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Date: 10/22/2014 10:06 AM  
Subject: Recirculated EIR (Phillips)

Laurance Shinderman  
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(See attached file: Visual Blight.docx)

To Murry Wilson:

As a resident of Trilogy at Monarch Dunes I am vehemently opposed to the Phillips 66 Rail Terminal Project.

The Re-Circulated EIR lists multiple areas in which Class I impacts could be mitigated; the reality is that their methodology is flawed and self serving when it comes to mitigating the Visual Impact. (Mitigation Measure AV-1a)

According to the REIR, portions of the project would be seen from public roadways and paths within the Trilogy residential development east of State Route 1.

Westbound Via Concha Road would provide limited views to the easternmost portion of the rail spur, similar to those from along State Route 1 in this area. Portions of Louise Lane would also allow for views of the rail spur to the southwest. From these residential streets the unloading facility would not be easily noticed due to topography and viewing distance. The proposed rail road tracks would be visible from some of the residential homes in the Monarch Ridge Townhome development, which is located just east of the of the development area across Highway 1.

*The KVA (Known Viewing Area) of the photos presented in the REIR were taken at the intersection of Via Concha and US1. This elevation is approximately 197 feet.*

*A more appropriate VA (Viewing Area) would have been from the 2<sup>nd</sup> tee on the golf course, or homes that are adjacent to the 2<sup>nd</sup> tee. This elevation is approximately 297 ft. (That's approximately 100' higher than the KVA, and a more realistic site to create a simulation). From this 297' elevation, the entire rail spur and oil transfer facility would be visible.*



*(Location...US1 and Via Concha)*

SHL-01

*Thus the unloading facility would be in the line of sight and the string of tanker cars would be in full view. The scenic view would be totally compromised by what the Phillips consultant euphemistically called the 80 black tanker cars...a horizontal, linear discordant coloration. would have been more succinct...it's a blight!*



*This picture would be more reflective of what would be the view; and not the self serving berm that Phillips suggests would mitigate the visual impact. Note the light stanchions. Phillips proposes 30' high light poles; which would be 10' to 20' higher than the berm and cast a nighttime glow; lighting up the transfer facility like a movie set.*

We therefore suggest that Phillips cannot mitigate the visual impact; and thus the project should be denied.

SHL-01  
cont

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Date: 10/27/2014 09:22 AM  
Subject: Opposition to the Recirculated EIR: Air Quality

We are opposed to the Rail Project as the Santa Maria Refinery is currently a clear and present danger to the health and welfare of the residents on the Mesa. The proposed Rail Terminal will only exacerbate and increase the release of carcinogenic petroleum coke (petcoke) particulates into the air.

Presently, the emissions from the refinery are a toxic soup of carcinogens, neurotoxins and hazardous metals. The EPA has proposed a plan to protect communities from the dangers of oil refineries, including long overdue emission limits, technology standards and expanded air monitoring. Of course the refineries are dragging their feet on this; yelping that it will increase their costs with limited health benefits. Nonsense!

The proposed rail spur lines would extend from the terminus of the current spur. The unloading facility would be located at the end of the existing coke storage area and along an existing internal refinery road. The "spur" would traverse the current coke fields with the 80 tanker cars and diesel engines upon entering and leaving the refinery.

(A coke hopper car currently used at the SMR Refinery...note the piles of coke dust)

80 tanker cars and the diesel engine that would jockey the cars to the unloading facility and the tracks will pass through the coke fields upon entering and leaving the facility.

Coke dust will be disturbed and flumed by the passing tanker cars adding to the toxic air quality presently at the facility. No mention is made as the cars being washed down, so upon leaving the SMR facility. Upon leaving the SMR these tanker cars will be spewing dust up and down the Union Pacific tracks and into the environment...a Google Earth view of the current SMR coke fields will show mountains of black coke, vehicles bulldozing the coke, a long conveyer transferring the coke and blackened earth on the refinery site and at the entrance to refinery from the Union Pacific tracks. As the proposed feed stock by oil by rail will come from tar sands, and thus be described as "heavy crude"; there is every expectation that the by-product of refining this crude; more petroleum coke (pet coke) will be produced.

#### Current Air Quality

Operational pollutant emissions (i.e., NOx, ROC, and DPM) within San Luis Obispo County and outside the County on the mainline could be potentially significant and unavoidable (Class I). The operational pollutant emissions associated with operation of the Rail Spur Project within the

SHL-02

County would exceed the SLOCAPCD thresholds. Outside the County the mainline emissions would exceed most other air district thresholds.

It is suggested by Phillips that this impact can be reduced to less than significant with the use of Tier 4 locomotive and the application of emission reduction credits, which would make the impact less than significant with mitigation (Class II). This assumes that the Phillips purchases Tier 4 locomotives and that these do in fact release fewer diesel particulates and that emission credits can be used.

The County may be preempted by Federal law from mitigating the air impacts associated with the locomotives outside of the SMR property. (See Section G of the Executive Summary for more discussion on the preemption issue). If the County is preempted from applying mitigation to the locomotive emissions on the UPRR mainline, the impact would remain significant and unavoidable (Class I). However, regardless of the preemption issue, the air emissions within the SMR according to Phillips, can be mitigated through the use of emission reduction credits. This begs the question... will emission credits be purchased...how many are “banked”; can these be used; and will there be sufficient credits for the term of operation which projected to be another 30 years! This calls into question; with transportation costs of oil by rail, and the cost of building the facility, plus emission credit purchases; and the purchase of T4 Diesel locomotives. Is this project economically justified; or is there yet another agenda for Phillips to go to the well yet again to expand the refinery and it’s capacity. They have already asked for and received the nod for an additional 10,000 barrel refining increase; why would we not see this as “mission creep”. The current air quality is a toxic stew: Phillips states this emphatically in the REIR

SHL-02  
cont

Air toxic emissions at the SMR would be significant and unavoidable (Class I) since the cancer risk over a 30-year exposure period would be greater than the 10 in a million threshold established by the SLOCAPCD. This cancer risk is driven mainly by diesel particulate emissions. About half of this cancer risk is due to the diesel particulate emissions from the existing trucking operations at the SMR. Use of Tier 4 locomotives would reduce most of the cancer risk from the rail operations, but the cancer risk would remain significant and unavoidable since the baseline risk is already about the SLOCAPCD threshold. As stated above, the County may be preempted by Federal law from applying mitigation to the UPRR locomotives.

How many emission credits are “in the bank”? Can they be used, and if so how long. Is this in perpetuity? Or is there a time limit in which they can be used and how are they monitored? Considering the ongoing cancer risk, the SMR has unmitigated gall to ask that this project be considered when their house is not in order now as to carcinogens. A better question would be to consider an orderly closing of the facility (my comments only).

For the health and safety of the community; Vote No on this project. There is no upside for the residents of the Mesa and San Luis Obispo County. The only “winner” would be Phillips to garner “advantaged oil” and increase their coffers; but if there were a disaster, SLO County would be left with the bill.

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(See attached file: coke train end of the current line at Phillips on the Mesa.jpg)

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Date: 10/27/2014 09:18 AM  
Subject: Recirculated DEIR

Opposition to the Rail Spur:

As a resident of Trilogy at Monarch Dunes I am vehemently opposed to the Phillips 66 Rail Terminal Project. The Re-Circulated EIR lists multiple areas in which Class I impacts could be mitigated; the reality is that their methodology is flawed and self serving when it comes to mitigating the Visual Impact. (Mitigation Measure AV-1a) According to the REIR, portions of the project would be seen from public roadways and paths within the Trilogy residential development east of State Route 1.

The specious RDEIR states: Westbound Via Concha Road would provide limited views to the easternmost portion of the rail spur, similar to those from along State Route 1 in this area. Portions of Louise Lane would also allow for views of the rail spur to the southwest. From these residential streets the unloading facility would not be easily noticed due to topography and viewing distance. The proposed rail road tracks would be visible from some of the residential homes in the Monarch Ridge Townhome development, which is located just east of the of the development area across Highway 1.

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A more appropriate VA (Viewing Area) would have been from the 2nd tee on the golf course, or homes that are adjacent to the 2nd tee. This elevation is approximately 297 ft. (That's approximately 100' higher than the KVA, and a more realistic site to create a simulation). From this 297' elevation, the entire rail spur and oil transfer facility would be visible.

(Location...US1 and Via Concha)

Thus the unloading facility would be in the line of sight and the string of tanker cars would be in full view. The scenic view would be totally compromised by what the Phillips consultant euphemistically called the 80 black tanker cars...a horizontal, linear discordant coloration. I characterize it more succinctly...it's a blight!

SHL-03

This picture would be more reflective of what would be the view; and not the self serving berm that Phillips suggests would mitigate the visual impact. Note the light stanchions. Phillips proposes 30' high light poles; which would be 10' to 20' higher than the berm and cast a nighttime glow; lighting up the transfer facility like a movie set.

SHL-03  
cont

Phillips cannot mitigate the visual impact; and thus the project should be denied.

