

Chapter 5

Incentive Programs

2012 PM2.5 Plan SJVUAPCD



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Chapter 5: Incentive Programs

[Note: The evaluation being conducted to develop this plan is an ongoing work in progress, and will continue to be revised and updated throughout the public process.]

Incentive programs are an integral part of the emission reduction efforts of the District. They provide an effective way to accelerate emission reductions and encourage advancements in technology, particularly in the mobile source sector, which are not under the District's regulatory jurisdiction, and are the source of 80% of the Valley's NO_X emissions. Developed in response to this jurisdictional predicament, the District's successful voluntary incentive grant program helps the Valley achieve emission reductions beyond the District's regulatory bounds.

The District operates one of the largest and most well-respected voluntary incentive programs in the state. With strong advocacy efforts at the state and federal levels, the District has seen a significant increase in incentive funding levels over the past five years with a proposed incentive program appropriation of \$182 million in the 2012-13 Recommended Budget. District incentive programs have a positive impact on air quality and are also highly successful due to the fact that participation is voluntary and the emission reductions are both highly cost-effective and surplus of the reductions required by regulations.

Since the District's inception in 1992, considerable funding has been expended in support of clean-air projects in the Valley. These projects have achieved significant emissions reductions and corresponding air quality and health benefits. The District typically requires match funding of 30% - 70% from grant recipients. To date, grant recipients have provided \$487,256,276 in match funding, with a combined District and grant recipient funding investment of \$919 million.

Over the past 10 years, the District has provided incentive funding to purchase, replace or retrofit thousands of pieces of equipment, including:

- 4,584 agricultural irrigation pump engines
- 726 agricultural equipment replacements
- 945 off-road equipment repowers
- 2,434 heavy-duty trucks
- 1,879 school bus retrofits
- 432 school bus replacements
- 3,585 lawnmower replacements
- 2,318 fireplace change-outs
- 18,476 commuter subsidies
- 35 locomotive replacements
- 396 new alt fuel light duty vehicles
- 706 vehicle retirements (car crushing)
- 17 bicycle infrastructure projects (bike paths)

The District's incentive programs continue to be a model for other agencies throughout the state. Recent audits noted the District's efficient, robust, and effective use of incentive grant funds in reducing air pollution. The District has been collaborating with EPA to establish criteria for the quantification of emissions reductions from SIP creditable incentive programs.

5.1 INCENTIVE FUNDING

The District is engaged at every level of state and federal government to craft policy and funding targets that account for the Valley's unique challenges and need to accelerate emissions reductions from mobile sources. To that end, the District is working closely with the Valley's legislative delegation to ensure that the Valley's needs are well represented in discussions of where to focus funding throughout the state and the region as a whole. In addition, the District is focused on how to effectively allocate the limited funding received for its incentive programs.

5.1.1 Funding Sources

The District continues to dedicate significant effort to ensure that the San Joaquin Valley receives its share of state and federal incentive funds through a variety of sources. In addition to aggressively pursuing funding from state funding sources such as the Carl Moyer Program and Lower Emission School Bus Program, the District has been very successful in securing grants from the highly-competitive federal Diesel Emission Reductions Act (DERA) and the state AB 118 Air Quality Improvement Program (AQIP). Many of the funding sources for these programs are scheduled to sunset during the scope of this plan.

While demand for incentive programs continues to be strong, in the coming years a significant portion of the funding that the District has relied upon for its incentive programs is set to expire, if not renewed. These programs include Proposition 1B, which provided \$1 billion statewide to reduce goods movement emissions; AB 923, which authorized a \$2 DMV fee and additional statewide funding for the Carl Moyer program; and AB 118, which provides \$200 million statewide for alternative and renewable fuel, and vehicle technology projects.

The single largest source of funding for the District's incentive programs is the Proposition 1B program. The District aggressively pursued its fair share of Proposition 1B funding and the central valley will receive approximately \$250 million over the life of the program. The District will receive its last allocation of Proposition 1B funding in FY 2013-2014. It is unlikely that bond funding for air quality incentive programs will be available in the near future.

