

**BAY AREA AIR QUALITY MANAGEMENT DISTRICT
939 ELLIS STREET
SAN FRANCISCO, CA 94109**

CEQA INITIAL STUDY

July 22, 2002

BACKGROUND

Project Title

Chevron Products Company's Avon Fuel Terminal's (Avon Terminal, BAAQMD Plant #91) request for Authority to Construct and Permit to Operate from the Bay Area Air Quality Management District (BAAQMD) for the proposed Ethanol Storage Tank Project

CEQA Background

The changes proposed in this permit application constitute a "project" as defined by the California Environmental Quality Act (CEQA). CEQA requires environmental review for projects developed or approved by California state, regional, or local government. Normally, the agency with general governmental powers, such as a city or county, rather than an air pollution control district serves as "lead agency" under CEQA, however, because BAAQMD is the only agency that requires a permit for this project, the District will be lead agency for the CEQA review of this project.

The evaluation of this project would typically be exempt from CEQA because the evaluation is a ministerial action conducted using the fixed standards and objective measurements outlined in the District's Permit Handbook. However, because this project is closely associated with Chevron's efforts to comply with California's methyl tertiary-butyl ether (MTBE) ban and Phase 3 reformulated gasoline requirements, we have determined that this project is not exempt from CEQA review.

On June 15, 2001, the Plumbers and Steamfitters union appealed the BAAQMD's issuance of Authorities to Construct for Valero Benicia Refinery's MTBE Phase-Out Project (Docket No. 3349). On January 10, 2002, the BAAQMD Hearing Board issued its "Order Granting Appeal". One of the Hearing Board's findings was that Valero Benicia Refinery's proposed MTBE Phase-Out Project did not include off-site activities associated with the transport, storage, and blending of ethanol at locations other than the refinery. The BAAQMD staff made a commitment to conduct CEQA review of the environmental impacts of those off-site activities on a site-by-site basis as we receive permit modification applications from those facilities.

We have determined that completion of a CEQA Initial Study is required to determine whether a Negative Declaration or EIR is required for this project.

Site Setting

Chevron's Avon terminal is located on the flat-lying plain on the south side of Carquinez Straits, the outflow of the Sacramento and San Joaquin rivers. It is approximately 25 feet above mean sea level with topography gently dipping north toward the rivers. It is

situated within an industrial area of Contra Costa County, surrounded by the Tosco refinery to the west, east and north. The site is bounded on the south by a PG&E substation and Monsanto Corporation. Facilities consist of aboveground storage tanks (ASTs), above and below ground product and process piping, an oil/water separator unit, several building and a tank truck loading rack.

Chevron Pipeline Company maintains a right-of-way along the northern property boundary. A railroad right-of-way runs parallel and to the north of the pipeline right-of-way. The only identified sensitive receptor would be Carquinez Straits. All surface and process water is held onsite in the containment pond. Under permit this is periodically released to the Tosco containment pond, then released to the straits via a natural stream channel. The western quarter of the site is paved with asphalt. This area is occupied by the office, shop, two trailers and the loading rack. The eastern three-quarters of the site is bare soil. This area is occupied by the bermed containment area surrounding the ASTs and the bermed containment pond. The only suspected hazard associated with the site would result from nearby seismic activity.

Project Description

The Avon Terminal receives, stores, and transfers gasoline and fuel oils. Products are received by pipeline and distributed by tanker trucks. Product manufacturing and refining does not take place at the Terminal.

Changes to the Terminal to accommodate the ethanol storage and additional processes include: 1) Ethanol Receiving Facilities; 2) Ethanol Distribution and Piping Facilities; 3) Ethanol Storage Facilities; and 4) Ethanol Dispensing Facilities. The modifications for each of these facilities changes are described in the following paragraphs.

Ethanol Receiving Facilities:

Ethanol will be transported to the Terminal via tanker truck. To receive the ethanol, Chevron proposes to install an ethanol tanker truck off-loading area with two (2) new ethanol unloading pumps rated at 400 gallons per minute (gpm) each. The tanker truck will draw ambient air into the tank while the liquid is being pumped out, and the vapors displaced into an internal floating roof tank, which is equipped with a mechanical shoe primary seal and rim mounted secondary seal to control vapor loss.

Ethanol Distribution and Piping Facilities:

Piping will be installed from the unloading pump to the ethanol storage tank, and from the ethanol storage tank to the dispensing rack. The design of the piping network has not been completed at this time, but the conservative estimate of 79 new valves, 128 new flange connections, 10 new pump seals, and 19 other components has been provided by the project engineer. This estimate encompasses all new piping components for this project.

Ethanol Storage Facilities:

Existing internal floating roof tank, Tank 104 (BAAQMD Source 4), will be used to store ethanol. Tank 104 is permitted and currently stores diesel fuel. The ethanol, which will be stored in Source 4, will be "denatured" ethanol. As a result, it will contain approximately 5% gasoline to prevent human consumption. Chevron Products Company is not going to be denaturing the ethanol. The facility will be purchasing the denatured ethanol from a supplier or manufacturer.

