

**SACRAMENTO METROPOLITAN AIR QUALITY  
MANAGEMENT DISTRICT**

For Agenda of **March 22, 2007**

**To:** Board of Directors  
Sacramento Metropolitan Air Quality Management District

**From:** Larry Greene  
Air Pollution Control Officer

**Subject:** Request by Aerojet for Emission Reduction Credits from the Community Bank

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**Recommendation**

Approve the attached resolution transferring 177.6 pounds per quarter (lb/qtr) of particulate matter (PM10) to Aerojet from the Community Bank.

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**Executive Summary**

Rule 205, Community Bank and Priority Reserve Bank, requires that requests for emission reduction credits (ERCs) from the Community Bank be approved by the Board when the term of the loan is greater than 5 years or the loan amount is greater than 900 pounds per quarter. Staff has received a request from Aerojet for a loan of 177.6 lbs/qtr of PM10 emission credits for a 20-year term from the Community Bank in order to offset PM10 emissions from the addition of static firing of test articles. This request requires Board approval.

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**Background**

Test Stand Zone J: Aerojet is proposing to modify this test stand to include static firing of both liquid and solid propellant rocket motors. Currently, Test Stand Zone J is permitted by the District (P/O Number 2041). Test Stand Zone J includes several test stands and ancillary facilities, which include liquid propellant storage, feed tank and process or utility equipment associated with simulated altitude testing such as test cabins, duct, steam jet ejectors and mechanical vacuum equipment.

Aerojet is proposing to modify the permit to add a static firing of test articles containing solid propellant at a testing frequency of up to 100 pound of solid propellant per day and 400 pounds of solid propellant per quarter. Test Stand Zone J is currently permitted only for liquid rocket testing.

Aerojet exceeds the offset trigger for PM10 under Rule 202, New Source Review. The modification to Test Stand Zone J will require 177.6 lbs/qtr of PM10 credits. Aerojet does not currently own a PM10 credit certificate. Aerojet has requested a loan of 177.6 lbs/qtr (710.4 lbs/year) of PM10 credits from the Community Bank for a twenty-year term to provide offsets for Authority to Construct 20083. An offset ratio of 1.2 to 1 for PM10 will be applied to this loan transaction.

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## Community Bank Approval Process

Rule 205, Section 310 states that the District Board of Directors must approve loan applications to the Community Bank prior to disbursement. This request is for the March 22, 2007 Board hearing so that the emission credits are effective on April 1, 2007.

In approving a loan request, the Board must consider the extent to which cleaner innovative technologies have been used to minimize credit needs and may conditionally grant loans to protect the health of the bank or to promote cleaner, innovative technology. The Board may deny any application if the Board determines that the denial is in the best interest of the Sacramento Federal Ozone Nonattainment Area.

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## Use of Clean Technology

Aerojet's modification to Test Stand Zone J will result in more than 10 lb/day of PM10 emissions and therefore is subject to Best Available Control Technology (BACT) requirements. Staff had previously prepared a Top-Down BACT analysis for another solid rocket motor test stand (P/O 14841) that was subject to the MACT standards under Title III of the Federal Clean Air Act. The analysis was required since hydrochloric acid (a toxic air contaminant) emissions from that test stand were greater than 10 tons per year. The analysis found that there were no add-on controls that were feasible or other good operating practices or work practice standards that could be imposed to limit emissions. Since that analysis, EPA has published the proposed NESHAP 40 CFR Part 63, Subpart P PPPP for engine test cells/stands and that regulation also found that there were no other controls that could be feasibly implemented for rocket engine testing.

Rule 205, Section 310.5 allows the Board the authority to place conditions on loan approvals in order to protect the health of the bank or promote clean technology. Staff recommends that no additional conditions be placed on these loans.

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## Loan Applications Under Consideration

There are no other requests for PM10 emission reduction loans for this quarter.