The Carl Moyer program has been an on-going and reliable source of funding since 1998. The Carl Moyer program as it operates today was largely established in 2004 with

the adoption of (AB 923 and SB 1107) which provided increased and continued funding through 2014, and expanded the program to include light-duty vehicle projects and agricultural sources of air pollution. In total, the District receives approximately \$14 million per year in Carl Moyer and other funding under AB 923. Without further action by the legislature, funds authorized by AB 923 will sunset on January 1, 2015.

In 2007, AB 118 was approved creating the California Alternative and Renewable Fuel, Vehicle Technology, Clean Air, and Carbon Reduction Act of 2007. AB 118 provides approximately \$200 million annually through 2015 for three new programs to fund air quality improvement projects and develop and deploy technology and alternative and renewable fuels. The bill creates a dedicated revenue stream for the programs via increases to the smog abatement, vehicle registration, and vessel registration fees. AB 118 is designed to reduce emissions of criteria pollutants and greenhouse gas emissions, and to deploy advanced technology. Most AB 118 programs are administered on a statewide basis. While the District has administered some of the AB 118 programs for the state, they have not been a significant portion of the District incentive program revenue. However, in the future these funds may be more important, particularly as the District becomes more involved in technology advancement projects. AB 118 is set to expire on January 1, 2016.

5.1.2 Incentive Strategy

Each of the funding sources administered by the District includes different guidelines and statutory requirements for the expenditure of those funds, but generally, the District currently considers the following factors when deciding how and where to spend our incentive funds:

Cost-effectiveness – An important influence when considering where to invest District funds is determining which types of projects and programs will give the District the greatest return on its investment. This is typically represented in dollars per ton of emissions reduced. While cost-effectiveness is a primary factor, the District also considers the funding of projects that may not have the highest cost-effectiveness, but provide other benefits, such as the advancement of new technology, or community involvement (as described below).

Inventory of available projects – This factor is critical in all District incentive programs. To date, the District has been extremely successful in designing programs that have broad appeal and applicability across a wide variety of industries. The result has been that, for the last 10 years, the District has had a substantial backlog of eligible projects waiting funding. However, with the regulatory landscape changing, many of the past project categories that created the enormous backlog have come under regulation, making them, in most cases, ineligible for funding. As a result, the District must continue not only to work within the existing regulations to find cost-effective, surplus project categories but also to focus in areas in which a significant inventory of eligible projects still exists.

Required expenditure timeframes – Each funding source that the District administers generally requires obligation and expenditure by certain deadlines. These deadlines greatly impact our funding priorities and choice of projects. The District may prioritize a funding category over others due to the timeframe associated with a particular funding source. For instance, we may prioritize certain projects that we can reasonably expect to be completed prior to the deadline for that specific fund, over other projects of equal relevance or cost-effectiveness but with longer expected completion times. Again, the flexibility of this option works in concert with the dynamic nature of our programs and projects and numerous expenditure deadlines.

Upcoming regulatory deadlines – To ensure that the District's incentive programs obtain the maximum SIP creditable emission reductions, a thorough analysis of all local, state and federal regulations relating to our target categories is performed. In addition, the District works proactively with the regulating agencies during the rule development process to understand the potential impacts of that rule on incentive projects and to ensure that opportunities for early incentive funding are maximized. These analyses determine which types of projects can be funded and for how long and also impacts the potential cost-effectiveness of certain categories.

Health benefits – In addition to seeking emissions reductions that provide benefit in attaining federal air quality standards, the District also seeks opportunities to incentivize projects that provide direct health benefits. For instance, the District's Lower Emission School Bus Program is focused primarily on the localized toxic risk involved in children's exposure to diesel particulates. While not the largest source of regional particulate pollution, replacing or retrofitting aging school buses has an enormous impact on the toxic risk of school transportation.

Promoting technology advancement – Given the immense challenge faced by the Valley in attaining federal air quality standards, funding projects that demonstrate and advance new emission reduction technologies are essential. The District's recent adoption of the Technology Advancement Program emphasizes the priority given to this area.

Environmental Justice – The District places a strong emphasis in providing funding in a manner that benefits environmental justice communities. The District has worked cooperatively with the Environmental Justice Advisory Group to understand the environmental justice issues in the District and craft programs that reduce emissions in these areas.