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Date: 11/02/2014 05:32 PM  
Subject: Phillips Re Circuated EIR

The Re circulated EIR notes many areas that present significant impacts yet avoid the realities that the Phillips Rail Terminal presents an "imminent hazard" that cannot be mitigated, and thus pre-exemption is not a skirt that they can hide behind.

In their February 2014, flyer to SLO County residents, Phillips stated that their "crude railcar fleet is one of the newest and are all DOT-111 cars ... including 2,000 that meet or exceed the Association of American Railroads safety standards."

(And as of October 22, 2014, the company had bought or ordered 3,200 railcars, and planned to boost its fleet to 3,700. <http://www.reuters.com/article/2014/10/23/crude-freight-unloading-idUSL2N0SI03D20141023>)

However, Phillips fails to tell us that it's the DOT-111 tank cars that have been involved in most or all of the previous derailments, explosions, fires and oil spills. While those cars may be state-of-the-art, the state-of-the-art has proven beyond doubt that it's not good enough.

A May, 2013 Phillips press release reported on their new cars - "During the first quarter (of 2013), the company took delivery of 400 railcars, which will transport crude to its refineries on the East and West Coasts."

In the Executive Summary (October 2104) page ES-5 Phillips wrote...

Phillips 66 has proposed to ship crude oil to the refinery in non-jacketed CPC-1232 tank cars (i.e., post October 1, 2011 tank cars). These cars have a capacity of approximately 31,808 gallons per car. Each car has a weight limit of 210,700 pounds of crude oil. Each tank car would be approximately 90 feet long. The tank cars would meet the current specifications that have been established by the American Railroad Association for use in transporting crude oil. The railcars would be designed to meet DOT Packing Group I requirements, which is the highest rating. The tank cars would be equipped with half height head shields, double couplers, and all stainless steel valves. The relief valve would be a designed for high flow. All of the tanker cars servicing the SMR as part of either a unit or manifest train would be owned or leased by Phillips 66. Well not so fast Phillips...In Lynchburg VA the rail tanker cars in a recent U.S. oil train mishap were the newer model CPC 1232 Tanker Cars

SHL-04

May 8 (Reuters) - Many of the tank cars involved in a fiery derailment of an oil train last week met safety standards that some in the industry consider a model for future containers, an official with the National Transportation Safety Board said on Friday. Ten of the 13 tank cars that jumped the tracks near downtown Lynchburg, Virginia, were model CPC-1232, said Eric Weiss, a spokesman for the NTSB. The CPC-1232 is considered an upgrade from the DOT-111 model that is the workhorse of the oil-by-rail sector. Earlier this week, U.S. Transportation Secretary Anthony Foxx said that DOT-111s are not fit to carry crude oil and should be mothballed or toughened. In the Virginia incident, the 105-car shipment of fuel from North Dakota's Bakken energy patch partially derailed and caught fire within a few hundred feet of a busy restaurant and children's museum in downtown Lynchburg. Please note: The derailment was within a few hundred feet of a busy restaurant and children's museum in downtown Lynchburg. So take a moment and let your mind's capture that scene and juxtapose it in downtown San Luis Obispo. A typical afternoon, folks reveling in the pristine air, and enjoying a coffee in their favorite coffee shop, or a meal creek side in one of the many restaurants and bistros...and then suddenly a shattering explosion and San Luis Obispo is no longer the "happiest city" in America, but now a poster child for a rail disaster..

SHL-04  
cont

Can't happen here? Are you sure? How sure?

Because Phillips proposes a 1.5 mile long unit train composed of 80 tanker cars carrying crude oil of dubious origin, down the Cuesta Grade 5 times a week; right through the heart of down town San Luis Obispo. This train will pass within yards of the Cal Poly Stadium, traverse local streets, cross Marsh St in the heart of the business district, and meander behind French Hospital.

Is this a bet that you want to take that Phillips and UPRR can mitigate disaster?

I think not...don't let this Phillip's Folly be your legacy...Vote No on the Re-circuated EIR; and tell Phillips not in our town. No Rail Terminal!

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Date: 11/03/2014 10:21 AM  
Subject: Opposition to the Phillips 66 Rail Spur

## **I am vehemently opposed to this Project!**

While Phillips 66 should be applauded for the extensive compendium of illustrations and appendices; they may also qualify for excellence in creative writing, by burying this intrusive Rail Terminal Project in a blizzard of nuanced and selectively interpreted visuals.

Let's look at the Visual Impact:

Phillips concludes this section with...By implementing mitigation measures AV-1a through AV-1c the impacts to the visual character and quality of the site and surroundings would be considered *less than significant with mitigation (Class II)*.

The required mitigation measures would cause the project to be less noticeable in the landscape, and as a result the perceived encroachment of industrial character into the current open space would be less evident.

**What nonsense and double speak.** A 1.5 mile long string of black tanker cars extending into what is now farm land or open land would be a visual blight...or what Arcadis, their consultant termed a “**horizontal linear discordant coloration**”.

SHL-05



But an earlier paragraph stated: The proposed unloading area would be within the existing industrial part of the coke processing facility, and would be consistent with the visual character of that area. The rail spur which would extend approximately 0.9 mile east, would add an industrial element into land which currently serves as visual open space. As seen from State Route 1, the Coastal Trail, the De Anza Trail and other eastern viewpoints, the rail spur and associated rail cars would **represent a visual expansion of the adjacent industrial refinery use.** This expansion of industrial elements would not be entirely unexpected at this location; however **the current balance of visual character elements would be altered.** **The visual encroachment of the industrial refinery-related activities onto the adjacent visual open space would have an adverse effect on the existing character of the site, and would represent a potentially significant impact.**

Their mitigation: *An earthen berm shall be constructed around the eastern perimeter of the rail spur. The berm shall be a minimum of 10 feet tall and a maximum of 20 feet tall above the existing grade and as shown on the Berm Location Concept Map shown below (Figure 4.1-11) for the purpose of reducing views of the rail spur and trains from State Route 1 and the California Coastal Trail / De Anza Trail.*

SHL-05  
cont



The view looking west and southwest from State Route 1 is **considered a scenic vista because of the panoramic composition of natural and agricultural land use patterns, sweeping views of the dunes and the coastline, and the Pacific Ocean beyond.** The Rail Spur Project elements, where visible, would not block views of coastal visual resources such as the dunes, the ocean, riparian areas, or agriculture. **The eastern extension of the rail spur and its associated trains would however reduce views of the open space seen in the mid-ground, an important visual contributor to the overall scenic vista, which has the potential to be a significant impact.**

What is most disconcerting is that the KVA (Known Viewing Areas) chosen were selected by Phillips and were along US1; and not the elevations where people actually live along Monarch Ridge and Monarch Dunes; some 100' higher in elevation, and would thus provide a visual blight as the view would look down on to the tracks

Well...let's go with paraphrasing a famous Ronald Regan retort in a Presidential Debate..."there you go again Phillips":

The alignment of the proposed rail spur track extension would be oriented nearly perpendicular to State Route 1, and as a result views of the tracks and trains would generally be looking down the tracks rather than seeing them from the side. This viewing orientation would lessen the visible area of the project relative to the overall view shed as seen from key viewpoints along State Route 1. **Nonsense!**

This is a static view of the proposed 5 track spur, and not just a singular spur as the Project is defined. The reality is that from any elevation the string of 80 black tanker cars and associated diesel engines would be visible and present visual blight. What's more, the system has been designed to allow for up to **two full trains to temporarily be on the Refinery Site at one time** in case a second train arrives while the first is still being unloaded.

SHL-05  
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**That means that there is the reality that 160 black tanker cars will be the “industrial intrusion”. Adding to the blight, Phillips proposes a “Bad Order” Track. They continue with; **Track 765** shall be repurposed as a “Bad Order” Track. This existing refinery spur track provides storage for crude railcars that cannot be unloaded and for rail cars requiring inspection and/or repair before continued use, as needed.**

So not only will we be treated to the visual blight, we will also have endure a “**Bad OrderTrack**” that is...let’s call it what it is...a **repair yard**. Thus there will be additional noise as the tanker cars are uncoupled and shunted to this “**Bad Order Track**”. Repairs will go on as the other cars are being unloaded presenting a cacophony of discordant sounds of welding, hammering, and grinding and other assaults to the ear; possibly throughout the evening so that schedules can be met.