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## Health of the Bank

The current ROC, NOx, and PM10 balances in the three accounts are:

Pollutant	Account Balances (pounds per year)			Total (tons per year)
	Military Base	Essential Public Services	Community Bank	
ROC	421,673.0	53,054.5	554,630.6	514.7
NOx	76,085.4	90,720.0	44,150.9	105.5
PM10	9,465.7	16,813.6	1,732.28	14.0

If the request for withdrawal of credits from the Community Bank is approved, there will be 1,021.9 lb/year of PM10 left in the Community Bank Account and a total of 27,301.2 lb/year of PM10 in all three accounts.

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### **Priority Determination**

Rule 205, Section 311, Community Bank Loan Prioritization, states that if loan requests exceed the quarterly funding cap, all loan applications in the funding cycle shall be prioritized. The total amount of PM10 credits requested from the Community Bank for this loan is 710.4 lb/year of, which does not exceed the funding cap.

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### **Conclusion**

Staff recommends that the Board approve a loan of 177.6 lb/qtr (710.4 lb/year) of PM10 credits from the Community Bank to Aerojet for a twenty-year term. The loan fee is estimated to be \$7,976.81 plus an annual administrative fee.

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Respectfully submitted,

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Larry Greene  
Air Pollution Control Officer  
Sacramento Metropolitan  
Air Quality Management District

Approved as to form:

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Kathrine Pittard  
District Counsel  
Sacramento Metropolitan  
Air Quality Management District

Attachment: Resolution

RESOLUTION NO. AQM \_\_\_\_\_  
BOARD OF DIRECTORS  
OF THE SACRAMENTO METROPOLITAN AIR QUALITY  
MANAGEMENT DISTRICT

WHEREAS, the Board of Directors of the Sacramento Metropolitan Air Quality Management District adopted Rule 205, COMMUNITY BANK AND PRIORITY RESERVE BANK; and

WHEREAS, pursuant to Rule 205, Section 101, the Community Bank is a depository of certified emission reduction credits which may be loaned for compliance with rules and regulations or for offset requirements of new source review; and

WHEREAS, there are no PM10 emission reduction credits in the possession of Aerojet at this time; and

WHEREAS, Rule 205, COMMUNITY BANK AND PRIORITY RESERVE BANK, Section 310 requires that loan applications to the Community Bank for amounts greater than 900 pounds per quarter and/or longer than 5 years must be approved by the District Board of Directors prior to disbursement; and

WHEREAS, pursuant to Rule 205, Section 310, the Board of Directors of the Sacramento Metropolitan Air Quality Management District may conditionally grant loans to protect the health of the bank; and

WHEREAS, pursuant to Rule 205, Section 310, the Board of Directors of the Sacramento Metropolitan Air Quality Management District considered the extent to which cleaner innovative technologies have been used to minimize the credits needed and imposes no additional conditions on these transfers.

NOW, THEREFORE, BE IT RESOLVED THAT the Board of Directors of the Sacramento Metropolitan Air Quality Management District authorizes and directs the transfer of the following PM10 emission reduction credits from the Community Bank to Aerojet for use with Sacramento Metropolitan Air Quality Management District permit number 20083 for a term of twenty years:

<b>PM10 Community Bank Transfer to Aerojet</b> (Pounds per Calendar Quarter)					
<b>Permit #</b>	<b>1<sup>st</sup> Quarter</b>	<b>2<sup>nd</sup> Quarter</b>	<b>3<sup>rd</sup> Quarter</b>	<b>4<sup>th</sup> Quarter</b>	<b>Total lb/yr</b>
20083	177.6	177.6	177.6	177.6	710.4

BE IT ORDERED that, pursuant to Rule 205, Section 310.4, the transfers be effective April 1, 2007.

ON A MOTION by Director \_\_\_\_\_, seconded by Director \_\_\_\_\_, the foregoing resolution was passed and adopted by the Board of Directors of the Sacramento Metropolitan Air Quality Management District, State of California, this 22nd day of March 2007, by the following vote, to wit:

AYES: Directors

NOES: Directors

ABSENT: Directors

\_\_\_\_\_  
Chairperson of the Board  
Sacramento Metropolitan Air  
Quality Management District  
State of California

(SEAL)

ATTEST: \_\_\_\_\_  
Clerk of the Board  
Sacramento Metropolitan Air Quality Management District