



REPORT TO COUNCIL

City of Sacramento

915 I Street, Sacramento, CA 95814-2604
www.CityofSacramento.org

CONSENT

October 17, 2006

Honorable Mayor and
 Members of the City Council

Title: Grant Agreements: Sacramento Emergency Clean Air and Transportation (SECAT) Program

Location/Council District: Citywide

Recommendation: Adopt 1) a **Resolution:** a) authorizing the acceptance and execution of a 2005 Sacramento Emergency Clean Air and Transportation (SECAT) Program Retrofit grant agreement with the Sacramento Area Council of Governments (SACOG) and the Sacramento Metropolitan Air Quality Management District (SMAQMD) in the amount of \$113,506 for retrofitting existing City diesel powered vehicles with particulate traps; b) approving the establishment of a grant project; and c) establishing revenue and expenditure budgets in the amount of \$113,506; and 2) a **Resolution:** a) authorizing the acceptance and execution of a 2006 SECAT Program Vehicle Purchase and Retrofit grant agreement with SACOG and SMAQMD in the amount of \$462,015 for the incremental cost of purchasing five liquid natural gas (LNG) vehicles and retrofitting existing City diesel powered vehicles with particulate traps; b) approving the establishment of a grant project; and c) establishing revenue and expenditure budgets in the amount of \$462,015.

Contact: Keith Leech, Fleet Manager, 808-5869

Presenters: Not applicable

Department: General Services

Divisions: Fleet Management

Organization No's: 3259

Description/Analysis:

Issue: SACOG and SMAQMD have released their SECAT grant application packages for projects that reduce diesel emissions from on-road, heavy-duty vehicles operating in the Sacramento Federal Ozone Non-attainment Area. The SECAT program was created by California Assembly Bill (AB) 2511 to help assure that the Sacramento region remains in conformity with its State Implementation Plan for air quality attainment.

This report provides recommendations for accepting two SECAT grants to retrofit low emission technology on our current fleet vehicles and to offset a portion of the cost of purchasing LNG vehicles. In September 2000, the California Air Resources Board (ARB) developed a comprehensive strategy to control diesel particulate matter (PM) emissions in California by 75% by 2010 and 85% by 2020. Acceptance of these grant funds will help the City move toward compliance with the ARB PM reduction program.

Policy Considerations: These grants provide an opportunity for the City to reduce Nitrous Oxide (NOx) emissions from our heavy-duty vehicle fleet. The Sacramento region is under tight federal deadlines to conform to clean air standards. Mobile source emissions, mainly from cars and trucks, are the source of more than 70 percent of the problem. Federal law requires that our region's transportation plan be in conformity with our air quality plan. For this reason, the City has previously recognized the importance of emission reduction, and has adopted, along with the County of Sacramento, both the Heavy Duty Low Emission Vehicle Acquisition Policy and the Low Emission Vehicle Acquisition Guidelines. The City is committed to the role of community leader in emission reduction.

Committee/Commission Action: Not applicable

Environmental Considerations: The Environmental Services Manager has determined that the authorization to accept and execute the 2005 and 2006 Sacramento Emergency Clean Air and Transportation (SECAT) Program Retrofit grant agreements; the establishment of grant projects; and, the establishment of revenue and expenditure budgets is exempt from the requirements of the California Environmental Quality Act (CEQA), pursuant to Section 15061(b)(3) of the CEQA Guidelines. Exemption 15061(b)(3) consists of an activity covered by the general rule that CEQA applies only to projects, which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA.

Rationale for Recommendation: The SECAT program is an extraordinary opportunity for the City to obtain reimbursement for the cost of retrofitting low emission technology on existing City fleet vehicles and for the incremental cost of purchasing LNG vehicles rather than diesel vehicles to further reduce emissions in the region. Fleet has already installed particulate traps on the required large diesel vehicles and has also ordered the five LNG vehicles in accordance with the Air Resource Board's "Diesel Particulate Matter Control Measure for On-Road Heavy-Duty Residential and Commercial Solid Waste Collection Vehicles" Rule. Installing the required particulate traps and ordering LNG vehicles moves the City toward compliance with the ARB. Accepting these grant funds provides the City with reimbursement for funds already spent and encumbered against the Fleet Fund.

Financial Considerations: The 2005 SECAT Program Retrofit grant provides reimbursement for the cost of retrofitting low emission technology on existing City fleet vehicles. This grant program provides up to \$113,506 in reimbursements to the City for retrofitting 14 existing Department of Utilities (DOU) fleet vehicles with particulate traps purchased with funding budgeted in the DOU FY2005/06 operating budget. The estimated cost of a particulate trap retrofitting device is \$14,900. This grant will reimburse the City an average of \$8,107 per installed device.

The 2006 SECAT Program Vehicle Purchase and Retrofit grant provides reimbursement for the incremental cost of purchasing LNG vehicles rather than diesel vehicles, as well as retrofitting existing City diesel powered vehicles with particulate traps. This grant program provides up to \$142,015 for the incremental cost of five LNG vehicles purchased with funding in the DOU FY 2005/06 operating budget. The estimated cost to purchase a new LNG vehicle is \$173,959, and the cost to purchase a new diesel vehicle is \$145,556. The difference of \$28,403 is the incremental cost of purchasing a LNG vehicle over a diesel vehicle. Additionally, this grant program provides up to \$320,000 for retrofitting 32 existing City diesel powered vehicles with particulate traps purchased with funding in the DOU and Department of Transportation FY2005/06 operating budgets, for a total grant reimbursement of \$462,015.

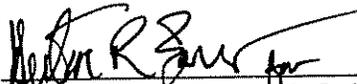
Neither of the grant programs requires matching funds from the City. The City is required to expend funds for these purchases up front, and will then be reimbursed as retrofit devices are installed and vehicles are received. This report recommends accepting two grants and establishing revenue and expenditure budgets in the amount of \$113,506 and \$462,015.

Emerging Small Business Development (ESBD): Purchasing and installing particulate traps was authorized by City Council and Procurement Services Manager on September 27, 2005. Formal competitive bidding was suspended and Cummins West, Inc. was awarded the contract due to lack of alternatives. Cummins West, Inc. is not a certified Emerging/Small Business Enterprise firm. The purchasing of the five LNG vehicles was put out to bid on November 23, 2005 (Bid Number: B061181037) and Sacramento Truck Center was awarded the bid. Sacramento Truck Center is not a certified Emerging/Small Business Enterprise Firm. All efforts were made to accommodate the City's policy to include Emerging/Small Business Enterprise's.

Respectfully Submitted by:



Keith Leech
Fleet Manager

Approved by: 
Reina J. Schwartz
Director, Department of General Services

Recommendation Approved:

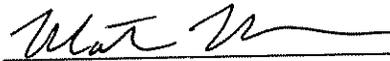

Ray Kerridge
City Manager

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BACKGROUND INFORMATION

- The Sacramento region has the sixth worst air quality in the nation, jeopardizing its ability to meet state and federal clean air standards. A significant part of the air quality problem in the Sacramento region is attributable to on-road motor vehicles, especially diesel-powered vehicles.
- The Sacramento Council of Governments (SACOG) through the Sacramento Emergency Clean Air and Transportation Program (SECAT) has released their grant application packages for projects that reduce Nitrous Oxide (NOx) emissions from on-road, heavy-duty vehicles operating in the Sacramento Federal Ozone Non-attainment Area.
- The SECAT program was created by California Assembly Bill (AB) 2511 to help assure that the Sacramento region remains in conformity with its State Implementation Plan (SIP) for air quality attainment
- With the goal in mind to help reduce the air quality problem in the Sacramento region, the City/County Heavy-Duty low emission vehicle (LEV) acquisition policy was approved by City Council on October 5, 1999 (Attachment 1).
- In September 2000, the California Air Resources Board (ARB) developed a comprehensive strategy to control diesel particulate matter (PM) emissions in California by 75% by 2010 and 85% by 2020 (Attachment 2).
- On May 25, 2005, the City Council adopted Resolution No. 2005-454 which adopted fuel strategies, which requires Fleet Management to make available funding for use in implementing alternative fuel, fueling infrastructure and new technology (Item 3). This Resolution also required the continued expansion of the City's use of Liquid Natural gas (LNG) to include trucks in other vocations beyond refuse trucks (Item 12) (Attachment 3).
- The proposed diesel particulate matter control measure for on-road heavy duty diesel-fueled vehicles owned or operated by public agencies and utilities implementation schedule requires the city to have 60% of its on-road diesel-fuel fleet outfitted with particulate traps by 2008.

"Revised"

HS

CITY OF SACRAMENTO -- COUNTY OF SACRAMENTO



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October 5, 1999

To: Sacramento County Board of Supervisors
Mayor, Members of the Sacramento City Council

From: Terry Schutten, County Executive
Robert P. Thomas, City Manager

Subject: **CITY OF SACRAMENTO/COUNTY OF SACRAMENTO HEAVY-DUTY
LOW-EMISSION VEHICLE (LEV) ACQUISITION POLICY**

Recommendation:

It is recommended that the Sacramento County Board of Supervisors and the Sacramento City Council adopt the attached resolutions approving the attached City of Sacramento/County of Sacramento Heavy-Duty Low-Emission Vehicle (LEV) Acquisition Policy.

Background:

On June 10, 1999, the Sacramento Transportation Authority (STA), as part of the project nomination process for the Transportation Equity Act for the 21st Century (TEA-21), considered a Sacramento Air Quality Management District (SMAQMD) funding request for approximately \$8.9 million to be used for heavy-duty low-emission vehicle incentives and infrastructure. That request prompted the City Manager, County Executive, Director of Public Works for the City, and the Administrator of the Public Works Agency for the County to send a joint letter (copy attached as Exhibit A) to STA wherein the City and County staff did not support the funding request at the level proposed by SMAQMD. That letter generally expressed concerns regarding the funding of Enterprise and other non-General Fund activities with general-purpose regional transportation funds. The letter also outlined staff's commitment to partner with SMAQMD to aggressively pursue viable alternative fuel opportunities as we work together to implement strategies to improve air quality in the Sacramento region. STA subsequently approved TEA 21 funding in the amount of \$2.0 million for public agency heavy-duty low-emission vehicles and the fueling infrastructure to support them.

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On June 22, 1999, as part of a Fleet Services Operations Workshop (Agenda Item No. 83), the Sacramento County Board of Supervisors indicated a strong interest in increasing the utilization of alternative fuel vehicles within the Sacramento County vehicle fleet. At the conclusion of the Workshop, the Board of Supervisors directed staff to work with the City of Sacramento to develop joint policy recommendations for consideration by the Sacramento City Council and the Board of Supervisors to guide future direction and decisions regarding initiatives that would effect regional air quality improvements.

