



**Santa Maria Refinery: Preparing for the Future**

# Phillips 66 Santa Maria Refinery Rail Spur Extension Project

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## Planning Commission Can Approve 3 Train/Week Project Without Further CEQA

- Identical in all ways to project except frequency of deliveries.
- Impacts fully evaluated.
- Lead Agency approval of reduced alternative furthers CEQA objectives.
- CEQA does “not require [a public agency] to delay the project further in order to evaluate the new project’s reduced impacts on the environment.”  
*Western Placer Citizens for an Agricultural and Rural Environment v. County of Placer*
- Project approved “need not be a blanket approval of the entire project initially described in the EIR. If that were the case, the informational value of the document would be sacrificed. Decision-makers should have the flexibility to implement that portion of the project which satisfies their environmental concerns.” *Dusek v. Anaheim Redevelopment Agency*

# Benefits of the 3 Train/Week Project

- Increases high quality habitat on the P66 site compared to today.
  - Project impacts 20.88 acres of “highly disturbed, degraded” habitat.
  - MM BIO-5a requires restoration of twice as much other land (41.76 acres), emphasizing rare and sensitive plant communities.
  - Higher replacement/restoration ratios required for certain plants.
- Reduces health risk compared to current conditions.
  - Mitigation measures will change existing truck schedule, reducing health risk from existing refinery operations.
- Enhances the economic vitality of Refinery including existing jobs (direct and indirect), purchases, taxes, contributions, etc.
- Adds jobs: construction jobs and permanent jobs.

# Benefits of the 3 Train/Week Project

- For most topics, 3 train/week Project has lower impacts than “No Project”.
- FEIR describes most likely “No Project” scenario:
  - Trains bring crude as far as San Joaquin Valley terminals (2 ½ per week)
  - Trucks haul crude from San Joaquin Valley to Santa Maria Pump Station (100 round trips per day; 110 miles each direction; 22,000 miles per day)
  - Pipeline from Santa Maria Pump Station to Refinery
  - “No Project” results in higher GHGs, higher health risk, traffic impacts
  - Risk of accident and spill are higher for trucks than trains.

3 Trains Per Week with Mitigation

or

100 Trucks Per Day with No Mitigation

# Benefits of the 3 Train/Week Project

## No Class I Impacts

From On-Site (Non-Preempted) Equipment and Activities

# Diesel Particulate Matter

FEIR says DPM  
threshold comes  
from SLO APCD CEQA  
Handbook  
(FEIR p. 4.3-34)

**Table 4.3.9 SLOCAPCD Thresholds of Significance for Operational Emissions Impacts**

Pollutant	Daily	Annual
ROG + NO <sub>x</sub>	25 pounds	25 tons
Diesel Particulate Matter	1.25 pounds	-
Fugitive Dust Particulate Matter (PM <sub>10</sub> )	25 pounds	25 tons
CO	550 pounds	-

Source: SLOCAPCD 2012

# Diesel Particulate Matter

SLO APCD CEQA Handbook says DPM threshold comes from Carl Moyer Guidelines (Handbook p. 3-4)

**Table 3-2: Thresholds of Significance for Operational Emissions Impacts**

Pollutant	Threshold <sup>(1)</sup>	
	Daily	Annual
Ozone Precursors (ROG + NO <sub>x</sub> ) <sup>(2)</sup>	25 lbs/day	25 tons/year
Diesel Particulate Matter (DPM) <sup>(2)</sup>	1.25 lbs/day	
Fugitive Particulate Matter (PM <sub>10</sub> ), Dust	25 lbs/day	25 tons/year
CO	550 lbs/day	
Greenhouse Gases (CO <sub>2</sub> , CH <sub>4</sub> , N <sub>2</sub> O, HFC, CFC, F6S)	Consistency with a Qualified Greenhouse Gas Reduction Plan OR 1,150 MT CO <sub>2</sub> e/year OR 4.9 CO <sub>2</sub> e/SP/year (residents + employees)	

1. Daily and annual emission thresholds are based on the California Health & Safety Code Division 26, Part 3, Chapter 10, Section 40918 and the CARB Carl Moyer Guidelines for DPM.

2. CalEEmod – use winter operational emission data to compare to operational thresholds.

# Diesel Particulate Matter

Carl Moyer  
Guidelines are not  
the source.

- They do not set DPM exposure thresholds.
- They have nothing to do with CEQA.