Community involvement/benefits – The District develops and administers programs with an emphasis on community involvement. Some examples of these are the Clean Green Yard Machine, Drive Clean! Rebate, Burn Cleaner, Transit Pass Subsidy, and the Polluting Automobile Scrap and Salvage programs.

5.1.3 Statutory Constraints on Incentive Funding

The District derives its current incentive funding from a range of local, state and federal funding sources. These funding sources contain restrictions on the types of projects that may be funded, funding limitations, expenditure deadlines, and administrative approach for distribution. These requirements vary significantly from one funding source to another, resulting in a complex matrix of funding categories and program requirements. Some key examples include:

Proposition 1B Goods Movement – Funding for this program must be used on heavy duty trucks and locomotives. The program's procedures require the use of a Request for Proposals (RFP) process and that the most cost-effective projects are funded first.

Lower Emission School Bus – Funding for this program must be used on school bus replacements or retrofits. The program requires that all retrofits be prioritized and that the oldest buses are replaced first.

Carl Moyer – Funding is predominately used for heavy-duty diesel equipment projects. The program has strict funding caps and cost-effectiveness requirements.

DMV Funds – Funding must primarily be used for on-road and off-road mobile sources. Portions of funds must follow State Carl Moyer and Lower Emission School Bus guidelines.

Advanced Emission Reduction Option Funds – Funding is for emission reduction incentive projects. The District's Governing Board has discretion as to where to apply these funds utilizing the District's annual budget process to allocate this funding.

Indirect Source Review (ISR) Funds – Funding preference is given to projects within proximity to development projects.

5.2 SIP CREDITABILITY OF INCENTIVE PROGRAMS

Historically, states and local air agencies have not been able to obtain SIP credits for incentive-based reductions. When given SIP credit, incentive-based emission reductions can be used alongside regulatory-based emission reductions to meet federal Clean Air Act requirements, such as demonstrating attainment with federal standards at a future date or demonstrating that emission reductions meet reasonable further progress requirements. Given the heavy investment from the public and private sectors in replacing equipment under these voluntary incentives, establishing a general framework to receive SIP credit for these emissions reductions is critical for ensuring the continued success of these programs.

As with rules adopted by the District, EPA guidance requires that emissions reductions achieved through voluntary incentive programs be demonstrated to be Surplus, Quantifiable, and Enforceable in order for those reductions to receive SIP credit.

Additionally, EPA guidance requires public and extensive documentation of emissions reductions proposed for SIP credit, with ongoing follow-up and tracking of the emissions reductions.

In order to be surplus, emission reductions from voluntary incentive programs generally must not be required by any local, state, or federal regulations. Quantifiable emission reductions will utilize calculation methodologies of state programs or other publically developed methodologies. In order to ensure enforceable emission reductions, creditable programs will require mechanisms such as legally binding agreements with program participants and physical inspections to verify the completion of projects. District incentive programs have been designed to meet the Surplus, Quantifiable, and Enforceable criteria, and are also transparent to the public through various reporting mechanisms.

The District has been in discussions with EPA regarding the process for documenting and submitting the information necessary to receive SIP credit for incentive-based emissions reductions. The framework for establishing this SIP credit may ultimately be in the form of a rule that establishes the documentation, reporting, and public review process. Through this planning process, the District will determine the appropriate level of incentive-based emissions reductions to incorporate into the plan.

5.3 CURRENT DISTRICT PROGRAMS

The District offers numerous incentives programs to reduce emissions from a variety of equipment such as heavy duty engines, school buses, and lawn and garden equipment. The District places particular emphasis on providing incentives to environmental justice communities. To date, the District has awarded \$432 million in incentive funding resulting in 93,349 tons of lifetime emission reductions. District staff will continue to expand on the success of its current programs and craft new incentive programs to foster additional emissions reductions from Valley sources.

The following summarizes incentive programs the District currently implements:

5.3.1 Heavy Duty Trucks

The District has administered numerous incentive programs targeted at on-road heavyduty trucks, one of the biggest sources of NO_X emissions in the Valley. Through the state's Proposition 1B Goods Movement Emission Reduction Program, Carl Moyer Program's Voucher Incentive Program (VIP), and other District operated voucher incentive programs funded by grants from EPA and locally generated incentive funds the District has replaced hundreds of older, high-polluting trucks with cleaner trucks certified to meet the latest California Air Resources Board emissions standards.