Discussion:

Subsequent to the September 22, 1999 Board of Supervisors' Workshop, an Alternative Fuels Task Team (the "Team") was formed for the purpose of preparing a proposed City/County Low-Emission Vehicle Acquisition Policy. This Team included representatives from the City's Department of Public Works Maintenance Services Division (Gene Moore and Bob Summersett) and Solid Waste Division (Reina Schwartz), the County's Department of Public Works Administration (Patrick Groff), Fleet Services Division (Thom Rose), Waste Management & Recycling Division (Dick Lockhart), Water Quality Division (Tim Lloyd), Transportation Division (Don Gibson), SMAQMD (Tim Taylor), and the Cleaner Air Partnership (Jude Lamare). The Team met on several occasions and developed the following proposed City of Sacramento/County of Sacramento Heavy-Duty Low-Emission Vehicle Acquisition Policy:

***Proposed
City of Sacramento/County of Sacramento
Heavy-Duty Low-Emission Vehicle (LEV) Acquisition Policy***

Policy Goal

The City and County of Sacramento are committed to doing our fair share to implement the region's air quality plan by reducing oxides of nitrogen(NOx) emissions from our heavy-duty fleet to meet the year 2005 standard for ozone in the Sacramento Federal Ozone Non-attainment Area.

Foundational Statement

We recognize that the region has an air quality problem which is related to vehicle operations, especially the operation of heavy-duty vehicles;

We recognize that public agencies in Sacramento County operate large vehicle fleets which have significant numbers of heavy-duty vehicles;

We recognize that public agencies have a significant role to play in improving air quality by reducing the emissions from their fleet operations, especially their heavy-duty vehicles.

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Commitment

Commit to being a community leader by:

- Showing how fleets can aggressively incorporate low-emission vehicles into fleet operations;*
- Showing how fleets can overcome training, facility and operational issues with resolve and commitment.*

Our efforts will focus on the conversion of the on-road, heavy-duty equipment fleets to certified low-emission vehicles as these vehicles are replaced as part of our regular systematic replacement programs.

We are committed to the following replacement schedule for our heavy-duty vehicles with certified low-emission heavy-duty vehicles:

- A minimum of 20% of all replacements in 2001 will be certified low-emission;*
- A minimum of 30% of all replacements in 2002 will be certified low-emission;*
- A minimum of 40% of all replacements in 2003 will be certified low-emission;*
- A minimum of 50% of all replacements in 2004 and thereafter will be certified low-emission.*

We will pursue grant and other sources of funding for the provision of alternative fuel facilities.

We will pursue grant and other funding sources, excluding general-purpose regional transportation funds, in order to fund any incremental increased costs of the low-emission heavy-duty vehicle conversion program.

We will continue to analyze other emission reduction strategies on an on-going basis.

We will continue to consult with the Air District about all types of ways to reduce emissions from on-road and off-road vehicles as well as passenger cars and light duty trucks.

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Performance & Cost as Issues *We recognize that both performance and cost are issues and that accommodations will be required to make low-emission vehicles work.*

We affirm that these issues will be addressed and managed and not used as roadblocks to the introduction of low-emission vehicles into the fleet.

We recognize that implementation of these policies may result in a need to increase user fees and/or service charges for the operations served by the low-emission vehicles which are incorporated in the fleets.

Cost-effectiveness *The maximum air quality benefit for dollars invested will be through the introduction of heavy-duty low-emission vehicles. While this should not be the exclusive focus, it should be the primary focus.*

Monitoring and Reporting *The heavy-duty replacement schedule outlined above will be monitored by staff and periodic progress reports will be presented to the Board of Supervisors and the City Council. These reports will also include a discussion of emerging low emission vehicle issues.*

The Air District will quantify and use these emissions benefits towards meeting the region's attainment plan.

The above policy recognizes that the region has an air quality problem which is related to vehicle operations, reflects a significant commitment on the part of the City and County of Sacramento to do our fair share to implement the region's air quality plan, and recognizes that the City and County of Sacramento should play a leadership role in aggressively incorporating low-emission vehicles into our fleet operations. The policy focuses on the conversion of our on-road, heavy-duty equipment fleets to certified low-emission vehicles as these vehicles are replaced as part of our regular systematic replacement programs.

The proposed four year phase-in program recognizes existing issues related to availability of low-emission engines, the need for additional and alternative maintenance equipment and facilities, and the need for additional staff training. It should be noted that the phase-in program represents minimum percentages of replacement vehicles being certified low-emission and that every effort will be made to achieve higher percentages. Alternative strategies to meet the phase-in program were discussed extensively as part of the Team meetings. As examples, every heavy-duty vehicle vendor could be required to submit a low-emission vehicle bid as an alternative or we could request bids for a specific number of low-emission vehicles as part of a separate process. It is

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recommended that Fleet Services and the operating divisions be allowed the flexibility to develop the most effective method to achieve the policy requirements. Everyone on the Team agreed that the key to success is to send a very strong message to the heavy-duty vehicle vendors that, as part of our requests for proposals/bids, the City and County are serious in our commitment to acquire a specific number (as a minimum) of low-emission vehicles in order to meet the program phase-in requirements.

The policy recognizes that, at least in the short term, implementation of this Heavy-Duty Low-Emission Vehicle Acquisition Policy may result in increased costs and increased user fees and/or service charges for the operations that utilize the low-emission vehicles. As an example, the County's Waste Management and Recycling Division typically replaces approximately 12 to 15 residential refuse collection vehicles per year. The City typically replaces approximately 6 to 10 refuse collection vehicles per year. Currently, refuse collection vehicles that include alternative fuel engines (CNG/LNG) are estimated to cost approximately \$30 thousand more each as compared to a similarly equipped diesel powered vehicle.

The proposed policy also includes a monitoring and reporting component wherein implementation of the heavy-duty vehicle replacement schedule will be monitored by staff and periodic (no less than annually) progress reports will be presented to the Board of Supervisors and the City Council. These reports will also include a discussion of emerging issues related to low-emission vehicles.

Conclusion:

The Sacramento Board of Supervisors is scheduled to hear this matter on Tuesday, October 5, 1999, at 2:30 P.M. The Sacramento City Council is scheduled to consider this matter on the afternoon of October 5, 1999. It is my understanding that representatives from SMAQMD and the Cleaner Air Partnership intend to address the Board of Supervisors and the City Council on this matter at today's meetings. If the Board of Supervisors and the City Council approves the attached policy, staff will work with SMAQMD and the Cleaner Air Partnership to take the policy to other jurisdictions and agencies for their information and/or approval. This would include, but not be limited to, the Cities of Citrus Heights, Folsom, Isleton, and Galt; SMAQMD; Sacramento Area Council of Governments (SACOG); and STA.

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Therefore, it is recommended that the Sacramento County Board of Supervisors and the Sacramento City Council approve the attached resolutions approving the attached City of Sacramento/County of Sacramento Heavy-Duty Low-Emission Vehicle Acquisition Policy.

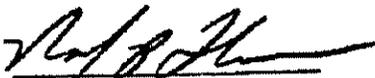
Respectfully submitted,


Patrick Groff, Director
Public Works Administration
County of Sacramento

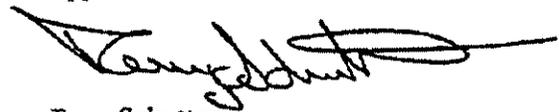
Respectfully submitted,


Mike Kashiwagi, Director of Public Works
City of Sacramento

Approval recommended,


Robert P. Thomas
City Manager

Approval recommended,


Terry Schutten
County Executive

by:


Warren H. Harada, Administrator
Public Works Agency

Cc: Gene Moore, Keith Leech, Bob Summersett, Burt McCollam, Reina Schwartz, Bob Shanks, Cheryl Creson, Don Gibson, Dick Lockhart, Tim Lloyd, Dennis Baldwin, Thom Rose, Mel Knight, Tim Taylor, Jude Lamare, Bill Mueller

PLG:pao

Attachments

Contacts for additional information – Patrick Groff, County Public Works at 874-8132.
Mike Kashiwagi, City Public Works at 264-5312

Attachment 2



California Environmental Protection Agency
 Air Resources Board

FACTS ABOUT

CALIFORNIA'S ACCOMPLISHMENTS IN REDUCING DIESEL PARTICULATE MATTER EMISSIONS

The identification of diesel particulate matter (PM) as a toxic air contaminant in 1998 led the California Air Resources Board (ARB) to adopt the *Risk Reduction Plan to Reduce Particulate Matter Emissions from Diesel-fueled Engines and Vehicles* (Plan) in September 2000. The Plan's goals are a 75 percent reduction in diesel PM by 2010 and an 85 percent reduction by 2020 from the 2000 baseline. The following information gives a brief overview of the significant accomplishments made to date in reducing diesel PM.

Cleaner Diesel Fuel

California's diesel fuel is the least polluting in the nation. In 2003, the ARB adopted a new regulation lowering the sulfur content of diesel fuel to enable the use of advanced emission control technologies for diesel engines. The California diesel regulations for sulfur and aromatics are estimated to result in 25 percent less PM and about seven percent less oxides of nitrogen (NOx) emissions. Sulfur levels in diesel fuel will be lowered to less than 15 parts per million by July, 2006. California's rule applies to on-road, off-road, and stationary engines while the federal low sulfur diesel rule applies only to on-road vehicles. Meanwhile, some refiners in California are already making ultra-low sulfur diesel so it is available where needed. California transit agencies have been required

Why is ARB concerned about emissions from diesel engines?

Diesel engines emit a complex mixture of air pollutants, composed of gaseous and solid material. The visible emissions in diesel exhaust are known as particulate matter or PM, which includes carbon particles or "soot." Diesel exhaust also contains a variety of harmful gases and over 40 other cancer-causing substances. In 1998, California identified diesel PM as a toxic air contaminant based on its potential to cause cancer, premature deaths, and other health problems. Exposure to PM is a health hazard, particularly to children whose lungs are still developing and the elderly who may have other serious health problems. Each year in California, diesel PM contributes to an estimated 2,900 premature deaths, 3,600 hospital admissions, 240,000 asthma attacks and respiratory symptoms and 600,000 lost workdays. Overall, diesel engine emissions are responsible for the majority of California's potential airborne cancer risk from combustion sources.

to use ultra-low sulfur diesel since July 1, 2002.

Cleaner New Diesel Engines

Standards for New On-Road Diesel Engines

In 2001, ARB adopted new PM and NOx emission standards to clean up large diesel engines that power big-rig trucks, trash trucks, delivery vans and other large vehicles. The new standard for PM takes effect in 2007 and reduces emissions to 0.01 gram of PM per brake horsepower-hour (g/bhp-hr.) This is a 90 percent reduction from the existing PM standard. New engines will meet the 0.01 g/bhp-hr PM standard with the aid of diesel particulate filters that trap the PM before exhaust leaves the vehicle.

Standards for New Off-Road Diesel Engines

ARB has worked closely with the United States Environmental Protection Agency (U.S. EPA) on developing new PM and NOx standards for engines used in off-road equipment such as backhoes, graders, and farm equipment. U.S. EPA has proposed new standards that would reduce the emission from off-road engines to similar levels to the on-road engines discussed above by 2010 – 2012. These new engine standards are expected to become final in 2004. Once approved by U.S. EPA, ARB will adopt these as the applicable state standards for new off-road engines. These standards will reduce diesel PM emission by over 90 percent from new off-road engines currently sold in California.