Thus, the visual blight cannot be mitigated and the Project should be denied. We invite you to take a drive through the community and you will get a first hand perspective of what the EIR calls a **scenic vista because of the panoramic composition of natural and agricultural land use patterns, sweeping views of the dunes and the coastline, and the Pacific Ocean.**

To rephrase The Big Yellow Taxi...by Joni Mitchell...What Phillips want to do is “**pave paradise and put up a Rail Terminal!**”

**Vote No!**

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Date: 11/04/2014 04:59 PM  
Subject: Phillips Playing Russian Roulette in Sourcing Crude

I am vehemently opposed to the Phillips 66 Rail Terminal Project as the Project is presents a significant imminent hazard, not only along the mainline of the UPRR through which the crude will be transported, but within the refinery itself on the Nipomo Mesa. According to the federal government, rail shipments of certain crude feedstocks, represent an "imminent hazard," such that a "substantial likelihood that death, serious illness, severe personal injury, or a substantial endangerment to health, property, or the environment may occur". (See U.S. Dept. of Transportation (DOT), Emergency Order: Petroleum Crude Oil.Railroad Carriers, Docket No. DOT-OST-2014-0067 (May 7, 2014).

Indeed, accidents involving these trains have already resulted in catastrophic consequences, including one recent calamity that killed 47 people, in Lac Megantic, incinerated an entire downtown area, and is expected to require the expenditure of \$400 million in taxpayer funds to remediate its disastrous environmental impacts.

Lac Megantic" Quebec-On July 5, 2013, a train loaded with 72 tank cars of crude oil being transported from North Dakota to New Brunswick stopped on a track with a descending grade. The train later began rolling downhill toward the town of LacMegantic, about 30 miles from the U.S. border. Near the center of town, 63 tank cars derailed, resulting in multiple explosions and subsequent fires. The accident killed 47 people and destroyed substantial sections of the town, causing the evacuation of 2,000 people. It was later determined that the crude oil released was more volatile than the transporter had originally reported to Canadian authorities. (Fishell, "Quebec government seeking \$400 million for Lac-Megantic rail disaster cleanup," Bangor Daily News (September 19, 2014).

According to the RDEIR; depending on the source of the crude oil, crude oil trains could use any portion of the UPRR network between Roseville/Colten and the source location of the crude.(Executive Summary page ES-6 Trains would arrive from different oilfields and/or crude oil loading points depending on market availability. The exact location of the source of crude oil that would be delivered to the refinery is unknown and could change over time based upon market conditions and availability.

It is unknown what route UPRR would use to deliver the trains to the SMR and it would likely vary based on the source location of the crude oil. However, there is certainty regarding the two segments of the route on the "Coast Line" that lead to the SMR from the north and from the south where there are no alternative routes. Coming from the north, the available routes merge south of San Jose. Coming from the south, the available routes merge north of Los Angeles.

It is quiet the "shell game" not knowing where the crude is sourced and exactly what crude is coming

SHL-06

either up or down the tracks.

The RDEIR fails to disclose the sources and analyze the environmental impacts of the new crude. There are a wide range of “advantaged” crudes with different chemical compositions currently available in commerce, and an increasing number of unconventional crudes such as crudes produced from bitumen sands (tar sands). Different types of crude can have very different impacts on such things as local air quality, green house gas emissions, and the risks associated with accidental releases. The proposed project will bring in large volumes (over 500 million gallons of crude oil per year; (28,105 gallons/tanker car per “unit train” X 80 tanker cars X 5 times a week X 52 weeks a year) from unidentified distant sources, of more than a mile in length. There is no discussion of the types of crude that will be transported; and this information is critical for a full and fair analysis of air quality.

The amount and toxicity of air emissions and potential releases associated with the transporting and storing of crude of unspecified origin may (including the proposed new pipe line within the facility), contain different or higher levels of contaminants which may result in higher emissions around the refinery. In fact the RDEIR states...

Operational pollutant emissions (i.e., NOx, ROC, and DPM) within San Luis Obispo County and outside the County on the mainline could be potentially significant and unavoidable (Class I). The operational pollutant emissions associated with operation of the Rail Spur Project within the County would exceed the SLOCAPCD thresholds. Outside the County the mainline emissions would exceed most other air district thresholds.

The RDEIR proposes “offsets” using emission credits previously earned for reducing emissions in the past rather than implementing on site mitigation measures. While offsets might reduce air pollution in California, or the general region, they will not reduce the localized air pollution impacts in the community where the Project is located. Not knowing the source and type of crude it fails to identify the risks of refining and storing this crude...For instance higher acid and/or sulfur content in a crude may increase the risk of corrosion to refinery equipment and pipes, which may in turn lead to leaks, explosions or fire. (Pipe Corrosion at the Chevron Richmond refinery contributed to the explosion and fire at the facility). <http://www.dir.ca.gov/DIRNews/2013/IR2013.html> So here we have it. Phillips in their quest for increased profits is choosing to source “advantaged” crude from disparate and undisclosed locations and is willing to play Russian Roulette with the health and safety and economic vitality of San Luis Obispo County, to say nothing of the entire state of California.  
Vote No! on this project.

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SHL-06  
cont



Thursday, November 06, 2014

I strongly object to the proposed Phillips 66 Rail Terminal Project!

Phillips is playing fast and loose with the timelines that the 80 tanker cars will be onsite for loading and unloading. The following in italics are directly from the Re-circulated draft EIR. The bold type has been added by me for emphasis.

*Once the unloading operations are complete, the two locomotives that were used for the unloading operations would connect to front of the empty train located on Track 5. These two locomotives would idle until the train left the refinery. During this period the rail car brakes would be pumped up with compressed air. In addition, UPRR would inspect the train to ensure all the cars are connected properly and the brakes are correctly pumped up. The idle time would depend upon how long the train had to wait until the UPRR scheduled departure. Based upon an **11.5 hour turnaround**, it would be about 1.4 hours.*

*5. **Train Departure** – Just prior to departure, the third locomotive on Track 764 would also connect to the front of the train. The empty train would leave the refinery and head back on to the UPRR mainline track with all three locomotives in the front. It is anticipated that each train would be at the refinery for about **10 to 12 hours**.*

*Table 2.5 provides a summary of the train operations and the estimated times associated with each operation listed above. The total time a train would be at the refinery would be approximately **10 to 12 hours**, of which about **eight hours would be needed for unloading, switching and repositioning activities**.*

Now here is where the time lines get a bit fuzzy...

*The unloading facility would also be equipped with steam lines that would allow the rail cars to be heated prior to unloading. Phillips 66 would construct new infrastructure to utilize steam already produced at SMR to heat cars that have been subject to **unanticipated delays during transit that has allowed the crude oil to cool**.*

*The unloading facility would include an access platform and a system of pumps and meters, suction lines from the railcars, carbon beds for vapor treatment, steam lines and steam condensate vessel, and a common pipeline leading to the refinery's existing tank farm.*

Note: None of these sources of mechanical noise has been modeled in the EIR and will of course add to the noise pollution in addition to the sounds of the tanker cars being uncoupled and re coupled with diesel engines jockeying the tanker cars around the terminal. We will be treated to raucous cacophony of discordant and abrasive sounds for hours and hours.

*During the heating operation, rail cars would be placed on Tracks 1 and 2 and each of the 80 cars would be connected to the steam line coming from the refinery. Each rail car would be equipped heating coils (i.e., piping coils) located on the outside bottom half of the rail cars. The steam would be travel from the inlet steam pipe to the heating coils on each tank car.*

SHL-07

*The rail cars would be heated for **about 21 hours** and then the normal unloading operations would begin. During the heating process, all of the locomotives would be shutdown.*

Let's do the math. If the cars will be heated about 21 hours; before the normal unloading operations would begin; then clearly the statement that the total time that the tanker cars will be in the refinery for 10-12 hours is incorrect.

Phillips is playing fast and loose with the time lines. If the tanker cars are sourced from tar sands crude, then they will have to be transported in heated tanker cars or have "rail bit" diluents to make the crude more viscous. So not knowing what the health hazards are with the additives to make the crude more viscous; or having 80 tanker cars that are **a boiling cauldron of crude** coming down the tracks and into the facility, we are being treated to a "heads Phillips wins, and tails we the residents of SLO County lose".

This is a recipe for disaster!

The questions keep mounting. Clearly Phillips will need to be more forthright with the type of crude, where it is sourced, and the worst case scenario as to how long the tanker cars will be in the facility.

The simple and easy answer is to Vote No! There is no upside to this project!

Laurance Shinderman  
1878 Eucalyptus Rd  
Nipomo, CA 93444

SHL-07  
cont

From: Laurance Shinderman <[lshinderman@sbcglobal.net](mailto:lshinderman@sbcglobal.net)>  
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<[akelassoc@earthlink.net](mailto:akelassoc@earthlink.net)>  
Date: 11/13/2014 11:00 PM  
Subject: Objection to the RDEIR and the Phillips Rail Project:

To Murry Wilson

The more I read the RDEIR, the more enraged I become that Phillips has the temerity and gall to even consider this Rail Terminal Project and that the planning department would entertain this folly.

Phillips is currently in non compliance in terms of diesel emissions and has the unmitigated chutzpah to suggest that regardless of the preemption issue, the air emissions within the SMR can be mitigated through the use of emission reduction credits.