## THE CARL MOYER PROGRAM GUIDELINES

Approved Revisions 2011



Approved by the Board: April 28, 2011

Revised Date: December 18, 2015

California Environmental Protection Agency  
 **Air Resources Board**

# Diesel Particulate Matter SLO APCD CEQA Handbook

Diesel particulate matter (DPM) is seldom emitted from individual projects in quantities which lead to local or regional air quality attainment violations. DPM is, however, a toxic air contaminant and carcinogen, and exposure DPM may lead to increased cancer risk and respiratory problems. Certain industrial and commercial projects may emit substantial quantities of DPM through the use of stationary and mobile on-site diesel-powered equipment as well diesel trucks and other vehicles that serve the project.

Projects that emit more than **1.25 lbs/day** of DPM need to implement on-site Best Available Control Technology measures. If sensitive receptors are within 1,000 feet of the project site, a Health Risk Assessment (HRA) may also be required. Sections 3.5.1 and 3.6.4 of this Handbook provide more background on HRAs in conjunction with CEQA review. Guidance on the preparation of a HRA may be found in the CARBOA report *HEALTH RISK ASSESSMENT FOR PROPOSED LAND USE PROJECTS*

# Diesel Particulate Matter SLO APCD CEQA Handbook

## *3.6.1 Toxic Air Contaminants*

### **Health Risk Assessments**

If a project has the potential to emit toxic or hazardous air pollutants, or is located in close proximity to sensitive receptors, impacts may be considered significant due to increased cancer risk for the affected population, even at a very low level of emissions. Such projects may be required to prepare a risk assessment to determine the potential level of risk associated with their operations. The SLO County APCD should be consulted on any project with the potential to emit toxic or hazardous air pollutants.

## Diesel Particulate -- FEIR

Impacts AQ.4 (Toxic Air Emissions at the SMR) would be reduced to less than significant with mitigation (Class II). Figure 5-7 shows the cancer health risk contours for the reduced rail delivery alternative with partial mitigation (no Tier 4 locomotives). The cancer risk would be below the threshold established by the SLOCAPCD. Table 5.9 provides a summary of the cancer risk for this alternative for various receptor locations. Mitigation measures associated with impact AQ.4 for the Rail Spur Project would apply to this alternative.

As shown in Table 5.9, the cancer risk at the maximally exposed individual resident would be less than 10 in a million for both the mitigation and partial mitigation cases. The partial mitigation case does not include Tier 4 locomotives since the County may be preempted by Federal law from implementing this measure. However, even without the use of Tier 4 engines, the cancer risk with partial mitigation would be less than significant with mitigation. Mitigation measures associated with impact AQ.4 for the Rail Spur Project would apply to this alternative.

# Diesel Particulate and Ambient Standard

Project Diesel Particulate will not exacerbate exceedences of PM10 Standard.  
FEIR p. 4.3-53:

As the area is currently impacted by fugitive dust emissions from the dunes areas, causing exceedances of the PM standard at area stations (such as the CDF station, see Table 4.3.2), additional emissions of particulate matter from the project site might cause additional days of exceedance. However, as per the SLOCAPCD Annual Report in 2013, the days which cause impacts from the dunes are associated with strong winds out of the northwest, with the strong winds generating high levels of dune dust and causing PM impacts. These periods would produce substantial dispersion of the diesel PM emissions from the project site and would not correlate with the same meteorological conditions that would be associated with maximum impacts from the rail spur operations. Therefore, rail spur operations are not anticipated to contribute to additional exceedances of the PM standard.

# Consistency With County Policies

- Project Diesel Particulate Emissions Consistent with County Policies
  - Staff Report Exhibit A used Diesel Particulate Emissions as a basis for finding Project inconsistent with policies.
  - For 3 Train/Week Project, HRA shows health risk is less than significant.
  - Therefore consistent with policies related to air quality
- Most of remaining inconsistencies found by staff concern ESHA.
  - Finding Unmapped ESHA on the Project Site contradicts County ordinance.
  - Because no Unmapped ESHA, Project is consistent with policies re sensitive habitats and biological resources.
- Remaining consistency issue is the buffer. Even with Project, more than ½ mile buffer between refinery and neighborhood: Consistent.

# Environmentally Sensitive Habitats

County Ordinance CZLUO § 23.11.030 defines Unmapped ESHA

- Sensitive Resource Areas where plant or animal life or their habitats are rare or especially valuable.
- **“The existence of Unmapped ESHA is determined by the County at or before the time of application acceptance and shall be based on the best available information.”**

Requires determination early in the permit process.

