

APPENDIX H

Mitigation Monitoring Reporting Program

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MITIGATION MONITORING AND REPORTING PROGRAM

Valero Benicia Crude By Rail Project

Introduction

This document describes the mitigation monitoring and reporting program (MMRP) for ensuring the effective implementation of the mitigation measures required for City of Benicia approval of a Use Permit for Valero Benicia Refinery's Crude by Rail Project (Project).

City of Benicia

When a lead agency approves findings pursuant to §21081.6 upon completion of a certified EIR it is required to adopt a reporting and monitoring program. The purpose of the reporting and monitoring program is to ensure that measures adopted to mitigate or avoid significant environmental impacts are implemented. A mitigation monitoring and reporting program does not need to be included with the EIR as at times the findings which trigger the program are made after considering the Final EIR. Note that mitigation measures are enforced through permit conditions, agreements, or other measures. The reporting and monitoring program will not only direct the implementation of mitigation measures by the applicant, but also facilitate the monitoring, compliance and reporting activities of the City and any monitors it may designate.

Project Background

The Project would allow the Refinery to receive crude oil by rail. Currently, these crudes are not readily accessible at the Refinery. The crudes would originate at sites in North America. Union Pacific Railroad would transport the crudes in railcars using existing rail lines to Roseville, California, where the cars would be assembled into a train for shipment to the Refinery.

The Project involves the installation of a new railcar unloading rack, rail track spurs, pumps, pipeline, and associated infrastructure at the Refinery. The Project would allow the Refinery to accept up to 100 railcars of crude oil a day in two 50 railcar trains. The trains would enter the Refinery on an existing rail spur crossing Park Road outside the southern boundary of the Refinery. The crude oil unloaded from the railcars would be pumped to the existing crude oil storage tanks in the Refinery via a new pipeline connected to existing piping infrastructure.

The Project would allow Valero to receive up to 70,000 barrels per day of the crude oil by rail. Based on Valero's current plans, Valero would reduce its shipments of crude by marine vessel by the same amount. The crude oil delivered to the Refinery by railcar would not displace the crude oil delivered by pipeline.

The Project would not include, nor would it require, any changes to existing Refinery operations or process equipment, other than installation and operation of the Project unloading rack and other Project components.

The Project has the following objectives:

1. Allow for the delivery of up to 70,000 barrels per day of North American-sourced crude oil by rail.
2. Replace marine vessel delivery with rail delivery of up to 70,000 barrels per day of crude oil.
3. Mitigate project-related impacts.
4. Implement the proposed Project without changing existing Refinery process equipment or Refinery process operations, other than operation of the Project components.
5. Continue to meet requirements of existing rules and regulations pertaining to oil refining including the State of California Global Warming Solutions Act of 2006 (AB 32).

Construction activities are ~~scheduled to begin in 2014 and are~~ expected to take approximately 25 weeks. Implementation of the Project would result in the addition of approximately 20 new permanent refinery personnel.

The Environmental Impact Report for the Project found that the resulting actions would have potentially significant impacts in the areas of:

- Air Quality
- Biological Resources
- Energy Conservation
- Geology and Soils
- Greenhouse Gas Emissions
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Transportation and Traffic

In addition, no mitigation measures were identified for the following areas as all potential project impacts were determined to be either no impact or less than significant:

- Cultural Resources
- Land Use and Planning
- Noise

Based on the Initial Study prepared for the Project, the City determined that the Project will result in no impacts or less than significant impacts to:

- Aesthetics
- Agriculture and Forestry Resources
- Mineral Resources
- Population and Housing

- Public Services
- Recreation
- Utilities and Service Systems

Accordingly, those topics were not studied in the EIR.

Roles and Responsibilities

As the lead agency under CEQA, the City of Benicia will be responsible for ensuring full compliance with the provisions of this monitoring program and has primary responsibility for implementation of the monitoring program. The City of Benicia has the authority to halt any activity associated with the construction and operation of the Project if the activity is determined to be a deviation from the approved Project or the adopted mitigation measures. The City of Benicia will act as the mitigation monitor and will designate to Valero how to contact the monitor.

