**Comment G1-90.17**

Question/Concern 17:

The Draft EIR Page 1-39 notes that: "The proposed project is expected to increase water demand by about 191,275 gpd which is less than the significance threshold of 262,820 gpd. The incremental increase in water use from the proposed project is expected to be produced by the privately-owned wells (i.e., from the available 2.82 billion gallons per year of adjudicated water rights). The existing water supply can meet the water demand of the proposed project and the daily water use associated with the proposed project is less than 262,820 gpd. Therefore, the proposed project water supply impacts are expected to be less than significant." Using the 2820 Mgy value, the 191,275 gpd level increase corresponds to about 70 Mgy (2.5% of total), while the above cited "significance threshold" of 262,820 gpd for an increase is about 96 Mgy (3.4% of total). Citizen claims that both 2.5% and 3.4% are comparably significant values.

Given the present drought in California, and the expectation that climate change will continue to present Californians with persistent ongoing continuous or periodic droughts, Citizen disputes the present conclusion: "Therefore, the proposed project water supply impacts are expected to be less than significant". Instead, Citizen asks that the project be considered under the alternative condition that: "Therefore, the proposed project water supply impacts are expected to be significant", and that the Draft EIR include additional analyses, recommendations, and requirements to lower the present estimated water demand of the project, by requiring additional conservation measures, on-site wastewater treatment, on-site recycling and wastewater reclamation, to allow reclaimed water use in lieu of additional "water demand".

These additional Draft EIR requirements would allow the project to lower both "water demand", and "wastewater discharge". Citizen recommends new planned final permits reduce the final total LARIC water demand levels and water discharge both by 50% from the current cited individual permit level values, to be properly protective of the future Public Health and Safety.

G1-90.17

G1-90.17  
cont'd.

**Response G1-90.17**

Response G1-90.14 addresses water demand from the proposed project.

As explained in Section 3.4.2.1 of the DEIR, the Refinery has been granted water rights by the State that are published in the Watermaster Service in the West Coast Basin report. The incremental increase in water demand from the proposed project is expected to be met by the Refinery's privately-owned wells. The statement that the proposed project increase of 191,275 gpd is 2.5% of the total water rights, and that the CEQA threshold of 262,800 gpd is 3.4% of the total water rights has no bearing on CEQA. The total water demand from the proposed project is less than the SCAQMD's CEQA significance threshold. Therefore, no mitigation measures are required as part of the EIR. The present drought in California also has no bearing on the CEQA analysis for the proposed project as the CEQA threshold for water demand remains at 262,800 gpd.

**Comment G1-90.18**

Question/Concern 18:

The Draft EIR Page 1-20 notes that: "The average amount of solid waste generated by the Tesoro Carson and Wilmington Operations during 2012/2013 was an average of 39,099 tons per year of solid waste during 2012/2013." It further notes that some waste may go to Class III landfills, creating an ongoing leaching and water contamination hazard, and some may go to transformation (i.e., refuse to energy) facilities, creating a likely additional air contamination load. Since, the EPA levies a "cradle to grave" responsibility on Waste Producers for the potential long-term environmental impacts of their waste generated, the SCAQMD and Draft EIR should require periodic waste testing and waste assessment, to determine the full and long-term environmental impacts of solid waste generated from these and the new proposed LARIC projects.

G1-90.18

### Response G1-90.18

The EPA and California Department of Toxic Substances Control (DTSC), not SCAQMD, regulate solid and hazardous waste disposal. All wastes generated by the operation of the proposed project will be managed and/or disposed of in compliance with applicable federal, state, and local statutes and regulations as explained in Section 3.6.3 of the DEIR. Waste generators are already required to conduct waste testing or characterization under existing hazardous waste regulations. Based on the waste testing or characterization, hazardous wastes are sent to a hazardous waste disposal facility permitted to receive such wastes. Similarly, hazardous waste disposal facilities are also already subject to, and must comply with, waste regulations that require characterization and/or certain waste testing. Therefore, no additional periodic waste testing and waste assessment is required by the DEIR. As explained in Section 4.6 of the DEIR, landfills in southern California and hazardous waste disposal facilities in California have the capacity to accept the solid or hazardous waste that is expected to be generated from the proposed project. Therefore, no significant adverse solid or hazardous waste impacts are expected, and no mitigation measures are required.

### Comment G1-90.19

Question/Concern 19:

The Draft EIR Pages C-17 and C-20 note that a Flash Fire: "Flash fires are the result of a release, formation of a flammable vapor cloud and ignition of the cloud. Flash fire hazard zones are defined by the maximum extent of the LFL portion of the vapor cloud. For example, a release from the line feeding the Carson light hydrotreater unit (LHU) stabilizer column could result in a flash fire. In this release scenario, the flash fire is the maximum hazard. For the LHU, this scenario is the worstcase scenario because it goes further than the other scenarios chosen for the LHU, so it is used to define the vulnerability zone for the LHU. An example hazard footprint and vulnerability zone associated with this "worst-case" event is illustrated in Figure 4-1."

Wikipedia notes under the heading "Flash Fires" that: "Flash fires may occur in environments where fuel, typically flammable gas or dust, is mixed with air in concentrations suitable for combustion. In a flash fire, the flame spreads at subsonic velocity, so the overpressure damage is usually negligible and the bulk of the damage comes from the thermal radiation and secondary fires."

Citizen notes that these secondary fires can create and propagate damage far longer than the initial Flash Fire, and these impacts need to be made part of the worst-case scenario assessment presented, and added to the Draft EIR, to fully assess the potential impact of this scenario.

Citizen further notes that the Figure 4-1 example used a wind-direction and velocity that apparently minimizes the offsite extent of this scenario. For completeness, an alternative Figure 4-1a example should be developed that maximizes the likely offsite extent of this Flash Fire scenario involving the LHU line, with additional impacts from likely secondary fires, as noted above, also included.

G1-90.19

### Response G1-90.19

Flash fires are short in duration, they only "exist" at a location for a few seconds. As the flame burns back (i.e., flashes back) toward to source of the release, the flame burns at a relatively slow rate (on the order of a few meters per second). Thus, any combustible material in the path of the flash fire is only exposed to the flame for a few seconds.

The DEIR conservatively assumes that any person caught in a flash fire (inside the LFL) will be affected by such an exposure. Due to the short duration of the flame at downwind locations, structures such as wooden buildings are not exposed to the flame long enough to support combustion (think of how hard it is to light a wood fire with a match). Dry brush and grass

materials may be susceptible to ignition via a flash fire, but the extent of their radiant impact would be defined by the flash fire itself since the grass cannot sustain a flame long enough to meet the radiant criteria (approximately 30 to 40 seconds) used to evaluate pool and jet fires. Metal structures are not susceptible to fire and would not be affected by the short duration of a flash fire flame at downwind locations. For safety reasons, vegetation is eliminated within process unit boundaries at the Refinery.

The focus of the risk of upset analysis presented in the Section 4.3.2 and Appendix C of the DEIR is the potential impact on the public as opposed to on-site worker impact. In many of the upset scenarios, the potential flash fire impacts (defined by the extent of the lower flammable limit (LFL)) generated the largest hazard zone. In the upset scenarios where the flash fire distances were the largest, all other hazard zones (based on the significance criteria for overpressure defined by 1 psi, radiant impacts defined by 1,600 Btu/hr/ft<sup>2</sup>) produced smaller impact distances than the flash fire.

It should be noted that the vulnerability zone for the flash fire is a circle around the release point with the radius equal to the maximum distance achievable by the LFL. No preference is given to wind direction. When all other evaluated impacts (i.e., explosion overpressure and radiant impacts) are within the vulnerability zone of the flash fire, there is no reason to present them since they are not the "worst case."

As described in Response G1-86.79, the DEIR used a wind speed of 20 miles per hour in the hazard analysis. The most relevant U.S. EPA guidance on wind speed is in regards to siting of LNG facilities in 49 CFR 193.2057(b), which states "In calculating exclusion distances, the wind speed producing the maximum exclusion distances shall be used except for wind speeds that occur less than 5 percent of the time based on recorded data for the area." The wind speed data for the Carson/Wilmington area indicates that the wind speed exceeds 20 miles per hour less than 0.05 percent of the time and the highest wind speed that occurred five percent of the time was only approximately eight miles per hour. Therefore, the DEIR conservatively used 20 miles per hour in the hazard analysis.

**Comment G1-90.20**

Question/Concern 20:

The Draft EIR Appendix C report, entitled: "Worst-Case Consequence Analysis for the Tesoro Los Angeles Refinery", which contains the above referenced pages C-17 through C-20, states: "a release from the line feeding the Carson light hydrotreater unit (LHU) stabilizer column could result in a flash fire. In this release scenario, the flash fire is the maximum hazard.". A careful reading is that this Appendix C report has covered ONLY the maximum LHU hazard.

Additional sections need to be added to this analysis, with each section identifying the maximum hazard and a worst-case hazard for each of the other units in the completed LARIC Project, including the effects of secondary fires, explosions, dust releases, and the on-site and off-site damage that their propagation can create.

G1-90.20

Question/Concern 20:

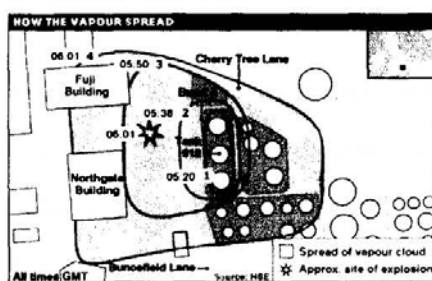
The Draft EIR Page C-26, Figure 4-6, identifies a "Vulnerability Zone for New 500,000 bbl. Storage Tanks", for the proposed group of 6 new such tanks, enabling storage of 3,000,000 bbl. of crude oil within a small spatial region. This Figure 4-6 "Vulnerability Zone" is only 5X larger than the geometric footprint of the tanks themselves. Citizen considers this Appendix C determination to be a potentially significant underestimate of the hazards and risks this tank group can present.

As an example, the vulnerability and subsequent explosion zone for the massive 12/11/2005 Buncefield UK Oil Storage Facility fire was determined to significantly exceed Appendix C value of 5X, as determined post-catastrophe, and summarized in the graphic below. This graphic shows >50X extent of the vulnerability zone, and highlights the need a further detailed study of the new 3,000,000 bbl. crude oil storage risk.

**Massive Buncefield UK Oil Storage Fire**

12/11/2005 – 12/15/2005

The overflow from the tank led to the rapid formation of a rich fuel and air vapour. It thickened to about 2m (6.6ft) and started spreading in all directions



<http://news.bbc.co.uk/2/hi/4525504.stm>

- 1) Fuel cascaded down the tank and formed a rich fuel/air mix, which collected in bund A (the area surrounding the tank bounded by a low wall designed to prevent leaked liquid spreading).
- 2) CCTV footage showed vapour flowing out of bund A from 0538. The cloud was initially about 1m deep, but thickened to 2m.
- 3) By 0550 vapour started flowing off the site, near the junction of Cherry Tree Lane and Buncefield Lane
- 4) Between 0550 and 0600 the rate at which fuel was being pumped into tank 912 gradually increased from 550 cubic metres (1,805 cubic feet) an hour to around 890 cubic metres (2,920 cubic feet) an hour
- 5) At 0601, with the vapour cloud cloaked over a large area and reaching buildings next to the site, the first explosion occurred

Further explosions followed and a large fire took hold, eventually engulfing 20 large storage tanks. Emergency services declared a major emergency at 0608 and a huge firefighting effort began, peaking with 25 fire engines, 20 support vehicles and 180 firefighters on site before the blaze was finally extinguished on 15 December.

G1-90.20  
cont'd.

**Response G1-90.20**

See Response G1-90.19 regarding the flash fire as being the worst-case consequence and the flash fire was not the only upset scenario analyzed. The DEIR fully analyzed the potential hazards of the proposed project in its entirety (see Table 4.3-2 and Figures 4.3-1 through 4.3-3 of the DEIR for all project components evaluated). As explained in Response G1-90.19, secondary effects of flash fires do not damage structures and metal objects within the vulnerability zone. For this reason secondary effects are not foreseeable and, therefore, are not evaluated. Similarly, secondary effects from other types of hazards are not expected (e.g., see Responses G1-78.226 and G1-78.227 for a discussion on vapor cloud explosions).

The six new storage tanks identified in the comment are for crude oil. A radiant vulnerability zone was calculated for each tank as if it were on fire. The six vulnerability zones are combined in order to make a composite vulnerability zone for the six tanks. A crude oil fire produces quite a lot of soot (the black smoke you see) and does not have as high a surface emissive power (the radiant flux from the flame) as other materials such as gasoline for example. Thus, fire fighters can often get quite close to a crude oil fire without sustaining injuries. The properties of crude oil result in the fire vulnerability zones in Figure 4-6 of the Worst Case Consequence Analysis report in Appendix C of the DEIR (also presented in Figure 4.3-1 of the DEIR).

The Buncefield incident is distinctly different from the proposed new crude oil storage tanks. Most notably, the Buncefield incident involved the overflowing of a gasoline storage tank, not a crude oil storage tank. The properties of the two fluids are quite different (e.g., gasoline has

## APPENDIX G1: RESPONSE TO COMMENTS

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lower flash point and lower density than crude oil). In addition, the Buncefield incident involved several events of failure such as the independent high-level switch (IHLS) which was meant to close down operations automatically if the tank overfills was found to be inoperable. The incident investigation found that the IHLS needed a padlock to retain its check lever in a working position. However, the switch supplier did not communicate this critical point to the installer and maintenance contractor or the site operator. Because of this lack of understanding, the padlock was not fitted. The approach taken in the hazards analysis study, combining the vulnerability zones from all the worst-case scenarios from the new and modified units in the proposed project, generates the same type of information requested in the comment. Therefore, no further analysis is required.

Comment Letter No. G1-91



June 10, 2016

RESPONSE TO: DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)

TO: Honorable members of the Board, and staff of the  
South Coast Air Quality Management District (SCAQMD)

CONCERNING: TESORO REFINING AND MARKETING COMPANY LLC  
LOS ANGELES REFINERY  
INTEGRATION AND COMPLIANCE PROJECT

SUBMITTED BY: PETER ROSENWALD  
P.O. BOX 3978  
SEAL BEACH, CA 90740  
(562) 438 - 5394

*Peter Rosenwald  
10 June 2016*

**My response to the EIR consists of four SECTIONS.**

Copies of newspaper articles in SECTION IV relate to comments made in SECTIONS I and III.

**PAGES IN THIS RESPONSE ARE NUMBERED CONSECUTIVELY TO ASSIST IN READING AND STUDYING THESE COMMENTS.**

SECTION I.

At the May 17, 2016 meeting at the Carson Community Center a Public Hearing on Title V Significant Revisions \*\*\*and\*\*\* Public Meeting on the (EIR), I made statements about how Tesoro operates its business practices. My comments were in the minority, as Tesoro employees and community supporters dominated the testimony. Their comment was, without reservation, the importance of the Refining and Marketing Company to the community. Pro Tesoro comment included their status as an outstanding employer, community benefactor, positive contributor to employment with high paying jobs, and educational booster.

G1-91.1

1.

My comments discussed the company's poor safety culture, intimidation of workers, compromised employee relations, and how Tesoro's business practices were contrary to good business practices reflected by almost all other oil companies. These facts were in complete contrast to the positive testimony in the first paragraph.

G1-91.1  
cont'd.

I have based my opinion on the contents of newspaper articles in SECTION III.

Here are examples which substantiate the company's operations and culture from four newspaper articles.

1.) "Chemical Safety Board Criticizes Tesoro," San Antonio (Texas) EXPRESS-NEWS, February 27, 2014.

The article describes a poor safety culture extending back to 2010 when 7 workers were killed at the Anacordes (Washington) refinery; in 2014 two contract workers were splashed with acid; after allowing the United States Chemical Safety Board (CSB) in the first day, the company refused any cooperation or access to their refinery in Martinez, California. (Do they think they are above the law?) The head of the CSB and members even wrote an open, op-ed letter to the Martinez NEWS-GAZETTE,

G1-91.2

2.) In a February, 2014 Contra Costa TIMES newspaper article the CSB's managing director, Dan Horowitz stated:

We certainly faced our share of jurisdictional challenges, but I can't think of another refinery that has taken a position that injuries aren't serious enough for us to investigate, and that we lack jurisdiction.

3.) "Refinery won't let feds in to inspect," San Francisco CHRONICLE, February 21, 2014.

In this article it was stated in a Cal/OSHA report that operators told investigators they were afraid to operate the alkylation unit, that they signed operational change sheets, under duress, and that Tesoro was not running the unit as it was designed to run . . . .

4.) The Long Beach PRESS-TELEGRAM reported in March, 2015 that the strike against the U.S. oil refinery industry was all about safety.

2.

SECTION II.

A letter, RE: OPPOSITION TO THE TESORO REFINERY EXPANSION, dated, May 16, 2016 to Julia May by Anthony Patchett, Esq. describes the background and rationale for Tesoro's EIR request, how it is faulted, and even how permitting its approval will have effects on a local environmental travesty: Rancho Liquid Petroleum Gas Holdings, LLP in San Pedro.

SECTION III.

A May 3, 2016 letter from me to the Long Beach City Council requests the City to refuse a \$20,000 grant supporting its Neighborhood Leadership Program.