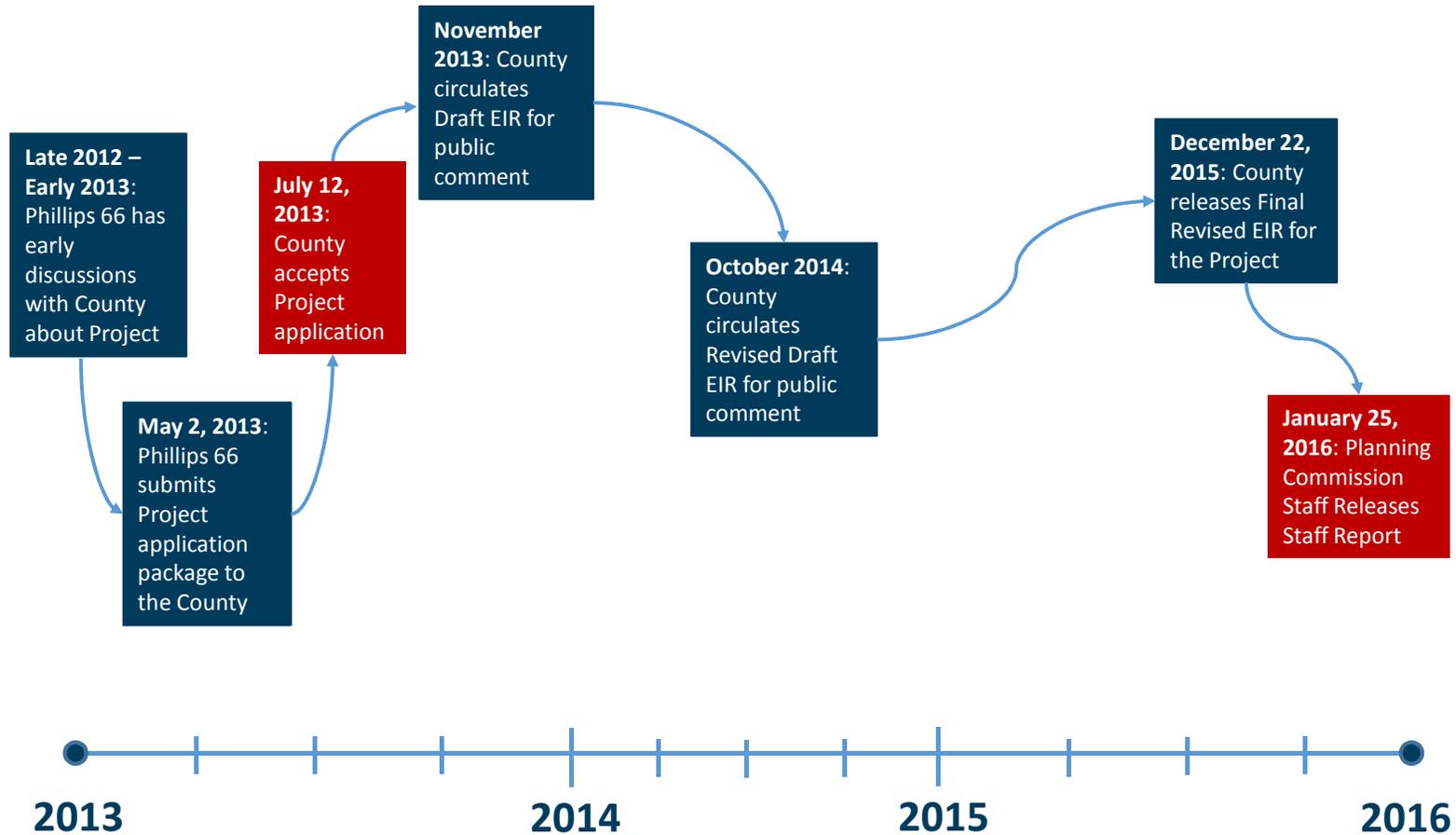
Balances habitat protection with need for predictable permit process.

# Environmentally Sensitive Habitats

**As applied in Rail Spur Extension Project, the ESHA discussion not about protection of biological resources.**

- EIR describes habitat that will be removed as highly disturbed and degraded.
- Mitigation measures require restoration at 2:1 ratio.
- There will be more high quality habitat on site with Project approval.
- FEIR concludes all impacts to on-site biological resources will be less than significant after mitigation.