Mitigation Monitoring and Reporting Program

The table attached presents a compilation of the mitigation measures in the Environmental Impact Report together with the required monitoring and reporting actions, effectiveness criteria, and timing.

**VALERO BENICIA CRUDE BY RAIL PROJECT
 MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation Measures	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Non-Compliance Sanction
Air Quality					
<p>Impact 4.1-1: The proposed Project would contribute to an existing or projected air quality violation.</p>	<p>Mitigation Measure 4.1-1: Implement BAAQMD Basic Mitigation Measures. Valero and/or its construction contractors shall comply with the following applicable BAAQMD basic control measures during Project construction:</p> <ul style="list-style-type: none"> • All exposed dirt non-work surfaces (e.g., parking areas, staging areas, soil piles, and graded areas, and unpaved access roads) shall be watered two times a day. • All haul trucks transporting soil, sand, or other loose material off-site shall be covered. • All visible mud or dirt track-out onto adjacent public roads shall be removed using wet power vacuum street sweepers at least once per day. The use of dry power sweeping is prohibited. • All vehicle speeds on unpaved roads shall be limited to 15 mph. • Idling times shall be minimized either by shutting equipment off when not in use or reducing the maximum idling time to five minutes (as required by the California Airborne Toxics Control Measure Title 13, Section 2485 of California of Regulations). Clear signage shall be provided for construction workers at all access points. • All construction equipment shall be maintained and properly tuned in accordance with manufacturer's specifications. All equipment shall be checked by a certified mechanic and determined to be running in proper condition prior to operation. • A publicly visible sign with the telephone number and person to contact at the City of Benicia regarding dust complaints shall be posted throughout construction. Valero and/or contractor shall respond and take corrective action within 48 hours of notification by the City. The BAAQMD's phone number shall also be visible to ensure compliance with applicable regulations. 	<p>Reporting action: Valero will submit documentation to the mitigation monitor that the dust control procedures are specified in construction contracts.</p> <p>Monitoring action: Field inspections during construction by the mitigation monitor.</p>	<p>Receipt by the mitigation monitor of the described documentation.</p> <p>Verification by the mitigation monitor that the prescribed procedures are being followed.</p>	<p>During construction activities.</p>	<p>Stop work order.</p>

**VALERO BENICIA CRUDE BY RAIL PROJECT (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation Measures	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Non-Compliance Sanction
Air Quality (cont.)					
Impact 4.1-2: The proposed Project could result in a cumulatively considerable net increase in criteria pollutant and ozone precursor emissions.	Implement Mitigation Measure 4.1-1	See MM 4.1-1.			
Biological Resources					
Impact 4.2-1: The proposed Project could have a substantial adverse effect on nesting birds in the Sulphur Springs Creek riparian corridor.	Mitigation Measure 4.2-1: Project construction activities should avoid the nesting season of February 15 through August 31, if feasible. If seasonal avoidance is not possible then no sooner than 30 days prior to the start of any Project activity a biologist experienced in conducting nesting bird surveys shall survey the Project area and all accessible areas within 500 feet. If nesting birds are identified, the biologist shall implement a suitable protective buffer around the nest and no activities shall occur within this buffered area. Typical buffers are 250 feet for songbirds and 500 feet for raptors, but may be increased or decreased according to site-specific, Project-specific, activity-specific considerations such as visual barriers between the nest and the activity, decibel levels associated with the activity, and the species of nesting bird and its tolerance of the activity. Construction activities that are conducted within a reduced buffer shall be conducted in the presence of a qualified full-time biological monitor.	Reporting action: Valero will notify the City if it intends to limit construction to non-nesting season.	Receipt of notification by the City.	30 days prior to construction activities.	Stop work order.
		Monitoring action: Biologist will survey Project area and implement suitable protective buffer(s), if necessary.	Verification by the Biologist that the buffer(s) are in place and no construction activities are occurring within buffer(s).	During construction activities.	
Impact 4.2-2: The proposed Project could have a substantial adverse effect on the Sulphur Springs Creek riparian corridor.	Implement Mitigation Measure 4.8-1	See MM 4.8-1.			
Impact 4.2-3: The proposed Project could have a substantial adverse effect on federally protected wetlands.	Implement Mitigation Measure 4.8-1	See MM 4.8-1.			

