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Board Agenda Item

TO: Air Pollution Control District Board

FROM: Aeron Arlin Genet, Air Pollution Control Officer

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SUBJECT: Innovative Technology Group Grant Programs Overview

RECOMMENDATION:

Receive a presentation on the status of the Innovative Technology Group's Grant Programs.

BACKGROUND:

Since 1988, the District's Innovative Technology Group (ITG) has successfully implemented grant incentive programs to help clean the air in Santa Barbara County. ITG grant projects have creatively leveraged over \$30 million in state and local funds to secure several thousand tons of voluntary emission reductions from countywide entities beyond the District's regulated authority, especially in the agricultural, marine, and mobile source sectors.

The sources of funding for these grant projects include:

- \$16.6M - local air quality mitigation fees;
- \$7.8M - California Air Resources Board Carl Moyer Program and Lower Emission School Bus Program; and
- \$6.4M - DMV surcharge revenue (AB2766 and AB923).

ITG projects have promoted clean air solutions using proven technologies, have achieved cost-effective emission reductions through voluntary public/private partnerships, and have fostered local business opportunities while providing long-term air quality benefits. Through the grant programs, the District collaborates with local stakeholders to incentivize emission reduction projects in advance of regulatory deadlines or for sources outside our regulatory authority (e.g., mobile sources). These projects improve local and countywide air quality and help grant applicants achieve early compliance with state regulations while reducing their compliance costs and infusing dollars into the local economy.

Grant Program Descriptions:

Below is a summary of the four primary grant programs the District is currently implementing countywide:

Carl Moyer Program

The District has participated in the California Air Resources Board's (ARB) Carl Moyer Program since its inception in Fiscal Year 1998-99. Over that time, ITG has leveraged approximately \$7.7M of Carl Moyer grant funds along with \$4.6M of grantee funds into \$12.3M of total funds for 138 projects. These 138 projects include agricultural diesel water pump repowers, marine diesel engine repowers, on-road diesel engine repowers and retrofits, off-road diesel engine repowers, and off-road equipment replacements. The projects have reduced approximately 1,300 tons of emissions with a program average cost-effectiveness value of \$8,838, well below the \$18,030/ton limit set by the ARB Carl Moyer Program guidelines.

In October 2015, Senate Bill 513 (Beall. Carl Moyer Memorial Air Quality Standards Attainment Program: Fees) was approved by the Governor. This bill established two pathways for changes to the Carl Moyer Program: 1) near-term procedural updates to incentive programs, which became effective on January 1, 2016, and 2) longer-term revisions to the Carl Moyer Program Guidelines, to be considered by the ARB Board by July 1, 2017. The near-term revisions include streamlining the administrative process, increasing administrative funds from 10% to 12.5%, providing allowances for leveraging funding, increasing the ability to fund school buses, and updating cost-effectiveness factors to account for inflation. Long-term revisions to the Carl Moyer Program Guidelines under consideration include developing additional source categories such as fueling or energy infrastructure, extending leveraging opportunities to additional grant programs, and revising the methodology for determining cost-effectiveness. The District is following the guideline update process and will implement the changes that are finalized by ARB.

During Fiscal Year 2016-17, the District will implement Year 18 Carl Moyer with approximately \$472,000 available for eligible projects and \$67,000 for program administration. For Year 18, the funds will be directed to two program areas: 1) Off-Road Equipment Replacement Program (for agricultural and construction equipment) and 2) Marine Diesel Engine Repower Program. The Year 18 program will launch in the fall and applicants will have one month to apply. Completed applications are ranked and funded based on cost-effectiveness, and other factors such as regional location and project type.

Lower-Emission School Bus Program

In 2001, the District Board approved participation in the ARB's Lower-Emission School Bus Program. Since that time, the District has awarded \$2.45M of grant funds into local school district transportation bus fleets, which helped fund the replacement of 25 older high-polluting school buses with new clean low-emission school buses and the retrofit of 34 other buses with diesel particulate filters to capture toxic exhaust. The program provides diesel exhaust and ozone precursor emission reductions that are realized in residential neighborhoods and benefit children who are among the most sensitive to toxic diesel exhaust.