SHL-08

Air toxic emissions at the SMR would be significant and unavoidable (Class I) since the cancer risk over a 30-year exposure period would be greater than the 10 in a million threshold established by the SLOCAPCD. This cancer risk is driven mainly by diesel particulate emissions. About half of this cancer risk is due to the diesel particulate emissions from the existing trucking operations at the SMR. Use of Tier 4 locomotives would reduce most of the cancer risk from the rail operations, but the cancer risk would remain significant and unavoidable since the baseline risk is already above the SLOCAPCD threshold. As stated above, the County may be preempted by Federal law from applying mitigation to the UPRR locomotives.

SHL-09

Phillips suggests that the use of Tier 4 locomotives would reduce the risk. Nonsense; while there may be Tier 4 standards, there are currently no Tier 4 locomotives. So this is a complete fabrication!

In describing the unloading processes in the DREIR they projected the amount of time that locomotives would be in operation at the unloading crude oil terminal. These are based upon assumptions that all the trains will arrive on schedule and no trains will have to be shunted aside to a "bad order track" for repair and that the unloading and uncoupling and re coupling and building the train back to the 80 crude oil tanker cars will go on without a hitch.

SHL-10

So let's use their numbers:

A unit train would be at the refinery site for about 11.5 hours. This includes the arrival and departure time. There would be about 19.2 total locomotive-hours of idle on-site, 5.8 total locomotive-hours of switching, and 9.5 locomotive hour of off time. This is a total of 34.5 locomotive- hours of operation (3

locomotives x 11.5 hours = 34.5 locomotive-hours of operation). It is expected that the turnaround for a train at the refinery would be between 10 and 12 hours.

Let's repeat that: 34.5 locomotive hours of operation for the 10-12 hours to unload the train.

That means 34.5 hours X 5 Days a week equals 172.5 hours a week! For the year that would be 8,970 locomotive hours. Year in and year out. For as long as the refinery is in operation.

That's a boat load of emission credits that they will have to buy; as they don't have that many banked.

So while they are using their emission credits; we the residents of the Mesa will be breathing the air borne diesel particulates that are already above the base line risk.

Add to this assault on our health and well being, we will be treated to the cacophony of the discordant and abrasive sounds as diesel engines jockey the cars into position; uncoupling and recoupling them; the clang of metal on metal as valves are hooked up and detached for unloading the crude; and the incessant hiss of steam as brakes are bled and tested or steam is pumped into the coils of the tanker cars so that the crude will flow.

Vote No Project:

Laurance Shinderman  
1878 Eucalyptus Rd.  
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415-254-6762 Mobile

(See attached file: Locomotive.docx)

SHL-10  
cont

SHL-11

From: Laurance Shinderman <[lshinderman@sbcglobal.net](mailto:lshinderman@sbcglobal.net)>  
To: "[p66-railspur-comments@co.slo.ca.us](mailto:p66-railspur-comments@co.slo.ca.us)"  
<[p66-railspur-comments@co.slo.ca.us](mailto:p66-railspur-comments@co.slo.ca.us)>  
Date: 11/16/2014 10:27 AM  
Subject: Opposition to the Phillips 66 Rail Spur Project: Piece Mealing

Phillips 66 in an utter lack of transparency is engaging in unlawful piecemealing of the Rail Project by not co-joining their EIR in Rodeo with that of the SMR in Nipomo.

SHL-12

The attached letter reflects my comments.

Laurance Shinderman  
1878 Eucalyptus Rd.  
Nipomo, CA 93444  
415-254-6762 Mobile

Once again, I'm writing to voice my objection to the Phillips 66; euphemistically named **rail spur project**. It is anything but! It is from my perspective the first of many such projects that Phillips has planned to increase refining capacity up and down the coast to take advantage of the political winds that have shifted so that they can refine and ship product off shore under the guise of "energy independence". And how will they do this; simply by sourcing "advantaged crude" from the tar sands that are literally flooding the market with cheap, and dirty crude.

The Phillips Santa Maria Refinery (SMR) and the Phillips 66 San Francisco Refinery, located in Rodeo California, are inextricably connected. They are, in fact, connected by a 200-mile pipeline and there is a direct production link between the 2 facilities. This pipeline has served this facility for decades; but now, Phillips wants to bring oil by rail down the coast on a 2000 mile journey to save a few dollars a barrel while putting the coast line and cities and towns along the route at risk.

The Phillips' website states...

***The San Francisco Refinery is comprised of two facilities linked by a 200-mile pipeline. The Santa Maria facility is located in Arroyo Grande, Calif., while the Rodeo facility is in the San Francisco Bay Area.***

Yet neither the RDEIR for the Rodeo Phillips 66 Propane Recovery Project (whose comment period closes on December 5, 2014) nor the REIR for SMR addresses the other project in any reasonable manner. Why? Simply because Phillips chooses to move in the dark shadows by withholding relevant information that could impact their twin projects.

Make no mistake...these are twin projects; the SMR will be providing partially refined product to the Rodeo refinery. It is obvious that without the SMR pre-refining which they do now, the Rodeo facility would not need the added capacity...and why do they need the added capacity, because the SMR will increase their refining capacity by bringing in crude by rail. But wait...the SMR refining capacity is capped...well, should they get the rail project approved, they will once again file yet another EIR to increase refining capacity...they pretty much said as much at a recent SCAC presentation in Nipomo.

So in their total lack of transparency, the Rodeo facility is not even mentioned under section "3.2 Cumulative Projects List" in the REIR makes us even more suspicious that Phillips may be engaging in what is known as "piecemealing".

The California Environmental Quality Act (CEQA) forbids "piecemeal" review of the significant environmental impacts of a project. In this case, the two projects should be considered as one big PROJECT. And, in doing so, it may be shown that the cumulative impact of both projects is much more environmentally calamitous than each one considered in isolation.

**Simply stated: The whole is greater than the sum of the parts.**

Vote No Project!

From: Laurance Shinderman <[lshinderman@sbcglobal.net](mailto:lshinderman@sbcglobal.net)>  
To: "[p66-railspur-comments@co.slo.ca.us](mailto:p66-railspur-comments@co.slo.ca.us)"  
<[p66-railspur-comments@co.slo.ca.us](mailto:p66-railspur-comments@co.slo.ca.us)>  
Date: 11/22/2014 01:08 PM  
Subject: Vote No!

NOPE (Not On Planet Earth) should this ill conceived project from Phillips be approved.

Economic Impact:

There is no basis for a finding that the benefits of the Project would outweigh its significant costs to the environment and to the health and safety of the thousands of people living in San Luis Obispo County and along the UPR main line.

The project objectives that the RDEIR offers in order to help the County develop a statement of overriding considerations include allowing the refinery to obtain a range of competitively priced crude oils, and maximize the use of existing infrastructure and resources to support the economic vitality of the County and State." (simply a self serving consideration) However, the RDEIR later notes that given the limited increase in local expenditures associated with the Rail Spur Project, the economic growth associated with future development at the proposed project site would not be significant," and "minimal new operational employment would be associated with the Rail Spur Project.

SHL-14

Simply stated; Phillips wants to increase it's profits to its shareholder to the detriment of residents up and down the mainline in terms of increased health risks and the potential of a horrific disaster or oil spill. Such a spill or disaster will cost tens of millions to clean up and stultify the economic renaissance and quality of life in the County.

Emission Credits:

Clearly the use of "emission credits" is a dodge; because they have not spelled out how many credits are available, do they expire, are they available to purchase for the duration of the refinery life and, are they even legal, when the air quality currently is over the risk level. Yet they want to bring in T-4 locomotives that are not yet on the market, and inflict 34.5 hours of diesel emissions (3 locomotives will be in operation concurrently) during the 12-14 hours of unloading, with emissions building up in huge concentrations as the locomotives will be moving in a confined space. Nor do they factor in the coke dust that will be disturbed and made airborne as 1.5 mile long trains traverse the current coke fields.

SHL-15

This is clearly a "heads they win and tails we lose". The county and the residents of San Luis Obispo County and along the coastal corridor that the tar sands laden crude oil tankers will travel should not be put at risk.

Vote No! NOPE!