**VALERO BENICIA CRUDE BY RAIL PROJECT (Continued)
MITIGATION MONITORING AND REPORTING PROGRAM**

Environmental Impact	Mitigation Measures	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Non-Compliance Sanction
Energy Conservation					
Impact 4.4-1: Construction and operation and maintenance of the Project would result in consumption of energy and could cause adverse effect on local and regional energy supplies or requirements.	Implement Mitigation Measure 4.1-1	See MM 4.1-1.			
Geology and Soils					
Impact 4.5-3: The proposed Project would not expose people or structures to potential adverse effects involving seismic-related ground failure, including liquefaction	<p>Mitigation Measure 4.5-1: Consistent with the geotechnical investigations and deformation analysis conducted to evaluate the potential for liquefaction hazards, the Valero Benicia Refinery shall incorporate into the final project design all recommendations to overcome lateral displacement, horizontal ground separation, and vertical settlement as provided by the licensed geotechnical engineer. Specifically, the Valero Benicia Refinery, in its design of the railroad project element located in areas identified as underlain by liquefiable or problematic soils, shall design for total seismic lateral displacements of 8 inches to 39 inches. Railroad ties and slabs shall be analyzed to evaluate the effect of up to a 6 inch wide horizontal ground separation and all recommendations to overcome such horizontal ground separation provided by the licensed geotechnical engineer incorporate into the final project design. A differential settlement of 2 inches across the gage width shall be analyzed to evaluate rail car tipping potential and all recommendations provided by the licensed geotechnical engineer incorporate into the final project design. All geotechnical design shall comply with seismic design requirements of CBC.</p> <p>Mitigation Measure 4.5-2: Valero Benicia Refinery shall include into its current track inspection program, regular and, in the event of a seismic incident with potential for track damage, post-earthquake inspections of the proposed track sections to ensure compliance with Federal Railroad Administration (FRA) track safety standards. Additionally, in the event of an incident with potential for track damage,</p>	<p>Reporting action: Valero will submit documentation, including bid plans and specifications to the City. Results of any site-specific geologic studies and associated recommendations should be included in the submittal.</p> <p>Any specific recommendations in geological reports will be included in the submittal and incorporated in the design.</p> <p>Reporting action: Valero will submit documentation of results of track inspection program to the City.</p>	<p>Review and approval of plans, specifications and documentation by Community Development Department.</p> <p>Review and approval of documentation by Community Development Department.</p>	<p>At the time of submittal of final project design.</p> <p>Concurrent with track inspection program.</p>	<p>Withhold building permit.</p> <p>Cease crude by rail operations.</p>

**VALERO BENICIA CRUDE BY RAIL PROJECT (Continued)
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Environmental Impact	Mitigation Measures	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Non-Compliance Sanction
Geology and Soils (cont.)					
Impact 4.5-3 (cont.)	such as an earthquake and associated secondary ground failure (such as liquefaction or lateral spreading) track inspection shall occur after the occurrence and before the operation of any train over that track.				
Hazards and Hazardous Materials					
Impact 4.7-7: The proposed Project could impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.	Implement Mitigation Measure 4.11-4	See MM 4.11-4.			
Hydrology and Water Quality					
Impact 4.8-1: The proposed Project would not violate any water quality standards or otherwise substantially degrade water quality.	Mitigation Measure 4.8-1: The Applicant and/or its contractor shall prepare and implement a storm water management plan (SWMP) for construction of the proposed Project. The proposed project is covered under the Applicant's National Pollutant Discharge Elimination System (NPDES) permit and storm water pollution prevention plan (SWPPP). A notice of intent (NOI) application and notice of termination (NOT) application are not required. Implementation of the SWMP shall start with the commencement of construction and continue through the completion of the proposed Project. The SWMP shall identify pollutant sources (such as sediment) that may affect the quality of storm water discharge and implement best management practices (BMPs) consistent with the California Stormwater Quality Association's BMP Handbook for Construction to reduce pollutants in storm water. The Applicant or the construction contractor shall install erosion and storm water control measures on the construction site such as installation of a silt fence and other BMPs, particularly at locations close to storm drains and water bodies. The BMPs shall also include practices for proper handling of chemicals such as avoiding fueling at the construction site and overtopping during fueling and installing spill containment pans.	Reporting action: Valero will submit SWMP to City. Monitoring action: Field inspections during construction by the mitigation monitor.	Review and approval of SWMP by Community Development Department.	Prior to construction activities. During construction activities.	Withhold building permit. Stop work order.