An e-Mail continues, referring to a message which I also delivered describing:

Tesoro:

\*\*\* Attempting to buy influence by awarding the grant, so that their expansion activities and polluting operations would be viewed favorably;

\*\*\* That the company could not be trusted (See SECTIONS I and II), as it had a poor reputation in safety practices and refinery operations;

\*\*\* That Mr. Ken Dami, Southern California Director of Government and Public Affairs, and a subordinate in his office, had promised me a reply on the company's position on the February, 2014 Martinez refinery accident, which was greeted with silence. This demonstrated to me that Tesoro does not operate in a reputable manner. (Also, tries to present a positive image from its donations while engaging in environmental rule influence and modification (the EIR). Approving the EIR would give them operations which will cause deleterious effects to the public both living in the Los Angeles Basin, and also close to their facilities.

G1-91.2  
cont'd.

At the May 17, 2016 Public Meeting and Hearing in Carson, described in SECTION I, the pro Tesoro testimony was from not only Tesoro employees, but also representatives from area: Boys and Girls Clubs, Chambers of Commerce, oil and energy lobbyists, members of a Tesoro sponsored service club, and even a Carson High School teacher whose academic program benefitted from a targeted grant (to name several of

G1-91.3



some categories represented). While Tesoro sponsors useful programs, the quid-pro-quo nature is definitely suspect This pro testimony needs to be balanced with the few community members (because the hour was late), testimony that was taken up mostly at the end of the meeting. Teachers, environmentalists, and parents gave sometimes emotional statements; a few people wept because of the hardships they had endured living in a polluted area.

G1-91.3  
cont'd.

The requests for modernizing the refineries and the additional three million barrel increase in crude oil storage will offset almost any improvement in air quality and environmental benefit from giving approval for the EIR.

G1-91.4

Renewable energy development does not seem to be considered in this project. Is Tesoro involved in contributing to the current awareness for research and development of alternative sources of energy? Is this a budgeted item for the company, and one of its goals? I am uncertain of this as I was not able to research this question. If not, is Tesoro actually mitigating its business operations, so as to be deserving as to what they are asking for: increased crude storage and refinery modifications. In a sense Tesoro operates as a "shell" business. For example, the injured workers at the Martinez refinery were 'contract' employees.

G1-91.5

Tesoro does not own its own sea crude oil transport vessels. This is another 'contracted-out' operation. While Tesoro maintains tanker captains to supervise the contract vessel operation, is this a safe manner to handle the incredibly large increase of crude shipping called for in the EIR?

G1-91.6

SECTION IV.

NEWSPAPER ARTICLES documenting Tesoro's shortcomings, from:  
Contra Costa TIMES;  
San Francisco CHRONCLE  
Oakland TRIBUNE  
San Antonio (Texas) EXPRESS-NEWS  
Martinez NEWS-GAZETTE  
Long Beach PRESS-TELEGRAM  
The COLUMBIAN (Vancouver, Washington)

SECTION I.

5.

6.

COMMENTS: CONCERNING PUBLIC HEARING ON:  
TITLE V SIGNIFIGANT REVISIONS \*\*\*and\*\*\*  
PUBLIC MEETING ON:  
DRAFT ENVIRONMENTAL IMPACT REPORT (EIR)

MAY 17, 2016

Dear Honorable Members of the Board, and Staff of the  
South Coast Air Quality Management District (SCAQMD),

I am attaching copies of newspaper articles concerning the  
operations of Tesoro Refining and Marketing Co. LLC. There is  
a theme to the articles in that Tesoro operates its facilities with  
a poor safety culture, intimidation of workers, and  
compromised employee-relations. The articles demonstrate  
that Tesoro operates in any manner that it wishes, even  
contrary to good business practices reflected by almost all  
other oil companies.

The sources of the articles are:

*Martinez News-Gazette*

*San Francisco Chronicle*

*Contra Costa Times*

*Oakland Tribune*

*San Antonio (Texas) Express-News*

*The Columbian (Vancouver, WA)*

*Long Beach Press-Telegram.*

These attributes described in the articles above mitigate  
against the approval Tesoro wishes to obtain.

Is this the character of a company the SCAQMD is potentially  
granting approval for the largest crude oil storage facility on  
the West Coast?

8.

## SECTION II.

9.



"...and justice for all."

LAW OFFICES OF ANTHONY G. PATCHETT, SBN: 090985  
P.O. Box 5232, Glendale, CA 91221-1099  
mrenvirlaw@sbcglobal.net  
Phone: 818-243-8863  
Fax: 818-243-9157

May 16, 2016

Julia May  
Senior Scientist  
Communities for a Better Environment (CBE)  
6325 Pacific Blvd. Suite 300  
Huntington Park, Ca 90255

**RE: OPPOSITION TO THE TESORO REFINERY EXPANSION**

Dear Julia,

Please submit my opposition to the proposed expansion of the Tesoro Refinery. The combination of the Carson and Wilmington facilities will create a massive volume of new crude oil storage tanks totaling 3.4 million barrels that will modify many processing units.

It will also add refinery Liquefied Petroleum Gas (LPG) rail car deliveries to Rancho LPG 's facility at 2110 N Gaffey Street, San Pedro. Tesoro presently stores butane and propane at the 25million gallon Rancho LPG site.

The result of an expansion of the Tesoro facilities is a monopoly of the refinery industry. Also, Tesoro should not be eligible to generate air pollution credits to offset other air pollution expansions for environmental improvements that were required for the merger

Tesoro recently received approval for a 2-year lease extension for a crude-by-rail to marine terminal in Vancouver, Washington that will bring Bakken crude oil to Los Angeles.

Tesoro's planned expansion will only heighten the potential danger looming at the Rancho LPG facility.

A Petition to EPA requesting a re-examination of the risk assessment at Rancho LPG was submitted on May 11, 2016 by the San Pedro Homeowners United Inc. and the Tongva Ancestral Territorial Tribal Nation.

I respectfully request that the DEIR properly reflect Tesoro's plans to bring dangerous crude oil to Los Angeles such as explosive, fracked Bakken crude oil or extreme carbon, corrosive Canadian Tar Sands.

Sincerely,

Anthony G. Patchett  
Retired-Assistant Head Deputy District Attorney, Environmental Crimes/OSHA Division, Los Angeles County

10.

SECTION III.

//.

May 3, 2016

Honorable Council members and City Staff:

These articles demonstrate that Tesoro operates in any manner that it wishes, even contrary to good business practices reflected in the operations of almost all other oil companies.

Is this the character of a company Long Beach wishes to sponsor its award-winning neighborhood leadership program?

Please do not accept the \$20,000 grant being offered by this poor corporate citizen.

Sources of articles included in this packet:

*Martinez News-Gazette*

*San Francisco Chronicle*

*Contra Costa Times*

*Oakland Tribune*

*San Antonio (Texas) Express News*

*The Columbian (Vancouver, WA)*

*Long Beach Press-Telegram*

Thank you for your consideration,

*Peter Josef Rosenwald*

**Peter Joseph Rosenwald**

**P.O. Box 3978  
Seal Beach, CA 90740**

**562-438-5394 (land line)  
562-537-1743 (Cell)  
[sunkistpete@yahoo.com](mailto:sunkistpete@yahoo.com)**

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6/9/16, 11:07 PM

12.

**Cc:** Alicia Rivera <alicia@cbeval.org>

**Subject:** UPDATED notes composed by Pete Rosenwald on 5/1/2016 Re: Giant Tesoro/ P-66 Refinery Integration Project DEIR - we are doing comments!

Because I am very concerned about ITEM # 7 on the Tuesday, May 3, Long Beach City Council Agenda, I am sending you this detailed e-Mail message. The bottom-line is that I believe TESORO is trying to influence the Long Beach Council regarding activities which would be extremely detrimental to our environmental health and safety.

**PLEASE attend and testify about the Tesoro/Phillips 66**

refinery mergers that will create the **LARGEST** refinery on the West Coast. There would be increased oil storage capacity (including explosive North Dakota Baaken and Alberta Tar Sands Crude).

**The meeting will be held at the Long Beach City Hall Council Chambers, 333 W. Ocean Blvd., LB 90802, at 6:30pm, on Tuesday, May 3.**

**FREE PARKING in the Civic Center Parking Structure:**

Drive **NORTH** on Broadway; just before Cedar Avenue there is a right side pocket on the South side of Broadway; stay in the far right Broadway lane to enter the structure.

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**The Agenda Item (#7) concerns Long Beach receiving a \$20,000 Grant from the Tesoro Foundation to support The Neighborhood Leadership Program (NLP) Class of 2016.**

**We need to be telling the Council that Long Beach does**



Print

6/9/16, 11:07 PM

13.

not want to accept the Grant, as Tesoro is attempting to buy influence (such as donating the \$20,000 Grant, and also donating an educational vehicle, "THE AQUARIUM ON WHEELS" to The Aquarium of the Pacific). At the same time they are making donations, which are being made at the same time to other community and government entities as well, THEY WANT TO EXPAND THEIR REFINER(IES) TO BE THE WEST COAST'S LARGEST, AND, INCREASE NEW CRUDE STORAGE BY OVER 3 MILLION BARRELS. They want to reduce offloading emissions from ships, in exchange for 8 new crude storage tanks. This exchange is N\*O\*T\* worth it.

**\*\*\*\*\*MAJOR TALKING POINT\*\*\*\*\***

**Tell the Council, or your Council member, that not only is the exchange for the \$20,000 Grant not worth it, but also, the offer comes from a company which CANNOT be trusted. . . and has a POOR reputation in safety practices and refinery operations (please see discussion BELOW:)**

**ASK THE COUNCIL TO VOTE NO ON THE \$20,000 GRANT.**

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My original message was sent to:

**TO: Alicia Rivera [alicia@cbecal.org](mailto:alicia@cbecal.org) of Communities for a Better Environment,  
---and---  
many other **CC** recipients.**

**THIS FORWARDED MESSAGE to all was suppose to be an original communication to: Ms. Brissa Sotelo-Vargas, Public & Governmental Relations Manager \*\*\*for\*\*\* Tesoro's Los Angeles Refineries, located in Carson and Wilmington in March, 2016.**

*I had originally met her at a public meeting in 2014 at the Boys and Girls Club on Willard Street in Long Beach.*

14.

*Ms. Sotelo-Vargas is currently on maternity leave from her Tesoro job.*

*In March, 2016 I began to write a message to Ms. Sotelo-Vargas, however I never finished the message.*

*Below please see a paragraph labeled 1.), which was all that I had completed at that time, which I never sent. Being sent now is an update of this March message, containing additional facts about Tesoro.*

Dear Brissa,

On January 11th, 2016 I met your supervisor at a dinner which the Tesoro Foundation sponsored for the City of Long Beach Neighborhood Leadership (NLP) Program. I'm a 2013 graduate of the Program. The dinner was the 18th Annual NLP Alumni Reunion Dinner. The theme of the dinner was:

*"Honoring Long Beach Neighborhood Treasures", and the pre-publicity stated: 'Sponsored by **TESORO** Foundation'. The dinner was located at the: Taco Loco Hall on Magnolia.*

Brissa, Tesoro Refining & Marketing Company, LLC, was represented by your supervisor:

Mr. Ken Dami,  
Director, Southern California  
Government and Public Affairs

I also gave Mr. Dami, in writing, several items of my concern, some of which I had given you previously. Neither Mr. Dami nor you have ever answered any of my concerns. Neither of you ever communicated with me, again in any manner, except by my initiative.

I was surprised to see that your Foundation was playing such an integral role in the City's Neighborhood Leadership Program (NLP). I understand that **TESORO** also provided support for last year's Neighborhood Leadership Program.

**I OPPOSE TESORO's CURRENT \$20,000 GRANT PROPOSAL TO SUPPORT THE NLP.**  
(If I had known about last year's support, I would have also opposed it at that time. My reasons for opposition are stated below.)

Some of the reasons for my curious surprise were:

1.) The fact that you had promised me your company's answer as to why Tesoro refused entrance to the U.S. Chemical Safety Board (CSB) in February, 2014 after a serious accident at your Golden Eagle Refinery in Martinez, CA (your company's behavior was

similar to the way Exxon/Mobil treated the U.S. Chemical Safety Board after a recent refinery explosion in Torrance). I asked you about this at a USC Sol Price School of Public Policy meeting you invited me to attend at The Metropolitan Water District of Southern California Headquarters on March 14, 2014 in Los Angeles.

15.

The meeting you invited me to was sponsored by:

The Athenian Society: Dean's (USC Price School) Speaker Series.  
 "Drought Emergency Declared: What's Next for Water in California"

At that time, I gave you a copy of the CSB letter (see citation below), and you said that you would give me an official reply from your company.

(In addition to the *Martinez News-Gazette* letter cited below, I gave you in

2014, and Mr.

Dami at the January, 2016 NLP dinner, several editorials and articles from Northern California newspapers describing Tesoro's poor safety culture, intimidation of refinery workers, and compromised employee union relations. I

also gave you an article from the *San Antonio (Texas) Express-News* (Tesoro's headquarters) detailing the CSB's criticism. (These, and other newspaper citations are detailed below.)

At the NLP Alumni Dinner, here's the citation from the *Martinez* newspaper which I had originally given you (and Mr. Dami) for your company's response:

*Martinez News-Gazette*, "Chemical Board Reacts to Tesoro Incident," March 4, 2014.

The *letter-to-the-editor* was an open letter to the President and Chief Executive Officer of **TESORO**, Mr. Gregory J. Goff in San Antonio, Texas. Here is a quote from the letter:

The action taken by Tesoro in preventing lawfully authorized CSB investigators from performing their official duties calls into question why Tesoro has taken this unprecedented action. It creates a real concern that Tesoro may be trying to withhold other facts and issues from the agency (for the 2014 Golden Eagle Refinery incident).

The letter continues that there were a ". . . multiple of shortcomings in Tesoro's plant safety culture. . . ." which were (also) responsible for the **loss** of life of 7 refinery workers lives at (their) Anacortes refinery in 2010.

**My opinion: CONCLUSION:**

The silence which I have experienced to my inquiries is *not* the behavior of a responsibly operated company. I believe that the company does not deserve to be an affinity partner of the City of Long Beach, or its subdivisions. I do not believe that this company operates in a reputable manner. Not only being the second year that the Neighborhood Leadership Program has been underwritten, here is another way **TESORO** has tried to present a positive image of itself, by sponsoring the provision of an educational vehicle for The Aquarium of the Pacific:

2.) At The Green Prize Festival, held at Admiral Kidd Park on April 30, 2016, The Aquarium of the Pacific was displaying its "Aquarium on Wheels." This vehicle is another example of

Tesoro attempting to demonstrate its contribution to the community, while at the same time engaging in environmental rule influence & modifications, which would cause additional oil operations, including crude storage and refining operations, which risk potentially deleterious effects on the public living in the Los Angeles Basin, and near their facilities. 16.

3.) Here are additional annotated newspaper citations about Tesoro:

**"Refinery Won't Let Feds in to Inspect,"** San Francisco *Chronicle*, February 21, 2014, :A1  
In an unprecedented challenge, Tesoro Corp. has barred federal authorities from going inside its refinery near Martinez to investigate an incident in which two workers were burned by acid spewing from a broken pipe.

**"Tesoro Thwarts Federal Investigators from Probing Recent Refinery Accident Near Martinez,"**

Contra Costa *Times*, February 21, 2014.

The CSB's Managing Director, Dan Horowitz, stated: "We certainly faced our share of jurisdictional challenges, but I can't think of another refinery . . . that has taken a position that injuries aren't serious enough for us to investigate, and that we lack jurisdiction."

**My comment:** I believe that the actions of this company indicate that they think they are above the law, and can operate in any manner they wish, ever if contrary to good business practices which

are reflected in the operations almost all other oil companies. Certainly, there is room for improvement,

and until this is conclusively demonstrated, **TESORO**, cannot be trusted. Is this the character of

a company Long Beach wishes to sponsor its award winning NLP, and other programs? I think *not*. Let them demonstrate that they've improved first, and give them another chance.

However,

now is not the time to accept any additional \$20,000 Grants, or other gifts from them.

**"Oakland Tribune Editorial: Tesoro Undermines Refinery Industry Credibility,"** The Oakland *Tribune*,

February 24, 2014.

Message to Tesoro Refinery management: People don't trust you, and they never will if you keep stonewalling . . . .

People's lives and safety are at stake inside the gates and in the surrounding neighborhoods.

Unfortunately, Tesoro's response belies industry claims, that it wants to make its plants safer, and that undermines those operators who are making legitimate and serious strides on

safety. It is time for a closer examination of Tesoro's processes . . . .

**My comment:** Is this who we want to sponsor our community programs in Long Beach?

**"Two Refinery Workers Sprayed with Acid,"** Martinez *News-Gazette*, February 25, 2014, reporter: Rick Jones.

Tesoro refinery under investigation by Cal/OSHA. . . . The United Steelworkers Union <sup>M.</sup> (USW) has demanded Tesoro Corp. develop a "comprehensive, cohesive" safety program after a Feb. 12 incident at the Golden Eagle plant in Martinez that injured two workers. . . . Cal/OSHA discovered violations of state regulations for injury and illness prevention and the safe handling of materials at the (alkylation unit of the refinery). "Tesoro management trivialized the extent of the workers' injuries to establish jurisdictional defense specifically to avoid the scrutiny of the U.S. Chemical Safety Board (CSB) and other agencies," USW Vice President Gary Beevers said in a press release. "Management platitudes about operating safely have been exposed, as constant downward pressure to produce has continued to threaten workers, their communities, and the environment." In a Cal/OSHA report, operators told investigators they were afraid to operate the alkylation unit. Workers at the refinery said they signed "green sheets" with the notation "signed under duress" for procedure changes, and also said that Tesoro is "cutting acid rates, and not running the unit as it is designed to be run. . . ."