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## Responses to Laurance Shinderman Comments

<p>SHL-01, SHL-03, and SHL-05</p>	<p>The RDEIR Aesthetics section considers all public viewpoints surrounding the project, and specifically addresses viewpoints associated with the developments and recreation east of Highway 1. The project location was directly viewed and analyzed from each of these potential viewpoints. The analysis, potential impacts and mitigation measures identified in the RDEIR Aesthetic section include and specifically address views from the residential and recreational developments east of Highway 1.</p> <p>Key Viewing Areas (KVAs) along Highway 1 provide a fair representation of how the majority of the public will experience the project. Highway 1 has the greatest traffic volume, is the closest public roadway and is a primary regional and local transportation route. KVAs along Highway 1 were positioned at major entrances to the Trilogy and other east side development to further increase their representative value. KVA-2, at the intersection of Highway 1 and Via Concha is at an elevation of approximately 200 feet above sea level. The closest residential street (and golf course) east of the project is at an elevation of approximately 235 feet above sea level. Potential viewpoints along Louise Lane and Eucalyptus Road rise to approximately 250 feet above sea level.</p> <p>Although the 35 to 50-foot viewpoint elevation difference between Highway 1 and the viewpoints to the east is not substantial when applied to the 0.5 to 1.5 mile viewing distance, field analysis showed that some public viewpoints would have slightly increased visual exposure to the project compared to views from Highway 1. This increased visual exposure would mostly occur through the 600-foot gap in the existing approximately one-mile long windrow of mature eucalyptus trees paralleling the east side of Highway 1. The RDEIR analyzed views from these elevated viewpoints, and includes mitigation measures which would minimize visual impacts from these areas.</p> <p>In addition, field review showed that this somewhat increased exposure also includes greater visibility of the existing Santa Maria Refinery, coke processing facility, railroad tracks and other development. As seen from these elevated locations the project would not block views of the Pacific Ocean, coastline, dunes, riparian corridors, or agricultural field patterns. Direct observation showed that from the vast majority of potential public viewpoints within the developed and recreation areas east of Highway 1, views of the project would be substantially or completely blocked by some combination of intervening vegetation, landform, distance or existing residential and recreational development.</p> <p>The RDEIR identifies and acknowledges potential impacts to the scenic vista and requires mitigation measures such as the screening berm which would reduce those impacts to a less than significant level. The RDEIR also notes that the project would not block views of the Pacific Ocean, sweeping coastline, dunes, riparian corridors, or agricultural field patterns.</p>
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## Responses to Laurance Shinderman Comments

The RDEIR describes an unloading of up to five trains per week, with a maximum of 250 allowed per year. With this average of less than one unloading operation per day, noticeably new activity would be minimal. In addition, because of viewing distance, existing topography, intervening vegetation, and the required screening berm, ground plane activity would not be easily noticed from the majority of public viewpoints. The same conditions which preclude visibility of much of the existing oil processing facility activity would also preclude much of the visibility of the proposed unloading facility and rail spur tracks.

The project proposes to construct the unloading facility and rail spur tracks adjacent to the southern slopes of a natural landform ridge. This adjacent landform rises to elevations ranging from approximately 120 to 145 feet above sea level. The proposed rail spur tracks are proposed at an elevation of approximately 94 feet above sea level, which would be as much as 55 feet lower than the landform to the north. As a result, views of the unloading facility and railroad spur from the north and the northeast would be substantially blocked. In addition, the eastern segment of the rail spur tracks, closest to Highway 1, are proposed to be constructed in an excavated area maintaining the approximately 94-foot elevation while the adjacent ground rises up eastward, resulting in the easternmost end of the tracks being approximately 20 feet below the surrounding natural terrain. This elevation difference, along with the required 10 to 20-foot tall mitigation berm, would combine for an approximately 30 to 40-foot tall earthen visual screen around the eastern end of the railroad spur. This berm height in combination with the natural ridge to the north will be sufficient to reduce visibility of the project to a less than significant level for viewpoints from the east, including elevated viewpoints in the Trilogy development and other public viewpoints.

The RDEIR has been revised to identify lighting associated with the unloading facility as follows: “The unloading area would have 70 floodlights placed or mounted under the canopy. Forty of these lights would be directed toward the railcars and placed 60 feet apart, with 8,238 Lumens each. Thirty of these canopy lights would be directed to the walkway area and would be placed 20 feet apart, with 5,856 Lumens each. Two additional lights on 20-foot poles would be focused on the Meter area and Drain Tanks. The lights associated with the unloading area would be used on an as-needed basis, when trains are being unloaded. This could occur at night between dusk and dawn, since trains could arrive at any hour. Trains would be on site approximately 10 to 12 hours, and unloading would last approximately 8 hours per train”.

The RDEIR acknowledges visibility of new night lights from the surrounding areas and identifies substantial mitigation measures to minimize any potentially adverse effects.

At the unloading facility all lights would be mounted under the proposed canopy. Forty of these canopy lights would be placed 60-feet apart, and 30 of

## Responses to Laurance Shinderman Comments

them would be 20-feet apart. Lighting for the rail spur would only be for perimeter fencing security purposes and would be placed on 15-foot tall poles, 500 feet apart. The project proposes to construct the unloading facility and rail spur tracks adjacent to the southern slopes of a natural landform ridge. This adjacent landform rises to elevations ranging from approximately 120 to 145 feet above sea level. The proposed rail spur tracks are proposed at an elevation of approximately 94 feet above sea level, which would be as much as 55 feet lower than the landform to the north. As a result, views of the unloading facility and railroad spur from the north and the northeast would be substantially blocked. In addition, the eastern segment of the rail spur tracks, closest to Highway 1, are proposed to be constructed in an excavated area maintaining the approximately 94-foot elevation while the adjacent ground rises up eastward, resulting in the easternmost end of the tracks being approximately 20 feet below the surrounding natural terrain. This elevation difference, along with the required 10 to 20-foot tall mitigation berm, would combine for an approximately 30 to 40-foot tall earthen visual screen around the eastern end of the railroad spur. This berm height in combination with the natural ridge to the north will help reduce visibility of night lighting for viewpoints from the east, including elevated viewpoints in the Trilogy development and other public viewpoints.

The lighting associated with the unloading facility would be viewed at a distance of approximately 1.5 miles or more from viewpoints east of Highway 1, and would be seen in the context of the Santa Maria Refinery immediately to the north. In addition the unloading facility proposes a covered canopy over the majority of the area, which would decrease light-trespass. Similar to the lack of visibility of the existing oil refinery's illuminated ground-plane, intervening topography would block views of the illuminated ground-plane of the unloading facility as seen from Highway 1 and the residential areas to the east. Although the unloading facility lights would introduce light into a new area, with applied mitigation measures they would not appear out of place given the relatively close proximity to the existing refinery and coke processing facility, which emits high levels of industrial lighting throughout the night, every night of the year.

In addition to the applicant-proposed lighting features such as downward-directed lights with fully shielded lenses, the RDEIR requires substantial mitigation measures that will minimize lighting impacts. Mitigation measures include that the lighting plan be based on a photometric study prepared by a qualified engineer who is an active member of the Illuminating Engineering Society of North America (IESNA), using guidance and best practices endorsed by the International Dark Sky Association.

Mitigation measures preclude illumination of adjacent slopes, prohibit placement of perimeter lights (which as previously described would be 15-foot tall) east of the screening berm (which as previously described would be 10 to 20-foot tall), and require the use of motion detectors rather than being

**Responses to Laurance Shinderman Comments**

	<p>continuously on.</p> <p>Importantly, following project completion the RDEIR requires the preparation of a Lighting Evaluation Report for review and approval by the County Department of Planning and Building prepared by a qualified lighting engineer not involved in the design of the original lighting plan. The Lighting Evaluation Report will conduct a comprehensive evaluation of in-place lighting, under all expected circumstances, and will require correction of any unexpected or residual lighting impacts based on direct observation of the completed project. The air quality mitigation that would limit rail car unloading from between 7 A.M. and 7 P.M. would also serve to reduce the nighttime lighting impacts to less than significant.</p> <p>The RDEIR acknowledges that the rail spur tracks and associated trail cars would encroach into views of the open space southeast of the Santa Maria Refinery. Although those existing open space views already include railroad tracks and trains, the RDEIR requires mitigation measures such as the screening berm which would reduce those impacts to a less than significant level.</p> <p>The RDEIR also notes that the project would not result in any blockage of views of the Pacific Ocean, sweeping coastline, dunes, riparian corridors, or agricultural field patterns. The existing visual setting as seen from the surrounding areas including the residential developments east of Highway 1 include the Santa Maria Refinery, coke processing plant, railroad tracks and other industrial support facilities. The proposed unloading facility, which would be more than 1.5 miles away from Highway 1 and points east, would be constructed on an already highly disturbed work-zone. With applied mitigation the project would appear as a logical extension of the existing industrial facility, with a similar level of visual compatibility as what currently exists.</p>
SHL-02	<p>A study performed by the SLOCAPCD, the South County Phase 2 Particulate Study, evaluated whether impacts from off-road vehicle activities at the Oceano Dunes State Vehicle Recreational Area (ODSVRA), the Phillips Refinery coke piles, and adjacent agricultural fields were contributing to the particulate problems on the Nipomo Mesa (SLOC APCD 2010). The Phase 2 portion of the study concluded that off-road vehicle activity in the ODSVRA is a major contributing factor to the PM concentrations observed on the Nipomo Mesa and that neither the petroleum coke piles at the Phillips facility nor agricultural fields or activities in and around the area are a significant source of ambient PM on the Nipomo Mesa. The composition of the particulates is predominately natural crustal particles. The SLOCAPCD has determined that the dune complex along the coast of the Five Cities area is the source of the high particulate matter levels measured at the South Coast stations (SLOCAPCD Annual Emissions Report, 2013). The SMR has a coke dust plan to reduce coke dust and it does involve watering. However, the proposed Project is not anticipated to increase coke handling or contribute to dust particulate levels in the area. Air quality violations on the mesa are primarily associated with</p>