Cleaner In-Use Diesel Engines

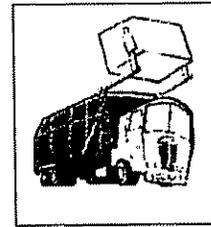
Over the past two years, ARB has developed six new regulations (details in next section) to reduce PM emissions and other pollutants from diesel engines. Another six to eight regulations are planned for adoption over the next two years. These regulations have relied on the following four approaches to significantly reduce emissions from diesel engines:

- Replace/Repower** – Replace the existing engine with a new diesel engine
- Retrofit** – Apply an ARB-verified diesel emission control system to the existing engine and fuel system (can include alternative fuels)
- Retire the Whole Vehicle** – Replacing it with an alternative-fueled vehicle or vehicle with a new, cleaner diesel engine.
- Operational Modification** – Examples include reduced operating time, reduced idling, or use of electric power

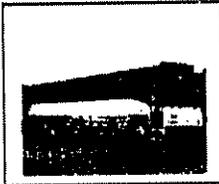
New Regulations for In-Use Diesel Engines

The ARB has adopted several regulations that will reduce diesel emissions from in-use vehicles and engines throughout California. In some cases, the PM reduction strategies also reduce smog-forming emissions such as NOx. These regulations include:

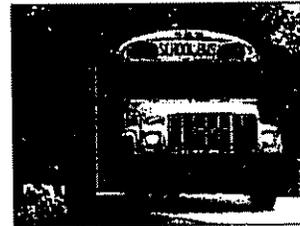
Waste Collection Trucks (adopted 2003): The waste collection vehicle rule offers a variety of strategies that owners must select and apply to each truck in a phased-in schedule from 2004 through 2010 to achieve PM reductions of up to 85 percent. The rule includes compliance flexibility. A key benefit of the rule is the reduction of PM emissions in residential neighborhoods.



Fleet Rule for Transit Agencies (adopted 2000): This regulation cuts NOx and PM emissions from about 10,000 buses operated by transit agencies. The fleet rule for transit agencies moves forward in steps over 10 years, requiring cleaner engines, cleaner fuel, and retrofitting of older buses. Amendments proposed for 2004 will require transit agencies to clean up the buses that had not been covered in the original rule.

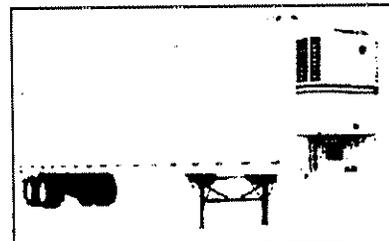


School Bus Idling Restrictions (adopted 2002): To reduce the exposure of children to toxic PM emissions, ARB enacted a rule to stop the prolonged idling of diesel school buses and other diesel vehicles near schools. Buses and commercial diesel vehicles are required to turn off their engines after arriving at a school and are allowed to start the engine no more than 30 seconds before departing, unless required for safety or work.



Stationary Engines (adopted 2004): There are approximately 26,000 stationary diesel-fueled engines in California. Most are used as emergency backup in the event of a power failure. Others are used to pump water in agricultural areas, to run compressors, cranes and other equipment. New ARB standards for these engines will bring an approximate 80 percent PM reduction by 2020 through stricter standards for new engines and requirements to retrofit existing engines

Transport Refrigeration Units (adopted 2004): Transport Refrigeration Units (TRUs) are diesel-powered refrigeration units that cool temperature-sensitive products while they are being shipped in trucks, trailers, shipping containers and rail cars. Although the diesel engines powering TRUs tend to be relatively small, there are about 40,000 of them operating in California. Their PM emissions will be reduced by 65 percent by 2010 and by 92 percent by 2020.



Portable Engines (adopted 2004): California has about 33,000 portable diesel engines used in pumps, airport ground support equipment, oil drilling rigs, generators, and a variety of other equipment. Portable engines emit a total of 4.2 tons per day of diesel PM. The engines also emit about 75 tons per day of smog-forming emissions. ARB's rule requires



stepped reductions in emissions from portable engines, reaching a 95 percent reduction in PM emissions in 2020 with concurrent significant cuts in smog-forming emissions.

Incentive Programs Cleaner Air

In addition to adopted regulations, the ARB has programs in place to provide incentives for owners of higher polluting diesel engines or vehicles to replace that equipment with cleaner, less-polluting equipment. Some of the programs that will reduce diesel PM are:

Carl Moyer Program: The Carl Moyer Program was established in 1999 to offer monetary incentives to reduce NOx emissions from diesel engines. Some of the strategies used to reduce NOx, such as replacing old diesel engines with new alternative-fuel engines, have also resulted in lower PM emissions. The Moyer Program pays vehicle owners to offset the extra cost of reducing NOx emissions below the levels called for by current standards, agreements or regulations. The state has paid about \$155 million in Moyer incentives since the Program began, with air district matching funds bringing the total to more than \$200 million. The Program's costs for reducing a ton of NOx have averaged less than \$5,000 per ton, with the additional benefit of more than 320 tons-per-year of PM reductions.

Lower-Emission School Bus Program: Since 2000, the state and local school districts have allocated more than \$70 million to reduce emissions from older, high-polluting school buses. This funding has gone to buy new, cleaner buses and to install filters on existing diesel buses. Thus far, the funding has seen the purchase of about 400 new school buses. Meanwhile, about 40 more new buses are on order and will be delivered to school districts by 2005. The program also will ultimately see 3,000 or more existing buses retrofitted with filters to significantly reduce their emissions.

Compliance Assurance Activities

ARB enforces its rules to ensure that emission benefits are maintained and has programs that assure emission reductions are real. These programs include:

Field Inspection and Testing: ARB regulations require that diesel engines not smoke. ARB has compliance teams that inspect diesel vehicles for excessive smoke and owners are required to perform smoke tests annually on their diesel trucks. Violators face fines and must bring their vehicles into compliance. In addition, we inspect vehicles and engines to ensure our in-use regulations are followed. Once a vehicle or engine is in compliance, it must remain in compliance throughout its life in California.

Retrofit Verification Procedure: One of the options for ARB's new in-use diesel PM reduction rules is reducing PM emissions through the application of ARB-verified diesel emission control strategies to existing engines. Verified control devices such as filters and catalysts or verified fuels can be cost-effective means

to reduce diesel PM from engines. ARB verifies diesel emission control strategies to assure they significantly reduce diesel PM, are durable, and have a mandatory warranty. Owners are required to use only ARB-verified products to ensure the mandated PM reductions are real and durable. ARB works with companies to verify products for those applications where they work best.

What Is Next?

If we are to have cleaner, healthier air as our state continues its rapid population and industrial growth, we must look at every possible action for reducing air pollution. In the years ahead ARB will continue looking for ways to reduce diesel engine PM emissions. Among the actions being considered are:

- Idling Restrictions for On-Road Diesel Trucks
- Requirements for existing stationary agricultural engines
- Rules for publicly-owned equipment and vehicles
- Rules for privately-owned equipment and vehicles
- Harbor craft requirements
- Ocean going vessels requirements
- Cleaner diesel fuel requirements for marine vessels and locomotives
- Reducing PM from cargo handling equipment at ports and shipping yards

For Further Information:

Visit our web site at <http://www.arb.ca.gov/diesel/dieselrrp.htm> for more information on our actions to reduce diesel PM or call the ARB's Public Information Office at (916) 322-2990.

Further information regarding the various programs and regulations discussed in this fact sheet can be found at:

New Engine Standards: <http://www.arb.ca.gov/msprog/onroadhd/onroadhd.htm>

Low Sulfur Diesel Fuel: <http://www.arb.ca.gov/fuels/diesel/diesel.htm>

Waste Collection Trucks: <http://www.arb.ca.gov/msprog/SWCV/SWCV.htm>

Transit Agency Buses: <http://www.arb.ca.gov/msprog/bus/bus.htm>

School Bus Idling Restrictions:

<http://www.arb.ca.gov/toxics/sbidling/sbidling.htm>

Stationary Engines: <http://www.arb.ca.gov/regact/statde/statde.htm>

Transport Refrigeration Units: <http://www.arb.ca.gov/diesel/tru.htm>

Portable Engines: <http://www.arb.ca.gov/diesel/portdiesel.htm>

Lower-Emission School Bus Program:

<http://www.arb.ca.gov/msprog/schoolbus/schoolbus.htm>

Carl Moyer Program: <http://www.arb.ca.gov/msprog/moyer/moyer.htm>

Verification Procedure: <http://www.arb.ca.gov/diesel/verdev/verdev.htm>.



COPY

DEPARTMENT OF
GENERAL SERVICES

CITY OF SACRAMENTO
CALIFORNIA

5130 24th Street Building One
Sacramento, CA 95822-3699

FLEET MANAGEMENT DIVISION

Phone 916 838 1888
Fax 916 399-9263

May 24, 2005

City Council
Sacramento, California

Honorable Members in Session:

SUBJECT: UPDATE ON FLEET OPERATIONS AND ADOPTION OF FUEL STRATEGIES

LOCATION AND COUNCIL DISTRICT: Citywide

RECOMMENDATION:

This report recommends that Mayor and City Council adopt the attached resolution that identifies long-range fuel strategies of the City

CONTACT PERSONS: Robert Summersett, Fleet Manager, 808-6309

FOR COUNCIL MEETING OF: June 14, 2005

SUMMARY:

This report is in response to a request by the Mayor and City Council that staff provided an update on fleet standards and the types of vehicles used by City staff, and an annual progress report on vehicles purchased, their respective emission ratings, and any units that could not be purchased as low emission vehicles during the past year, and a request by the City Manger to develop a long-term fuel strategy for adoption by the Mayor and City Council

COMMITTEE/COMMISSION ACTION: None

BACKGROUND INFORMATION:

Fleet Standards and Vehicle Types

On June 15, 2004, Mayor Fargo and Council Members Tretheway and Cohn requested information on fleet standards and the types of vehicles used by City staff, and a report on vehicle utilization

City Council
Update on Fleet Operations
May 24, 2005

Staff has prepared a listing of standard vehicles by position classification (Attachment 1) considering operating requirements and needs, comparison with comparable positions in other agencies, and available types and sizes of lowest emission and highest fuel mileage vehicles. Several City position classifications including Fire Battalion Chief, Assistant Fire Chief, and Survey Party Chief continue to require the use of Sport Utility Vehicles (SUV) for operational reasons. Requests for SUVs for any other City positions require approval from the City Manager.

Vehicle Utilization

Staff developed minimum utilization standards and evaluated the City fleet based on the criteria developed. This evaluation identified 245 vehicles as possibly being under utilized. This information has been provided to the Budget Office and all departments for their information. Departments have been asked to review and evaluate under utilized vehicles. While there may be valid reasons for retaining under utilized vehicles, some may be able to be disposed of, reassigned or used in lieu of adding units to the City's fleet.

Annual Progress Report on Vehicles Purchased

On July 27, 2004, City Council adopted resolution 2004-613 revising the City's low emission vehicle acquisition policy. The revised policy requires an annual progress report to Council showing the vehicles purchased and their respective emission ratings and any units that could not be purchased as low emission vehicles during the reporting period. A table updating the City's activities is provided in Attachment 2. In total, 89 percent of vehicles purchased and received in FY 2004/05 qualified as low emission.