Investigators were also told there are acid leaks from the tubing on the sample stations "all the time." Operators stated that if they opened the valve, it would splash up and hit them with acid. . . .

**My comment:** Here is a company which operates a high risk refining business, in a manner, at the loss to its employees' safety. Is **TESORO** a company Long Beach wishes to receive support? Again, I think *not*. City Council: **Please vote NO on receiving a \$20,000 Grant from TESORO.**

**"Chemical Safety Board Criticizes Tesoro,"** San Antonio *Express-News*, February 27, 2014, reporter: Vicki Vaughan.

This article continued to describe **TESORO** as a company which "found a multiple of shortcomings in its plant safety culture." "It urged Tesoro to "reverse course" and cooperate with its (CSB) investigation."

The article also mentioned: "Last month (January, 2014) Tesoro was sharply criticized by the safety board (CSB) in its report on a fire and explosion that occurred in April, 2010 at the company's Anacortes, Washington refinery in which seven workers were killed. The . . . report . . .

portrayed Tesoro's safety culture as deficient . . . "found (at Anacortes) a multiple of shortcomings in Tesoro's plant safety culture."

**My comments:** At a hometown newspaper of the headquarters of **TESORO** Corp., there is an article describing a faulted safety history of the company. Again, please vote *no* on their \$20,000 Grant; the money for the NLP may be found elsewhere. Even after the Anacortes investigation, there was no significant change in **TESORO's** safety culture 4 years later.

**"Commentary---United Steelworkers Say Refinery Strike is About Safety,"** Long Beach *Press-*

*Telegram*, March 8, 2015, reporters: Jorge Cabrera and Barbara Rahke.

"A strike against the U.S. oil refinery industry by nearly 7,000 members of the United Steelworkers is now entering its second month. Two facilities in California are affected --- one in

Carson, one in Martinez --- both owned by the Tesoro refining company. What's the conflict about?

Safety, say the steelworkers . . . ."

**My comments:** This commentary demonstrates an ongoing problem with **TESORO**.

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"**Port of Vancouver (Washington State) Stalls Release of Oil Term Lease Documents,**"

The *Columbian*, April 21, 2016, reporter: Brooks Johnson.

**TESORO**, and the Savage Construction Company, are trying to build the world's largest crude oil terminal at the Port of Vancouver, Washington. Is this really needed in today's renewal energy environment? **TESORO** has projects planned up and down the entire West Coast.

Sincerely,

Peter Rosenwald, **MSLS** (Master of Science in Library Science)

\*\*\*Co-recipient, The Leon Shirley Award for Grassroots Community Activism, given by: FACTS --- (Families to Amend California's Three Strikes); phone: 310-677-7445, 2012.

\*\*\*Recipient of Higher Education Act Title 2-B Fellowship specializing in Library Services for Disabled and Institutionalized People, and Health Sciences Librarianship; Degree: **MSLS** (Master of Science in Library Science); Wayne State University, Detroit, 1977.

\*\*\*Graduate of City of Long Beach Neighborhood Leadership Program, City of Long Beach Neighborhood Services Bureau, 2013.

\*\*\*Recipient of The Lifetime Service Award for Peace and Justice, given by: The Long Beach Area Peace Network, December 31, 2015.

P.O. Box 3978

Seal Beach, CA 90740

(562) 438 - 5394

[sunkistpete@yahoo.com](mailto:sunkistpete@yahoo.com)

CELL: (562) 537 - 1743

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SECTION IV.

**Tesoro thwarts federal investigators from probing recent refinery accident near Martinez****Contra Costa Times (Walnut Creek, CA) - Friday, February 21, 2014****Readability:** >12 grade level (Lexile: 1400L)**Author:** Robert Rogers Contra Costa Times

MARTINEZ -- Federal chemical safety officials say Tesoro Corp. is preventing them from investigating an incident at its refinery near Martinez in which two workers were burned by acid spewing from a broken pipe.

Three U.S. Chemical Safety Board investigators showed up a day after the Feb. 12 incident and initially gained access, but Tesoro's lawyers raised "jurisdictional challenges" and forced the investigators to leave, said Dan Horowitz, the CSB's managing director.

"We've certainly faced our share of jurisdictional challenges, but I can't think of another refinery or chemical plant that has taken a position that injuries aren't serious enough for us to investigate and that we lack jurisdiction," Horowitz said. "This is a new one to me."

Two workers suffered minor injuries Feb. 12 after an acid spill at the Tesoro Golden Eagle Refinery. The workers were airlifted to UC Davis Medical Center and treated for first- and second-degree burns and released, according to a hospital spokeswoman.

Contra Costa Fire District spokeswoman Lisa Martinez said the workers suffered burns after being exposed to a sulfuric acid.

The safety board was created in 1998, and has spent much of the past 18 months investigating the August 2012 fire at Chevron's Richmond refinery.

Tesoro spokeswoman Melissa Flynn released an email statement Friday saying the company was "surprised" that CSB intended to investigate the incident, which she called a "personal safety incident that did not result in serious injuries or substantial property damage."

"We recognize the important regulatory role of the CSB, and the company will voluntarily work with the appropriate regulatory agency in every instance," Flynn wrote. "However, Tesoro has decided that it must respectfully decline to participate in the CSB's review due to their lack of authority in this particular instance."

Horowitz disagreed, saying the CSB responded the day after his investigators were denied further access by issuing a subpoena to force Tesoro to comply with the investigation and turn over records related to the accident. Tesoro must respond to the subpoena by March 7, Horowitz said.

"Any time you lose containment in a refinery and workers are exposed, the incident is serious on its face," Horowitz said. "Clearly, it's important to find out what's going on (at the facility)."

The CSB's investigation of the Chevron fire in Richmond has resulted in hundreds of pages of investigative reports and recommendations for sweeping changes in refinery regulations.

California's Interagency Working Group on Refinery Safety, convened after the Chevron fire, released its final report last week, calling for improved community emergency response systems; better coordination among regulators; strengthening enforcement tools available to regulators; and requiring refineries to implement inherently safer systems, recommendations that in part echoed those made by the CSB.

"The bottom line is if the recommendations in the report are implemented, worker and public safety will be improved," Assemblywoman Nancy Skinner, D-Berkeley, said in a prepared statement. "The recommendations include increasing fines on violations and better public notification when incidents occur."

When asked in a telephone interview Friday about Tesoro's refusal to cooperate with the Chemical Safety Board,



## APPENDIX G1: RESPONSE TO COMMENTS

Skinner said, "CSB was established by Congress to help improve safety as an independent watchdog. I cannot imagine that CSB would not have a legitimate role or right to work on the incident at Tesoro." 21.

On Feb. 18, the state Division of Occupational Safety and Health (Cal/OSHA) ordered Tesoro to shut down the section of the refinery where the pipe was located pending further investigation. An agency spokeswoman wrote in an email Friday that Cal/OSHA discovered violations of state regulations for injury and illness prevention and the safe handling of hazardous materials at the unit.

Flynn, the Tesoro spokeswoman, said Cal/OSHA was permitted access because "it is clearly within their jurisdiction to investigate."

In order to reopen the alkylation unit, which adds octane boosters to refined gasoline, Tesoro must demonstrate to Cal/OSHA that a series of steps have been taken, including a complete review of operating procedures and engineering controls, refresher training for workers in the unit and a review of management of procedures, said Cal/OSHA spokeswoman Erika Monterroza.

"Cal/OSHA's investigation continues into the incident," Monterroza said Friday.

According to Cal/OSHA's order halting use of the unit, operators interviewed said they are "afraid" to operate the unit and that Tesoro is "cutting acid rates and not running the unit as it is designed to be run."

The latest incident comes on the heels of Tesoro agreeing to pay \$472,000 in civil penalties for 35 alleged air pollution violations between 2009 and 2011 in a settlement with the Bay Area Air Quality Management District. In April 2010, an explosion at Tesoro's Anacortes, Wash., refinery killed seven workers.

The CSB investigated that incident, and issued a draft report last month criticizing the company's approach to facility safety.

Contact Robert Rogers at 510-262-2726 or rrogers@bayareanewsgroup.com. Follow him at Twitter.com/roberthroggers.

**Caption:** [Photo: The Tesoro Golden Eagle refinery is photographed on Saturday, December 13, 2003 in Martinez, Calif. Hunters that drive through the refinery to reach the Point Isabel wetlands will now be searched. The refinery has changed their policies due to security concerns. \(Jose Carlos Fajardo/Contra Costa Times\)](#)  
[Photo: The Golden Eagle refinery owned by Tesoro just east of Martinez, Calif. on Wednesday, November 19, 2003. Tesoro purchased the refinery from Tosco. \(Dean Coppola/Contra Costa Times\)](#)  
[Photo: The high-tech delayed coker that opened in 2008 at the Tesoro Refinery in Martinez, Calif., is photographed Tuesday Aug. 30, 2011. \(Dan Rosenstrauch/Staff\)](#)

**Section:** *Breaking*

**Index Terms:** *My Town ; Environment ; Contra Costa ; News ; Local*

**Record Number:** *25200054*

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*Acid spews on workers - Tesoro bars safety agency*  
**Refinery won't let the feds in to inspect**

**San Francisco Chronicle (CA) - Friday, February 21, 2014**

**Readability:** >12 grade level (Lexile: 1440L)

**Author:** Jaxon Van Derbeken

In an unprecedented challenge, Tesoro Corp. has barred federal authorities from going inside its refinery near Martinez to investigate an incident in which two workers were burned by acid spewing from a broken pipe, The Chronicle has learned.

State officials ordered a partial shutdown of the Golden Eagle Refinery following the Feb. 12 incident after inspectors with California's workplace safety agency found numerous suspected safety violations, state officials said.

The investigators with Cal/OSHA went to the plant at 150 Solano Way in the unincorporated community of Pacheco when a pipe containing sulfuric acid burst, spraying the two workers in the face with the caustic chemical. The two were flown by helicopter to UC Davis Medical Center in Sacramento, where they were treated for first- and second-degree burns and released later that day.

On Feb. 18, Cal/OSHA ordered Tesoro to shut down the section of the refinery where the pipe was located until the company reviews its operations, shows how it protects workers against acid spills and conducts refresher training. The unit adds octane boosters to refined gasoline.

Probe blocked

Investigators with the U.S. Chemical Safety Board, the lead federal agency in major chemical-plant accidents, showed up a day after the incident and gained access to the refinery grounds. However, Tesoro has rebuffed federal investigators' subsequent requests to return to the refinery, agency officials said Thursday.

Tesoro officials said the Feb. 12 incident was minor and did not qualify under the rules for a federal investigation.

Safety board officials could not recall another refinery or chemical plant on U.S. soil that has challenged the board's authority since its inception in 1998.

"It's rather unique," said Dan Horowitz, the federal agency's managing director, "because our authority is very broad. We not only investigate incidents, but we can investigate hazards even where there has not been a release."

Feds' job

The Tesoro incident, Horowitz said, falls squarely into the agency's jurisdiction.

"This is a hazardous unit - it released a hazardous substance, (and) those workers were seriously impacted," Horowitz said. "This is not the sort of accident that should be occurring, a loss of containment involving a hazardous substance. This is exactly the sort of incident that regulatory systems are designed to prevent. We need to find out why this happened."

He said the Chemical Safety Board has subpoenaed Tesoro to turn over documents about the unit's operations and answer questions related to the accident by March 7.

Tesoro, based in San Antonio, downplayed the incident and said it was not satisfied the federal board had the right to intervene.

Elizabeth Watters, a company spokeswoman, described the incident as a "minor chemical release" that left the two workers with "minor chemical burns."

## APPENDIX G1: RESPONSE TO COMMENTS

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Elizabeth Watters, a company spokeswoman, described the incident as a "minor chemical release" that left the two workers with "minor chemical burns."

"We were surprised when the Chemical Safety Board notified the company that the agency intended to deploy a team to investigate, as the (board) is not charged with investigating a personal safety incident that did not result in serious injuries or substantial property damage," Watters said.

The Chemical Safety Board's interest in Tesoro's operations heightened in April 2010, when an explosion at the company's Anacortes, Wash., refinery killed seven workers. In a draft report issued last month, the federal board said Tesoro had a lax approach to safety, which had led to "catastrophic consequences."

Don Holmstrom, head of the board's Western regional office of investigations, said the latest probe will focus on safety culture as well.

"We think there are some serious safety issues that need further examination," he said. "We need to examine how strong their safety culture is."

Working with state

Watters said the company takes "all incidents seriously" and was cooperating with Cal/OSHA's probe, "as it is clearly within their jurisdiction to investigate."

The workers burned in the latest incident were wearing standard protective gear, but Tesoro had not issued them the specialized equipment required by law to protect their face and body from acid burns, Holmstrom said.

Workers at the refinery told state investigators that they were "afraid" to operate the unit where the spill occurred because acid leaks occur "all the time," according to a Cal/OSHA report. They said the pipes carrying the caustic fluid are dangerously thin.

They said the pipe that failed Feb. 12 broke again just four days later, Cal/OSHA said. Pipe-fitters were working on the unit and "the piping came apart in the exact same spot it did during the accident," the state report said.

**Caption:** Tesoro Corp.'s Golden Eagle Refinery, where two workers were recently sprayed with sulfuric acid, sits near Interstate 680 close to the Waterbird Regional Preserve in Pacheco. Michael Short / Special to The Chronicle

**Memo:** Jaxon Van Derbeken is a San Francisco Chronicle staff writer. E-mail: [jvanderbeken@sfchronicle.com](mailto:jvanderbeken@sfchronicle.com)

**Edition:** 5star-dot

**Section:** MainNews

**Page:** A1

**Index Terms:** Tesoro Corp., Chemical Safety Board; METRO, REFINERIES, ACCIDENTS, PROBE

**Location(s):** 150 Solano Way, Tesoro Golden Eagle Refinery, Pacheco, CA 94553, USA

**Record Number:** 85220CHE

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Access World News

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**Oakland Tribune editorial: Tesoro undermines refinery industry credibility****Oakland Tribune, The (CA)** - Monday, February 24, 2014**Readability:** 11-12 grade level (Lexile: 1250L)**Author:** Oakland Tribune editorial &#169; 2014 Bay Area News Group

Message to Tesoro Refinery management: People don't trust you, and they never will if you keep stonewalling.

A pipe ruptured Feb. 12 at the company's refinery near Martinez. Two workers were airlifted to UC Davis Medical Center with first- and second-degree burns from spewing acid. To make matters worse, the pipe came apart in the exact same spot four days later.

Yet, somehow, Tesoro does not consider these serious injuries, wrongly questions the authority of the U.S. Chemical Safety Board to investigate and is refusing to cooperate with the agency's probe.

The company, after first granting the federal agency access, has blocked it from returning. When safety board investigators first arrived they found that the company was already altering the accident site, rather than preserving the evidence.

It smells of a horrible cover-up by a company with a long history of safety lapses. It threatens to undermine decades of work in Contra Costa to build trust between the county's refineries, the community and the government agencies responsible for protecting public and worker safety.

The state Division of Occupational Safety and Health has issued an order barring Tesoro from restarting the failed unit. In it, the agency outlines inadequate protections for workers, employees' fearing for their safety and intimidation by management.

This same refinery was the site of a 1999 accident that killed four workers. While the plant was under different ownership then, Tesoro has had its own problems there and at its Anacortes, Wash., refinery, where seven people were killed.

At the Contra Costa facility in just one year, 2012, significant incidents included two fires, a sulfuric acid release, a vapor release, and an unspecified leak, according to the Chemical Safety Board.

As for Anacortes, the board concluded in a damning report last month, the fatal explosion and fire there resulted from a "complacent" attitude toward flammable leaks and occasional fires. The board found that Tesoro had failed to correct a history of hazardous conditions.

It's imperative that Tesoro cooperate with the safety board. No other government agency has done, and is doing, such thoughtful and thorough examinations of refinery accidents and the industry's safety practices.

As we saw from its investigation of the 2012 Chevron refinery explosion in Richmond, the safety board provides analysis that is critical to the prevention of future explosions.

People's lives and safety are at stake inside the gates and in the surrounding neighborhoods. Unfortunately, Tesoro's response belies industry claims that it wants to make its plants safer, and that undermines those operators who are making legitimate and serious strides on safety. It is time for a close examination of Tesoro's processes.

**Caption:** [Photo: The Golden Eagle refinery owned by Tesoro just east of Martinez, Calif. \(Staff archives\)](#)

**Section:** My Town

**Two refinery workers sprayed with acid**

Martinez News-Gazette (CA) - Tuesday, February 25, 2014

**Readability:** >12 grade level (Lexile: 1370L)

**Author:** Rick Jones

Tesoro refinery under investigation by Cal/OSHA

The United Steelworkers union has demanded Tesoro Corp. develop a "comprehensive, cohesive" safety program after a Feb. 12 incident at the Golden Eagle plant in Martinez that injured two workers.

The state Division of Occupational Safety and Health's (Cal/OSHA) investigation continues into the incident that occurred at the alkylation unit of the refinery, after a pipe containing sulfuric acid burst, spraying two workers in the face. The two were flown by helicopter to UC Davis Medical Center in Sacramento, where they were treated for first- and second-degree burns and released later that day.

