

ENGINEERING GDF EVALUATION

May 15, 2003

ARCO #9540, BP West Coast Products, LLC; GDF#10687 Application #5718

RAMTOX Corp., on behalf of ARCO #9540/BP West Coast Products, LLC, submitted this application to increase the facility's annual gasoline volume sales. The facility is located at 3010 Union Ave., San Jose, CA.

This station is within 1000 feet of the outer boundary the New Covenant Christian Center & School. California Health and Safety Code Section 42301.6 requires that a public notice be prepared and distributed to each address located within 1000 feet of a source that emits hazardous air emissions. In addition, the public notice must be distributed to parents and guardians of students enrolled in any school that is located within one-quarter mile of the ARCO Service Station site.

The ARCO #9540 facility operates the following equipment: Three (3) 10,000 gallon underground gasoline storage tanks, and associated piping. Six (6) gasoline dispensers equipped with twelve (12) three-product gasoline nozzles. This facility is equipped with Phase I (Two-Point) and Phase II (Balance) vapor recovery systems.

Emission Calculations:

Emission factors are taken from the Gasoline Service Station Industrywide Risk Assessment Guidelines developed by the California Air Pollution Officers Association's (CAPCOA) Toxics Committee. The increased emissions of POC (HC) include emissions from loading, breathing, refueling and spillage. The new annual gasoline throughput limit for this facility is based on a Risk Screening Assessment and Regulation 8-7-301 and 302.

$$\begin{aligned} \text{POC (HC)} &= (1.27 \text{ lb}/1000 \text{ gal})(4.6 \text{ MM gal}/\text{yr}) = 5,842.0 \text{ lb}/\text{yr} \\ &= 16.0 \text{ lb}/\text{day} (365 \text{ day}/\text{yr}) \\ \text{Cumulative Increase} &= 2.92 \text{ TPY} \end{aligned}$$

Toxics Emissions and Risk Screening Analysis:

The toxic air contaminant of concern at this site is benzene, a carcinogen. Benzene is emitted during gasoline dispensing operations. The estimated *increase* in emission rate and annual emissions of benzene are greater than the toxic trigger level (6.7 lb/yr), therefore an Air Toxics Risk Screening is required. According to the risk screening analysis, the maximum cancer risk is 10 chances in a million and the risk at the school is 0.3 chances in a million for proposed increase of annualized gasoline sales (Ref.; Interoffice Memorandum dated 12/3/2002). This level of risk is considered acceptable under the District's Risk Management Policy for operations that meet the requirements for BACT. As defined in the Toxic Division Risk Management Policy, the impact is acceptable and the facility passes the screening assessment

Statement of Compliance:

The operation of the gasoline dispensing facility is subject to and is compliance with Regulation 8 - Organic Compounds, Rule 7 - Gasoline Dispensing Facilities and California Air Resources Board (CARB) Executive Order G-70-97-A and G-70-17-AD. The operation of this facility meets the requirement of 8-7-301 and 302 (Phase I and Phase II, respectively).

This facility has the potential to emit more than 10 pounds of POC per day, therefore assume BACT is triggered. BACT is compliance with Regulation 8-7-301 through 312 and conformance with CARB certification demonstrated through piping configuration, equipment list and District source test procedures (District approved ST-27 and 30 test results).

This project is considered to be ministerial under Regulation 2-1-311 because it is evaluated in accordance with Chapter 3.2 of the Permit Handbook (Gasoline Dispensing Facilities). And, therefore is not subject to CEQA review. The engineering review for this project requires only the application of standard conditions and standard emission factors and therefore is ministerial as defined by CEQA.

Permit Conditions:

Pursuant to BAAQMD Toxic Section Policy, this facility's annual gasoline throughput shall not exceed 6.4 million gallons in any consecutive 12-month period.

Recommendation:

I recommend that a new permit to operate be issued to ARCO #9540/BP West Coast Products, limiting the annual gasoline quantity to the total amount determined by the risk screening analysis.

Exemptions:

None

By: _____
John Joseph
Permit Coordinator