Of 141 vehicles purchased since July 1, 2004, 117 were light and medium duty vehicles, all had an emission rating of LEV II or more stringent. LEV II is the low emission vehicle standard effective with the 2004 model year vehicles. The majority of the LEV II units were Police patrol and unmarked cars purchased in the last year.

Of the heavy-duty units, four were LEV. (four liquefied natural gas fueled refuse trucks) and the remaining 15 were at or below the October 2004 emission standard for heavy-duty vehicles. Bids have been received for the purchase and installation of diesel particulate filters (DPF) for retrofitting 35 units, mostly refuse trucks. The DPF will significantly reduce the particulate and oxides of nitrogen (NOx) emissions from these units. Installation on the units will be completed by the end of the year.

Long Term Fuel Strategy

At the request of the City Manager, staff has drafted a long-term fuel strategy for the City (Attachment 3). The goals of the strategy are to reduce fuel consumption and costs, reduce emissions, and reduce the City's dependence on foreign energy sources. The greatest potential for meeting all of these goals may be reached by replacing existing vehicles with more efficient, higher fuel mileage vehicles, setting goals for reducing fuel consumption for all City departments, and by changing how vehicles and equipment are used, dispatched and routed. A hybrid or alternate fuel replacement analysis and a strategy to replace 100% of the standard fleet sedans (non-Police) as

City Council
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they come due for replacement has been included (Attachment 4). If the fuel strategies are approved, Fleet Management will work with City departments to prioritize, assess feasibility, and develop department-specific strategies, and will provide a status update to the Mayor and City Council during FY2005/06 midyear review.

FINANCIAL CONSIDERATIONS:

Some of the strategies recommended will require additional funding. The report back at mid-year will address any significant budget issues.

ENVIRONMENTAL CONSIDERATIONS:

There are no environmental considerations associated with this report.

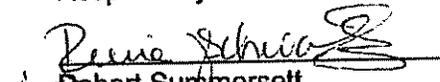
POLICY CONSIDERATIONS:

This report is consistent with the Low Emission Vehicle (LEV) Acquisition Policy, Resolution 2004-613, and the City's Strategic Plan goal to achieve sustainability and livability.

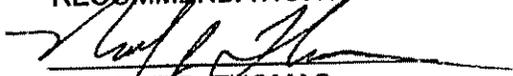
ESBD CONSIDERATIONS:

No goods or services are being purchased under this report.

Respectfully submitted,


Robert Summersett
Fleet Manager

RECOMMENDATION APPROVED:


ROBERT P. THOMAS
City Manager

Approved:

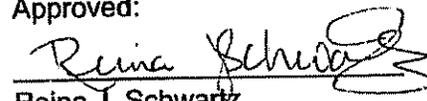

Reina J. Schwartz
Director, Department of General Services

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Fleet Vehicle & Equipment Standard
January 25, 2005

Job Description	Recommended Vehicle Type
Animal Enforcement Officer	Full Size Pickup with Animal Body
Assistant City Attorney	Compact Sedan
Building & Construction Inspector or Senior Engineer	Extended Cab Compact Pickup
Carpenter	Full Size Cargo Van
Code Enforcement Officer	Compact Sedan
Community Center Attendant	Full Size Pickup
Construction Inspector I, II & III	Extended Cab Compact Pickup
Electrician	Full Size Pickup
Fire Assistant Chief (Special Ops)	SUV
Fire Battalion Chief	SUV
Fire Chief	Full Size Sedan
Deputy Fire Chief	Mid Size Sedan
Fire Inspector	Compact Sedan
Fire Investigator	Compact Pickup with Camper Shell
General Services Building Maintenance Worker	Full Size Pickup
General Services Mechanical Maintenance Supervisor	Full Size Pickup
General Supervisor, Transportation/General Services	Extended Cab Compact Pickup
General Services Stationary Engineer	Full Size Cargo Van
Golf Superintendent	Compact Pickup
Marina Attendant	Electric Vehicle
Parking Enforcement Officer	Traffic Scooter
Parking Administration	Compact Sedan
Parking Attendant	Extended Cab Compact Pickup
Parking Custodian	Extended Cab Compact Pickup
Parking Enforcement Supervisor	Compact Sedan
Parking Maintenance Worker	Extended Cab Compact Pickup
Parks Maintenance Supervisor	Extended Cab Compact Pickup
Parks/Trees Maintenance Worker	Full Size Pickup
Plumber General Services	Full Size Pickup
Police Bomb Squad Officer	Full Size Pickup, 4WD or Full Size Sedan
Police Captain	Mid Size Sedan
Police Lieutenant	Mid Size Sedan
Police Chief	Full Size Sedan
Police Deputy Chief	Full Size Sedan
Police Crime Scene Investigator	Mid Size SUV, 4WD
Police Community Service Officer	Compact Passenger Van, assigned patrol unit
Police Detective	Mid Size Sedan
Police Information Systems Technician	Compact Passenger and Cargo Van
Police Investigation Officer	Junker, various size/type
Police K-9 Officer	Full Size Pursuit Sedan
Police Motor Officer	Motorcycle
Police Patrol Officer	Full Size Pursuit Sedan
Police Records and Communications	None
Police Mounted Unit Officer	Full Size Pickup
Police Supply Specialist	None
Police Swat Officer	Full Size Sedan
Police Watch Commander	SUV, marked
Safety Specialist	Compact Sedan
Service Contractor Inspector	Extended Cab Compact Pickup
Signals and Lighting Tech I & II	Full Size Pickup
Signals and Lighting Supervisor	Extended Cab Compact Pickup
Solid Waste Route Supervisor	Extended Cab Compact Pickup

Attachment 1

Job Description	Recommended Vehicle Type
Street Maintenance Supervisor	Extended Cab Compact Pickup
Structural Maint. Supervisor-Carpenter	Extended Cab Compact Pickup
Structural Maint. Supervisor-Paint	Extended Cab Compact Pickup
Structural Maint. Supervisor-Electrician	Extended Cab Compact Pickup
Supervising Engineer	Extended Cab Compact Pickup
Supervising Surveyor	Extended Cab Compact Pickup
Survey Party Chief	Full Size SUV, 2WD
Telecommunication Engineer	Compact Sedan
Traffic Investigator	Extended Cab Compact Pickup
Traffic Worker I, II & III	Full Size Pickup
Traffic Program Analyst	Compact Passenger Van
Traffic Supervisor	Extended Cab Compact Pickup
Tree Maint Supervisor	Extended Cab Compact Pickup
Utilities Lead worker, Maintenance	Full Size Pickup
Utilities Lead worker, Plant Operations	Full Size Pickup
Utilities Meter Reader	Compact Sedan
Utilities Machinist	Full Size Pickup
Utilities Machinist Helper	Full Size Pickup
Utilities Machinist Supervisor	Extended Cab Compact Pickup
Utilities Senior Maintenance Worker	Full Size Pickup
Utilities Services Insp.	Compact Sedan
Utilities Superintendent	Extended Cab Compact Pickup
Utilities Supervisor, Drainage	Extended Cab Compact Pickup
Utilities Supervisor, Sewer	Extended Cab Compact Pickup
Utilities Supervisor, Water Distribution	Extended Cab Compact Pickup

City of Sacramento

Low Emission Vehicle Purchases

Fiscal Year	2000	2001	2002	2003	2004	2005	Totals
Light Duty - Total Number of Units, Less than 6000 lb. GVWR	108	124	120	135	107	110	704
Emission Designation							
LEV	1	1	66	99	0	0	167
LEV II (1)						77	77
PZEV	0	0	2	11	9	9	31
AT-PZEV						2	2
SULEV	0	0	0	0	28	2	30
ULEV	0	0	0	0	7	20	27
ZEV	5	0	10	0	1	0	16
LEV (Compressed Natural Gas)	3	0	0	0	0	0	3
Percentage of Low Emissions Light Duty Units Purchased	8%	1%	65%	81%	42%	100%	50%
Medium Duty - Total Number of Units 6000-14,000 lb. GVWR	9	79	43	39	17	7	194
Emission Designation							
LEV	0	0	24	2	0	0	26
LEV II						3	3
SULEV						4	4
Percentage of Low Emissions Medium Duty Units Purchased	0%	0%	56%	5%	0%	100%	17%
Heavy Duty - Number of Units Greater than 14,000 lb. GVWR	11	22	45	22	33	19	152
Emission Designation							
LEV (Liquefied Natural Gas)	0	17	18	0	12	4	51
2.5 g Diesel (Oct. 2004 Emission Standard) (2)	0	0	1	12	21	15	34
LEV (Propane)	1	1	0	2	0	0	4
Percentage of Low Emission HD Units Purchased	9%	82%	42%	64%	100%	21%	59%
Total Percentage of Low Emissions Vehicles Purchased	8%	8%	58%	64%	50%	89%	45%

(1) 40 units marked patrol, 31 unmarked police sedans, 6 general fleet vehicles

(2) Units purchased with lower emission ratings and placed in service in advance of the implementation date. Not considered low emission for units purchased after Oct. 2004

Purinox: Designated units in the City fleet have consumed approximately 37,000 gallons of Purinox fuel verified to reduce NOx emissions by 14%.

LEV - Certified Low Emission Vehicle through 2003 model year

LEV II - Certified Lower Emission Vehicle, more stringent starting with 2004 model year

PZEV - Partial Zero Emission Vehicle

AT-PZEV - Advanced Technology Partial Zero Emission Vehicle

ULEV - Ultra Low Emission Vehicle

SULEV - Super Ultra Low Emission Vehicle

Attachment 3

Fleet Fuel and Energy Reduction Ideas and Long Term Fuel Strategy

Executive Summary

This report has been prepared at the request of the City Manager outlining goals for reducing costs, fuel consumption and vehicle emissions and offering recommendations for a City strategy to meet them. A longer term look at future fuels and fuel strategy including transportation energy security for the City of Sacramento are also presented.

The United States and particularly California will continue to experience volatile and increasingly higher fuel prices due to increasing demand and limited supply.

Meeting these goals will require a multi-faceted approach including

- > Aggressive replacement of older vehicles with newer more fuel efficient vehicles
- > Operational changes to reduce trips and to do more efficient routing
- > Implementation of technology such as GPS systems and web and teleconferencing
- > Changes in the types and sizes of vehicles the City purchases
- > Changes in the frequency of purchases (replacement vehicle scheduling) to take advantage of cleaner, more efficient units

The primary keys to success will be managers, supervisors and drivers. They must actively participate in making changes in the way they assign and do their work, the way they operate their vehicles and equipment, and must select vehicles that offer lowest emissions and highest fuel mileage.

A program to purchase a high percentage of hybrid sedans may offer the most dramatic reduction in fuel consumption even though it may not currently be cost effective. Replacement of 10 standard fleet models with hybrid units could reduce consumption by over 2,300 gallons per year. The added cost is about \$96,000.