The District's truck voucher programs have been designed to provide an alternative source of incentive funding for small businesses that do not qualify for funding under the Prop 1B Program. These voucher programs are designed to be highly efficient, with

contracted Valley dealerships providing much of the assistance to the applicants and a streamlined review and approval process for vouchers.

5.3.2 Agricultural Pumping Engines

In an air district where farming accounts for a large majority of the local economy, the agricultural irrigation pump engine replacement incentive program provides up to 85% funding for farmers looking to replace their older, dirtier diesel engines with lowemission Tier 4 engines or zero emission electric motors. This program provides an excellent way for the District to achieve significant emission reductions from farming operations, while still taking into consideration economic needs for our valley's farmers. Eligible projects are funded with local, state, and federal sources, including but not limited to: ISR, Carl Moyer Program, AB923, Federal Designated Funding, and Federal Diesel Air Shed Grant.

Over the past ten years, the District has funded the replacement of over 4,584 agricultural pump engines, with more projects currently in the queue. Over two thousand of these replacements involved replacing older diesel engines with electric motors. The District is seeing increased demand for emissions compliant diesel engine repowers to electric motors in recent years. This option is ideal for both parties since the District achieves the maximum emissions reductions with electric motor repowers and farmers lower their operating costs by switching to electricity, a more affordable fuel source.

A typical irrigation pump project will require District staff first verify the old engine is operational and confirms eligibility requirements. The engine owner is then offered the incentive and has the new engine or motor installed then ensures the old engine is sufficiently disabled. A post-inspection is conducted prior to payment in order document the new engine or motor's specifics and ensure the emission reductions are accurate. Ongoing monitoring and reporting ensures the projects meet contracted emission reduction targets.

5.3.3 Agricultural Equipment

Off-road agricultural equipment repowers and replacements play a crucial role in reducing emissions because there is believed to be a vast, un-tapped inventory of uncontrolled and unregulated tractors, backhoes, wheel loaders, and other off-road farming vehicles in our valley. Eligible projects are funded with local, state, and federal sources, including but not limited to: ISR, Carl Moyer Program, AB923, Federal Diesel Earmark Grant, and Federal Diesel Air Shed Grant.

The District has funded the repower and replacement of over 1,017 off-road agricultural vehicles, with more projects currently in the queue. It is estimated that a large inventory of vehicles that qualify for repower or replacement still exists and, the program has the potential for significant and very cost-effective emission reductions. Whether a farmer wishes to repower the current equipment with a cleaner engine or replace the equipment altogether, this program allows the District to achieve surplus emission

reductions while also facilitating the early retirement and fleet turnover for our Valley's farmers, resulting in more efficient farming operations with less overall hours of operation.

An important component of the District's incentive efforts in this category has been its collaboration with the NRCS to replace agricultural tractors. Over the course of this collaborative tractor replacement program the District has obligated \$22.3 million in incentive funds, NRCS has obligated \$54.3 million, and this has leveraged \$71.4 million in applicant cost share for these new tractors. This \$148 million investment by the District, NRCS, and Valley farmers has resulted in significant emission reductions, and work is underway with EPA to ensure the reductions from this investment can be credited to the SIP.

In both repower and replacement projects, the farmer enters into an agreement with the District to replace the old, dirty engine or vehicle with newer, cleaner technology. District staff first performs a pre-inspection to determine that the equipment and engine are operational. Then a final inspection is performed to verify the new equipment, as well as witness the old equipment and engine's destruction at a District approved recycling or scrapping facility, ensuring the old equipment and engine will never be put back into service. Ongoing monitoring and reporting ensure the expected emission reductions and operation of the equipment meet the grant agreement requirements.