Funding was derived from DMV surcharge fees (\$2.1M), local mitigation fees (\$250K), and ARB Lower Emission School Bus Program (\$100K). The District has collaborated with the following county school districts on these bus projects: Blochman, Carpinteria, College, Cuyama, Goleta, Guadalupe, Lompoc, Los Olivos, Orcutt, Santa Maria, and Santa Ynez. The District has also assisted the Lompoc school district's operation of their compressed natural gas (CNG) bus fleet by replacing older CNG fuel tanks with new CNG fuel tanks on several school buses and upgrading their CNG fueling infrastructure.

Now that most of the county's school buses comply with ARB's Truck and Bus Regulation, the program's focus is expected shift to more to alternative fuel projects, such as electrification, CNG, and biofuels. An electrification project could be either a new battery electric bus for a school district fleet or a repower of an existing diesel-fueled school bus with a battery electric drive train. Because electric bus technology is currently expensive, these projects may require multiple funding sources. A few school districts have already expressed interest in electrification projects.

Senate Bill 513, mentioned earlier, also included changes to the Lower-Emission School Bus Program and related guidelines, which will allow the District to use DMV surcharge fees to help fund repowers of school buses, update school bus project cost caps, and raise the administration expense allowance from 5% to 6.25%.

For Fiscal Year 2016-17, the District has budgeted \$300,000 from DMV surcharge fees for the Lower Emission School Bus Program and plans to use these funds to partially fund one diesel school bus replacement project and possibly partially fund a new electric school bus to expand a school district fleet.

Electric Vehicle Charging Station Infrastructure Program

The District has worked collectively with neighboring air districts and other groups for several years to advance publicly available electric vehicle (EV) charging infrastructure. In 2011, the District launched a grant program with \$100,000 in funds from local air quality mitigation fees for purchase and installation of public EV charging stations. To date the District has funded \$95,000 for 11 Level-2 EV charging stations at the City of Santa Barbara Waterfront, Peabody School in Santa Barbara, and UCSB, and one Level-3 DC fast charging station in the City of Goleta. In 2015, your Board approved a \$200,000 program budget increase to fund public, nonprofit, and privately owned charging stations from local air quality mitigation fees. We are currently funding a public Level-2 charging station in the City of Guadalupe and have received interest from numerous entities about other potential projects in Fiscal Year 2016-17. The District has \$135,000 budgeted for the Electric Vehicle Charging Station Infrastructure Program in Fiscal Year 2016-17. The program funds primarily come from our Guadalupe Dunes Oil Field air quality mitigation fees.

Old Car Buy Back Program

Over the past 23 years, the District has used \$6.4M of grant funds, primarily from DMV surcharge fees, along with Notice of Violation fees and local air quality mitigation fees, to implement three separate light-duty vehicle-scraping programs. These three scrap programs have cost-effectively retired and repaired over 6,200 vehicles and reduced an estimated 840 tons of emissions. Table 1 provides a summary of these three scrap programs:

Table 1

| Old Car Buy Back Programs | Funding | Cars Retired | Cars Repaired | Emission Reductions (tons) | Cost-Effectiveness (\$/ton) |
|----------------------------------|----------------|---------------------|----------------------|-----------------------------------|------------------------------------|
| 1993-1996 ¹ | \$930,000 | 1,214 | 43 | 231 | \$4,025 |
| 1999-2002 ² | \$410,000 | 497 | 0 | 112 | \$3,660 |
| 2006-Present ³ | \$5,100,000 | 4,454 | 0 | 497 | \$10,234 |