Ethanol Dispensing Facilities:

One new 2,400 gpm regular unleaded supply pump will be installed, along with the possibility of two new 450 gpm ethanol supply pumps and associated piping, to move the gasoline and ethanol from the storage tank to the tanker truck loading rack. The existing loading rack will be modified for ethanol addition to the gasoline and also to combine supreme unleaded gasoline (SUL) and regular unleaded gasoline (RUL) for distribution as mid-grade unleaded gasoline (MUL).

Mid-Grade to Regular-Grade Tank Conversion:

Tank 101 is currently an internal floating roof tank that is permitted to store unleaded gasoline. Chevron will change the product stored in this tank from Mid-Grade to Regular-Grade. The fill and discharge piping from this tank will be modified for the new product. Emissions from this product change will remain as previously permitted.

Permit Application Number: 3362

Name, Address, Contact and Phone Number of Proponent

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Project Location

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**CHEVRON AVON FUEL TERMINAL
ETHANOL STORAGE TANK PROJECT**

ENVIRONMENTAL IMPACTS

(Note: All responses are explained on attached sheets)

	Potentially Significant Impact	Potentially Significant Unless Mitigation Incorporated	Less Than Significant Impact	No Impact
1. Land Use and Planning. Would the proposal:				
a. Conflict with general plan designation or zoning?	_____	_____	_____	_____ X _____
b. Conflict with applicable environmental plans or policies adopted by agencies with jurisdiction over the project?	_____	_____	_____	_____ X _____
c. Be incompatible with existing land use in the vicinity?	_____	_____	_____	_____ X _____
d. Affect agricultural resources or operations (e.g. impacts to soils or farmlands, or impacts from incompatible land uses)?	_____	_____	_____	_____ X _____
e. Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	_____	_____	_____	_____ X _____
2. Population and Housing. Would the proposal:				
a. Cumulatively exceed official regional or local population projections?	_____	_____	_____	_____ X _____
b. Induce substantial growth in an area either directly or indirectly (e.g. through projects in an undeveloped area or extension of major infrastructure)?	_____	_____	_____	_____ X _____
c. Displace existing housing, especially affordable housing?	_____	_____	_____	_____ X _____

3. Geologic Problems. Would the proposal result in or expose people to potential impacts involving:

- | | | | | |
|--|-------|-------|-------|---------------------|
| a. Fault rupture? | _____ | _____ | _____ | <u> X </u> |
| b. Seismic ground shaking? | _____ | _____ | _____ | <u> X </u> |
| c. Seismic ground failure, including liquefaction? | _____ | _____ | _____ | <u> X </u> |
| d. Seiche, tsunami, or volcanic hazard? | _____ | _____ | _____ | <u> X </u> |
| e. Landslides or mud flows? | _____ | _____ | _____ | <u> X </u> |
| f. Erosion, changes in topography or unstable soil conditions from excavation, grading, or fill? | _____ | _____ | _____ | <u> X </u> |
| g. Subsidence of the land? | _____ | _____ | _____ | <u> X </u> |
| h. Expansive soils? | _____ | _____ | _____ | <u> X </u> |
| i. Unique geologic or physical features? | _____ | _____ | _____ | <u> X </u> |

4. Water. Would the proposal result in:

- | | | | | |
|--|-------|-------|-------|---------------------|
| a. Changes in absorption rates, drainage patterns, or the rate and amount of surface runoff? | _____ | _____ | _____ | <u> X </u> |
| b. Exposure of people or property to water related hazards such as flooding? | _____ | _____ | _____ | <u> X </u> |
| c. Discharge into surface waters, or in any alteration of surface water quality (e.g. temperature, dissolved oxygen, or turbidity)? | _____ | _____ | _____ | <u> X </u> |
| d. Changes in the amount of surface water in any water body? | _____ | _____ | _____ | <u> X </u> |
| e. Changes in currents, or the course or direction of water movements? | _____ | _____ | _____ | <u> X </u> |
| f. Change in the quantity of ground waters through direct additions or withdrawals, through interception of an aquifer by cuts or excavations, or through substantial loss of groundwater recharge capability? | _____ | _____ | _____ | <u> X </u> |

- | | | | | | |
|----|---|-------|-------|----------------------|----------------------|
| g. | Altered direction or rate of flow of groundwater? | _____ | _____ | _____ | _____ X _____ |
| h. | Impacts to groundwater quality? | _____ | _____ | _____ X _____ | _____ |
| i. | Substantial reduction in the amount of groundwater otherwise available for public water supplies? | _____ | _____ | _____ | _____ X _____ |

5. Air Quality. Would the proposal:

- | | | | | | |
|----|---|-------|-------|----------------------|----------------------|
| a. | Violate any air quality standard or contribute to an existing or projected air quality violation? | _____ | _____ | _____ X _____ | _____ |
| b. | Expose sensitive receptors to pollutants? | _____ | _____ | _____ | _____ X _____ |
| c. | Alter air movement, moisture, or temperature, or cause any change in climate? | _____ | _____ | _____ | _____ X _____ |
| d. | Create objectionable odors? | _____ | _____ | _____ | _____ X _____ |