5.3.4 Locomotives

The emissions from goods movement are a significant source of diesel PM in the San Joaquin Valley and the state of California and many of the larger cities in the Valley are home to locomotive rail yards Locomotives in particular present a considerable health concern from diesel PM emissions. Residential areas located in close proximity to rail yards have shown a significant increase in cancer risk and can equal or exceed the regional background levels. In addition, numerous studies have shown a strong link between elevated PM levels and premature deaths, asthma attacks and emergency room visits. The locomotive component of the Heavy-Duty Engine Program awards up to 85% grant funding for newer, cleaner diesel locomotive engines and locomotive replacements. Eligible projects are funded with local, state, and federal sources, including but not limited to: Carl Moyer Program, Federal Diesel Air Shed Grant, and the DERA.

The District had funded the repower or replacement of 11 locomotives, with more projects currently in the queue. One of the major benefits to the locomotive repower and replacement program is increased efficiency and longevity in result of the revolutionary GenSet engine technology. The GenSet system involves the use of multiple smaller off-road tier 4 emission level engines mounted on a single chassis. Furthermore, this system allows for each of the engines to be fired up individually so that in low power demand situations only one of the engines can be used, helping to reduce unnecessary emissions. In addition, this system comes equipped with idle reduction technology that will shut down the engine during periods of inactivity.

The program typically begins with an RFP developed by the District and will call for prospective sub-recipients to submit proposals for locomotive repower or replacement projects. At the close of the solicitation period, District staff will review all proposals for completeness and select the locomotive engines to be replaced based on the scoring criteria set forth in the RFP. During the pre-inspections, all necessary locomotive engine information is verified by District inspectors and documented in digital photographs. Upon verification of all information, District staff enters into an agreement with the sub-recipient for the project. Finally, once the replacement switcher locomotive engine has been purchased and the original engine has been dismantled, the sub-recipient will complete and return the claim-for-payment packet and a post-inspection is performed, prior to payment, to verify the new information. Monitoring and reporting continue for the duration of the agreement to ensure the emission reductions expected from the project occur.

5.3.5 Forklifts

Significant opportunities for emission reductions in the San Joaquin Valley can be achieved through the District's Large Spark-Ignited (LSI) forklift retrofit program and the electric forklift new purchase program. Because emission standards for new engines have been in effect only for the past few years, a significant number of high-emitting equipment is still in operation and available for retrofit. Operators can meet the proposed in-use fleet-average emission standards by procuring low- and zero-emission equipment and by retrofitting uncontrolled equipment in their fleets. The use of new controlled engines and the retrofit of existing engines can reduce fuel use and improve engine life, creating cost savings that offset a portion of the additional equipment cost. Eligible projects are funded with federal, state, and local sources, including Carl Moyer Program funds and motor vehicle surcharge fees.

The District has funded 17 forklift projects to date. The installation of a LSI retrofit system will improve engine operation and reduce fuel use. Closed-loop fuel systems generally improve the engine's overall efficiency. It is estimated there is a 10- to 20-percent reduction in fuel consumption with engines employing closed-loop systems. An electric forklift has as obvious advantage as an emission-free vehicle but can typically cost \$1,500 to \$5,000 more than a comparable LSI forklift. However, since an electric forklift has a longer useful life and reduced fuel and maintenance costs, the electric forklift can reduce life-cycle costs compared to a LSI forklift.

The forklift program is an 'over-the-counter' program, in that applications are continually accepted on a first-come, first-served basis. Contrary to many of the off-road or agricultural components in the Heavy-Duty Engine Program, a pre-inspection is not performed for the new electric forklift component (LSI retrofits are pre-inspected to ensure emissions are real and quantifiable). After contracts are awarded and the new equipment is purchased and installed, post-inspections are performed to ensure emission reductions are accurately recorded, and ongoing monitoring and reporting are required to ensure the emission reductions occur.

5.3.6 School Bus Replacement and Retrofit

School Bus replacements and retrofits play a vital role in reducing school children's exposure to both cancer-causing and smog-forming pollution. The School Bus Replacement and Retrofit programs provide grant funding for new, safer school buses and air pollution control equipment (retrofit devices) on buses that are already on the road. Public school districts in California that own their buses are eligible to receive funding. Eligible projects are funded with local, state, and federal funds including: Lower Emission School Bus Program (Proposition 1B), DERA, and the American Reinvestment and Recovery Act (ARRA).