## Responses to Laurance Shinderman Comments

	<p>natural crustal particulates.</p> <p>The use of higher sulfur crude oils would increase the amount of sulfur produced at the SMR. This increase in sulfur and the associated truck trips are addressed in the EIR in Section 4.3 (Air Quality and Greenhouse Gases). As the SMR already processes heavy crude oils, and the tar sands crude oils would have a similar proportion of heavier materials, the production of coke is not expected to change with the project.</p> <p>Emission reduction credit information has been added to the final EIR, indicating that there are sufficient emission reduction credits available with the SLOCAPCD to offset the criteria pollutants generated by the project within SLOC. The SLOCAPCD has a well established program of credits for criteria pollutants and GHG which can be used to offset the emissions increases. The mitigation measures have been developed in coordination with the SLOCAPCD. ERC are standard practice in many air districts state-wide to reduce the impacts of criteria pollutant emissions</p>
SHL-04	<p>As noted in the RDEIR, the current DOT-111 tank cars have serious safety deficiencies that can lead to an unacceptable spill rate in the event of a train derailment. As a result, the RDEIR specifically included mitigation measure HM-2a, which requires only rail cars designed to Option 1: PHMSA and FRA Designed Tank Car as listed in Table 4.7.6, shall be allowed to unload crude oil at the Santa Maria Refinery. Even with the improved rail cars, the RDEIR found that the risk of a crude oil train accident and spill was considered a Significant and Unavoidable (Class I) impact.</p>
SHL-06	<p>As stated in Section 2.6 (Project Description), the SMR, as with all refineries, is similar to other manufacturing facilities that regularly evaluate their principal manufacturing feedstocks in terms of availability, suitability, and economics. This is certainly true of the crude oil feedstock used at the SMR. As described above, the refinery processes a range of crude oils from different sources, and the crudes vary from time to time. In addition, the refinery often blends crudes from multiple sources prior to processing. As the data in Table 2.6 of the RDEIR shows, the SMR historically has processed and currently processes primarily heavy, sour crudes, although these are sometimes blended with other lighter, sweeter crudes in small amounts.</p> <p>Phillips 66 expects to continue to receive, blend and process a comparable range of crudes in the future, and will select future crude to be delivered by rail based upon a number of factors including availability, suitability, and economics. It is not possible to predict precisely which crude oils will be delivered to the SMR via rail. One of the objectives of the project is to provide greater access to the larger crude oil market, and the specific crudes received by rail would likely vary from time to time as has been the case for the current refinery crude slate. However, the crude oil types evaluated in the EIR provide a reasonable representation of the range of crude oil types that could be</p>

## Responses to Laurance Shinderman Comments

processed based on current economics and crude oil availability.

The RDEIR examined changes in emissions associated with a change of slate as part of Impact AQ.2 (see Section 4.3, Air Quality and Greenhouse Gases). For the SMR, key crude slate parameters that could impact air emissions include the percent of BTEX, vacuum resid, sulfur and metals in the crude oil. The BTEX was analyzed in the health risk assessment to determine the increased health risk. Increased sulfur was assessed as to the increased sulfur truck trips that would be required. None of the other components would alter the emissions at the refinery as the heavy metals would not be emitted into the air from the SMR. Note that as the API gravity would be similar, the emissions of volatile components (ROG) from fugitive emissions would be similar with the change in crude slate.

BTEX levels of Canadian tar sands crude oil are similar to other heavy crude oil processed by the SMR and the EIR demonstrates that any increases in BTEX would generate a nominal increase in health risk. The potential increase in BTEX has been addressed in the EIR. See Impacts AQ.2 and AQ.4 in Section 4.3, Air Quality and Greenhouse Gas Emissions. However, during the Enbridge Spill, 1,086 air samples of benzene levels, for example, were measured and 21 of the samples showed air concentrations above the EPA action levels (<http://www.epa.gov/enbridgespill/data/dataair.html>) of 6 ppb, indicating that some volatiles were present in the spilled materials although not very much. Sampling conducted by the Michigan Department Of Natural Resources And Environment Environmental Laboratory on the crude oil in the Enbridge pipeline (which was dilbit from Canada, same as would be expected for the proposed project) indicated that benzene could be as high as 1,100 ppm in the crude, Xylene as high as 1,200 ppm and Toluene as high as 1,900 ppm (measured as mg/kg) (<http://www.epa.gov/enbridgespill/data/index.html#aqdata>). The results indicated a BTEX concentration of about 0.50%, or, as per Table 4.3.13 in the RDEIR, within or below the range of crude oils currently processed by the SMR. The Keystone Pipeline FEIS (2013) also examined a wide range of crude oils and demonstrated that the " BTEX content of the dilbits [from Canada] is much lower than that of many lighter crude oils"

The EIR analyzed a BTEX concentration of 1.25% to be conservative which indicated nominal increases in health risk. BTEX levels of the proposed project crude do not present a "far greater" amount of BTEX from fugitive components. In addition, fugitive emissions from components are estimated based on industry-wide average emission rates developed by the EPA and include a wide range of crude oil types, volatilities, BTEX fractions and compositions. The EIR demonstrated that changes to health risk due to a potential increase in BTEX to 1.25% are nominal and do not require further analysis. See Appendix B.2.

The metals in the tar sands oil would not be volatilized at the SMR or along

**Responses to Laurance Shinderman Comments**

	<p>transportation routes and would therefore not contribute to increases in air-based health risk.</p> <p>Emission reduction credit information has been added to the final EIR, indicating that there are sufficient emission reduction credits available with the SLOCAPCD to offset the criteria pollutants generated by the project within SLOC. The SLOCAPCD has a well established program of credits for criteria pollutants and GHG which can be used to offset the emissions increases. The mitigation measures have been developed in coordination with the SLOCAPCD. ERC are standard practice in many air districts state-wide to reduce the impacts of criteria pollutant emissions.</p> <p>The discussion in the comment about crude by rail accidents does not identify a specific environmental analysis or CEQA issue relative to the EIR and compliance with CEQA. The commenter's statements about rail accidents are included in the FEIR for the decision-makers' consideration as part of the County's deliberations on the proposed project.</p> <p>The RDEIR does discuss the impacts to communities along the mainline rail routes as part of the discussion in Impact HM.2 (see Section 4.7, Hazards and Hazardous Materials).</p>
SHL-06	<p>There is a considerable amount of information on crude slate characteristics and hazards presented in the RDEIR as Impact HM.3. As noted in the RDEIR, the SMR is designed to handle heavy sour crude, to only partially refine crude oil to extract intermediates and gases, and uses the heavier crude oil components to produce petroleum coke.</p> <p>The SMR, as with all refineries, is similar to other manufacturing facilities that regularly evaluate their principal manufacturing feedstocks in terms of availability, suitability, and economics. This is certainly true of the crude oil feedstock used at the SMR. The refinery processes a range of crude oils from different sources, and the crudes have varied over time. In addition, the refinery often blends crudes from multiple sources prior to processing to assure the crude is within the processing design limits of the refinery.</p> <p>For the SMR, key crude slate parameters that could impact hazards and potential releases at the refinery have to do with the corrosivity of the crude oil. RDEIR Table 4.7.14 provided the key corrosivity driving properties (sulfur and total acid number (TAN)) of the typical crude blend and range of major crudes processed at the SMR as well as a range of typical crudes that could be delivered by rail.</p> <p>Naphthenic acids are natural constituents in many petroleum sources, including bitumen from oil sands. Naphthenic acids can create corrosion problems. This type of corrosion is referred to as naphthenic acid corrosion (NAC). Because of the lack of available naphthenic acid concentration data for crude oil, the</p>

## Responses to Laurance Shinderman Comments

petroleum industry uses a measurement known as the total acid number (TAN) to qualitatively measure the potential for an oil to produce such corrosion problems. High sulfur levels can lead to sulfide related corrosion.

SMR currently processes sour, heavy crudes with elevated levels of sulfur and organic acids. The SMR follow the guidelines laid out in the American Petroleum Institute Recommended Practice "Guidelines for Avoiding Sulfidation Corrosion Failures in Oil Refineries". Phillips 66 also has a required standard for their refineries (M-42-RS-03 "Sulfidation Service Equipment."), which the SMR is in compliance with. Both these documents provide rules and guidelines to monitor, mitigate and prevent sulfidation corrosion of process equipment.

With respect to organic acid corrosion, SMR follows generally accepted industry practices and the Phillips 66 Consensus Best Practice for "Naphthenic Acid Service Equipment." This document provides guidelines and recommendations for appropriate metallurgy and wide-spread risk based inspection including inspection frequency and methods, use of corrosion inhibitors and suggestions for possible equipment locations, material types, fluid velocities and temperature ranges where naphthenic acid corrosion may be expected to occur. SMR has a comprehensive inspection and monitoring program for naphthenic acid corrosion and has made numerous metallurgical upgrades of piping and equipment in response to program findings. Phillips 66 has approved capital projects planned between now and 2015 to further upgrade piping and equipment and improve organic acid corrosion resistance at SMR.