On Feb. 18, Cal/OSHA ordered Tesoro to shut down the section of the refinery where the pipe was located pending further investigation. The unit adds octane boosters to refined gasoline. Cal/OSHA discovered violations of state regulations for injury and illness prevention and the safe handling of hazardous materials at the unit.

"Tesoro management trivialized the extent of the workers' injuries to establish jurisdictional defense specifically to avoid the scrutiny of U.S. Chemical Safety Board (CSB) and other agencies," USW Vice President Gary Beevers said in a press release. "Management's platitudes about operating safely have been exposed, as constant downward pressure to produce continues to threaten workers, their communities and the environment."

In a Cal/OSHA report, operators told investigators they were afraid to operate the alkylation unit. Workers at the refinery said they signed "green sheets" with the notation "signed under duress" for procedure changes and also said that Tesoro is "cutting acid rates and not running the unit as it is designed to be run." They are told to "cut the fresh acid rate to save the chemical plant (another unit) from working too hard. The operators state they argue with management when given the order to cut fresh acid because it causes all kinds of problems in the unit."

Investigators were also told there are acid leaks from the tubing on the sample stations "all the time." Operators stated if they open the valve from the beaker to the bottom of the sample station too much, it will splash up and hit them with acid.

Operators also reported Tesoro failed to conduct required management of organizational changes (MOOC) when they decided to reduce staffing for start-up and shutdown of the alkylation unit.

According to Cal/OSHA spokeswoman Erika Monterroza, in order to remove the order, Tesoro must demonstrate to Cal/OSHA that the following steps have been taken:

- Conduct a complete review of operating procedures for the alkylation unit;
- Review engineering controls of sample stations as per Title 8 section 5189(j);
- Review requirements for taking samples at the sample station including personal protective equipment;
- Review management of change procedures and conduct a management of organizational change for startup and shutdown of the unit;
- Provide refresher training to all operators at the unit.

"Cal/OSHA's investigation continues into the incident," Monterroza said Friday.

Tesoro did not respond to questioning as of presstime Monday.

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The Martinez refinery has 700 full-time workers according to the Tesoro website and can produce 160,000 barrels per day making it the second largest refinery in Northern California. Tesoro has operated the refinery since 2002.

**Section:** General News

**Index Terms:** Cal/OSHA, Division of Occupational Safety and Health, Erika Monterroza, Golden Eagle, Martinez, Martinez refinery, OSHA, refinery workers hurt, Tesoro, U.S. Chemical Safety Board, United Steelworkers

**Record Number:** cf6540cd76d9bf438f3f55a934813cc164dfed9

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**Chemical Safety Board criticizes Tesoro****San Antonio Express-News (TX) - Thursday, February 27, 2014****Readability:** >12 grade level (Lexile: 1390L)**Author:** Vicki Vaughan

In a sharply worded letter to Tesoro Corp.'s chief executive Wednesday, the U.S. Chemical Safety Board blasted the company for denying access to its investigators following a Feb. 12 accident at the company's Martinez, Calif., plant.

The barring of safety board officials "creates a real concern that Tesoro may be trying to withhold other facts and issues from the agency," the letter said.

The letter was addressed to Tesoro CEO Gregory Goff and signed by safety board Chairman Rafael Moure-Eraso and board members Mark Griffon and Beth Rosenberg.

A Tesoro spokesperson did not respond to an interview request by deadline.

Agency officials said they wanted to "unanimously express our disappointment" that locally based Tesoro refused to allow its investigators to re-enter an area of the refinery where a pipe burst and sprayed sulfuric acid on two workers. The workers were airlifted to a hospital, treated for burns and released later that day.

The agency's investigators were able to enter the plant the day after the accident, but were denied access when they asked to return, safety board officials said on Feb. 20.

In denying access, a Tesoro official said at the time that the incident was a "minor chemical release," and that the federal agency "is not charged with investigating a personal safety incident that did not result in serious injuries or substantial property damage."

The safety board said in its letter to Goff that it has legal grounds for pursuing its inquiries. The release of acid that injured the workers "absolutely constitute serious injuries," the agency said.

Even if no injuries had occurred, the board said has the authority to conduct hazard studies. The safety board has subpoenaed Tesoro for documents about the unit at the Martinez plant.

In Wednesday's letter, the agency said Tesoro indicated it will not comply "with the subpoena and other document requests," a stance that is "contrary to the federal statute that governs access and cooperation by companies" for incidents the board is investigating.

Safety board managing director Daniel Horowitz said Wednesday that Tesoro indicated in recent discussions it might challenge the subpoena over the serious injury issue, but the company stopped short of saying it would resist.

"At the same time, there is not an agreement right now on prompt site access, witnesses, documents," Horowitz said.

Last month, Tesoro was sharply criticized by the safety board in its report on a fire and explosion that occurred in April 2010 at the company's Anacortes, Wash., refinery in which seven workers were killed. The agency's draft report, released Jan. 30, portrayed Tesoro's safety culture as deficient. The agency reiterated that opinion in the letter, saying its Anacortes investigation "found a multitude of shortcomings in Tesoro's plant safety culture."

The agency said it wants to examine "safety culture issues stemming from the Feb. 12 incident" at Tesoro's Martinez plant. It urged Tesoro to "reverse course" and cooperate with its investigation.

vvaughan@express-news.net

San Francisco Chronicle archives contributed to this report.

**Chemical Board reacts to Tesoro incident****Martinez News-Gazette (CA)** - Tuesday, March 4, 2014**Readability:** >12 grade level (Lexile: 1570L)**Author:** admin

EDITOR'S NOTE: The following letter is from U.S. Chemical Safety Board (CSB) members to the president of Tesoro.

Dear Mr. Goff:

The undersigned members of the U.S. Chemical Safety Board (CSB) write to you today to unanimously express our disappointment in Tesoro's recent actions blocking this agency from performing its congressionally-mandated duties in investigating the Feb. 12, 2014, sulfuric acid release and resulting serious injuries at your refinery in Martinez, Calif.

The actions taken by your company's refinery management in consultation with your legal counsel, refusing to permit the CSB to return to the site, refusing to preserve the site, prohibiting the conduct of certain interviews, and indicating that you will not comply with a duly issued document subpoena and other document requests, are contrary to the federal statute that governs access and cooperation by companies where an incident has occurred that is under investigation by the CSB.

Your counsel has presented to us and to the public the inaccurate claim that less than serious injuries occurred to two workers, who suffered first and second degree chemical burns when their bodies were sprayed with sulfuric acid while putting a sampling station back in service in the sulfuric acid alkylation unit. Your company's contention is that the CSB does not have jurisdiction in this matter.

A sulfuric acid release is a serious chemical process safety incident subject to CSB investigative jurisdiction.

We point out that our investigation team has determined already that approximately five gallons a minute was leaking until isolated. Acid splashing on workers' unprotected faces or other parts of the body, resulting in first and second-degree burns requiring air evacuations to a hospital burn unit, treatment, and subsequent significant lost time at work, absolutely constitute serious injuries.

However, even if no injuries had occurred, the CSB governing statutes provide authority for the agency to conduct hazard studies; the agency has for over a year been gathering information from numerous refineries with the intent of producing such a report.

Therefore any serious accident – such as a significant sulfuric acid leak – falls under CSB jurisdiction.

The action taken by Tesoro in preventing lawfully authorized CSB investigators from performing their official duties calls into question why Tesoro has taken this unprecedented action. It creates a real concern that Tesoro may be trying to withhold other facts and issues from the agency.

Our draft report on the 2010 accident at Tesoro's Anacortes refinery which killed seven workers on Jan. 30, 2014, found a multitude of shortcomings in Tesoro's plant safety culture. The CSB is interested in examining safety culture issues stemming from the Feb. 12 incident, providing another legal ground for our inquiry.

At the Martinez facility, despite your counsel's efforts to block our access, we have proceeded in our investigation and have determined that a mechanical integrity failure occurred on equipment connected to a 100,000 gallon process vessel containing flammable hydrocarbons and concentrated sulfuric acid, resulting in the sprayed acid, and that operators being sprayed by acid and caustic during routine sampling activities is a common occurrence.

We have also learned that protective equipment required by procedure for sampling was not provided for the workers at the time – operators did not have ready access to face shields and acid suit jackets at the Martinez facility.

Furthermore, some workers have made the assertion to us and to their union representatives that they have been fearful





## APPENDIX G1: RESPONSE TO COMMENTS

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for their jobs at times when they wished to express safety concerns. We therefore seek further access and renewed cooperation with your company in order to determine all the facts. 29.

We hasten to point out that the CSB is not a regulatory agency and does not issue fines or penalties, nor do we assess any individual blame for incidents. We look for root causes – to be shared with the workforce, the public and the industry in the interests of accident prevention.

Our independent, high-quality reports and safety videos have been recognized and respected over the years for their important contributions to safety. We are dismayed that Tesoro would not stand in support of furthering this vital mission.

The Chemical Safety Board strongly requests that, under your leadership, Tesoro reverse course, recognize its error, and cooperate with the lawfully authorized CSB investigation.

Yours Sincerely,

Dr. Rafael Moure-Eraso, Chairman and Board Member; Mark Griffon, Board Member; Dr. Beth Rosenberg, Board Member

**Section:** Letters to the Editor

**Index Terms:** Dr. Beth Rosenberg, Dr. Rafael Moure-Eraso, Golden Eagle refinery, Mark Griffon, Martinez, refinery accident, Tesoro, Tesoro refinery, U.S. Chemical Safety Board

**Record Number:** dd25e16da621c7a1d88e82841ef6dd03e8379fe  
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30.

**Access World News****Commentary - United Steelworkers say refinery strike is about safety***Long Beach Press-Telegram (CA) - March 8, 2015**Author/Byline: Jorge Cabrera and Barbara Rahke Section: Opinion Page: 17 Readability: >12 grade level (Lexile: 1450)*

A strike against the U.S. oil refinery industry by nearly 7,000 members of the United Steelworkers is now entering its second month. Two facilities in California are affected — one in Carson, one in Martinez — both owned by the Tesoro refining company.

What's this conflict about?

Safety, say the steelworkers. Oil companies are not hiring enough people and overscheduling their existing staff, resulting in fatigue that can lead to serious problems.

Not so fast, says the oil industry. Don Romasko, the CEO of Motiva — a joint venture of Shell Oil and Saudi Refining — sent a memo to employees in February claiming that the union's primary concern is not safety or fatigue, but replacement of "routine maintenance contractors with USW-represented employees."

Safety and staffing, however, are two sides of the same coin. Working in the oil and gas industry, according to federal safety statistics, is one of the most dangerous jobs in the country, with more than 800 deaths between 2003 and 2010. That's seven times more dangerous than other U.S. industries.

Our organizations — the Southern California Coalition for Occupational Safety and Health (COSH) and National COSH — advocate for effective measures to prevent injuries, illnesses and fatalities in workplaces in California and across the country. To maintain a safe workplace, best practices require an experienced, permanent staff with detailed knowledge of safety protocols to keep complex equipment running properly. A rotating cast of temporary workers can't provide the same measure of security.

An oil refinery is not an oil change shop. A typical U.S. refinery processes a million gallons of flammable and explosive liquids every day, moving through a maze of piping and equipment at high pressure and high temperatures. It's a potentially dangerous environment with catastrophic consequences if failures occur.

It's a lesson that was learned the hard way at an Exxon refinery in Beaumont, Texas, in 2013. A fatal fire broke out at the facility after an inexperienced contracting firm, new to the job, used a torch to open stuck bolts on a piece of equipment still filled with hydrocarbons. Two workers were killed and 10 others injured.

It's not just workers who are risk when these tragedies occur. Entire communities can suffer, since refineries and chemical plants are often located in densely populated urban areas. A release of oil or toxic chemicals can render an entire neighborhood uninhabitable for days, with lasting health effects from chemical exposure.

The oil refinery strike is taking place as steelworkers negotiate a master agreement covering the entire industry. They're pushing hard on safety issues because potentially dangerous situations are not rare events. Once every eight days, a serious fire, explosion or toxic release takes place at a U.S. refinery.

"A big part of this strike is that none of us wants to be the next person to lose his life for no good reason," says USW member Butch Cleve, currently on the picket line at a Tesoro refinery in Anacortes, Wash. Five years ago,

## APPENDIX G1: RESPONSE TO COMMENTS

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5/2/16, 10:47 AM

31.

Cleve was walking inside the plant, not outside of it, consoling co-workers after seven people died in an explosion there in April 2010. The incident was caused by the failure of a 40-year old piece of equipment called a heat exchanger, which had not been replaced despite repeated warnings.

In 2005, 15 workers died following an explosion at one of the Texas City refineries where workers are now on strike. (The plant was owned by BP at the time, but has since been purchased by Marathon.) An investigation by the U.S. Chemical Safety Board found that three key operators had been working 12-hour shifts, seven days in a row, for weeks at a time.

Excessive work hours can be extremely hazardous. That's why the U.S. government sets limits on hours worked for truck drivers, rail engineers and airline pilots. But there are no mandatory limits on work hours for refinery workers. The American Petroleum Institute has recommended voluntary restrictions, but even these weak rules are not always followed. The steelworkers report that many refineries routinely assign workers 12-hour shifts, seven days in row, for nearly a month at a time.

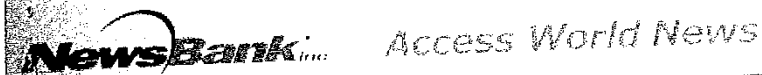
Without enforceable regulations, collective bargaining is the only way to set reasonable limits on work schedules. People who handle hazardous chemicals for a living know that one mistake can be tragic. Steelworkers are walking picket lines outside their workplaces so that when they go back inside, the right people will be on the job — with the right training and enough rest — to do their work as safely as possible.

Jorge Cabrera is coordinator and project leader of the Southern California Coalition for Occupational Safety and Health (SoCalCosh). Barbara Rahke is board chair of the National Council for National COSH and executive director of the Philadelphia Project on Occupational Safety and Health (PhilaPOSH).

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## SECOND TESORO SPILL INJURES TWO WORKERS - Contract workers suffer acid burns; feds say company downplayed February incident

Contra Costa Times (Walnut Creek, CA) - Tuesday, March 11, 2014

Readability: >12 grade level (Lexile: 1350L)

Author: Robert Rogers and Natalie Neysa Alund STAFF WRITERS

**Abstract:** Contract workers suffer acid burns; feds say company downplayed February incident

MARTINEZ -- As Tesoro's Golden Eagle refinery dealt with the second acid spill in less than a month that required hospital treatment for workers, federal chemical safety officials said late Monday that the company had misrepresented to the public the extent of last month's incident.

The U.S. Chemical Safety Board said in a written statement that an "eye-opening" Tesoro document indicates that the Feb. 12 mishap resulted in the release of 84,000 pounds of sulfuric acid -- "hardly the minor release that Tesoro has been describing to the public."

The CSB said it was sending an investigator to probe Monday's spill. The agency said earlier Monday that it had regained access to the refinery near Martinez last week after Tesoro had prevented its investigators from returning to the site of the Feb. 12 incident.

Two employees were treated at a hospital Monday morning after they were exposed to sulfuric acid, Contra Costa County Hazardous Materials specialist Maria Duazo said.

Refinery officials contacted the agency at 10:49 a.m. and reported that two contract employees suffered sulfuric acid burns, she said. The workers, she added, both wore protective clothing.

Fire crews responded to the refinery, and the workers were taken by ambulance to John Muir Medical Center in Walnut Creek for serious but not life-threatening injuries.

The state's worker safety regulatory agency, Cal/OSHA, was also responding to the scene Monday, agency spokesman Peter Melton said. It issued an order for Tesoro to preserve the site of the accident.

Tesoro spokeswoman Tina Barbee wrote in an email Monday that the workers "were exposed to a chemical at a unit during planned maintenance activities."

Barbee wrote that the workers were wearing protective safety equipment and were decontaminated in a shower before being taken to the hospital, and that one has since been released.

The incident comes less than a month after two other workers were burned with sulfuric acid in the alkylation unit.

"The cause of (Monday's) incident is under investigation and is believed to be unrelated to the chemical release that occurred on Feb. 12," Barbee wrote. Tesoro also disagreed with the CSB's assertion that the company misrepresented the scope of February's chemical release. "... (T)he release was contained in a process sewer, which is part of the system's design," Barbee wrote. "The amount of SO<sub>2</sub> released to the environment was classified as minor according to regulatory requirements."

Cal/OSHA shut down the unit from Feb. 18 to Feb. 28 while it investigated the Feb. 12 incident. Late last month, federal chemical safety officials sent a sharply worded letter to Tesoro CEO Gregory Goff alleging that company officials violated federal law in blocking investigators from the site of the Feb. 12 accident.

## APPENDIX G1: RESPONSE TO COMMENTS

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Three U.S. Chemical Safety Board investigators showed up a day after the incident and initially gained access, but Tesoro's lawyers raised "jurisdictional challenges" and forced the investigators to leave, said Dan Horowitz, the CSB's managing director. 33.

Horowitz wrote in an email Monday that CSB investigators had gained access to the facility last week.

Investigators "made progress," Horowitz wrote. "Tesoro has been cooperating to some extent."