## Phillips 66 Company Rail Spur Extension and Crude Unloading Project Timeline of Application and Environmental Review



# Environmentally Sensitive Habitats

## Draft EIR November 2013

- Found all impacts to biological resources mitigated to less than significant.
- Briefly mentioned ESHA in Land Use Chapter, Chapter 9
- No assertion that Project Site was Unmapped ESHA.

# Environmentally Sensitive Habitats

## Revised Draft EIR November 2014

- Found all impacts to biological resources less than significant.
- Stated that all biological resources reports were reviewed.
- Stated that additional surveys were conducted.
- Added ESHA definitions and substantial discussion
- **Expressly found no Unmapped ESHA.**

## Final EIR December 2015

- Suggested possibility of ESHA.
- Still no determination of ESHA

# Environmentally Sensitive Habitats

- During the past 2 ½ years, Phillips 66 has incurred substantial costs for permit processing.
  - \$286,579 paid to County for staff time
  - \$1,137,319 paid to County to reimburse for County's consultants
  - \$1,854,254 paid to consultants to support County's efforts in preparing EIR and to review County documents
  - \$21,649 paid to APCD for its staff time and consultants
- Deadline in the Ordinance was intended to avoid precisely such an outcome.
- We urge the Planning Commission to apply the Ordinance as adopted by the Board of Supervisors, and find no Unmapped ESHA

# Federal Preemption of Regulation of Railroads

Figure 2-8 Main UPRR Rail Routes in the United States



Source: UPRR website

# Vertical Coastal Access

- Not Part of the Rail Spur Project
- Hold Over from Throughput Increase Project
- All evidence confirms access here is not appropriate under CZLUO
  - Contrary to protection of sensitive coastal resources
  - Contrary to Public safety due to railroad crossing
- Request Planning Commission make a final decision on this question and state that coastal access is not required under the ordinance.

# Who Are We?

- **We Are Phillips 66**
  - Created as separate company on May 1, 2012 via a spinoff from ConocoPhillips
- **Integrated Downstream Company**
  - Midstream, Chemicals, Refining, and Marketing & Specialties
  - No oil exploration or production – we buy crude oil on the open market
- **Santa Maria Refinery Basics**
  - Employ 130 full-time people in addition to ~75 specialized contractors
  - Built in 1955
  - Important part of California energy infrastructure and the local economy
  - Over \$2.2 million in annual tax revenue
  - Employee and Contractor payroll is \$44 Million



# What Are We Proposing?

- **Modification to the existing rail facilities that will allow the receipt of 3 trains per week per the EIR Project Alternative**
  - Eastward extension of the existing rail spur
  - Rail car unloading facility
  - Aboveground on site pipeline to transfer crude oil to existing tanks
  - *No change in the amount of crude oil processed at the refinery*
  - *No increase in tank storage*
  - *No change in the amount of petroleum coke produced at the refinery*
  - *No impact to ESHA (because the project site has no ESHA)*
  - *Net increase in high quality habitat*



# Why This Project?

- **Maintain viability of the refinery**
  - Over 200 jobs
  - Local and state taxes paid - \$2.2 million annually
  - Employee and contractor payroll - \$44 million annually
  - Purchasing from suppliers - \$30 million annually
- **California Crude Oil Production Decline**
  - The decline of California crude oils is very well documented
  - Production along the Central Coast drastically reduced
  - Competition for barrels
- **Major Pipeline Shutdown**
  - Third party (not Phillips 66) pipeline from Las Flores Canyon to Sisquoc out of service indefinitely
  - Offshore platforms not producing crude oil



# Benefits and Features of The Project

- **Maintain viability of the refinery**
  - Over 200 jobs
  - Refinery impacts over 1,200 jobs in the local area
- **Lower Modeled Health Risk (EIR 3 Train per week alternative)**
  - Health risks due to on site operations lower than APCD threshold
  - Will lower the overall health risk of the refinery
  - No significant impacts due to on site operations
- **Safe Mainline Operation**
  - Safe movement of 3 trains per week from San Ardo through SLO County to LA for 20 years
  - Speed limits, track inspections, remote on line rail car inspections
  - Regulated by DOT, PHMSA, FRA
    - Actions have resulted in safer operations
- **Habitat Restoration**
  - Native restoration will be twice the size of the disturbance area
  - Continuous long term monitoring, ensuring high quality habitat







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