The next step is to share the ideas with all representatives of City departments who use vehicles and equipment and develop an aggressive Citywide strategy for presentation to City Council at Mid Year 2006.

Goals

The primary goals of the City with respect to Fleet Management are as follows:

- > Reduce the overall quantity of fuel consumed by City vehicles and equipment, and reduce costs
- > Reduce emissions from the City fleet
- > Reduce the City's dependence on foreign energy sources

Background

California and the nation, most likely will see continuing energy cost increases and volatile energy prices. This is due to increasing demand from over 24 million registered vehicles in California in 2003 to a possible 31.5 million registered vehicles in 2020. California faces three major problems from its reliance on petroleum: economic, sources of supply, and environmental.

Attachment 3

The economic problem is consumers must be given viable options for reducing their transportation energy consumption. Without options, the consumption continues to rise. The rising cost of energy can have a negative result on the state and local economies. At the national level, there is no energy policy in place and increases in the corporate average fuel economy of vehicles produced has not been elevated.

Sources of supply are also limited for California. In state production of petroleum has been declining by about 2 percent per year making California increasingly dependent on sources outside of the state for petroleum and refined petroleum products.

Increasing reliance on petroleum would increase greenhouse gas emissions, which continue to be an obstacle to improved air quality.

Technology and Fuels of the Future

Over the years the City has been involved with many fuels and technologies for reducing emissions. One of the primary goals in addition to reducing emissions has been to gain experience with the technology as well as demonstrate its effectiveness in real world applications. Since the early 1970s automotive emissions have been steadily reduced and miles per gallon increased on almost every new model year of vehicle. Today sedans can be purchased as standard offerings that have emissions comparable to an electric vehicle when electrical generation plant emissions are factored in.

The improvements have not been confined to sedans and light trucks, medium and heavy duty diesel engine emissions have also reduced significantly. According to the Sacramento Air Quality Management District, medium and heavy duty engine technology is improving such that the fuel used is becoming less significant. In other words, the type of fuel is no longer a significant contributing factor to the emissions. Diesel emissions are now almost as low as (liquefied or compressed) natural gas engine emissions. The EPA and Ford are currently working on a clean diesel project for passenger vehicles. Jeff Holmslead, EPA assistant administrator for air and radiation was recently quoted, "Diesel engines are an extremely attractive technology to help achieve EPA's future emissions standards."

Hybrid technology is becoming available for medium duty trucks. FedEx has been utilizing this technology in some of their package delivery vans as demonstration units for some time now. This technology could significantly reduce both the emissions and fuel consumption of medium duty vehicles. Fuel cells, though exciting and well publicized, are estimated to be at least 10 years out. Generally, hydrogen is considered the primary fuel for fuel cells.

As fuel type becomes less significant as a contributor to emissions, domestic capacity or supply security may become a greater issue. Fuels such as ethanol, bio-diesel, Fischer-Tropsch (gas to liquid) diesel and hydrogen can be produced domestically. Fuels where there is excess available global capacity such as liquefied natural gas (LNG) from which compressed natural gas (CNG) can be produced may increase in availability with construction of proposed LNG shipping terminals on the west coast of North America. This type of facility would receive and store LNG transported in by ship and be used primarily to augment natural gas (pipeline) supplies but be available for motor fuel as well. With a significant increase in supply, the cost should decrease. Sacramento County is developing a LNG liquefaction facility at the Keifer Landfill site using landfill gas which could also augment local supplies and reduce

Attachment 3

transportation costs. As the cost of production or supply and the availability of infrastructure come on line, these fuels may become more viable.

CNG may have acceptance in some types of vehicles. The transit industry is widely using CNG as a motor fuel, however, in other types of vehicles like refuse trucks, the tank capacity required increases the weight of the vehicles and either reduces payload capacity or increases vehicle size to accommodate the added fuel tanks. Light duty CNG vehicle offerings have declined in the last few years, probably due to limited infrastructure and reduced carrying capacity and range. Honda continues to offer their Civic sedan in a CNG model and just recently announced the availability of an economical "home" refueling system. This may have possibilities for the City's fleet. Currently, there are 3 CNG fueled Hondas in the fleet. They fuel predominantly in West Sacramento.

Conventional fuels with continued reformulation such as ultra low sulfur diesel and unleaded gasoline will continue to be available. Though with increasing dependence on foreign sources the cost will continue to be volatile. The absence of a clear national energy policy presents added challenges at the local level, since the market forces and technology are not generally impacted by the City's demands.

Fuels of the Future

- Gasoline – Unleaded gasoline in new formulations to reduce emission causing elements
- Diesel – Ultra low sulfur diesel fuel. Reformulated diesel fuel that allows for more effective after treatment for reduced emissions
- PuriNOx – PuriNOx fuel consisting of an emulsified mix of water, naphtha and other chemicals for reduced NOx production
- Ethanol – Ethanol is a product created from vegetal products, generally used in a blend with unleaded gasoline. This is a renewable resource.
- Bio-Diesel – Bio-Diesel is a product created from vegetal products, generally used in a blend with diesel fuel. This is a renewable resource. It requires approximately a gallon of diesel fuel to produce 3 gallons of bio-diesel.
- CNG – Compressed Natural Gas stored at up to 3,600 pounds per square inch pressure in storage cylinders on the vehicles/equipment, requires several tanks in order to provide adequate range for most application.
- LNG – Liquefied Natural Gas stored in "thermos bottle" type tanks on vehicles/equipment as a cryogenic product. Requires less storage volume than CNG.
- Fischer-Tropsch Diesel – Fischer-Tropsch Diesel, also known as gas to liquid can be produced from natural gas and other sources, very high quality diesel fuel.
- Hydrogen – Hydrogen gas, generally stored on vehicles in "thermos bottle" type tanks on vehicles/equipment, similar to LNG, but, much colder. This is also a cryogenic product.

Strategies

The following are fuel strategies for the City of Sacramento. The focus is relatively diverse, meaning no one fuel or technology would be used exclusively. To do so may put the City at risk if there are future shortages or if infrastructure and supply cannot be assured.

1. Develop a target goal to reduce fuel consumption 15% from the 2003 levels by 2010. Expect all City departments and organizations using Fleet vehicles and equipment to do their fair share in reaching this goal. This goal is based on use reduction measures that

Attachment 3

are technically feasible and cost beneficial according to 'Options to Reduce Petroleum Fuel Use' published by the California Energy Commission

- 2 Aggressively incorporate hybrid and CNG (Honda Civic GX) vehicles into the City's sedan fleet by replacing 100% of the standard fleet sedans coming due for replacement every year. This equates to about 10 to 12 sedans per year. The added cost for the initial purchases will be \$96,000 more than 10 standard replacement units. Fuel consumption could be reduced up to 2,300 gallons per year. Continue to expand implementation of hybrid technology, currently available in sedans, light pickup trucks and small SUVs, as it becomes available for other classes of vehicles. (See Attachment 4)
- 3 Identify and make available funding for use in implementing alternative fuel, fueling infrastructure and new technology into the Fleet
- 4 Purchase only standard vehicles based on the actual type of use and need of a particular position classification with an emphasis on purchasing units offering greatest fuel economy and least emissions in its respective class
- 5 Accelerate replacement of older units with newer, less polluting vehicles that consume less fuel
- 6 Reduce fleet size by removing under utilized units from the fleet or through reassignment in place of additional units
- 7 Promote reduced idling, trip reduction, routing for efficiency and use of public transportation to operating departments within the City. Create systems and policies that encourage using alternate forms of transportation when appropriate
- 8 Reduce the number of overnight retention vehicles to only those as needed for valid and plausible on-call response
- 9 Reduce the maximum allowed mileage from residence to the intersection of Highways 99 and 50 for overnight retention vehicle assignments from the current 35 air mile radius to 25 statute miles
- 10 Add systems to vehicles and equipment to allow continued operation of warning lights with the engine off without compromising the ability to restart
- 11 Accelerate change over to ultra low sulfur diesel fuel. Ultra low sulfur diesel is required for engines equipped with particulate traps. This will be phased in starting midyear 2006 and mandated in 2007. Some Solid Waste vehicles are required to have emission systems enhancements by the end of 2006 and will require ultra low sulfur fuel
- 12 Continue expansion of the City's use of Liquefied Natural Gas (LNG) to include trucks in other vocations beyond refuse trucks
- 13 Identify specific applications and available technology for expansion of Compressed Natural Gas (CNG) fueled units, support expanding CNG fueling infrastructure and individual unit fueling through the use of "Fuel Maker" fueling systems

Attachment 4

Hybrid (Gasoline/Electric) and Compressed Natural Gas (CNG) Comparison

The following illustrates the cost, fuel mileage and emission differences between hybrid vehicles and comparable gasoline fueled vehicles

Year	Model	Cost	City MPG	Hwy MPG	Emission Rating	Annual Fuel Use
2005	Honda Civic Hybrid	\$20,336	47	48	AT-PZEV*	204 gal
2005	Honda Civic CNG	\$22,083	30	34	AT-PZEV*	310 gal (CNG)
2005	Dodge Stratus Sdn	\$11,348	22	30	PZEV**	436 gal

A typical sedan in City of Sacramento service travels approximately 800 miles per month. Using the City MPG rating, over a year the Honda would consume 204 gallons of fuel compared to 436 gallons for the Dodge, 232 gallons less. The benefit of the greater economy of the Honda would require over 20 years to offset the initial cost differential. However, if the vehicles are retained for 8 years in the City fleet, over 1,800 gallons less would be consumed by each Honda compared to the Dodge. Hybrid batteries for the Honda and Toyota are now warranted for 10 years, 150,000 miles.

Though both have the same emission rating, in reality, the Honda will emit approximately 4.5 pounds/year compared to approximately 7.6 pounds/year for the Dodge when considering upstream emissions. The upstream emissions come from pumping and transporting a greater quantity of fuel required for the Dodge. From this perspective the Honda emissions are about 40% less than the Dodge.

The City currently has six hybrid sedans in the fleet and two hybrid full size GM pickups. Aggressive expansion of hybrid units could significantly reduce the quantity of fuel required for sedans. Significant emissions dates are 1996 and 2001. If 10 sedans older than 1996 year model were replaced, fuel consumption would be reduced up to 2,300 gallons per year. The added cost for 10 replacement sedans with hybrid models compared to conventional models is \$96,000.

Compressed natural gas (CNG) sedans are approximately the same cost as the hybrid. Though not as fuel efficient, their use will reduce gasoline consumption by about 400 gallons per year for each unit. The offset is using about 300 gallons of CNG. With the availability of small, in-home fueling stations, the inconvenience of going to fueling stations would be eliminated greatly increasing the acceptability of CNG units.

*AT-PZEV rating stands for advanced technology, partial zero emission vehicle. Advanced technology refers to the hybrid design. The emission rating is comparable to an electric vehicle when power generation emissions are factored in.

**PZEV rating stands for partial zero emission vehicle. The emission rating is comparable to an electric vehicle when power generation emissions are factored in.