In the statement released Monday, the Chemical Safety Board said Tesoro had yet to provide some of the key documents it is seeking, including a recent survey of safety culture. In addition, the CSB said evidence at the site had not been preserved.

The two workers who suffered injuries in the acid spill at the refinery last month were flown to UC Davis Medical Center and treated for first- and second-degree burns and released, according to a hospital spokeswoman.

In a prepared statement released Feb. 21, Tesoro spokeswoman Melissa Flynn said the company was "surprised" that CSB intended to investigate the incident, which she said resulted in "minor chemical burns" to two employees.

Federal law gives the CSB power to investigate "any accidental release resulting in a fatality, serious injury or substantial property damages," according to the legislative code that appears on the agency's website.

Contact Robert Rogers at 510-262-2726.

**Caption:** PHOTO: The Tesoro Golden Eagle Refinery near Martinez was the site of a sulfuric acid spill that injured workers in February and again on Monday. Two employees were treated at a hospital Monday morning, according to county officials. (Jose Carlos Fajardo/ STAFF)

**Section:** News

**Page:** 1B

**Record Number:** 2019477

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34.

**Oakland Tribune editorial: Consider shutdown if Tesoro Refinery doesn't change attitude**

**Oakland Tribune, The (CA) - Tuesday, March 11, 2014**

**Readability:** 11-12 grade level (Lexile: 1260L)

**Author:** Oakland Tribune editorial &#169; 2014 Bay Area News Group

Managers of Tesoro's refinery near Martinez must start demonstrating that they put safety before profits or regulators should start considering steps to shut it down.

Monday's acid spill was the second in less than a month, each involving the same unit and same chemical, and each sending two workers to the hospital. After the first incident, Tesoro stonewalled, blocking U.S. Chemical Safety Board investigators from accessing the refinery.

During the legal standoff, the company altered the accident site rather than preserving the evidence. When investigators finally gained some cooperation, they found out that the release was not the minor incident Tesoro had portrayed but rather involved an estimated 84,000 pounds of sulfuric acid.

Time after time, public figures, be it politicians or major companies, compound their errors by covering up rather than coming clean and working to resolve systemic problems. The more Tesoro digs in, the more the community rightly questions its safety culture.

The plant, under different ownership, was the site of a 1999 accident that killed four workers. Under Tesoro ownership in just one year, 2012, significant incidents included two fires, a sulfuric acid release, a vapor release and an unspecified leak, according to the safety board.

Meanwhile, at Tesoro's Anacortes, Wash., refinery, a 2010 fatal explosion and fire resulted from what the safety board called a "complacent" attitude toward flammable leaks and occasional fires. The board found Tesoro had failed to correct a history of hazardous conditions.

This community must not stand for that here.

Sure, a shutdown would hurt not only the local job market but also increase gas prices, albeit only a small amount, probably no more than a dime a gallon. But a major incident would have its own serious economic consequences.

Moreover, the money pales in comparison to the threat to worker safety, the environment and the health of surrounding residents and employees posed by a company that seems to recklessly dismiss safety.

Most in the industry recognize a "trust us" approach no longer cuts it. Chevron understood that after the 2012 explosion at its Richmond refinery that nearly killed 19 workers, spewed tons of pollutant-laced black smoke into the air for hours, sent 15,000 surrounding residents seeking medical attention and hospitalized about 20.

The public needs outside oversight to protect it. That's why the Chemical Safety Board has clear authority to investigate such accidents and find ways to ensure they don't happen again.

That's why Tesoro's stonewalling is so appalling. The company has yet to fully cooperate with the federal agency's investigation of the last release. If it doesn't immediately change its attitude, tougher action is needed.

**Caption:** [Photo: The Golden Eagle refinery owned by Tesoro just east of Martinez, Calif. \(Staff archives\)](#)

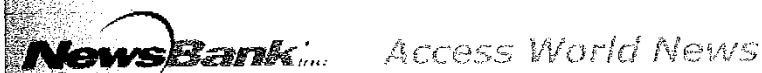
**Section:** My Town

**Index Terms:** Opinion

**Record Number:** 25320040

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35.

## Tesoro bashed for dropping worker-safety programs at Contra Costa refinery where acid spills occurred

Contra Costa Times (Walnut Creek, CA) - Wednesday, March 12, 2014

*Readability: >12 grade level (Lexile: 1520L)*

*Author: Robert Rogers Contra Costa Times*

MARTINEZ -- Political and labor leaders ripped Tesoro on Tuesday for backing out of two volunteer worker-safety programs in 2012 as scrutiny of the company grew in the wake of two acid spills in less than a month that sent workers from its Golden Eagle oil refinery to the hospital.

Tracy Scott, a representative of United Steelworkers Local 5, said Tuesday that Tesoro management opted out of the union-driven Triangle of Prevention safety program and the Voluntary Protection Program, a cooperative program among management, workers and Cal/OSHA, the state workplace safety agency, designed to prevent and control occupational hazards.

"We believe pulling out of (the programs) was a mistake," Scott said. "Other refineries we represent have these multilayered programs in place and embrace them, whereas Tesoro is decidedly against them."

Rep. George Miller, D-Martinez, also slammed Tesoro for ditching the Triangle of Prevention program in a news release Tuesday, noting that the program remains in place at other Tesoro refineries in California and Washington.

"Tesoro should reinstate its successful labor-management safety program ... that it has regrettably terminated," Miller said in the release.

As part of the program, the local refinery union appoints a representative who coordinates and participates in on-site training, organizes incident and near-miss investigation teams, takes part in the investigation process and communicates results of investigations and the status of recommendations to the refinery community. VPP includes regular on-site evaluations and is overseen by Cal/OSHA, which works with labor and management to "systematically identify and correct hazards," according to Cal/OSHA's website.

Tesoro, which previously came under fire for refusing to allow officials from the U.S. Chemical Safety Board on site to investigate the Feb. 12 accident before relenting last week, defended its safety record at Golden Eagle, saying 2013 was the safest on record at the refinery near Martinez, with the equivalent of three recordable injuries in approximately 3.5 million working hours. The refinery has about 700 full-time workers.

"Our Golden Eagle refinery has more than 10 represented health and safety workers, which is a robust group, and employee engagement remains an integral part of our safety and incident investigation process," spokeswoman Tina Barbee wrote in an email.

Barbee also said the refinery had dropped the Triangle of Prevention program because of "inherent shortcomings" and had replaced it with something more comprehensive.

Asked about the shortcomings of the program, Barbee wrote, "We believe our current system has better root cause analysis during incident investigation than the TOP program."

Barbee said safety indicators in Tesoro's performance review made it technically ineligible to participate in the Voluntary Participation Program.

But Scott said workers see the situation differently. He said an internal survey of workers at the refinery last year revealed "a significant disconnect between management and hourly (workers) in their beliefs about the refinery's safety."

"The survey was to ascertain how people felt about certain things, including safety," Scott said. "Management gave a glowing report, while employees who deal directly with the work in the refinery had an opinion that was considerably deteriorated from the last survey in 2007."

Scott added that workers are concerned with the refinery's widespread use of "leak seal repairs," which bolster failing pipes with wraps consisting of Fiberglas and durable resins.

The rapid succession of two incidents involving acid burns has drawn harsh spotlight onto the refinery, which, according to Tesoro's website, is the second-largest in Northern California.

Two contract employees of Brinderson, a refinery contractor in Benicia, were treated at a hospital Monday morning after they were exposed to sulfuric acid, according to county health officials and Cal/OSHA spokesman Peter Melton. The workers, who were wearing protective clothing, were taken by ambulance to a hospital for injuries and released later that night.

Monday's spill occurred while the workers were trying to remove a damaged pipe, according to Contra Costa County Hazardous Materials Division Director Randy Sawyer.

An official who answered the phone at Brinderson said the company would have no comment.

Two refinery employees, who reportedly were not wearing protective clothing, were burned with sulfuric acid in the same alkylation unit on Feb. 12 in a mishap that resulted in the release of an estimated 84,000 pounds of sulfuric acid, according to the Chemical Safety Board, which accused Tesoro in a statement on Monday of publicly downplaying the scope of that release. After that incident, Cal/OSHA shut down the unit from Feb. 18 to Feb. 28 while it investigated.

"... based on what we have learned so far, there is a troubling trend of degraded safety conditions, and a loss of confidence by employees that the refinery's management will adequately maintain equipment and piping," Miller said in his statement.

Contra Costa County Supervisor John Gioia, of Richmond, also stepped up pressure on Tesoro.

"This raises a very serious red flag that there is a safety culture issue at the refinery," Gioia said.

In an email Monday night, Barbee disputed the Chemical Safety Board's claim that Tesoro had misrepresented the scope of the Feb. 12 spill, saying "the release was contained in a process sewer, which is part of the system's design."

But on Tuesday, Sawyer of the county's Hazardous Materials Division disputed any classification of the incidents as "minor."

"Any time you have workers burned I consider it serious," Sawyer said.

Contact Robert Rogers at 510-262-2726 or rrogers@bayareanewsgroup.com. Follow him at Twitter.com/SFBaynewsrogers.

**Caption:** Photo: A guard stands in front of the main entrance of the Tesoro Golden Eagle Refinery in Pacheco, Calif., on Monday, March 10, 2014. For the second time in less than a month, workers have suffered injuries in an acid spill. The two employees were being treated at a local hospital Monday morning after they were exposed to sulfuric acid. Contra Costa County Hazardous Materials specialist Maria Duazo said. (Jose Carlos Fajardo/Bay Area News Group)

**Section:** Breaking

**Index Terms:** My Town ; Western Contra Costa ; Contra Costa ; News ; Local

**Record Number:** 25323204

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### Tesoro dispute resonates locally

Columbian, The (Vancouver, WA) - Monday, March 31, 2014

*Readability: 10-12 grade level (Lexile: 1190L)*

*Author: Eric Florip Columbian staff writer*

From the start, the proposed oil terminal at the Port of Vancouver generated heated debate over what such a facility would mean for the community.

But in recent weeks, the local conversation has also been shaped by an incident hundreds of miles from Vancouver.

Opponents of the terminal have pointed to a Tesoro Corp.-owned oil refinery in Martinez, Calif., that saw a chemical release burn two workers on Feb. 12. The severity of those burns has been disputed, and the U.S. Chemical Safety Board alleges Tesoro blocked the agency from fully investigating the incident, at one point barring inspectors from entering the facility.

Tesoro is one of the companies behind the proposed oil terminal in Vancouver.

During a recent swing through Vancouver, Tesoro officials adamantly denied hindering the CSB's investigation — despite a letter from the agency directly contradicting Tesoro's account of what happened. In it, the CSB's three members blasted Tesoro for downplaying the seriousness of the workers' injuries, and for preventing the CSB from performing its federally mandated duties.

Tesoro officials say that's not true.

"We deeply respect all of our regulators," Keith Casey, Tesoro's senior vice president of strategy and business development, told The Columbian last week. "We have fully cooperated with all of our regulators, and we never barred the CSB from that facility."

#### Dueling accounts

The dueling claims present very different versions of the same incident at a time when Tesoro's credibility and safety record are being questioned in Vancouver and elsewhere.

"You either believe Tesoro or you believe this independent group," said Dan Serres, conservation director for advocacy group Columbia Riverkeeper. "And it's pretty clear that Tesoro is understating the impact to workers in this incident."

Tesoro Corp. and Savage Companies want to build an oil terminal capable of handling as much as 380,000 barrels of crude per day. Oil would arrive by rail from North Dakota, then leave by marine vessels on its way to U.S. refineries. The Vancouver terminal would be the largest such facility in the Northwest.

Port of Vancouver commissioners have already approved a lease with the Tesoro-Savage joint venture. But some other local leaders have been skeptical of the plan. A majority of Vancouver City Council members say they oppose the oil terminal.

In announcing his opposition earlier this month, Councilor Jack Burkman directly cited the California incident among his reasons. He noted the apparent disconnect between how Tesoro characterized the incident and how federal regulators described it.

"Actions often speak much louder than words," Burkman said at a March 17 council meeting. "These actions yell at me."

Many critics have also cited a 2010 explosion at a Tesoro refinery in Anacortes that killed seven people.

In the California incident, Tesoro described workers' burns as "minor." But the CSB letter said the workers suffered first- and second-degree burns after they were "sprayed" by sulfuric acid at the refinery. A CSB representative reportedly later said that 84,000 pounds of acid was released in the incident.

Tesoro doesn't dispute that number. But almost all of that acid went into a drain designed to catch it in the event of a chemical release, said Brian Sullivan, Tesoro vice president of corporate affairs.

The CSB letter also alleges that the workers were not provided with the proper protective equipment at the time — a claim Tesoro flatly denies.

"That's just not true," Sullivan said.

The CSB is an independent federal agency charged with investigating industrial chemical accidents. It does not issue citations or fines, but it does make recommendations.

Sullivan noted that Tesoro works with more regulators than just the CSB at its facilities. The Martinez refinery, for example, also falls under the jurisdiction of local and state regulators, including the California Division of Occupational Safety and Health, he said. Tesoro maintains it has fully cooperated with those agencies, including the CSB.

The CSB's letter makes it clear that the agency feels otherwise. Sullivan said the company is disappointed that the dispute has played out publicly in the media, rather than directly between the two parties. More than a month after it was sent, the CSB letter remains prominently posted on the agency's website.

Tesoro executives have said it's premature to judge the proposal until its review — now in the hands of the state Energy Facility Site Evaluation Council — fully plays out. But Burkman and others so far haven't been pleased with what they've heard.

"The more I have learned about the proposed oil terminal and the related shipment of oil by rail, the more concerned I have become," Burkman said earlier this month.

Eric Florip: 360-735-4541; eric.florip@columbian.com; twitter.com/col\_enviro.

**Caption:** Troy Wayrynen/The Columbian Oil tank cars move through a rail yard in Vancouver. An oil terminal proposed at the Port of Vancouver has generated controversy.

**Section:** Metro

**Page:** A1

**Index Terms:** COAL AND OIL ; VANCOUVER ; WEST VANCOUVER

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**Access World News**

39.

**Commentary - United Steelworkers say refinery strike is about safety**

*Long Beach Press-Telegram (CA) - March 8, 2015*

**Author/Byline:** *Jorge Cabrera and Barbara Rahke* **Section:** *Opinion* **Page:** *17* **Readability:** *>12 grade level (Lexile: 1450)*

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## APPENDIX G1: RESPONSE TO COMMENTS

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**Response to Comment Letter No. G1-91**

**Peter Rosenwald**

**Comment G1-91.1**

SECTION I.

At the May 17, 2016 meeting at the Carson Community Center a Public Hearing on Title V Significant Revisions \*\*\*and\*\*\* Public Meeting on the (EIR), I made statements about how Tesoro operates its business practices. My comments were in the minority, as Tesoro employees and community supporters dominated the testimony. Their comment was, without reservation, the importance of the Refining and Marketing Company to the community. Pro Tesoro comment included their status as an outstanding employer, community benefactor, positive contributor to employment with high paying jobs, and educational booster.

My comments discussed the company's poor safety culture, intimidation of workers, compromised employee relations, and how Tesoro's business practices were contrary to good business practices reflected by almost all other oil companies. These facts were in complete contrast to the positive testimony in the first paragraph.

G1-91.1

G1-91.1  
cont'd.

**Response G1-91.1**

The comment does not raise any issues related to the proposed project or the DEIR. Therefore, no further response is necessary under CEQA.

The comment refers to the commenter's testimony provided at the May 17, 2016 public hearing on the Title V permit and public meeting on the DEIR. Responses to comments made at the May 17, 2016 hearing and meeting are provided in Appendix G2. Appendix G2, Responses G2-72 through G2-75 address comments provided by Mr. Rosenwald.

**Comment G1-91.2**

I have based my opinion on the contents of newspaper articles in SECTION III.

Here are examples which substantiate the company's operations and culture from four newspaper articles.

1.) "Chemical Safety Board Criticizes Tesoro," San Antonio (Texas) EXPRESS-NEWS, February 27, 2014.

The article describes a poor safety culture extending back to 2010 when 7 workers were killed at the Anacortes (Washington) refinery; in 2014 two contract workers were splashed with acid; after allowing the United States Chemical Safety Board (CSB) in the first day, the company refused any cooperation or access to their refinery in Martinez, California. (Do they think they are above the law?) The head of the CSB and members even wrote an open, op-ed letter to the Martinez NEWS-GAZETTE,

2.) In a February, 2014 Contra Costa TIMES newspaper article the CSB's managing director, Dan Horowitz stated:

We certainly faced our share of jurisdictional challenges, but I can't think of another refinery that has taken a position that injuries aren't serious enough for us to investigate, and that we lack jurisdiction.

3.) "Refinery won't let feds in to inspect," San Francisco CHRONICLE, February 21, 2014.

In this article it was stated in a Cal/OSHA report that operators told investigators they were afraid to operate the alkylation unit, that they signed operational change sheets, under duress, and that Tesoro was not running the unit as it was designed to run . . .

4.) The Long Beach PRESS-TELEGRAM reported in March, 2015 that the strike against the U.S. oil refinery industry was all about safety.

G1-91.2

SECTION II.

A letter, RE: OPPOSITION TO THE TESORO REFINERY EXPANSION, dated, May 16, 2016 to Julia May by Anthony Patchett, Esq. describes the background and rationale for Tesoro's EIR request, how it is faulted, and even how permitting its approval will have effects on a local environmental travesty: Rancho Liquid Petroleum Gas Holdings, LLP in San Pedro.

