

THE CALIFORNIA DEBT LIMIT ALLOCATION COMMITTEE
December 5, 2007
Staff Report
*REQUEST FOR A QUALIFIED PRIVATE ACTIVITY BOND ALLOCATION FOR AN
EXEMPT FACILITY PROJECT*

Prepared by Brady Hill.

Applicant: California Pollution Control Financing Authority

Allocation Amount Requested: \$47,000,000

Project Name: Air Products and Chemicals, Inc. (Wilmington Facility) & Air Products Manufacturing Corp. (Martinez Facility)

Project Address, City, County, Zip Code:

Site A. – 700 North Henry Ford Avenue, Wilmington, Los Angeles, 90744-6717

Site B. – 3485 Pacheco Boulevard, Martinez, Contra Costa, 94553

Project Sponsor Information:

Martinez Facility:

Name: Air Products Manufacturing Corporation
Address: 17330 Brookhurst Street, Suite 260
Fountain Valley, CA 92708-3720
Principals: Jeffrey A. Lockett, Eric J. Guter and Hubertus R. Law
Contact: Jennifer S. Thomas
Phone: (610) 481-7445

Wilmington Facility:

Name: Air Products and Chemicals, Inc.
Address: 7201 Hamilton Boulevard
Allentown, PA 18195-1501
Principals: John E. McGlade, Stephen J. Jones, Paul E. Huck
and George G. Bitto
Contact: Jennifer S. Thomas
Phone: (610) 481-7445

Project User Information:

Name: Same as Project Sponsor
Address: Same as Project Sponsor
Contact: Same as Project Sponsor
Phone: Same as Project Sponsor

Project Financing Information:

Bond Counsel: Law Offices of Leslie M. Lava
Underwriter: Banc of America Securities LLC and Goldman Sachs & Co.
Credit Rating: Corporate Rating of "A"
Credit Enhancement Provider: Not applicable
Private Placement Purchaser: Not applicable
TEFRA Hearing: November 2, 2007

Project Sponsor's principal activity: According to the application, Air Products and Chemicals, Inc. is the parent of a group of corporations including Air Products Manufacturing Corporation, which are engaged in the manufacture and sale of industrial gases and specialty chemicals.

First Tier Business (Yes/No): No

Regulatory Mandate (Yes/No): No

Sources of Funds:

Tax-Exempt Bond Proceeds	\$ 47,000,000
Other Sources	<u>\$153,000,000</u>
Total Sources	\$200,000,000

Uses of Funds:

New Equipment Purchase & Installation	<u>\$200,000,000</u>
Total Uses	\$200,000,000

Description of Proposed Project: According to the application, the bond issue for the Martinez hydrogen facility qualifies for tax-exempt financing as an asset related and subordinated to the clean fuels operations performed in the Royal Dutch Shell PLC (Shell) refinery in Martinez, California. The hydrogen produced by the facility is an essential ingredient in the recycling of solid wastes generated in the refining operations. In addition, the Wilmington hydrogen plant qualifies for tax-exempt financing as an asset related and subordinated to clean fuels operations performed in the Ultramar (now the Valero Energy Corporation's Wilmington Refinery) and Texaco (now the Shell Wilmington Refinery) refineries in Wilmington, California. The hydrogen produced at the Wilmington hydrogen plant is an essential part of the recycling of solid wastes generated at the Valero and Shell Wilmington Refineries. In both facilities, the hydrogenator reactor uses catalysts to treat olefins and organic sulfur in the feed gas stream. Two desulfurizer reactors remove hydrogen sulfide. The purified feed gas is mixed with superheated steam and sent to the reformer, which is basically a large furnace with catalyst beds. The reformer breaks the feed gas down into the mixture of hydrogen, carbon oxides, unreacted methane, steam and nitrogen. The reformed gas is cooled by generating steam in the process gas boiler. Purge gas from the steam is used to fuel the reformer and the hydrogen is sent to the PSA unit for final purification. The PSA unit removes nearly all constituents of the gas except hydrogen. The purified hydrogen is compressed for delivery to the refineries at pressure levels ranges from 450 psig to 2000 psig. In conclusion, the Martinez hydrogen plant produces 88 MMSCFD of high purity hydrogen and 300,000 lbs/hr of superheated steam for export to Royal Dutch Shell PLC using feed gas streams coming from the refinery. In addition, the Wilmington hydrogen plant produces 83 MMSCFD of high purity hydrogen and uses the steam produced in the manufacturing process to generate electricity for use both in the operation of the hydrogen plant and for export to Valero Energy Corporation's Wilmington refinery.

Environmental impact:

- 1) Air Quality: According to the application, the bonds will fund a portion of the cost of facilities that manufacture hydrogen for use in oil refineries. Significant environmental benefits are achieved from the use of this hydrogen by refineries to produce cleaner burning fuels. In addition, the hydrogen plant also uses pressure swing absorption technology to recover hydrogen from refinery fuel steams and provides the added benefit of reduced emissions of nitrogen oxides, sulfur oxides and other particulate matter from the refinery.
- 2) Water Quality: None indicated.

- 3) Energy Efficiency: According to the application, these facilities are large and efficient plants which use less natural gas than smaller plants. These facilities use “off” gases, which conserves even more natural gas.
- 4) Recycling of Commodities: According to the application, the portion of the facility that qualifies for tax-exempt financing produces hydrogen that is used to process vacuum residual, which is a solid waste by-product of the refinery operations. By recycling this vacuum residual into useable fuels, the refineries avoid the need to dispose of this by-product through other means.
- 5) Safety and Compliance: According to the application, the Project Sponsor is in compliance with all the state and federal environmental regulations regarding the operation of the proposed facility and its existing facilities that it currently operates.
- 6) Consumer Costs Savings and Efficiencies: According to the application, the tax-exempt financing reduces the overall cost of financing the hydrogen facility. This enables Air Products to lower the cost of the hydrogen produced at the facility to its customer and in turn allows the refinery to hold down the cost of reformulated fuels sold to consumers.
- 7) In addition, Air Products has developed a pipeline system around its facilities in Southern California and has expanded its supply to other customers in the area. This system enables every user to benefit from economies of scale and improved reliability of supply. Lastly, the refinery projects provide a base supply that allows Air Products to invest significant amounts in its production units. Once these units are in place, Air Products can “piggy back” merchant production onto the system. By investing in a larger plant and building a merchant pipeline system, Air Products can easily supply new customers by simply tapping into the main supply line.

Other public benefits provided by the project:

According to the application, for the five-year period including and following construction, the Facilities will produce 3990 jobs and generate \$60.2 million in new spending. The proposed Project will also generate the following tax revenue:

Property taxes (for Facilities)	\$2 million (annually)
Payroll taxes/Property Taxes/Sales Taxes (paid by employees)	\$19.3 million (five year period)
Tax Revenues on Bonds	\$87.8 million (over 30 year period)

Contribution to Small Business Assistance Fund: According to the application, this project was originally funded with taxable bonds issued by CPCFA. Upon the closing of the taxable bond issues, payments of \$96,000 and \$75,000, respectively, were made to the Small Business Assistance Fund. An additional \$70,000 was paid during 1988 when a portion of the bonds was converted to tax-exempt status. When a bond cap allocation is received for the balance of the bonds, additional payments of \$154,000 and \$175,000 will be made to the Fund for a total contribution of \$570,000.

Legal Questionnaire: No information was disclosed that raised any question regarding the financial viability or legal integrity of the applicant.

Recommendation: Staff recommends that the Committee approve \$33,900,000 in tax-exempt bond allocation on a carryforward basis.