6. Transportation/Circulation. Would the proposal result in:

- | | | | | | |
|----|---|-------|-------|----------------------|----------------------|
| a. | Increased vehicle trips or traffic congestion? | _____ | _____ | _____ X _____ | _____ |
| b. | Hazards from design features (e.g. sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)? | _____ | _____ | _____ | _____ X _____ |
| c. | Inadequate emergency access or access to nearby uses? | _____ | _____ | _____ | _____ X _____ |
| d. | Insufficient parking capacity on-site or off-site? | _____ | _____ | _____ | _____ X _____ |
| e. | Hazards or barriers for pedestrians or bicyclists? | _____ | _____ | _____ | _____ X _____ |
| f. | Conflicts with adopted policies supporting alternative transportation (e.g. bus turnouts, bicycle racks)? | _____ | _____ | _____ | _____ X _____ |
| g. | Rail, waterborne, or air traffic impacts? | _____ | _____ | _____ | _____ X _____ |

10. Noise. Would the proposal result in:

- | | | | | |
|---|-------|-------|-------|---------------------|
| a. Increases in existing noise levels? | _____ | _____ | _____ | <u> X </u> |
| b. Exposure of people to severe noise levels? | _____ | _____ | _____ | <u> X </u> |

11. Public Services. Would the proposal have an effect upon, or result in a need for new or altered governmental services in any of the following areas:

- | | | | | |
|---|-------|-------|-------|---------------------|
| a. Fire protection? | _____ | _____ | _____ | <u> X </u> |
| b. Police protection? | _____ | _____ | _____ | <u> X </u> |
| c. Schools? | _____ | _____ | _____ | <u> X </u> |
| d. Maintenance of public facilities, including roads? | _____ | _____ | _____ | <u> X </u> |
| e. Other governmental services? | _____ | _____ | _____ | <u> X </u> |

12. Utilities. Would the proposal result in a need for new systems or supplies, or substantial alterations to the following utilities:

- | | | | | |
|--|-------|-------|-------|---------------------|
| a. Power or natural gas? | _____ | _____ | _____ | <u> X </u> |
| b. Communications systems? | _____ | _____ | _____ | <u> X </u> |
| c. Local or regional water treatment or distribution facilities? | _____ | _____ | _____ | <u> X </u> |
| d. Sewer or septic tanks? | _____ | _____ | _____ | <u> X </u> |
| e. Storm water drainage? | _____ | _____ | _____ | <u> X </u> |
| f. Solid waste disposal? | _____ | _____ | _____ | <u> X </u> |
| g. Local or regional water supplies? | _____ | _____ | _____ | <u> X </u> |

13. Aesthetics. Would the proposal:

- | | | | | |
|---|-------|-------|-------|---------------------|
| a. Affect a scenic vista or scenic highway? | _____ | _____ | _____ | <u> X </u> |
| b. Have a demonstrable negative aesthetic effect? | _____ | _____ | _____ | <u> X </u> |
| c. Create light or glare? | _____ | _____ | _____ | <u> X </u> |

14. Cultural Resources. Would the proposal:

- | | | | | |
|---|-------|-------|-------|---------------------|
| a. Disturb paleontological resources? | _____ | _____ | _____ | <u> X </u> |
| b. Disturb archaeological resources? | _____ | _____ | _____ | <u> X </u> |
| c. Affect historical resources? | _____ | _____ | _____ | <u> X </u> |
| d. Have the potential to cause a physical change which would affect unique ethnic cultural values | _____ | _____ | _____ | <u> X </u> |
| e. Restrict existing religious or sacred uses within the potential impact area? | _____ | _____ | _____ | <u> X </u> |

15. Recreation. Would the proposal:

- | | | | | |
|---|-------|-------|-------|---------------------|
| a. Increase the demand for neighborhood or regional parks or other recreational facilities? | _____ | _____ | _____ | <u> X </u> |
| b. Affect existing recreational opportunities? | _____ | _____ | _____ | <u> X </u> |

16. Mandatory Findings of Significance.

- | | | | | |
|---|-------|-------|-------|---------------------|
| a. Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal, or eliminate important examples of the major periods of California history or prehistory? | _____ | _____ | _____ | <u> X </u> |
|---|-------|-------|-------|---------------------|

- | | | | | |
|--|-------|-------|---------------------|---------------------|
| b. Does the project have the potential to achieve short-term, to the disadvantage of long-term, environmental goals? | _____ | _____ | _____ | <u> X </u> |
| c. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.) | _____ | _____ | <u> X </u> | _____ |
| d. Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly? | _____ | _____ | _____ | <u> X </u> |

DISCUSSION OF ENVIRONMENTAL IMPACTS

Project

This project has been assigned Bay Area Air Quality Management District Application Number 3362.

Introduction

The Attachment explains the reasons that particular items in the checklist were checked. Explanations are provided both for those items involving some potential impact and for those, which no impact is anticipated.