SECTION III.

A May 3, 2016 letter from me to the Long Beach City Council requests the City to refuse a \$20,000 grant supporting its Neighborhood Leadership Program.

An e-Mail continues, referring to a message which I also delivered describing:

Tesoro:

\*\*\* Attempting to buy influence by awarding the grant, so that their expansion activities and polluting operations would be viewed favorably;

\*\*\* That the company could not be trusted (See SECTIONS I and II), as it had a poor reputation in safety practices and refinery operations;  
\*\*\* That Mr. Ken Dami, Southern California Director of Government and Public Affairs, and a subordinate in his office, had promised me a reply on the company's position on the February, 2014 Martinez refinery accident, which was greeted with silence. This demonstrated to me that Tesoro does not operate in a reputable manner. (Also, tries to present a positive image from its donations while engaging in environmental rule influence and modification (the EIR). Approving the EIR would give them operations which will cause deleterious effects to the public both living in the Los Angeles Basin, and also close to their facilities.

G1-91.2  
cont'd.

**Response G1-91.2**

The comment does not raise any issues related to the proposed project or the DEIR. Therefore, no further response is necessary under CEQA.

The comment expresses opinions based on the contents of newspaper articles in Sections II and III of the comment letter. None of the statements in the comment pertain to the proposed project or the DEIR. The comments are noted and no response is necessary. However, Tesoro provided the SCAQMD the following information that is responsive to some of the claims.

The comment specifically identifies several newspaper articles:

- 1-3. Various newspaper articles including February 27, 2014 San Antonio [Texas] Express-News, February 21, 2014 San Francisco Chronicle, and February 21, 2014 Contra Costa Times. These articles describe an incident at the Tesoro Martinez, California Refinery that occurred in 2014 including subsequent alleged actions by the Martinez Refinery operators relative to the United States Chemical Safety Board (CSB) and an accident at the Tesoro Anacortes, Washington Refinery that occurred in 2010.

Regarding the acid release at the Martinez Refinery's Alkylation Unit in February 2014, Tesoro reports that it notified Cal/OSHA immediately after the event occurred and reports that it worked with Cal/OSHA on a daily basis to take recommended actions. Cal/OSHA employs an investigation team of highly trained and highly regarded experts in the field. Tesoro has expressed its view that the release was immediately and appropriately addressed by Cal/OSHA under its jurisdiction.

According to Tesoro, it did not bar the CSB from entering the Martinez Refinery. Tesoro says it provided information to facilitate and assist the CSB in assessing the incident and making a threshold jurisdictional determination. For the next several days and despite Tesoro's jurisdictional questions, and contrary to CSB's assertion that it was barred from the Martinez Refinery, Tesoro says it allowed the CSB's investigative team to enter the Martinez Refinery, inspect the incident scene and take photographs. According to Tesoro, no restrictions were placed on the amount of time the teams spent at the scene. Tesoro says it also provided documents and space to work at the Martinez Refinery and facilitated interviews of employees with knowledge of the incident, including the incident commander on the night of the incident, the shift supervisor, and an area operations manager. Tesoro asked the CSB to explain its basis for conducting a full investigation into an event of this nature.

Tesoro reports that the CSB findings and recommendations of the Anacortes Refinery incident are based on the incident investigation and do not include a corporate-level assessment. Therefore, the CSB report concerning process safety culture were expressly limited to the Anacortes Refinery and do not apply to any other Tesoro refineries (see CSB Investigation referenced in the comment Footnote 335 at Section 1.2.2, paragraphs 18-19; Section 8.6). The Anacortes Refinery is not related to the proposed project. Additional information regarding the findings/lessons learned from the Anacortes Refinery incident is provided in Response G1-78.234.

Section 3.3.6 of the DEIR describes existing Refinery safety systems at the Tesoro Los Angeles Refinery. As explained in Section 4.3 and Appendix C of the DEIR and Master Response 9, the proposed project has been fully analyzed for hazard impacts based on a worst-case consequence analysis. This includes proposed project equipment, including pipelines and storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising). The DEIR found that hazards associated with the Naphtha Isomerization Unit, new crude oil storage tanks, the SARP, and interconnecting pipelines are potentially significant based on worst-case release scenarios.

The hazard analysis takes a worst-case approach by assuming that the entire contents of a tank or other equipment would rapidly be released, and that no safety measures are implemented that could reduce the severity of an accidental release. It is expected that hazard impacts would be less than analyzed because the Refinery has safety measures in place and specified employees are trained regarding safety measures. Further, the DEIR imposes measures to mitigate hazard impacts (see Section 4.3.3 of the DEIR). Finally, as described in Section 3.3.7 of the DEIR, the Refinery is subject to many laws and regulations that address safety and emergency responses in



the event of an accident. Nonetheless, the DEIR conservatively concluded that hazard impacts would remain significant.

4. March, 2015, Long Beach Press-Telegram. This article claims that a strike against the U.S. oil refinery industry is about safety. Information in the comment does not pertain to the proposed project or the DEIR. Therefore, no further response is necessary under CEQA. See the response to 1, 2, and 3 above for additional information on the analysis of potential safety impacts associated with the proposed project.

The paragraph labeled Section II, references a May 16, 2016 letter to Julia May by Anthony Patchett, Esq. The letter expresses opposition to the “Tesoro Refinery Expansion.” Master Response 6 explains that the volume of available crude oil storage capacity has no bearing on Refinery crude oil processing capacity. The proposed project would not create a new or larger refinery or result in a substantial increase of crude oil throughput capacity. It would further integrate the Refinery's Carson and Wilmington Operations.

Sections 2.7.1.3 and 4.1.2.1 of the FEIR describe the potential 6,000 bbl/day crude oil capacity increase that could be accommodated with the DCU H-100 heater permit revision. The potential impacts of this crude oil capacity increase are fully analyzed in Chapter 4 of the DEIR. Master Response 7 further explains that the proposed project is not an expansion of the Refinery.

The comment, labeled Section III, references a May 3, 2016 letter from this commenter to the Long Beach City Council requesting that it refuse a \$20,000 grant supporting the Neighborhood Leadership Program. Information in the comment does not pertain to the proposed project or the DEIR, no further response is necessary under CEQA.

The comment's claim that approving the DEIR would cause deleterious effects to the public living near the Refinery is not substantiated with facts. As explained in Section 4.2.2.2 of the DEIR, upon completion, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NOx, SOx, PM10, and PM2.5 emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are discussed in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in local overall reductions in GHG emissions, as discussed in Section 5.2 of the DEIR and summarized in Table 5.2-8 (see page 5-26).

As explained in Master Response 3, the DEIR fully analyzed and disclosed the proposed project's potential health impacts from all pollutants. The proposed project's potential cancer and non-cancer human health impacts, including asthma and other respiratory illnesses, were analyzed in the DEIR, and determined to be less than significant. The estimated cancer risk due to the operation of the proposed project was found to be less than the SCAQMD's cancer risk significance threshold of ten in one million (see DEIR Section 4.2.2.5). The non-cancer chronic and acute hazard indices were found to be below the SCAQMD's non-cancer chronic and acute hazard index threshold of 1.0. Therefore, the proposed project is not expected to cause a

significant adverse health impact. Master Response 14 explains the potential localized impacts to the surrounding community.

**Comment G1-91.3**

At the May 17, 2016 Public Meeting and Hearing in Carson, described in SECTION I, the pro Tesoro testimony was from not only Tesoro employees, but also representatives from area: Boys and Girls Clubs, Chambers of Commerce, oil and energy lobbyists, members of a Tesoro sponsored service club, and even a Carson High School teacher whose academic program benefitted from a targeted grant (to name several of some categories represented). While Tesoro sponsors useful programs, the quid-pro-quo nature is definitely suspect This pro testimony needs to be balanced with the few community members (because the hour was late), testimony that was taken up mostly at the end of the meeting. Teachers, environmentalists, and parents gave sometimes emotional statements; a few people wept because of the hardships they had endured living in a polluted area.

G1-91.3

G1-91.3  
cont'd.

**Response G1-91.3**

During the public hearing on the Title V permit and public meeting on the DEIR, the public was invited to speak. Following the SCAQMD's normal procedures for public meetings, people who wished to speak submitted speaker cards and were called to speak in the order that the cards were received.

The comment does not raise any issues related to the proposed project or the DEIR. Therefore, no further response is necessary under CEQA.

**Comment G1-91.4**

The requests for modernizing the refineries and the additional three million barrel increase in crude oil storage will offset almost any improvement in air quality and environmental benefit from giving approval for the EIR.

G1-91.4

**Response G1-91.4**

As described in Response G1-91.2, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NOx, SOx, PM10, and PM2.5 emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are explained in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in overall reductions in GHG emissions, as discussed in Section 5.2 of the DEIR and summarized in Table 5.2-8 (see page 5-26).

As described in Sections 2.7.2.11 and 4.2.2.2.2 of the DEIR, the proposed project includes constructing new and replacement storage tanks that will result in a decrease in transportation emissions with respect to marine vessels that deliver crude oil. The new and replacement storage tanks are proposed to provide sufficient crude oil storage capacity to allow crude oil tankers to offload more quickly at the Wilmington Operations Long Beach Marine Terminal and in one visit to the dock at Marine Terminal 1. This increase in crude oil storage capacity means that marine vessels will spend less time maneuvering or at dock or anchor in the Port because of improved offloading efficiency (i.e., quicker offloading and the elimination of or reduction of demurrage costs and the need for anchorage while waiting for available storage tank space to finish offloading). The DEIR did not take credit for emission reductions from marine vessel operations. However, annual emission reductions from improved marine vessel offloading efficiency were estimated and can be found in Master Response 6. Based on this analysis, daily marine vessel emissions would not increase and annual emissions would be substantially reduced.

**Comment G1-91.5**

Renewable energy development does not seem to be considered in this project. Is Tesoro involved in contributing to the current awareness for research and development of alternative sources of energy? Is this a budgeted item for the company, and one of its goals? I am uncertain of this as I was not able to research this question. If not, is Tesoro actually mitigating its business operations, so as to be deserving as to what they are asking for: increased crude storage and refinery modifications. In a sense Tesoro operates as a “shell” business. For example, the injured workers at the Martinez refinery were ‘contract’ employees.

G1-91.5

**Response G1-91.5**

The comment asks if Tesoro is involved in renewable technology. The comment is outside the scope of the proposed project and, therefore, does not pertain to the environmental analysis in the DEIR. No further response is necessary under CEQA.

**Comment G1-91.6**

Tesoro does not own its own sea crude oil transport vessels. This is another ‘contracted-out’ operation. While Tesoro maintains tanker captains to supervise the contract vessel operation, is this a safe manner to handle the incredibly large increase of crude shipping called for in the EIR?

G1-91.6

**Response G1-91.6**

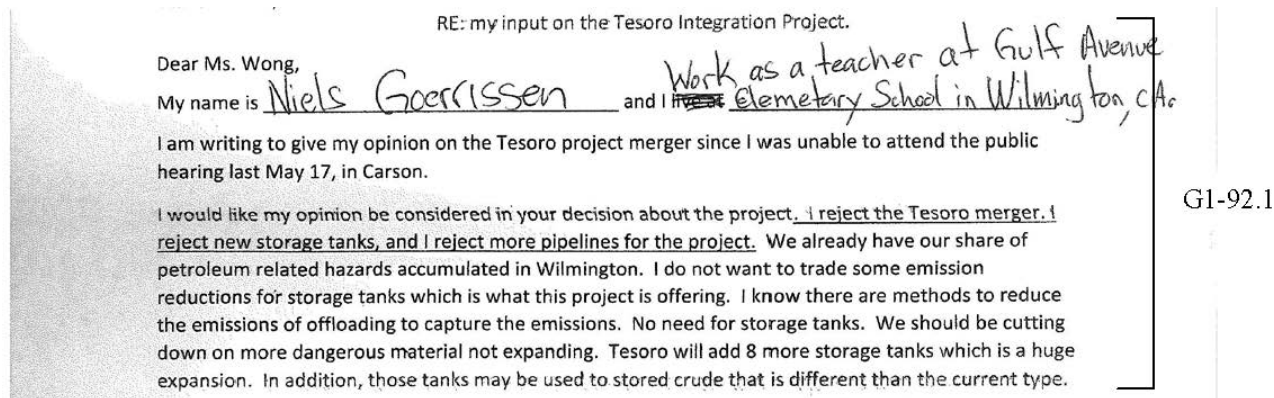
The increase in marine deliveries associated with the proposed project is limited to the 6,000 bbl/day (2.2 million bbl/yr) that was analyzed in the DEIR (see pages 4-26 through 4-29). As explained in Response G1-78.180, the proposed project will improve efficiency associated with marine deliveries of crude oil, thus reducing emissions. The marine vessel operators that transport crude oil specialize in petroleum cargos transport and are well-trained to operate safely. Tesoro reports that it has a very robust vetting program to ensure that petroleum cargo transport is conducted in quality vessels with competent crews operating them. Tesoro subscribes to the Sire Vetting Program which provides access for vessel inspections and crew training and qualification records. The comment does not provide any evidence that the proposed project's continued use of non-Tesoro marine vessels and marine vessel operations will increase hazards.



Response to Comment Letter No. G1-92

Niels Goerrissen

Comment G1-92.1



Response G1-92.1

The comment regarding the rejection of the proposed project does not raise issues related to the proposed project or the DEIR. The comment is noted and no response is necessary under CEQA.

As explained in Master Response 7, the proposed project is not a merger. Tesoro acquired the Carson Operations from BP in 2013. The Carson and Wilmington Operations have already merged. The pre-existing Carson and Wilmington Operations have been operating as one Refinery since the acquisition. As explained in Section 2.1 of the DEIR, the proposed project is designed to better integrate the Carson and Wilmington Operations, which will improve processing efficiency and reduce emissions.

The proposed project includes constructing new and replacement storage tanks, but this component of the proposed project does not increase crude oil capacity at the Refinery. The new and replacement storage tanks are proposed to provide sufficient crude oil storage capacity to allow crude oil tankers to offload more quickly at the Wilmington Operations Long Beach Marine Terminal and in one visit to the dock at Marine Terminal 1. This increase in crude oil storage capacity means that marine vessels will spend less time maneuvering, at dock, and/or at anchor in the Port because of improved offloading efficiency (i.e., quicker offloading and the elimination of or reduction of, demurrage costs and the need for anchorage while waiting for available storage tank space to finish offloading). The DEIR did not take credit for emission reductions from marine vessel operations. However, annual emission reductions from improved marine vessel offloading efficiency were estimated and can be found in Master Response 6. Based on this analysis, daily marine vessel emissions would not increase and annual emissions would be substantially reduced.

With respect to offloading emission control, the new and replacement crude oil storage tanks are connected to the marine terminals, and the marine vessels unload directly into the crude oil

receiving tanks. Because the new and replacement crude oil storage tanks will be permitted and constructed to comply with BACT, there are no associated unloading racks or unloading emissions other than fugitive emissions associated with the piping used to transfer crude oil from the marine terminals. Therefore, offloading emissions will be controlled to the maximum extent possible and there will be no additional, unutilized opportunity to reduce emissions through an offloading capture method.

Master Response 6 explains that the volume of available crude oil storage capacity has no bearing on Refinery crude oil processing capacity. The proposed project would not create a new or larger refinery or result in a substantial increase of crude oil throughput capacity; it would further integrate the Refinery's Carson and Wilmington Operations.

Sections 2.7.1.3 and 4.1.2.1 of the FEIR describe the 6,000 bbl/day potential crude oil capacity increase that could be accommodated with the DCU H-100 heater permit revision. The potential impacts of this crude oil capacity increase are fully analyzed in Chapter 4 of the DEIR. Master Response 7 further explains that the proposed project is not an expansion of the Refinery.

As explained in Master Response 4, the proposed project is not designed to facilitate a crude oil blend switch and the Refinery will not process different crude oil as a result of the proposed project beyond what was analyzed in the DEIR. Thus, because the new and replacement storage tanks are being installed to store crude oil for processing at the Refinery—not for third party sale and use—the tanks likewise will not store crude oil of a different type than that currently being processed at the Refinery. Additionally, as explained in Master Response 9, the DEIR fully analyzes any potential hazard impacts related to the increase in storage tanks.

**Comment G1-92.2**

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

G1-92.2

**Response G1-92.2**

The proposed project has complied with the public process required by CEQA Guidelines § 15087. As explained in detail in Master Response 1, the DEIR was circulated for an extended length of time. The public comment period closed on June 10, 2016, after two extensions. A 94-day public review and comment period (March 8, 2016 through June 10, 2016) was provided, which exceeds CEQA requirements. A public hearing on the Title V permit and public meeting on the DEIR was held on May 17, 2016. Copies of the DEIR were made available in neighborhood public libraries. Notices were published and distributed for the original public comment period, the two extensions, and the public hearing on the Title V permit and public meeting on the DEIR.

In addition, Tesoro independently offered and provided community outreach to over 100 entities including public agencies, community organizations, neighborhood organizations, business associations, and other interested parties to explain the scope of the proposed project and the potential environmental effects of the proposed project. The community meetings were held on April 4, 11, and 14, 2016 in Carson, Wilmington, and Long Beach, respectively. Tesoro has identified that a total of 277 people attended the meetings.