RESOLUTION NO. 2005-454

ADOPTED BY THE SACRAMENTO CITY COUNCIL

ON DATE OF June 14, 2005

UPDATE ON FLEET OPERATIONS AND ADOPTION OF FUEL STRATEGIES.

WHEREAS, the Mayor and City Council have adopted a Strategic Plan goal to Achieve Sustainability and Livability; and

WHEREAS, reduced fuel consumption and improved air quality are key components of a sustainable and livable community; and

WHEREAS, the City of Sacramento has been a leader in the Sacramento region in emission reduction; and

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF SACRAMENTO THAT:

The following fuel strategies are adopted to guide staff in achieving the goals of reduced fuel consumption, improved overall air quality and operational efficiency:

1. Develop a target goal to reduce fuel consumption 15% from the 2003 levels by 2010. Expect all City departments and organizations using Fleet vehicles and equipment to do their fair share in reaching this goal. This goal is based on use reduction measures that are technically feasible and cost beneficial according to "Options to Reduce Petroleum Fuel Use" published by the California Energy Commission.
2. Aggressively incorporate hybrid and CNG (Honda Civic GX) vehicles into the City's sedan fleet by replacing 100% of the standard fleet sedans coming due for replacement every year. This equates to about 10 to 12 sedans per year. The added cost for the initial purchases will be \$96,000 more than 10 standard replacement units. Fuel consumption could be reduced up to 2,300 gallons per year. Continue to expand implementation of hybrid technology, currently available in sedans, light pickup trucks and small SUVs, as it becomes available for other classes of vehicles (See Attachment 4)

RESOLUTION NO. 2005-454

ADOPTED BY THE SACRAMENTO CITY COUNCIL

ON DATE OF JUN 14 2005

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FOR CITY CLERK USE ONLY

RESOLUTION NO.: 2005-454

DATE ADOPTED: JUN 14 2005

3. Identify and make available funding for use in implementing alternative fuel, fueling infrastructure and new technology into the Fleet.
4. Purchase only standard vehicles based on the actual type of use and need of a particular position classification with an emphasis on purchasing units offering greatest fuel economy and least emissions in its respective class.
5. Accelerate replacement of older units with newer, less polluting vehicles that consume less fuel.
6. Reduce fleet size by removing under utilized units from the fleet or through reassignment in place of additional units.
7. Promote reduced idling, trip reduction, routing for efficiency and use of public transportation to operating departments within the City. Create systems and policies that encourage using alternate forms of transportation when appropriate.
8. Reduce the number of overnight retention vehicles to only those as needed for valid and plausible on-call response.
9. Reduce the maximum allowed mileage from residence to the intersection of Highways 99 and 50 for overnight retention vehicle assignments from the current 35 air mile radius to 25 statute miles.
10. Add systems to vehicles and equipment to allow continued operation of warning lights with the engine off without compromising the ability to restart.
11. Accelerate change over to ultra low sulfur diesel fuel. Ultra low sulfur diesel is required for engines equipped with particulate traps. This will be phased in starting midyear 2006 and mandated in 2007. Some Solid Waste vehicles are required to have emission systems enhancements by the end of 2006 and will require ultra low sulfur fuel.
12. Continue expansion of the City's use of Liquefied Natural Gas (LNG) to include trucks in other vocations beyond refuse trucks.
13. Identify specific applications and available technology for expansion of Compressed Natural Gas (CNG) fueled units, support expanding CNG fueling infrastructure and individual unit fueling through the use of "Fuel Maker" fueling systems.

FOR CITY CLERK USE ONLY

RESOLUTION NO : 2005-454

DATE ADOPTED: JUN 14 2005

14. Initiate a test or pilot program for using bio-diesel when the California Air Resources Board approves a formulation for use in California.
15. Consider new fuel and technology offerings for pilot programs to test the effectiveness as they become available. Included will be Fischer-Tropsch diesel (GTL) and hydrogen for use in fuel cells.
16. Continue active involvement with the Clean Cities Coalition to stay abreast of new innovative ideas and be willing to utilize City equipment to demonstrate promising technologies.

HEATHER FALCO

MAYOR

ATTEST:

SHIRLEY CONCOLINO

CITY CLERK

FOR CITY CLERK USE ONLY

RESOLUTION NO : 2005-454
DATE ADOPTED: JUN 14 2005

RESOLUTION NO. 2006-XXXX

Adopted by the Sacramento City Council

October 17, 2006

AUTHORIZING THE ACCEPTANCE AND EXECUTION OF THE 2005 SACRAMENTO EMERGENCY CLEAN AIR AND TRANSPORTATION (SECAT) PROGRAM GRANT AGREEMENT WITH THE SACRAMENTO AREA COUNCIL OF GOVERNMENTS (SACOG) AND THE SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT (SMAQMD) IN THE AMOUNT OF \$113,506 FOR RETROFITTING EXISTING CITY DIESEL POWERED VEHICLES WITH PARTICULATE TRAPS

BACKGROUND

- A. The Sacramento region has the sixth worst air quality in the nation, jeopardizing its ability to meet state and federal clean air standards. A significant part of the air quality problem in the Sacramento region is attributable to on-road motor vehicles, especially diesel-powered vehicles.
- B. AB 2511 has created the Sacramento Emergency Clean Air & Transportation (SECAT) Program, an incentive-based approach to reducing diesel emissions and improving the region's air quality.
- C. This grant application is consistent with the City's revised Low Emission Vehicle Acquisition Policy, Resolution 2004-613 and Fleet Fuel Strategies, Resolution 2005-454.
- D. The proposed diesel particulate matter control measure for on-road heavy duty diesel-fueled vehicles owned or operated by public agencies and utilities implementation schedule requires the city to have 60% of its on-road diesel-fuel fleet outfitted with particulate traps by 2008.

BASED ON THE FACT SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:

- Section 1. The City Manager or his designated representative is hereby authorized to accept and execute a 2005 SECAT Program Retrofit grant agreement with SACOG and SMAQMD in the amount of \$113,506 for retrofitting existing City diesel powered vehicles with particulate traps

- Section 2. The Finance Director is authorized to establish a 2005 SECAT Grant Project.
- Section 3. Revenue and expenditure budgets for the 2005 SECAT grant project in the amounts of \$113,506 are established.

EXHIBIT A

See attached Grant VET-05-0120



YOU HAVE BEEN APPROVED FOR FUNDING UNDER THE SECAT PROGRAM!

Thank you for applying for funding under the Sacramento Emergency Clean Air Transportation (SECAT) program. We have approved your application for funding and now need your signatures on the SECAT funding agreements enclosed with this letter.

Please read the agreements carefully as they will explain your requirements and obligations as a condition of receiving SECAT funding. Special attention should be noted to the following items:

- Section 2.1.4 requires that a District-approved digital odometer device be installed on the vehicle (different than the standard vehicle odometer)
- Section 2.1.5 requires that the old vehicle be surrendered to a District-approved salvage dealer through the participating vehicle dealership
- Section 2.5 requires the Sacramento Metropolitan Air Quality Management District to be listed as a lien holder on the replacement vehicle through the length of the agreement
- Section 2.8 describes the minimum operational requirements under the program
- Section 2.17.1 prohibits the sale or encumbering of the replacement vehicle during the agreement
- Exhibit C indicates that the incentive amount shown in the agreement includes a \$1,200 allowance towards the purchase and installation of the digital odometer – **THIS WILL BE INVOICED AND PAID SEPARATELY FROM THE TRUCK**

If you agree with these terms, please initial the agreements on pages 2 & 4, and sign the agreements on page 8. All three signed agreements must be sent back to me to process them. One wet copy will be returned to you after the agreements have been signed by the Sacramento Metropolitan Air Quality Management District and the Sacramento Area Council of Governments

Please send the signed agreements to me at:

Kristian Damkier
Sacramento Metropolitan AQMD
777 12th St, 3rd Floor
Sacramento, CA 95814

It will take approximately 2-3 weeks for us to process the agreements after receiving all three signed copies. Once you have received a wet copy from us, you can invoice us for the project costs. A check is usually delivered within 2-3 weeks of receiving your invoice. Please contact me at (916) 874-4892 or your dealer for more information

Thank you for helping to clean the air in the Sacramento region!

SECAT is a joint effort of the Sacramento Metropolitan Air Quality Management District and the Sacramento Area Council of Governments whose goal is to improve air quality in the Sacramento region.

Agreement Number VET-05-0120

**SACRAMENTO AREA COUNCIL OF GOVERNMENTS
and
SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT
SACRAMENTO EMERGENCY AIR QUALITY AND TRANSPORTATION PROGRAM
(SECAT)**

This Agreement (Agreement) is between the Sacramento Area Council of Governments (SACOG), the Sacramento Metropolitan Air Quality Management District (District), and City of Sacramento (Participant).

1.0 Recitals

- 1.1. The District is part of the six-county federal Sacramento Ozone Nonattainment Area (Nonattainment Area). (A map of the Nonattainment Area is included in Exhibit A.) Ozone is formed by the interaction of precursor pollutants, including Nitrogen Oxide (NOx). The majority of NOx in the Sacramento Nonattainment Area is generated by vehicles, including heavy-duty vehicles and engines.
- 1.2. The state legislature established the Sacramento Emergency Air Quality and Transportation Program (SECAT Program) to help the air districts within the Nonattainment Area comply with the federal standards. The SECAT Program is administered by SACOG, but recognizes the importance of coordinating among the air districts to implement the Program. (Health Saf. Code § 44299.50, 44299.75.)
- 1.3. One of the air-quality-improvement methods identified in the SECAT Program is the development of an incentive program to promote the advance purchase and use of low-NOx on-road-heavy-duty vehicle and engine technology. The idea behind the method is to encourage vehicle and engine owners to purchase low-NOx technology even before use of the technology is required by law or regulation.
- 1.4. The District previously developed and implemented a vehicle and engine incentive program, and SACOG and the District have coordinated efforts to develop a similar approach to implement the SECAT Program.
- 1.5. SACOG finally approved this approach to implementing the SECAT Program on October 19, 2000. SACOG also simultaneously approved the use of this Agreement form and authorized its Executive Director to execute agreements implementing the approach.
- 1.6. The District approved the use of this Agreement form on October 26, 2000 in Resolution No. 200-053, and authorized its Air Pollution Control Officer (APCO) to execute agreements implementing the plan.
- 1.7. The Participant wishes to participate in this process by using SECAT Program funds to aid in the purchase of the low-NOx equipment identified in Exhibit B.

2.0 Terms and Conditions

The parties agree to the terms and conditions listed below.

2.1. Purchase and Payment:

2.1.1. Participant will purchase and operate the equipment described in Exhibit B and identified below (check all that apply):

- A new low-emission vehicle
- A low emission engine repower vehicle replacing the vehicle or engine specified in Exhibit B
- A low emission engine retrofit

2.1.2 SACOG will pay the Participant up to \$113,506 to assist the Participant in the purchase of the equipment described in Exhibit B.

2.1.3 _____ (Initial only to authorize two-party payments) By initialing this paragraph, the Participant:

(i) Notifies SACOG and the District that it has entered into a purchase agreement with Cummins West, the manufacturer or distributor of the equipment identified in Exhibit B.