The District has provided funding for the retrofit of 1,879 school buses and the replacement of 432 school busses to date. New buses purchased to replace older buses may be fueled with diesel or an alternative fuel, such as Compressed Natural Gas (CNG), provided that the required emissions standards specified in the current guidelines for the Lower-Emission School Bus Program are met. Funds are also available for replacing on-board CNG tanks on older school buses and for updating deteriorating natural gas fueling infrastructure. Commercially available hybrid-electric school buses may be eligible for partial funding.

Eligible school buses are selected based on specific program requirements, such as replacing the oldest models first. After determining eligibility, school districts are awarded contracts that provide a time period for project completion. A claim for payment must also be submitted before funds can be awarded.

5.3.7 Community Incentives

While all of the District's incentive programs are open to any residents of the Valley, there are a number of programs, such as the Heavy-Duty Engine Program and the Proposition 1B Goods Movement Emission Reduction Incentive Program, that are specifically designed for Valley businesses. These programs focus primarily on replacing or retrofitting large diesel-powered equipment such as trucks, tractors and agricultural irrigation pump engines. These programs are highly efficient and extremely cost-effective. Of equal importance, the District currently operates several incentive programs designed for the general public. These programs give people in every walk of life the opportunity to assist the District in reaching our goal of cleaner air for all Valley residents. These programs allow residents of the Valley to "buy in" and be part of the solution.

The District's community incentives include a wide range of project types, and source categories. Current community incentive programs include the following:

Polluting Automobile Scrap and Salvage (PASS) – The PASS program offers three components: participants have retired their older vehicles for a cash incentive, replaced older high emitting vehicles with a voucher towards the purchase of a newer cleaner

vehicle, and recently the program has offered emissions related repairs to high emitting vehicles. The program has replaced 202 high emitting vehicles with newer cleaner vehicles, retired 504 additional vehicles for a lower cash incentive, screened nearly 5,000 vehicles for high emissions, and provided nearly 3,000 of those vehicles vouchers for emissions related repairs. The program has been operated with locally generated incentive funds, and will continue to retire and replace vehicles utilizing funding provided by the State's Enhanced Fleet Modernization Program. Vehicle repairs were conducted with grant funding from the Reformulated Gasoline Settlement Fund, created as a result of an antitrust class action, and will continue to be funded utilizing locally generated incentive funds.

Clean Green Yard Machine (CGYM) – The CGYM program helps clean the Valley's air through incentives for residents to retire their old gas mowers in favor of nonpolluting, electric mowers. The program has utilized locally generated incentive funds as well as funding from the State's AQIP. Over the past two years the program has replaced over 3,500 gas lawn mowers with clean electric models.

Burn Cleaner Program – The Burn Cleaner Program offers to help Valley residents upgrade their current wood-burning devices and open fireplaces to natural or propane gas devices, or clean pellet devices. The District offers a financial incentive to any interested resident and an additional incentive to low-income residents through a streamlined voucher program that involves partnering with interested retailers. The program has upgraded over 2,300 wood-burning devices, and continues to receive a steady stream of applicants.

Drive Clean! Rebate Program – During 2011-12, the District revamped its incentive program aimed at encouraging Valley residents to drive advanced clean vehicles, establishing a new incentive structure that provides a variety of incentives for electric and other alternative-fueled vehicles. Additionally, in addition to clean vehicle rebates, Drive Clean! includes incentives that cover a portion of the charging infrastructure cost associated with electric vehicles.

Alternatives to Professionally Managed Pyrotechnic Firework Displays – In 2012 the District provided incentive funding for a pilot program to demonstrate clean laser light shows as an alternative to pyrotechnics for 4th of July celebrations. Success and popularity of the three pilot shows funded by the District may lead to future expansion of the program.

Public Benefit Grants Program – The Public Benefit Grant Program is another recent addition to the District's incentive programs, and provides funding to Valley cities, counties and other public agencies for a wide variety of clean-air public-benefit projects that provide benefits to Valley residents. Eligible applicants are cities, counties, special districts (i.e. water districts, irrigation districts, etc.) and public educational institutions (i.e. school districts, community colleges, state universities, etc.) located within the geographic area of the District.