The proposed project has been fully analyzed for potential hazard impacts, including those associated with pipelines, storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising). Section 4.3 of the DEIR found that hazards associated with the Naphtha Isomerization Unit, new crude oil storage tanks, the SARP, and interconnecting pipelines are potentially significant due to hazards associated with worst-case release scenarios. A Worst-Case Consequence Analysis was presented in Appendix C and discussed in Section 4.3 of the DEIR. See Master Response 9 for additional information regarding the hazards analyses of pipelines and storage tanks, including impacts associated with earthquakes.

**Comment G1-92.3**

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-92.3

**Response G1-92.3**

As explained in Response G1-92.2, notice was provided to the community through the mail and in the newspaper. The proposed project was also discussed at public hearings and meetings.

As explained in Section 4.2.2.2 of the DEIR, upon completion, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NOx, SOx, PM10, and PM2.5 emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are described in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in local overall reductions in GHG emissions, as described in Section 5.2 of the DEIR and summarized in Table 5.2-8 (see page 5-26).

As explained in Master Response 3, the DEIR fully analyzed and disclosed the proposed project's potential health impacts from all pollutants. The proposed project's potential cancer and non-cancer human health impacts, including asthma and other respiratory illnesses, were analyzed in the DEIR, and determined to be less than significant. The estimated cancer risk due to the operation of the proposed project was found to be less than the SCAQMD's cancer risk significance threshold of ten in one million (see Section 4.2.2.5 of the DEIR). The non-cancer chronic and acute hazard indices were found to be below the SCAQMD's non-cancer chronic and acute hazard index threshold of 1.0. Therefore, the proposed project is not expected to cause a



## **APPENDIX G1: RESPONSE TO COMMENTS**

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significant adverse health impact. Master Response 14 explains the potential localized impacts to the surrounding community.

Comment Letter No. G1-93

Date 6/4/16

Jillian Wong  
Program Supervisor, CEQA  
AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765

RE: my input on the Tesoro Integration Project.

Dear Ms. Wong,

My name is KISHAN SISTLA and I live at 20432 LEAPWOOD AVE  
APT 9C, CARSON 90746

I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.

I would like my opinion be considered in your decision about the project. I reject the Tesoro merger. I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-93.1

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

G1-93.2

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-93.3

Please add my comment about this project. If possible, I would like to know that you received my comments.

Thank you,

Kishan Sistla

**Response to Comment Letter No. G1-93**

**Kishan Sistla**

**Comment G1-93.1**

Dear Ms. Wong,

My name is

*KISHAN SISTLA* and I live at *20432 LEAPWOOD*

*APT 9C CARSON AVE 90746*

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G1-93.1

**Response G1-93.1**

The comment regarding the rejection of the proposed project does not raise issues related to the proposed project or the DEIR. The comment is noted and no response is necessary under CEQA.

As explained in Master Response 7, the proposed project is not a merger. Tesoro acquired the Carson Operations from BP in 2013. The Carson and Wilmington Operations have already merged. The pre-existing Carson and Wilmington Operations have been operating as one Refinery since the acquisition. As explained in Section 2.1 of the DEIR, the proposed project is designed to better integrate the Carson and Wilmington Operations, which will improve processing efficiency and reduce emissions.

The proposed project includes constructing new and replacement storage tanks, but this component of the proposed project does not increase crude oil capacity at the Refinery. The new and replacement storage tanks are proposed to provide sufficient crude oil storage capacity to allow crude oil tankers to offload more quickly at the Wilmington Operations Long Beach Marine Terminal and in one visit to the dock at Marine Terminal 1. This increase in crude oil storage capacity means that marine vessels will spend less time maneuvering, at dock, and/or at anchor in the Port because of improved offloading efficiency (i.e., quicker offloading and the elimination of or reduction of, demurrage costs and the need for anchorage while waiting for available storage tank space to finish offloading). The DEIR did not take credit for emission reductions from marine vessel operations. However, annual emission reductions from improved marine vessel offloading efficiency were estimated and can be found in Master Response 6. Based on this analysis, daily marine vessel emissions would not increase and annual emissions would be substantially reduced.

With respect to offloading emission control, the new and replacement crude oil storage tanks are connected to the marine terminals, and the marine vessels unload directly into the crude oil

receiving tanks. Because the new and replacement crude oil storage tanks will be permitted and constructed to comply with BACT, there are no associated unloading racks or unloading emissions other than fugitive emissions associated with the piping used to transfer crude oil from the marine terminals. Therefore, offloading emissions will be controlled to the maximum extent possible and there will be no additional, unutilized opportunity to reduce emissions through an offloading capture method.

Master Response 6 explains that the volume of available crude oil storage capacity has no bearing on Refinery crude oil processing capacity. The proposed project would not create a new or larger refinery or result in a substantial increase of crude oil throughput capacity; it would further integrate the Refinery's Carson and Wilmington Operations.

Sections 2.7.1.3 and 4.1.2.1 of the FEIR describe the 6,000 bbl/day potential crude oil capacity increase that could be accommodated with the DCU H-100 heater permit revision. The potential impacts of this crude oil capacity increase are fully analyzed in Chapter 4 of the DEIR. Master Response 7 further explains that the proposed project is not an expansion of the Refinery.

As explained in Master Response 4, the proposed project is not designed to facilitate a crude oil blend switch and the Refinery will not process different crude oil as a result of the proposed project beyond what was analyzed in the DEIR. Thus, because the new and replacement storage tanks are being installed to store crude oil for processing at the Refinery—not for third party sale and use—the tanks likewise will not store crude oil of a different type than that currently being processed at the Refinery. Additionally, as explained in Master Response 9, the DEIR fully analyzes any potential hazard impacts related to the increase in storage tanks.

**Comment G1-93.2**

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

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G1-93.2  
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**Response G1-93.2**

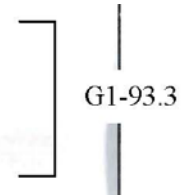
The proposed project has complied with the public process required by CEQA Guidelines § 15087. As explained in detail in Master Response 1, the DEIR was circulated for an extended length of time. The public comment period closed on June 10, 2016, after two extensions. A 94-day public review and comment period (March 8, 2016 through June 10, 2016) was provided, which exceeds CEQA requirements. A public hearing on the Title V permit and public meeting on the DEIR was held on May 17, 2016. Copies of the DEIR were made available in neighborhood public libraries. Notices were published and distributed for the original public comment period, the two extensions, and the public hearing on the Title V permit and public meeting on the DEIR.

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The proposed project has been fully analyzed for potential hazard impacts, including those associated with pipelines, storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising). Section 4.3 of the DEIR found that hazards associated with the Naphtha Isomerization Unit, new crude oil storage tanks, the SARP, and interconnecting pipelines are potentially significant due to hazards associated with worst-case release scenarios. A Worst-Case Consequence Analysis was presented in Appendix C and discussed in Section 4.3 of the DEIR. See Master Response 9 for additional information regarding the hazards analyses of pipelines and storage tanks, including impacts associated with earthquakes.

**Comment G1-93.3**

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.



**Response G1-93.3**

As explained in Response G1-93.2, notice was provided to the community through the mail and in the newspaper. The proposed project was also discussed at public hearings and meetings.

As explained in Section 4.2.2.2 of the DEIR, upon completion, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NOx, SOx, PM10, and PM2.5 emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are described in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in local overall reductions in GHG emissions, as described in Section 5.2 of the DEIR and summarized in Table 5.2-8 (see page 5-26).

As explained in Master Response 3, the DEIR fully analyzed and disclosed the proposed project's potential health impacts from all pollutants. The proposed project's potential cancer and non-cancer human health impacts, including asthma and other respiratory illnesses, were analyzed in the DEIR, and determined to be less than significant. The estimated cancer risk due to the operation of the proposed project was found to be less than the SCAQMD's cancer risk significance threshold of ten in one million (see Section 4.2.2.5 of the DEIR). The non-cancer chronic and acute hazard indices were found to be below the SCAQMD's non-cancer chronic and acute hazard index threshold of 1.0. Therefore, the proposed project is not expected to cause a

**APPENDIX G1: RESPONSE TO COMMENTS**

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significant adverse health impact. Master Response 14 explains the potential localized impacts to the surrounding community.

Comment Letter No. G1-94

June 10, 2016

L Bassett  
344 W. 231 St  
Carson CA  
90745

Jillian Wong  
Program Supervisor, CEQA  
21865 Copley Drive  
Diamond BAR, Ca 91765

Dear Ms. Wong,

Regarding the Tesoro Integration Project, I would like to have you not allow this project to go further. Already, these two companies have merged with no good effect on the community. Further allowing them to increase profits by laying pipe lines and creating massive storage tanks on this earthquake prone area makes no sense to this highly air quality challenged area.

G1-94.1

I would like at the very least more time and more effort on your part, to let the community know this project is about to begin. While campaigning and knocking on doors - no one I spoke to in the Carson area knew that any of this was going on.

G1-94.2

Please consider the air quality of this area and the need to let all know that this project is under consideration

G1-94.3

Yours truly,  
LBassett

**Response to Comment Letter No. G1-94**

**L Bassett**

**Comment G1-94.1**

Regarding the Tesoro Integration Project, I would like to have you not allow this project to go further. Already, these two companies have merged with no good effect on the community. Further allowing them to increase profits by laying pipe lines and creating massive storage tanks on this earthquake prone area makes no sense to this highly air quality challenged area.

G1-94.1

**Response G1-94.1**

The comment regarding opposition to the proposed project does not raise issues related to the proposed project or the DEIR. The comment is noted and no response is necessary under CEQA.

The comment expresses opposition to the proposed project because it involves constructing new pipelines and storage tanks in an earthquake prone area. Section 3.3.6 of the DEIR describes existing Refinery safety systems at the Tesoro Refinery. As explained in Section 4.3 and Appendix C of the DEIR and Master Response 9, the proposed project has been fully analyzed for hazard impacts based on a worst-case consequence analysis. This includes proposed project equipment, including pipelines and storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising). The DEIR found that hazards associated with the Naphtha Isomerization Unit, new crude oil storage tanks, the SARP, and interconnecting pipelines are potentially significant based on worst-case release scenarios. The hazards analyses regarding the potential impact of earthquakes and other natural disasters have been fully analyzed as explained in Master Response 9.

The hazard analysis takes a worst-case approach by assuming that the entire contents of a tank or other equipment would rapidly be released, and that no safety measures are implemented that could reduce the severity of an accidental release. It is expected that hazard impacts would be less than analyzed because the Refinery has safety measures in place and specified employees are trained regarding safety measures. Further, the DEIR imposes measures to mitigate hazard impacts (see Section 4.3.3 of the DEIR). Finally, as described in Section 3.3.7 of the DEIR, the Refinery is subject to many laws and regulations that address safety and emergency responses in



the event of an accident. Nonetheless, the DEIR conservatively concluded that hazard impacts would remain significant.

**Comment G1-94.2**

*I would like at the very least more time and more effort on your part, to let the community know this project is about to begin while campaigning and knocking on doors - no one I spoke to in the Carson area knew that any of this was going on.*

G1-94.2

**Response G1-94.2**

The proposed project has complied with the public process required by CEQA Guidelines § 15087. As explained in detail in Master Response 1, the DEIR was circulated for an extended length of time. The public comment period closed on June 10, 2016, after two extensions. A 94-day public review and comment period (March 8, 2016 through June 10, 2016) was provided, which exceeds CEQA requirements. A public hearing on the Title V permit and public meeting on the DEIR was held on May 17, 2016. Copies of the DEIR were made available in neighborhood public libraries. Notices were published and distributed for the original public comment period, the two extensions, and the public hearing on the Title V permit and public meeting on the DEIR.

In addition, Tesoro independently offered and provided community outreach to over 100 entities including public agencies, community organizations, neighborhood organizations, business associations, and other interested parties to explain the scope of the proposed project and the potential environmental effects of the proposed project. The community meetings were held on April 4, 11, and 14, 2016 in Carson, Wilmington, and Long Beach, respectively. Tesoro has identified that a total of 277 people attended the meetings.

**Comment G1-94.3**

*Please consider the air quality of this area and the need to let all know that this project is under consideration*

G1-94.3

**Response G1-94.3**

As explained in Section 4.2.2.2 of the DEIR, upon completion, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NOx, SOx,

## **APPENDIX G1: RESPONSE TO COMMENTS**

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PM10, and PM2.5 emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are described in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in local overall reductions in GHG emissions, as described in Section 5.2 of the DEIR and summarized in Table 5.2-8 (see page 5-26).

Response G1-94.2 addresses the public outreach process and extended comment period that was provided for the proposed project.

Comment Letter No. G1-95

Date \_\_\_\_\_

Jillian Wong  
Program Supervisor, CEQA  
AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765

RE: my input on the Tesoro Integration Project.

Dear Ms. Wong,

My name is Jasmine Larios and I live at 402 E 228st. Carson, CA

I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.

I would like my opinion be considered in your decision about the project. I reject the Tesoro merger. I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-95.1

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

G1-95.2

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-95.3

Please add my comment about this project. If possible, I would like to know that you received my comments.

Thank you,



**Response to Comment Letter No. G1-95**

**Jasmine Larios**

**Comment G1-95.1**

Dear Ms. Wong,  
My name is Jasmine Larios and I live at 402 E 228st. Carson, CA  
I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.  
I would like my opinion be considered in your decision about the project. I reject the Tesoro merger. I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-95.1

**Response G1-95.1**

The comment regarding the rejection of the proposed project does not raise issues related to the proposed project or the DEIR. The comment is noted and no response is necessary under CEQA.

As explained in Master Response 7, the proposed project is not a merger. Tesoro acquired the Carson Operations from BP in 2013. The Carson and Wilmington Operations have already merged. The pre-existing Carson and Wilmington Operations have been operating as one Refinery since the acquisition. As explained in Section 2.1 of the DEIR, the proposed project is designed to better integrate the Carson and Wilmington Operations, which will improve processing efficiency and reduce emissions.

The proposed project includes constructing new and replacement storage tanks, but this component of the proposed project does not increase crude oil capacity at the Refinery. The new and replacement storage tanks are proposed to provide sufficient crude oil storage capacity to allow crude oil tankers to offload more quickly at the Wilmington Operations Long Beach Marine Terminal and in one visit to the dock at Marine Terminal 1. This increase in crude oil storage capacity means that marine vessels will spend less time maneuvering, at dock, and/or at anchor in the Port because of improved offloading efficiency (i.e., quicker offloading and the elimination of or reduction of, demurrage costs and the need for anchorage while waiting for available storage tank space to finish offloading). The DEIR did not take credit for emission reductions from marine vessel operations. However, annual emission reductions from improved marine vessel offloading efficiency were estimated and can be found in Master Response 6. Based on this analysis, daily marine vessel emissions would not increase and annual emissions would be substantially reduced.

With respect to offloading emission control, the new and replacement crude oil storage tanks are connected to the marine terminals, and the marine vessels unload directly into the crude oil receiving tanks. Because the new and replacement crude oil storage tanks will be permitted and

constructed to comply with BACT, there are no associated unloading racks or unloading emissions other than fugitive emissions associated with the piping used to transfer crude oil from the marine terminals. Therefore, offloading emissions will be controlled to the maximum extent possible and there will be no additional, unutilized opportunity to reduce emissions through an offloading capture method.

Master Response 6 explains that the volume of available crude oil storage capacity has no bearing on Refinery crude oil processing capacity. The proposed project would not create a new or larger refinery or result in a substantial increase of crude oil throughput capacity; it would further integrate the Refinery's Carson and Wilmington Operations.

Sections 2.7.1.3 and 4.1.2.1 of the FEIR describe the 6,000 bbl/day potential crude oil capacity increase that could be accommodated with the DCU H-100 heater permit revision. The potential impacts of this crude oil capacity increase are fully analyzed in Chapter 4 of the DEIR. Master Response 7 further explains that the proposed project is not an expansion of the Refinery.

As explained in Master Response 4, the proposed project is not designed to facilitate a crude oil blend switch and the Refinery will not process different crude oil as a result of the proposed project beyond what was analyzed in the DEIR. Thus, because the new and replacement storage tanks are being installed to store crude oil for processing at the Refinery—not for third party sale and use—the tanks likewise will not store crude oil of a different type than that currently being processed at the Refinery. Additionally, as explained in Master Response 9, the DEIR fully analyzes any potential hazard impacts related to the increase in storage tanks.

**Comment G1-95.2**

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

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G1-95.2  
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**Response G1-95.2**

The proposed project has complied with the public process required by CEQA Guidelines § 15087. As explained in detail in Master Response 1, the DEIR was circulated for an extended length of time. The public comment period closed on June 10, 2016, after two extensions. A 94-day public review and comment period (March 8, 2016 through June 10, 2016) was provided, which exceeds CEQA requirements. A public hearing on the Title V permit and public meeting on the DEIR was held on May 17, 2016. Copies of the DEIR were made available in neighborhood public libraries. Notices were published and distributed for the original public comment period, the two extensions, and the public hearing on the Title V permit and public meeting on the DEIR.

In addition, Tesoro independently offered and provided community outreach to over 100 entities including public agencies, community organizations, neighborhood organizations, business associations, and other interested parties to explain the scope of the proposed project and the potential environmental effects of the proposed project. The community meetings were held on April 4, 11, and 14, 2016 in Carson, Wilmington, and Long Beach, respectively. Tesoro has identified that a total of 277 people attended the meetings.