In 2011, the District updated the Old Car Buy Back program to offer \$1,000 to people who wish to retire model year 1993 and older vehicles. The District signed five-year contracts with Steelhead Recyclers in Goleta, Perry's Auto Wrecking and Salvage in Lompoc, and Black Road Auto and Tow in Santa Maria. These three dismantlers operate the Old Car Buy Back Program on a daily basis by implementing five critical steps in the process: 1) interfacing with the vehicle owner; 2) determining vehicle eligibility by verifying registration history, smog check status, and title; 3) inspecting the functionality of the vehicle; 4) paying the vehicle owner; and 5) submitting all documentation to the District. This program provides broad community benefit and is an effective partnership between the District and dismantlers. The contracts with all three of the regional dismantlers expire on October 20, 2016. In order to keep the program running smoothly, the District will be seeking Board approval at the October 2016 Board meeting for contract extensions.

The District has \$500,000 in DMV surcharge fees budgeted for the Old Car Buy Back Program in Fiscal Year 2016-17.

¹ The program was called the "Old Vehicle Cleanup Partnership"

1993-1996: Model Year (MY)1981 or older;

- \$740/car to retire: Vehicle owner-\$500; Contractor-\$190; Dismantler-\$50
- \$675/car to repair: Vehicle owner-\$450; Contractor-\$190; Inspection Station-\$35

² 1999-2002: MY1984 or older; \$820/car to retire: Vehicle owner-\$500; Contractor-\$195; Dismantler-\$125

³ 2006-2008: MY1988 or older; \$1,000/car to retire: Vehicle owner-\$800; Contractor-\$150; Dismantler-\$50

2008-2010: MY1992 or older; \$1,000/car to retire: Vehicle owner-\$800; Contractor-\$150; Dismantler-\$50

2010-2011: MY1992 or older; \$1,250/car to retire: Vehicle owner-\$1,000; Contractor-\$175; Dismantler-\$75

2011-Present: MY1993 or older; \$1,200/car to retire: Vehicle owner-\$1,000; Dismantler-\$200

Table 2 provides a summary of the Fiscal Year 2016-17 funding sources for our grant programs.

Table 2

| Program | Funding Source | Program Funds | Administrative Funds | Total Program Funds |
|--|--------------------------------------|----------------------|-----------------------------|----------------------------|
| Year 18 Moyer | Carl Moyer Program | \$471,890 | \$67,413 (12.5%) | \$539,303 |
| Lower Emission School Bus | DMV fees | \$281,250 | \$18,750 (6.25%) | \$300,000 |
| Electric Vehicle Charging Station Infrastructure | Guadalupe Dunes Oil Field Mitigation | \$117,450 | \$17,550 (13%) | \$135,000 |
| Old Car Buy Back | DMV fees | \$468,750 | \$31,250 (6.25%) | \$500,000 |
| TOTAL FUNDS | | \$1,339,340 | \$134,963 | \$1,474,303 |

Outreach and Recognition

Both the federal and state government have recognized and awarded the District’s ITG grant program accomplishments. In 1996, ITG won the Presidential Award for Sustainable Development and the California Governor’s Environmental and Economic Leadership Award for successfully leveraging \$5 million of offshore oil mitigation money to fund over \$22 million in projects.

In 1999 the US Environmental Protection Agency (EPA) presented the District with an Earth Day Award for two 1998 projects: 1) Clean Air Express Dual-Fuel Bus Project, which launched the nation’s first dual-fuel low-emission commuter buses in Lompoc; and 2) Agricultural Booster Pump Initiative, which helped farmers replace high-polluting water pump engines with new engines that are 75 percent lower emitting. The EPA award recognized the District for using “innovative approaches to achieve air pollution reductions in two areas — transportation and agriculture — in which the agency has no regulatory authority.”

Public outreach is a vital component of administering all grant programs. The District implements a variety of outreach strategies to raise community awareness of available grant funding and secure viable emission reduction projects. Critical communication tools include the District’s website, newsletters, direct correspondence with interested public entities, private businesses, school districts, local government television, and local publications.