REduce MOtor Vehicle Emissions (REMOVE) – The REMOVE Program provides incentives for specific projects that will reduce motor vehicle emissions within the District. The program allocates funds to cost-effective projects that have the greatest motor vehicle emission reductions resulting in long-term impacts on air pollution problems in the Valley. All projects must have a direct air quality benefit to the District. Eligible project types include, E-mobility (video-telecommunications), bicycle infrastructure, alternative fuel vehicle mechanics training, public transportation and commuter vanpool subsidies.

5.4 NEW INCENTIVE PROGRAMS, IMPROVEMENTS, AND PRIORITIES

The District has successfully launched and expanded incentive programs in the Valley steadily increasing the scope, accessibility, and efficiency of its programs. Incentive programs developed by the District have been models for other agencies to follow. The success of the District's PASS program provided an example the State followed with the design of its Enhanced Fleet Modernization Program, and the District's augmentation of the State's Hybrid Truck and Bus Voucher Incentive Program (HVIP) was also implemented by the South Coast AQMD. The recent launch of the District's agricultural equipment replacement program has been highly successful, with the USDA NRCS using the program as the model for their own complementary program. This commitment to development of new and innovative incentive programs will maintain the District as a shining example for other agencies nationwide.

In addition to ongoing efforts to improve and streamline existing programs, the District is currently exploring new program opportunities to expand the portfolio of programs available. As this plan continues to be developed, the District will continue to look for additional incentive program opportunities.

Construction Equipment Replacement – This new program will provide incentives for construction fleets to replace their heavy-duty off road equipment sooner than required by the State's In-Use Off-Road Diesel Vehicle Regulation. This program will be developed with a public process, and ensure the emission reductions achieved are surplus, quantifiable, and enforceable.

Refuse Vehicle Replacement Program – The concept for this program is to provide incentives for the replacement of older refuse trucks, with a particular emphasis in Environmental Justice and other vulnerable communities. At the recommendation of the Grants Committee of the Environmental Justice Advisory Group, this program will be developed by the District in a public process informed by input from members of the community and stakeholders.

Expanded Clean Green Yard Machine Program – Currently, the District's Clean Green Yard Machine Program focuses on lawnmower replacements. The concept to enhance this program is to expand the eligible types of yard care equipment to include low or zero-emission equipment such as hedge trimmers, sweepers, edgers, string

trimmers, blowers etc. The District would provide rebates for the purchase of this cleaner technology in lieu of higher-polluting varieties.

Technology Advancement Program – The District is actively pursuing demonstrations of new opportunities through its Technology Advancement Program, including the recent launch of the zero emissions commercial lawn and garden demonstration program. Technologies capable of reducing emissions in the Valley are being demonstrated, and if successful these demonstrations may provide an opportunity for the District to develop incentive programs to adopt these technologies. Additional information about the District's Technology Advancement Program can be found in Chapter 6.

As the District continues to evaluate control measures in this plan incentive priorities will be further developed. The current incentive priorities are reflected in the upcoming fiscal year incentive spending plan and include funding for these categories and programs:

Community Incentives

Drive Clean! Rebate (passenger vehicles) PASS Vehicle Repair Burn Cleaner (residential woodburning) Clean Green Yard Machine (lawn mowers) REMOVE (vanpools, bikepaths, etc.)

Goods Movement

Proposition 1B Heavy Duty Trucks Proposition 1B Line-Haul Locomotives Railyard Switcher Locomotives

Heavy Duty Equipment Programs

Agricultural Equipment Replacement Agricultural Irrigation Pumps Truck Voucher and Reuse Construction Equipment Replacement Refuse Fleet Replacement

Advanced Transportation/Vehicles

Public Benefit Grants Electric Vehicle Strategic Plan

School Bus Replacement and Retrofit

School Bus Replacement/Retrofit Statewide Retrofit Program

Regional Assistance

Energy Efficiency Partnership Greenhouse Gas Mitigation Assistance

Technology Advancement

Technology Advancement Program Zero-Emissions Commercial Lawn and Garden

Future incentive priorities will be informed by this and future planning efforts, future state and federal regulations, development and demonstration of new technologies, the dynamic needs of the Valley, and public input.