The proposed project has been fully analyzed for potential hazard impacts, including those associated with pipelines, storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising). Section 4.3 of the DEIR found that hazards associated with the Naphtha Isomerization Unit, new crude oil storage tanks, the SARP, and interconnecting pipelines are potentially significant due to hazards associated with worst-case release scenarios. A Worst-Case Consequence Analysis was presented in Appendix C and discussed in Section 4.3 of the DEIR. See Master Response 9 for additional information regarding the hazards analyses of pipelines and storage tanks, including impacts associated with earthquakes.

### Comment G1-95.3

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-95.3

### Response G1-95.3

As explained in Response G1-95.2, notice was provided to the community through the mail and in the newspaper. The proposed project was also discussed at public hearings and meetings.

As explained in Section 4.2.2.2 of the DEIR, upon completion, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NOx, SOx, PM10, and PM2.5 emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are described in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in local overall reductions in GHG emissions, as described in Section 5.2 of the DEIR and summarized in Table 5.2-8 (see page 5-26).

As explained in Master Response 3, the DEIR fully analyzed and disclosed the proposed project's potential health impacts from all pollutants. The proposed project's potential cancer and non-cancer human health impacts, including asthma and other respiratory illnesses, were analyzed in the DEIR, and determined to be less than significant. The estimated cancer risk due to the operation of the proposed project was found to be less than the SCAQMD's cancer risk significance threshold of ten in one million (see Section 4.2.2.5 of the DEIR). The non-cancer chronic and acute hazard indices were found to be below the SCAQMD's non-cancer chronic and acute hazard index threshold of 1.0. Therefore, the proposed project is not expected to cause a

## **APPENDIX G1: RESPONSE TO COMMENTS**

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significant adverse health impact. Master Response 14 explains the potential localized impacts to the surrounding community.

Comment Letter No. G1-96

Date \_\_\_\_\_

Jillian Wong  
Program Supervisor, CEQA  
AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765

RE: my input on the Tesoro Integration Project.

Dear Ms. Wong,

My name is Patricia Larios and I live at 402 E. 28th St. Carson CA 90745

I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.

I would like my opinion be considered in your decision about the project. I reject the Tesoro merger. I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-96.1

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

G1-96.2

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-96.3

Please add my comment about this project. If possible, I would like to know that you received my comments.

Thank you,





**Response to Comment Letter No. G1-96**

**Patricia Larios**

**Comment G1-96.1**

Dear Ms. Wong,  
My name is Patricia Larios and I live at 402 E. 28th St. Carson CA 90745

I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.

I would like my opinion be considered in your decision about the project. I reject the Tesoro merger. I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-96.1

**Response G1-96.1**

The comment regarding the rejection of the proposed project does not raise issues related to the proposed project or the DEIR. The comment is noted and no response is necessary under CEQA.

As explained in Master Response 7, the proposed project is not a merger. Tesoro acquired the Carson Operations from BP in 2013. The Carson and Wilmington Operations have already merged. The pre-existing Carson and Wilmington Operations have been operating as one Refinery since the acquisition. As explained in Section 2.1 of the DEIR, the proposed project is designed to better integrate the Carson and Wilmington Operations, which will improve processing efficiency and reduce emissions.

The proposed project includes constructing new and replacement storage tanks, but this component of the proposed project does not increase crude oil capacity at the Refinery. The new and replacement storage tanks are proposed to provide sufficient crude oil storage capacity to allow crude oil tankers to offload more quickly at the Wilmington Operations Long Beach Marine Terminal and in one visit to the dock at Marine Terminal 1. This increase in crude oil storage capacity means that marine vessels will spend less time maneuvering, at dock, and/or at anchor in the Port because of improved offloading efficiency (i.e., quicker offloading and the elimination of or reduction of, demurrage costs and the need for anchorage while waiting for available storage tank space to finish offloading). The DEIR did not take credit for emission reductions from marine vessel operations. However, annual emission reductions from improved marine vessel offloading efficiency were estimated and can be found in Master Response 6. Based on this analysis, daily marine vessel emissions would not increase and annual emissions would be substantially reduced.

With respect to offloading emission control, the new and replacement crude oil storage tanks are connected to the marine terminals, and the marine vessels unload directly into the crude oil receiving tanks. Because the new and replacement crude oil storage tanks will be permitted and

constructed to comply with BACT, there are no associated unloading racks or unloading emissions other than fugitive emissions associated with the piping used to transfer crude oil from the marine terminals. Therefore, offloading emissions will be controlled to the maximum extent possible and there will be no additional, unutilized opportunity to reduce emissions through an offloading capture method.

Master Response 6 explains that the volume of available crude oil storage capacity has no bearing on Refinery crude oil processing capacity. The proposed project would not create a new or larger refinery or increase crude oil throughput capacity, except to the extent that the DCU H-100 heater permit revision will increase the capacity of that unit by 6,000 bbl/day; it would further integrate the Refinery's Carson and Wilmington Operations.

Sections 2.7.1.3 and 4.1.2.1 of the FEIR describe the 6,000 bbl/day potential crude oil capacity increase that could be accommodated with the DCU H-100 heater permit revision. The potential impacts of this crude oil capacity increase are fully analyzed in Chapter 4 of the DEIR. Master Response 7 further explains that the proposed project is not an expansion of the Refinery.

As explained in Master Response 4, the proposed project is not designed to facilitate a crude oil blend switch and the Refinery will not process different crude oil as a result of the proposed project beyond what was analyzed in the DEIR. Thus, because the new and replacement storage tanks are being installed to store crude oil for processing at the Refinery—not for third party sale and use—the tanks likewise will not store crude oil of a different type than that currently being processed at the Refinery. Additionally, as explained in Master Response 9, the DEIR fully analyzes any potential hazard impacts related to the increase in storage tanks.

### Comment G1-96.2

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

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G1-96.2

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### Response G1-96.2

The proposed project has complied with the public process required by CEQA Guidelines § 15087. As explained in detail in Master Response 1, the DEIR was circulated for an extended length of time. The public comment period closed on June 10, 2016, after two extensions. A 94-day public review and comment period (March 8, 2016 through June 10, 2016) was provided, which exceeds CEQA requirements. A public hearing on the Title V permit and public meeting on the DEIR was held on May 17, 2016. Copies of the DEIR were made available in neighborhood public libraries. Notices were published and distributed for the original public comment period, the two extensions, and the public hearing on the Title V permit and public meeting on the DEIR.

In addition, Tesoro independently offered and provided community outreach to over 100 entities including public agencies, community organizations, neighborhood organizations, business associations, and other interested parties to explain the scope of the proposed project and the potential environmental effects of the proposed project. The community meetings were held on April 4, 11, and 14, 2016 in Carson, Wilmington, and Long Beach, respectively. Tesoro has identified that a total of 277 people attended the meetings.

The proposed project has been fully analyzed for potential hazard impacts, including those associated with pipelines, storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising). Section 4.3 of the DEIR found that hazards associated with the Naphtha Isomerization Unit, new crude oil storage tanks, the SARP, and interconnecting pipelines are potentially significant due to hazards associated with worst-case release scenarios. A Worst-Case Consequence Analysis was presented in Appendix C and discussed in Section 4.3 of the DEIR. See Master Response 9 for additional information regarding the hazards analyses of pipelines and storage tanks, including impacts associated with earthquakes.

**Comment G1-96.3**

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-96.3

**Response G1-96.3**

As explained in Response G1-96.2, notice was provided to the community through the mail and in the newspaper. The proposed project was also discussed at public hearings and meetings.

As explained in Section 4.2.2.2 of the DEIR, upon completion, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NOx, SOx, PM10, and PM2.5 emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are described in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in local overall reductions in GHG emissions, as described in Section 5.2 of the DEIR and summarized in Table 5.2-8 (see page 5-26).

As explained in Master Response 3, the DEIR fully analyzed and disclosed the proposed project's potential health impacts from all pollutants. The proposed project's potential cancer and non-cancer human health impacts, including asthma and other respiratory illnesses, were analyzed in the DEIR, and determined to be less than significant. The estimated cancer risk due to the operation of the proposed project was found to be less than the SCAQMD's cancer risk significance threshold of ten in one million (see Section 4.2.2.5 of the DEIR). The non-cancer chronic and acute hazard indices were found to be below the SCAQMD's non-cancer chronic and acute hazard index threshold of 1.0. Therefore, the proposed project is not expected to cause a

## APPENDIX G1: RESPONSE TO COMMENTS

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significant adverse health impact. Master Response 14 explains the potential localized impacts to the surrounding community.

Comment Letter No. G1-97

Date 4/5/14

Jillian Wong  
Program Supervisor, CEQA  
AQMD  
21865 Copley Drive  
Diamond Bar, CA 91765

RE: my input on the Tesoro Integration Project.

Dear Ms. Wong,

My name is Tammy Seuf and I live at 111 1/2 Loma Ave #13 <sup>Ca</sup> <sub>90804</sub>

I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.

I would like my opinion be considered in your decision about the project. I reject the Tesoro merger. I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-97.1

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

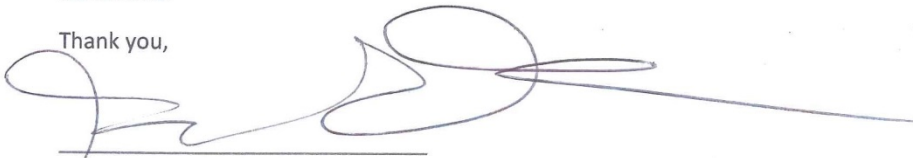
G1-97.2

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-97.3

Please add my comment about this project. If possible, I would like to know that you received my comments.

Thank you,



**Response to Comment Letter No. G1-97**

**Danny Scott**

**Comment G1-97.1**

Dear Ms. Wong,  
My name is Danny Scott and I live at 1111 1/2 Loma ave bit 3 Carson 90204

I am writing to give my opinion on the Tesoro project merger since I was unable to attend the public hearing last May 17, in Carson.

I would like my opinion be considered in your decision about the project. I reject the Tesoro merger. I reject new storage tanks, and I reject more pipelines for the project. We already have our share of petroleum related hazards accumulated in Wilmington. I do not want to trade some emission reductions for storage tanks which is what this project is offering. I know there are methods to reduce the emissions of offloading to capture the emissions. No need for storage tanks. We should be cutting down on more dangerous material not expanding. Tesoro will add 8 more storage tanks which is a huge expansion. In addition, those tanks may be used to stored crude that is different than the current type.

G1-97.1

**Response G1-97.1**

The comment regarding the rejection of the proposed project does not raise issues related to the proposed project or the DEIR. The comment is noted and no response is necessary under CEQA.

As explained in Master Response 7, the proposed project is not a merger. Tesoro acquired the Carson Operations from BP in 2013. The Carson and Wilmington Operations have already merged. The pre-existing Carson and Wilmington Operations have been operating as one Refinery since the acquisition. As explained in Section 2.1 of the DEIR, the proposed project is designed to better integrate the Carson and Wilmington Operations, which will improve processing efficiency and reduce emissions.

The proposed project includes constructing new and replacement storage tanks, but this component of the proposed project does not increase crude oil capacity at the Refinery. The new and replacement storage tanks are proposed to provide sufficient crude oil storage capacity to allow crude oil tankers to offload more quickly at the Wilmington Operations Long Beach Marine Terminal and in one visit to the dock at Marine Terminal 1. This increase in crude oil storage capacity means that marine vessels will spend less time maneuvering, at dock, and/or at anchor in the Port because of improved offloading efficiency (i.e., quicker offloading and the elimination of or reduction of, demurrage costs and the need for anchorage while waiting for available storage tank space to finish offloading). The DEIR did not take credit for emission reductions from marine vessel operations. However, annual emission reductions from improved marine vessel offloading efficiency were estimated and can be found in Master Response 6. Based on this analysis, daily marine vessel emissions would not increase and annual emissions would be substantially reduced.

With respect to offloading emission control, the new and replacement crude oil storage tanks are connected to the marine terminals, and the marine vessels unload directly into the crude oil

receiving tanks. Because the new and replacement crude oil storage tanks will be permitted and constructed to comply with BACT, there are no associated unloading racks or unloading emissions other than fugitive emissions associated with the piping used to transfer crude oil from the marine terminals. Therefore, offloading emissions will be controlled to the maximum extent possible and there will be no additional, unutilized opportunity to reduce emissions through an offloading capture method.

Master Response 6 explains that the volume of available crude oil storage capacity has no bearing on Refinery crude oil processing capacity. The proposed project would not create a new or larger refinery or increase crude oil throughput capacity, except to the extent that the DCU H-100 heater permit revision will increase the capacity of that unit by 6,000 bbl/day; the proposed project would further integrate the Refinery's Carson and Wilmington Operations.

Sections 2.7.1.3 and 4.1.2.1 of the FEIR describe the 6,000 bbl/day potential crude oil capacity increase that could be accommodated with the DCU H-100 heater permit revision. The potential impacts of this crude oil capacity increase are fully analyzed in Chapter 4 of the DEIR. Master Response 7 further explains that the proposed project is not an expansion of the Refinery.

As explained in Master Response 4, the proposed project is not designed to facilitate a crude oil blend switch and the Refinery will not process different crude oil as a result of the proposed project beyond what was analyzed in the DEIR. Thus, because the new and replacement storage tanks are being installed to store crude oil for processing at the Refinery—not for third party sale and use—the tanks likewise will not store crude oil of a different type than that currently being processed at the Refinery. Additionally, as explained in Master Response 9, the DEIR fully analyzes any potential hazard impacts related to the increase in storage tanks.

**Comment G1-97.2**

I would also like to request more time for public participation. Many people in Wilmington and surrounding impacted communities are unaware about the Tesoro proposal to join the two refineries into one. I reject the additional storage capacity that Tesoro proposes, along with more dangerous pipelines. This project is near an earthquake zone which makes it even more dangerous for us who live so close to the refinery. While we do not know when an earthquake will happen, it will happen sometime. Having so much more stored crude plus pipelines underground would make an event like that even more destructive and dangerous.

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G1-97.2

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**Response G1-97.2**

The proposed project has complied with the public process required by CEQA Guidelines § 15087. As explained in detail in Master Response 1, the DEIR was circulated for an extended length of time. The public comment period closed on June 10, 2016, after two extensions. A 94-day public review and comment period (March 8, 2016 through June 10, 2016) was provided, which exceeds CEQA requirements. A public hearing on the Title V permit and public meeting on the DEIR was held on May 17, 2016. Copies of the DEIR were made available in neighborhood public libraries. Notices were published and distributed for the original public comment period, the two extensions, and the public hearing on the Title V permit and public meeting on the DEIR.

In addition, Tesoro independently offered and provided community outreach to over 100 entities including public agencies, community organizations, neighborhood organizations, business associations, and other interested parties to explain the scope of the proposed project and the potential environmental effects of the proposed project. The community meetings were held on April 4, 11, and 14, 2016 in Carson, Wilmington, and Long Beach, respectively. Tesoro has identified that a total of 277 people attended the meetings.

The proposed project has been fully analyzed for potential hazard impacts, including those associated with pipelines, storage tanks, and process units regardless of the cause of release (e.g., human error, equipment failure, sabotage, terrorism, natural disaster, or civil uprising). Section 4.3 of the DEIR found that hazards associated with the Naphtha Isomerization Unit, new crude oil storage tanks, the SARP, and interconnecting pipelines are potentially significant due to hazards associated with worst-case release scenarios. A Worst-Case Consequence Analysis was presented in Appendix C and discussed in Section 4.3 of the DEIR. See Master Response 9 for additional information regarding the hazards analyses of pipelines and storage tanks, including impacts associated with earthquakes.

**Comment G1-97.3**

Since most people in our communities are not aware about this project, I request more time to notify people so that this process can receive enough public input. This larger than usual project should have more public participation before deciding on it. I myself would like you to consider denying a permit for this project because it is putting a much larger, additional threat on our lives. The quality of life in Wilmington and surrounding communities is already very poor in terms of illnesses due to the air quality from many polluting sources such as Tesoro. I reject the project.

G1-97.3

**Response G1-97.3**

As explained in Response G1-97.2, notice was provided to the community through the mail and in the newspaper. The proposed project was also discussed at public hearings and meetings.

As explained in Section 4.2.2.2 of the DEIR, upon completion, the proposed project will result in regional and local reductions in CO emissions and local reductions of operational NOx, SOx, PM10, and PM2.5 emissions. The increase in operational VOC emissions associated with the proposed project was found to be less than significant. The proposed project emissions are described in detail in Section 4.2 of the DEIR and are summarized in Table 4.2-4 (see pages 4-16 through 4-18). The proposed project will result in local overall reductions in GHG emissions, as described in Section 5.2 of the DEIR and summarized in Table 5.2-8 (see page 5-26).

As explained in Master Response 3, the DEIR fully analyzed and disclosed the proposed project's potential health impacts from all pollutants. The proposed project's potential cancer and non-cancer human health impacts, including asthma and other respiratory illnesses, were analyzed in the DEIR, and determined to be less than significant. The estimated cancer risk due to the operation of the proposed project was found to be less than the SCAQMD's cancer risk significance threshold of ten in one million (see Section 4.2.2.5 of the DEIR). The non-cancer chronic and acute hazard indices were found to be below the SCAQMD's non-cancer chronic and acute hazard index threshold of 1.0. Therefore, the proposed project is not expected to cause a



## **APPENDIX G1: RESPONSE TO COMMENTS**

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significant adverse health impact. Master Response 14 explains the potential localized impacts to the surrounding community.