(ii) Authorizes SACOG to issue checks payable to both the Participant and Cummins West.

(iii) Acknowledges that this section merely streamlines the payment process for the benefit of the Participant, and does not create a third-party contractual benefit for the manufacturer/distributor.

(iv) Acknowledges that, notwithstanding any two-party payment authorized under this section, the Participant alone, and not the manufacturer/distributor, is responsible for performance under this Agreement.

2.1.4 This Agreement and any payments to Participant are subject to the provisions and limitations imposed by Health and Safety Code sections 44299.5 and 44299.75. Neither the District nor SACOG are permitted to make payments that contravene these sections of the Health & Safety Code or any other law or regulation. If a payment under this Agreement violates any applicable law or regulation, the Participant shall reimburse the entire payment.

2.1.5 Ensure that a District-approved digital odometer device is installed on the vehicle.

2.2 Vehicle or Engine Equipment

2.2.1 The Participant must submit information showing that the equipment described in Exhibit B is approved for sale by the California Air Resources Board (CARB).

2.2.2 The Participant must demonstrate that the equipment described in Exhibit B is certified using one or more of the three following methods (check all that apply):

- CARB certification testing
 CARB approval through the "Procedure for Technical Review and for Verification of Emission Reduction Claims for PM and NOx Retrofit Devices of Existing On-Road and Off-Road Heavy-Duty Diesel Vehicle and Equipment"
 U.S. Environmental Protection Agency certification testing

2.2.3 The Participant warrants that the equipment described in Exhibit B meets all the eligibility requirements described in the *Requests for Applications for Funding from: Sacramento Emergency Clean Air and Transportation Program* adopted by SACOG on September 21, 2000

2.2.4 Because the goal of the SECAT Program is to encourage the use of low-NOx technology that is not already required by law, the Participant warrants that its purchase is not required by any law or regulation. (If the Participant is a public agency, Participant further warrants that its board policies do not require the purchase).

2.3 **Engine Replacement or Repower:** If the Participant is replacing or repowering an engine:

2.3.1 The Participant must either:

- (i) Transfer ownership of the replaced or repowered engine to a factory-authorized remanufacturing program approved by both SACOG and the District, and provide SACOG and the District copies of receipts or other documents confirming the transfer, or
- (ii) Destroy the replaced or repowered engine in a manner acceptable to both SACOG and the District. If the engine is destroyed, the Participant must permit both SACOG and the District to inspect the destroyed engine.

2.3.2 Under special circumstances, SACOG and the District may authorize an alternative to section 2.3.1, as long as there is no detrimental impact to air quality.

2.4 _____ **(Participant to Initial) Operational Requirements:** Each vehicle or engine described in Exhibit B must operate within the Sacramento Nonattainment Area for at least the minimum miles specified in Exhibit C.

2.4.1 At anytime during this Agreement, SACOG and the District may demand full repayment if the Participant fails to fulfill the minimum performance requirements established in Exhibit C.

(i) SACOG and the District may jointly consent to waive all or a portion of this repayment obligation after considering the circumstances leading to the failure. Neither SACOG nor the District may unreasonably withhold their consent to a waiver.

(ii) Either SACOG or the District may file, or require that Participant file, a UCC-1 Form securing all or a part of the funds paid to Participant under this Agreement. Participant must file the UCC-1 Form within 1 month of receiving a request from SACOG or the District.

2.4.2 Participant's operation of the equipment described in Exhibit B must conform to the eligibility requirements stated in the September 21 SECAT Program Request for Applications and the goals and objectives of the SECAT Program.

2.4.3 Participant shall display a decal approved by SACOG and the District on each vehicle or engine described in Exhibit B. The location of the decal must be approved by SACOG and District.

2.4.4 **Certificate of Digital Odometer Installation:** Submit a District-approved Certificate of Digital Odometer Installation form from a District-approved installer, verifying that an odometer has been installed, or obtain the District's written consent to defer compliance with this requirement until a device becomes available. Once a digital odometer becomes available, the Participant will need to have it installed at no cost to the SECAT Program.

2.5 Recordkeeping

2.5.1 The Participant shall provide written biannual reports for five years commencing with the first date the Participant operates the vehicle or engine. Reports must be filed with SACOG and the District by January 31 and July 31 of each year. Participant must maintain records adequate to document the required information.

The records must include:

- | |
|--|
| * Copies of all driver log book entries for the preceding 6 months |
| * Miles traveled within the Nonattainment Area |
| * Vehicle downtime |
| * Fuel consumed |
| * Fuel cost |
| * Type and cost of maintenance performed |

2.5.2 Either SACOG or the District (or both) may conduct an audit of Participant's operations to verify that Participant is complying with the Agreement terms. Any audits will be conducted at a reasonable time and with reasonable notice to Participant.

2.6 **Indemnity:** The Participant shall indemnify and defend SACOG and the District, their officers, agents, employees and volunteers, from any and all liabilities of any kind that:

- 2.6.1 Arise from, or are alleged to arise from, any breach of the responsibilities required of the Participant by this Agreement, or
- 2.6.2 Are related in any way to the vehicles or engines described in Exhibit B.
- 2.7 **Prohibition on Emission Reduction Credits:** The receipt of funds under this Agreement prohibits application for any form of emission reduction credit – for any pollutant – for the purchase of the equipment described in Exhibit B. This prohibition includes, but is not limited to: (i) all attainment, nonattainment, criteria and noncriteria pollutants, and (ii) application for Emission Reduction Credits (ERC), Mobile Emission Reduction Credits (MERC) and/or Certificates of Advanced Placement (CAP). This prohibition extends to credits from all Air Quality Management or Air Pollution Control Districts.
- 2.8 **Voluntary Act:** The Participant's purchase of the equipment described in Exhibit B is a completely voluntary act and neither SACOG nor the District have made representations or guarantees to the Participant regarding the equipment.
- 2.9 **Insurance:** The Participant shall maintain the insurance coverage described in Exhibit D, and either SACOG or the District may require the Participant to name SACOG and the District as additional insureds. In the event the Participant does not maintain the required insurance, SACOG or the District may terminate this Agreement.
- 2.10 **Additional Terms and Conditions:**
- 2.10.1 The Participant shall not sell or encumber the equipment described in Exhibit B without the written consent of both SACOG and the District.
- 2.10.2 The Participant must notify SACOG and the District in the event Participant files for bankruptcy. The Participant must mail the notice within 30 days of filing for bankruptcy.
- 2.10.3 The Participant must notify SACOG and the District if:
- (i) the Participant suffers a catastrophic loss, or
 - (ii) any other event has occurred or is likely to occur that could impair the Participant's ability to perform the conditions of this Agreement.
- Such notice shall be provided to the District within 30 days of the date Participant knows, or should have known, that the event has occurred or is likely to occur.
- 2.10.4 No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by all parties.
- 2.10.5 No performance rendered or payment due under this Agreement may be delegated or assigned without the written consent of all the parties hereto. If Participant

assigns any of its rights or obligations under this contract, all of the terms and conditions of this contract shall apply to the Participant's assignee.

2.10.6 This Agreement shall begin upon execution by both parties and terminate on .

2.10.7 The Participant must observe and comply with all laws and regulations. This Agreement is executed in Sacramento County, California and shall be governed by the laws of the State of California. Any action arising out of this Agreement must be filed in a state court or federal court located in Sacramento, California

2.10.8 This Agreement consists of:

- This Agreement
- Exhibit A, Sacramento Ozone Nonattainment Area Map
- Exhibit B, Engine and Vehicle Information
- Exhibit C, Performance Requirements
- Exhibit D, Insurance Requirements

The Requests for Applications for Funding from: Sacramento Emergency Clean Air and Transportation Program approved by SACOG on September 21, 2000.

2.10.9 Correspondence between the District, SACOG and Participant should be addressed to the following:

To District	To SACOG	To Participant
Kristian Damkier Sacramento Metropolitan AQMD 777 12 th Street, Third Floor Sacramento, CA 95814-1908 Phone: (916) 874-4892 FAX: (916) 874-4899	Mr. David Young SACOG 1415 L Street, Suite 300 Sacramento, CA 95814 Phone: (916) 321-9000 FAX: (916) 321-9551	Bob Summersett City of Sacramento 5730 24th Street Sacramento, CA 95822- Phone: (916) 808-6309 FAX: (916) 399-9263

The address and/or contacts may be changed by written notice to the other party. Such written notice may be given by mail, using the U.S. Postal Service, or personal service.

RESOLUTION NO. 2006-XXXX

Adopted by the Sacramento City Council

September 26, 2006

AUTHORIZING THE ACCEPTANCE AND EXECUTION OF THE 2006 SACRAMENTO EMERGENCY CLEAN AIR AND TRANSPORTATION PROGRAM GRANT AGREEMENT WITH THE SACRAMENTO AREA COUNCIL OF GOVERNMENTS (SACOG) AND THE SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT (SMAQMD) IN THE AMOUNT OF \$462,015 FOR THE INCREMENTAL COST OF PURCHASING FIVE LIQUID NATURAL GAS (LNG) VEHICLES AND RETROFITTING EXISTING CITY DIESEL POWERED VEHICLES WITH PARTICULATE TRAPS

BACKGROUND

- A. The Sacramento region has the sixth worst air quality in the nation, jeopardizing its ability to meet state and federal clean air standards. A significant part of the air quality problem in the Sacramento region is attributable to on-road motor vehicles, especially diesel-powered vehicles.
- B. AB 2511 has created the Sacramento Emergency Clean Air & Transportation (SECAT) Program, an incentive-based approach to reducing diesel emissions and improving the region's air quality.
- C. This grant application is consistent with the City's revised Low Emission Vehicle Acquisition Policy, Resolution 2004-613 and Fleet Fuel Strategies, Resolution 2005-454.
- D. The proposed diesel particulate matter control measure for on-road heavy duty diesel-fueled vehicles owned or operated by public agencies and utilities implementation schedule requires the city to have 60% of its on-road diesel-fuel fleet outfitted with particulate traps by 2008.

BASED ON THE FACT SET FORTH IN THE BACKGROUND, THE CITY COUNCIL RESOLVES AS FOLLOWS:

- Section 1. The City Manager or his designated representative is hereby authorized to accept and execute a 2006 SECAT Program Vehicle Purchase and Retrofit agreement with SACOG and SMAQMD in the amount of \$462,015 for the incremental cost of purchasing five liquid natural gas (LNG) vehicles and retrofitting existing City diesel powered vehicles with particulate traps.

Section 2. The Finance Director is authorized to establish the 2006 SECAT grant project.

Section 3. Revenue and expenditure budgets for the 2006 SECAT grant project in the amounts of \$462,015 are established.

EXHIBIT B

See Attached Grant VET-06-0042

Agreement Number VET-06-0042

**SACRAMENTO AREA COUNCIL OF GOVERNMENTS
and
SACRAMENTO METROPOLITAN AIR QUALITY MANAGEMENT DISTRICT
SACRAMENTO EMERGENCY AIR QUALITY AND TRANSPORTATION PROGRAM
(SECAT)**

This Agreement (Agreement) is between the Sacramento Area Council of Governments (SACOG), the Sacramento Metropolitan Air Quality Management District (District), and City of Sacramento (Participant).