**VALERO BENICIA CRUDE BY RAIL PROJECT (Continued)
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Environmental Impact	Mitigation Measures	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Non-Compliance Sanction
Transportation/Traffic					
<p>Impact 4.11-4: The proposed Project would not result in inadequate emergency access.</p>	<p>Mitigation Measure 4.11-4:</p> <ul style="list-style-type: none"> Coordinate with the City of Benicia Fire Department to finalize the City of Benicia Fire Department/Valero Benicia Refinery Fire Department Operation Aid Agreement (“Agreement”) to be implemented in the event an emergency occurs during a Project train crossing. The “Agreement” shall provide methods of adequately informing the Fire Department of the expected train crossing schedule and alternate routes to access the Park Road and Bayshore Road industrial areas during the event that a train crosses Park Road. In order to inform Benicia Dispatch of a train crossing during an emergency, Valero shall provide, install, and maintain camera(s) at specified location(s) determined by the City, with coordination from Valero. The camera shall meet the City’s standards and have a real-time connection to Benicia Dispatch. The camera connection will signal to Benicia Dispatch that emergency responders shall use East 2nd Street as the identified alternative route to the Park Road and Bayshore Road industrial areas. East 2nd Street was identified for its direct access to area and the Opticom system in place at all signalized intersections. The camera must be installed and operational prior to commencement of the Project or certificate of occupancy. In order to minimize potential impacts associated with utilizing the alternative route, Valero shall provide the necessary devices for the City’s emergency response vehicles that are not equipped for the Opticom system. The emergency response vehicles identified to receive a device shall be those without the necessary device as of the date the “Agreement” is executed. Valero shall be responsible for the maintenance of the camera during the life of the Project. 	<p>Reporting action: Valero will notify the City that it has finalized the Operational Aid Agreement, installed cameras and City designated locations, and provided the necessary Opticom systems for the City’s emergency vehicles.</p>	<p>Receipt of notification by the mitigation monitor and agreement by the Benicia Fire Department that the camera and Opticom systems are operating.</p>	<p>Not later than 30 days prior to project operation.</p>	<p>Cease crude by rail operations.</p>

**VALERO BENICIA CRUDE BY RAIL PROJECT (Continued)
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Environmental Impact	Mitigation Measures	Monitoring/Reporting Action	Effectiveness Criteria	Timing	Non-Compliance Sanction
Transportation/Traffic (cont.)					
Impact 4.11-4 (cont.)	<ul style="list-style-type: none"> Utilize the Refinery's existing onsite emergency response team to assist with responding to off-site emergencies within the Park Road and Bayshore Road industrial areas as requested by the City of Benicia Fire Department under the existing mutual aid agreement, if an emergency occurs during the event of a train crossing on Park Road. The procedures for the occurrence of this support by the Valero Refinery Fire personnel are outlined in the proposed Benicia Fire-Valero Fire Operational Aid Agreement. 	Reporting action: Report annually for the first 2 years of project operation on the effectiveness of these procedures.	Receipt of notification by the mitigation monitor.	Annually. Timing to be determined by mitigation monitor.	Cease crude by rail operations.