Phillips 66 has a number of existing process safety policies and procedures that would apply to the SMR rail project, including the equipment and operating procedures. These programs are designed to prevent releases of hazardous materials, minimize risk, and ensure the refinery's ability to process crude without increasing risk of releases. For example, the Mechanical Integrity Program covers equipment used to process, control, and store hazardous chemicals and assigns responsibility for equipment inspection and testing as well as maintenance. This program meets the requirements of CCR Title 8 Sec 5189, "Process Safety Management of Acutely Hazardous Materials" (f), (j) and 29 CFR 1910.119, "Process Safety Management of Highly Hazardous Chemicals" (j).

The refinery uses a Positive Material Identification (PMI) program to ensure the integrity of all mechanical and pressurized systems. This program is overseen by the refinery's Inspection Supervisor.

Any new feedstock coming to the refinery undergoes a complete Management of Change (MOC) analysis to ensure that all hazards, as well as the refinery's systems are safe and operable. The MOC program is part of the refinery's Process Safety Management program and tracks equipment modification, addition of new systems and process changes. MOC covers all changes that

## Responses to Laurance Shinderman Comments

involve specific chemicals at or above threshold limits as defined in California Code of Regulation, Section 5189, Appendix A or flammable liquids or gasses as defined by California Code of Regulations, Section 5194(c) including new construction, modifications, changes in chemicals or materials, changes in feedstock, and changes in concentrations, temperatures, pressures, or flow rates outside of established Safe Process Limits.

A review of the data in RDEIR Table 4.7.14 shows that the expected range of sulfur and TAN would be within the range of the crudes that are currently being processed at the SMR. Therefore, the change in crude slate would not be expected to change the sulfur or TAN levels compared to the crude sources that are currently being processed at the SMR. It is possible that the TAN could increase when compared to the typical crude blend. However, with the programs and management systems, discussed above, in place, this potential increase would not be expected to increase the hazards or likelihood of a release at the SMR. Therefore, the impact would be less than significant.

The RDEIR examined changes in emissions associated with a change of slate, as indicated in Section 4.3.4.2, Air Quality and Greenhouse Gases, which states” For the SMR, key crude slate parameters that could impact air emissions include the percent of BTEX, vacuum resid, sulfur and metals in the crude oil. “The BTEX was analyzed in the health risk assessment to determine the increased health risk. Increased sulfur was assessed as to the increased sulfur truck trips that would be required. None of the other components would alter the emissions at the refinery as the heavy metals would not be emitted into the air from the SMR. Note that as the API gravity would be similar, the emissions of volatile components (ROG) from fugitive emissions would be similar with the change in crude slate.

BTEX levels of Canadian tar sands crude oil are similar to other heavy crude oil processed by the SMR and the RDEIR demonstrates that any increases in BTEX would generate a nominal increase in health risk. See Response to CBE-21 and CBE-23. The metals in the tar sands oil would not be volatilized at the SMR or along transportation routes and would therefore not contribute to increases in air-based health risk.

The Canadian tar sands are not as "explosive" as Bakken crude oil and present similar risks to the rail transportation of heavy crudes that currently occur within California and through SLOC.

The increased levels of nickel, vanadium, lead and copper do not affect air emissions as none of the crude oil is combusted and none of the metals are carried over in the fuel gas. The metals would remain in the coke. Sulfur production would increase producing potentially more sulfur trucks trips, as discussed in the RDEIR (see Section 4.3, Air Quality and Greenhouse Gases and 4.12, Transportation and Circulation).

## Responses to Laurance Shinderman Comments

The use of higher sulfur crude oils would increase the amount of sulfur produced at the SMR. This increase in sulfur and the associated truck trips are addressed in the RDEIR in Section 4.3, Air Quality and Greenhouse Gases. Emissions of sulfur dioxide are not anticipated to increase as most of the sulfur in the crude is removed as elemental sulfur and trucked from the site and the SLOCAPCD has limits on the emissions of sulfur dioxide from the refinery processing equipment.

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The Canadian tar sands are not as "explosive" as Bakken crude oil and present similar risks to the rail transportation of heavy crudes that currently occur within California and through SLOC.

The use of SLOCAPCD thresholds is supported by the SLOCAPCD in their review of the EIRs for this project.

Offset credits are used in the RDEIR to mitigate the impacts of criteria pollutant emissions, which can contribute to the formation of ozone throughout the air district. Emissions of toxic pollutants contribute to cancer risks and are generally more local impacts. Emission credits are not proposed for these impacts. The use of DPM credits was removed from the Final EIR. The mitigation measures for toxic impacts are to utilize Tier 4 locomotives, which are substantially cleaner than most locomotive currently operating and Tier 4 locomotives are available in 2015. However, this mitigation measure may be preempted by Federal requirements.

Emission reduction credit information has been added to the final EIR, indicating that there are sufficient emission reduction credits available with the SLOCAPCD to offset the criteria pollutants generated by the project within

**Responses to Laurance Shinderman Comments**

	<p>SLOC. The SLOCAPCD has a well established program of credits for criteria pollutants and GHG which can be used to offset the emissions increases. The mitigation measures have been developed in coordination with the SLOCAPCD. ERC are standard practice in many air districts state-wide to reduce the impacts of criteria pollutant emissions</p> <p>According to an article in Bloomberg in 9/2014, GE has taken orders for over 1,000 new Tier 4 locomotives that it will be producing in 2015. So the Tier 4 locomotives are feasible mitigation, are available and starting to enter the market this year (<a href="http://www.bloomberg.com/news/2014-09-29/well-timed-bet-has-ge-ahead-of-caterpillar-in-locomotives.html">http://www.bloomberg.com/news/2014-09-29/well-timed-bet-has-ge-ahead-of-caterpillar-in-locomotives.html</a>).</p>
SHL-07	<p>The two crudes evaluated in the RDEIR are Canadian Dilbit crudes that would not need to be heated. The impacts on the SMR and the rail operations have all been based upon transporting and refining Canadian Dilbit crudes. Phillips 66 has request as part of their project the ability to heat the crude on one train per year. For the one train that may need to be heated, the time it would be at the SMR would be closer to about 31 to 33 hours. However, for the 21 hours of heating the locomotives would be shutdown. For the remaining 10 to 12 hours the operations would be the same as all other trains during the unloading process. All other trains would be at the SMR for about 10 to 12 hours.</p> <p>Table 4.9.9 in Chapter 4.9, Noise and Vibration, list all of the noise generating equipment that would be used for the rail unloading operations and includes the pumps, transformers, HVAC system, and air compressors. The meters, carbon bed and other vessels are not noise generating equipment.</p>
SHL-08	<p>Emission reduction credit information has been added to the final EIR, indicating that there are sufficient emission reduction credits available with the SLOCAPCD to offset the criteria pollutants generated by the project within SLOC. The SLOCAPCD has a well established program of credits for criteria pollutants and GHG which can be used to offset the emissions increases. The mitigation measures have been developed in coordination with the SLOCAPCD. ERC are standard practice in many air districts state-wide to reduce the impacts of criteria pollutant emissions</p> <p>Current trucking activities produce potential cancer risks that exceed thresholds. However, SMR stationary source activities do not currently exceed cancer risk thresholds.</p>
SHL-09	<p>The mitigation measures for toxic impacts are to utilize Tier 4 locomotives, which are substantially cleaner than most locomotive currently operating and Tier 4 locomotives are available in 2015. However, this mitigation measure may be preempted by Federal requirements.</p> <p>According to an article in Bloomberg in 9/2014, GE has taken orders for over 1,000 new Tier 4 locomotives that it will be producing in 2015. So the Tier 4</p>