1.0 Recitals

- 1.1. The District is part of the six-county federal Sacramento Ozone Nonattainment Area (Nonattainment Area). (A map of the Nonattainment Area is included in Exhibit A.) Ozone is formed by the interaction of precursor pollutants, including Nitrogen Oxide (NOx). The majority of NOx in the Sacramento Nonattainment Area is generated by vehicles, including heavy-duty vehicles and engines.
- 1.2. The state legislature established the Sacramento Emergency Air Quality and Transportation Program (SECAT Program) to help the air districts within the Nonattainment Area comply with the federal standards. The SECAT Program is administered by SACOG, but recognizes the importance of coordinating among the air districts to implement the Program. (Health Saf. Code § 44299.50, 44299.75.)
- 1.3. One of the air-quality-improvement methods identified in the SECAT Program is the development of an incentive program to promote the advance purchase and use of low-NOx on-road-heavy-duty vehicle and engine technology. The idea behind the method is to encourage vehicle and engine owners to purchase low-NOx technology even before use of the technology is required by law or regulation.
- 1.4. The District previously developed and implemented a vehicle and engine incentive program, and SACOG and the District have coordinated efforts to develop a similar approach to implement the SECAT Program.
- 1.5. SACOG finally approved this approach to implementing the SECAT Program on October 19, 2000. SACOG also simultaneously approved the use of this Agreement form and authorized its Executive Director to execute agreements implementing the approach.
- 1.6. The District approved the use of this Agreement form on October 26, 2000 in Resolution No. 200-053, and authorized its Air Pollution Control Officer (APCO) to execute agreements implementing the plan.
- 1.7. The Participant wishes to participate in this process by using SECAT Program funds to aid in the purchase of the low-NOx equipment identified in Exhibit B.

2.0 Terms and Conditions

The parties agree to the terms and conditions listed below.

2.1. Purchase and Payment:

2.1.1. Participant will purchase and operate the equipment described in Exhibit B and identified below (check all that apply):

- A new low-emission vehicle
- A low emission engine repower vehicle replacing the vehicle or engine specified in Exhibit B
- A low emission engine retrofit

2.1.2 SACOG will pay the Participant up to \$462,015 to assist the Participant in the purchase of the equipment described in Exhibit B.

2.1.3 _____ (Initial only to authorize two-party payments) By initialing this paragraph, the Participant:

- (i) Notifies SACOG and the District that it has entered into a purchase agreement with _____, the manufacturer or distributor of the equipment identified in Exhibit B.
- (ii) Authorizes SACOG to issue checks payable to both the Participant and _____.
- (iii) Acknowledges that this section merely streamlines the payment process for the benefit of the Participant, and does not create a third-party contractual benefit for the manufacturer/distributor.
- (iv) Acknowledges that, notwithstanding any two-party payment authorized under this section, the Participant alone, and not the manufacturer/distributor, is responsible for performance under this Agreement.

2.1.4 This Agreement and any payments to Participant are subject to the provisions and limitations imposed by Health and Safety Code sections 44299.5 and 44299.75. Neither the District nor SACOG are permitted to make payments that contravene these sections of the Health & Safety Code or any other law or regulation. If a payment under this Agreement violates any applicable law or regulation, the Participant shall reimburse the entire payment.

2.1.5 Ensure that a District-approved digital odometer device is installed on the vehicle.

2.2 Vehicle or Engine Equipment

2.2.1 The Participant must submit information showing that the equipment described in Exhibit B is approved for sale by the California Air Resources Board (CARB).

- 2.2.2 The Participant must demonstrate that the equipment described in Exhibit B is certified using one or more of the three following methods (check all that apply):
- CARB certification testing
 - CARB approval through the "Procedure for Technical Review and for Verification of Emission Reduction Claims for PM and NOx Retrofit Devices of Existing On-Road and Off-Road Heavy-Duty Diesel Vehicle and Equipment"
 - U.S. Environmental Protection Agency certification testing
- 2.2.3 The Participant warrants that the equipment described in Exhibit B meets all the eligibility requirements described in the *Requests for Applications for Funding from: Sacramento Emergency Clean Air and Transportation Program* adopted by SACOG on September 21, 2000.
- 2.2.4 Because the goal of the SECAT Program is to encourage the use of low-NOx technology that is not already required by law, the Participant warrants that its purchase is not required by any law or regulation. (If the Participant is a public agency, Participant further warrants that its board policies do not require the purchase).
- 2.3 **Engine Replacement or Repower:** If the Participant is replacing or repowering an engine:
- 2.3.1 The Participant must either:
- (i) Transfer ownership of the replaced or repowered engine to a factory-authorized remanufacturing program approved by both SACOG and the District, and provide SACOG and the District copies of receipts or other documents confirming the transfer, or
 - (ii) Destroy the replaced or repowered engine in a manner acceptable to both SACOG and the District. If the engine is destroyed, the Participant must permit both SACOG and the District to inspect the destroyed engine.
- 2.3.2 Under special circumstances, SACOG and the District may authorize an alternative to section 2.3.1, as long as there is no detrimental impact to air quality.
- 2.4 _____ **(Participant to Initial) Operational Requirements:** Each vehicle or engine described in Exhibit B must operate within the Sacramento Nonattainment Area for at least the minimum miles specified in Exhibit C.
- 2.4.1 At anytime during this Agreement, SACOG and the District may demand full repayment if the Participant fails to fulfill the minimum performance requirements established in Exhibit C.
- (i) SACOG and the District may jointly consent to waive all or a portion of this repayment obligation after considering the circumstances leading to the

failure. Neither SACOG nor the District may unreasonably withhold their consent to a waiver.

(ii) Either SACOG or the District may file, or require that Participant file, a UCC-1 Form securing all or a part of the funds paid to Participant under this Agreement. Participant must file the UCC-1 Form within 1 month of receiving a request from SACOG or the District.

2.4.2 Participant's operation of the equipment described in Exhibit B must conform to the eligibility requirements stated in the September 21 SECAT Program Request for Applications and the goals and objectives of the SECAT Program.

2.4.3 Participant shall display a decal approved by SACOG and the District on each vehicle or engine described in Exhibit B. The location of the decal must be approved by SACOG and District.

2.4.4 **Certificate of Digital Odometer Installation:** Submit a District-approved Certificate of Digital Odometer Installation form from a District-approved installer, verifying that an odometer has been installed, or obtain the District's written consent to defer compliance with this requirement until a device becomes available. Once a digital odometer becomes available, the Participant will need to have it installed at no cost to the SECAT Program.

2.5 Recordkeeping

2.5.1 The Participant shall provide written biannual reports for five years commencing with the first date the Participant operates the vehicle or engine. Reports must be filed with SACOG and the District by January 31 and July 31 of each year. Participant must maintain records adequate to document the required information.

The records must include:

- | |
|--|
| <ul style="list-style-type: none"> * Copies of all driver log book entries for the preceding 6 months * Miles traveled within the Nonattainment Area * Vehicle downtime * Fuel consumed * Fuel cost * Type and cost of maintenance performed |
|--|

2.5.2 Either SACOG or the District (or both) may conduct an audit of Participant's operations to verify that Participant is complying with the Agreement terms. Any audits will be conducted at a reasonable time and with reasonable notice to Participant.

2.6 **Indemnity:** The Participant shall indemnify and defend SACOG and the District, their officers, agents, employees and volunteers, from any and all liabilities of any kind that:

2.6.1 Arise from, or are alleged to arise from, any breach of the responsibilities required of the Participant by this Agreement, or

2.6.2 Are related in any way to the vehicles or engines described in Exhibit B.

2.7 **Prohibition on Emission Reduction Credits:** The receipt of funds under this Agreement prohibits application for any form of emission reduction credit – for any pollutant – for the purchase of the equipment described in Exhibit B. This prohibition includes, but is not limited to: (i) all attainment, nonattainment, criteria and noncriteria pollutants, and (ii) application for Emission Reduction Credits (ERC), Mobile Emission Reduction Credits (MERC) and/or Certificates of Advanced Placement (CAP). This prohibition extends to credits from all Air Quality Management or Air Pollution Control Districts.

2.8 **Voluntary Act:** The Participant's purchase of the equipment described in Exhibit B is a completely voluntary act and neither SACOG nor the District have made representations or guarantees to the Participant regarding the equipment.

2.9 **Insurance:** The Participant shall maintain the insurance coverage described in Exhibit D, and either SACOG or the District may require the Participant to name SACOG and the District as additional insureds. In the event the Participant does not maintain the required insurance, SACOG or the District may terminate this Agreement.

2.10 Additional Terms and Conditions:

2.10.1 The Participant shall not sell or encumber the equipment described in Exhibit B without the written consent of both SACOG and the District.

2.10.2 The Participant must notify SACOG and the District in the event Participant files for bankruptcy. The Participant must mail the notice within 30 days of filing for bankruptcy.

2.10.3 The Participant must notify SACOG and the District if:

- (i) the Participant suffers a catastrophic loss, or
- (ii) any other event has occurred or is likely to occur that could impair the Participant's ability to perform the conditions of this Agreement.

Such notice shall be provided to the District within 30 days of the date Participant knows, or should have known, that the event has occurred or is likely to occur.

2.10.4 No alteration or variation of the terms of this Agreement shall be valid unless made in writing and signed by all parties.

2.10.5 No performance rendered or payment due under this Agreement may be delegated or assigned without the written consent of all the parties hereto. If Participant assigns any of its rights or obligations under this contract, all of the terms and conditions of this contract shall apply to the Participant's assignee.

2.10.6 This Agreement shall begin upon execution by both parties and terminate on 12/31/2011.

2.10.7 The Participant must observe and comply with all laws and regulations. This Agreement is executed in Sacramento County, California and shall be governed by the laws of the State of California. Any action arising out of this Agreement must be filed in a state court or federal court located in Sacramento, California.

2.10.8 This Agreement consists of:

- This Agreement
- Exhibit A, Sacramento Ozone Nonattainment Area Map
- Exhibit B, Engine and Vehicle Information
- Exhibit C, Performance Requirements
- Exhibit D, Insurance Requirements

The Requests for Applications for Funding from: Sacramento Emergency Clean Air and Transportation Program approved by SACOG on September 21, 2000.

2.10.9 Correspondence between the District, SACOG and Participant should be addressed to the following:

To District	To SACOG	To Participant
Kristian Damkier Sacramento Metropolitan AQMD 777 12 th Street, Third Floor Sacramento, CA 95814-1908 Phone: (916) 874-4892 FAX: (916) 874-4899	Mr David Young SACOG 1415 L Street, Suite 300 Sacramento, CA 95814 Phone: (916) 321-9000 FAX: (916) 321-9551	Reina Schwartz City of Sacramento 5730 24th Street Sacramento, CA 95822- Phone: (916) 808-6309 FAX: (916) 399-9263

The address and/or contacts may be changed by written notice to the other party. Such written notice may be given by mail, using the U.S. Postal Service, or personal service.