**Responses to Laurance Shinderman Comments**

	<p>locomotives are feasible mitigation, are available and starting to enter the market this year (<a href="http://www.bloomberg.com/news/2014-09-29/well-timed-bet-has-ge-ahead-of-caterpillar-in-locomotives.html">http://www.bloomberg.com/news/2014-09-29/well-timed-bet-has-ge-ahead-of-caterpillar-in-locomotives.html</a>)</p>
SHL-10	<p>Emission reduction credit information has been added to the final EIR, indicating that there are sufficient emission reduction credits available with the SLOCAPCD to offset the criteria pollutants generated by the project within SLOC. The SLOCAPCD has a well established program of credits for criteria pollutants and GHG which can be used to offset the emissions increases. The mitigation measures have been developed in coordination with the SLOCAPCD. ERC are standard practice in many air districts state-wide to reduce the impacts of criteria pollutant emissions</p>
SHL-11	<p>Noise levels along the mainline and at the SMR would increase with the additional trains. Noise levels along the mainline are addressed in Section 4.9 (Noise and Vibration) under impact N.3. Noise levels at the SMR are discussed in Section 4.9 under impacts N.1 for construction and N.2 for operations. Based on in-field monitoring and modeling, noise impacts would be less than significant with mitigation (Class II).</p>
SHL-12	<p>Operations at the Rodeo Refinery are not anticipated to change with the processing of Rail Spur Project crude oil. The refinery currently handles heavy crude oil and the characteristics of the Rail Spur Project crude oil are similar to current heavy crude oils. Section 4.3, Table 4.3.13 summaries the different characteristics of the crude oils. BTEX levels may increase (although some tar sands crude oils have lower percentages of BTEX than the heavy crudes currently being processed. The SMR refinery ships naphtha and gas oils via pipeline to the Rodeo Refinery. Both of these are semi-refined products. The composition of these two products is not expected to change with the Rail Spur Project.</p> <p>As discussed in the Project Description (Chapter 2.0) the SMR currently processes a range of crude oils from different sources, and the crudes vary from time to time. In addition, the refinery often blends crudes from multiple sources prior to processing. A comparison of crude oils and their characteristics demonstrates that the crudes likely to be received by unit train would be comparable to those currently or recently processed at the SMR. The SMR is not requesting any changes or modifications to its crude unit or other processing units that would allow it to process any crude types that it can't be process currently.</p> <p>The only proposed change to the Rodeo Refinery is the Propane Recovery Project. The Rodeo Refinery (SFR) produces gases as a byproduct of the refining process, and these gases are used as fuel in various refinery processes (referred to as "refinery fuel gas" or "RFG"). Currently, the propane and part of the butane generated at the SFR is used as RFG. Instead of using the propane and butane as fuel at the SFR, the Propane Recovery</p>

## Responses to Laurance Shinderman Comments

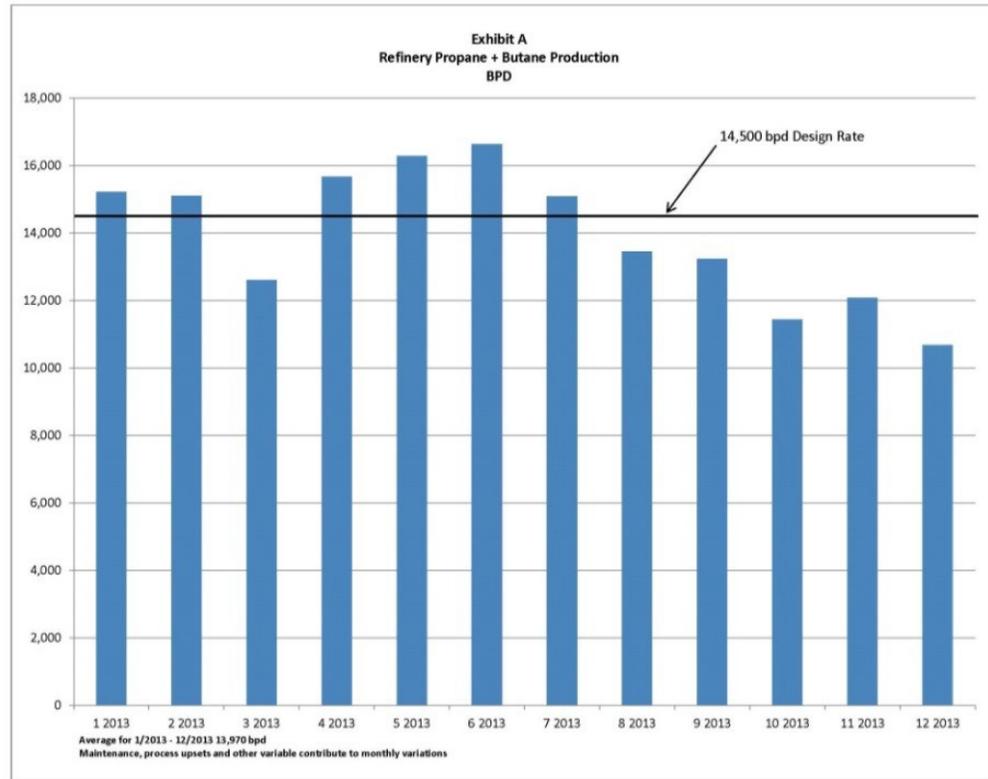
Project will allow Phillips 66 to recover, store, and ship propane and additional butane via rail to outside customers. Therefore, the primary project objective is to recover liquid petroleum gases ("LPGs" *i.e.*, propane and butane) that already exist in the RFG. The Propane Recovery Project will not cause or require an increase in the amount of recoverable LPG present in the RFG; it will simply allow recovery of the LPGs that already are present in the RFG.

The Propane Recovery Project is designed to remove up to 14,500 barrels of LPGs per day. Data regarding actual LPG content of the RFG is consistent with the design basis for the project. The figure below shows that, for the twelve month period from January through December 2013, the average LPGs in the Rodeo RFG was 13,970 barrels per day.

The equipment design is a limiting factor on the amount of propane and butane that can be captured and stored, regardless of how much propane and butane can be produced by the SFR in the future or what type of crude oil is processed. Phillips 66 specified this design basis in the application to the Bay Area Air Quality Management District for an authority to construct the Propane Recovery Project, and it has been translated into an enforceable condition included in the draft permit prepared by the air district. Therefore, the amount of propane and butane to be extracted once the Propane Recovery Project is operational will be constrained by the physical design of the equipment and the permit limits.

Most of the LPG produced at the SFR does not arrive as propane and butane in crude oil or in the semi-refined products received from the Santa Maria Refinery (SMR). Rather, the vast majority of LPG produced at the SFR is created through the refining process itself. As explained above, the design capacity of the Rodeo Propane Recovery Project was sized to recover LPGs that are currently being produced and burned as part of the refinery fuel gas at the SFR. No changes in the crude delivery system, type of crude or operations at the SMR are needed in order to fully utilize the propane recovery unit in Rodeo.

## Responses to Laurance Shinderman Comments



The commenter's have overlooked the fact that the refining process at the SFR itself accounts for 90% of the propane and butane currently produced and proposed to be recovered by the Rodeo Propane Recovery Project. As described at pages 3-8 to 3-9 of the Recirculated Draft Environmental Impact Report for the Propane Recovery Project, the refining process incorporates four primary functions: separation, conversion, purification and blending. Crude oil and other incoming feed streams contain mixtures of various hydrocarbon compounds that can be separated using distillation and fractionation in the first step of the refining process. At the SFR, a small amount of butane and propane is separated from the crude oil in these first stage processes. However, butane and propane are also created from other hydrocarbon compounds during the conversion phase of the refining process. Overall approximately ten percent of the LPG (combined butane and propane) arrives as identifiable fractions of the crude oil, and the balance of approximately ninety percent is created in the refining processes (cracking units).

Since LPG in the crude oil accounts for only a very small fraction (approximately ten percent) of the total LPG produced at the SFR, a change in crude oil LPG content in Santa Maria or in Rodeo would have very little effect on the volume of LPG available for recovery at Rodeo.

As discussed in the Recirculated Draft Environmental Impact Report for

**Responses to Laurance Shinderman Comments**

	<p>the Propane Recovery Project Section 3.4.2.1, and shown in Figure 3-7, the proposed Project’s design basis was derived from data taken at the Refinery in August, 2011. In the same section, the RDEIR for the Propane Recovery Project also provides an update to substantiate this 2011 design basis with the most recent full year (2013) of RFG data from the Refinery in Figure 3-8. This figure shows that for 2013 an average of 13,970 barrels per day (BPD) of propane and butane were available and that monthly this quantity of propane and butane varies. Note that between the 2011 design basis and the 2013 data, no change to crude feedstock, such as those of concern to commenter’s, had been made. These data provide the substantial evidence to support the “independent utility” of this Project and further support that the EIR has not inappropriately piecemealed or segmented this Project.</p>
SHL-13	<p>As stated in Chapter 1.0, Introduction, the project is a proposed rail spur extension and rail crude oil unloading facility (Rail Spur Project) that would be located at the Santa Maria Refinery (SMR) in Nipomo. The use of the term “Rail Spur Project” is just an acronym for the entire project.</p> <p>See Response SHL-13 for response to the issue of piecemealing for the Rodeo Propane Recovery Project and the Rail Spur Project at the SMR.</p>
SHL-14	<p>The comment does not identify a specific environmental analysis or CEQA issue relative to the EIR and compliance with CEQA. The commenter’s statements about benefits and drawbacks of the project and Phillips 66 profits are included in the FEIR for the decision-makers’ consideration as part of the County’s deliberations on the proposed project.</p>
SHL-15	<p>Emission reduction credit information has been added to the final EIR, indicating that there are sufficient emission reduction credits available with the SLOCAPCD to offset the criteria pollutants generated by the project within SLOC. The SLOCAPCD has a well established program of credits for criteria pollutants and GHG which can be used to offset the emissions increases. The mitigation measures have been developed in coordination with the SLOCAPCD. ERC are standard practice in many air districts state-wide to reduce the impacts of criteria pollutant emissions</p>