

**SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT**  
**FINAL DRAFT STAFF REPORT**

**Proposed New Rule 9610**  
**(State Implementation Plan Credit for Emission Reductions Generated**  
**through Incentive Programs)**

May 21, 2013

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**I. SUMMARY**

The on-going mission of the San Joaquin Valley Unified Air Pollution Control District (District) is to improve air quality and protect the health of residents in the San Joaquin Valley air basin (Valley). As such, the District has implemented among the most stringent prohibitory regulations and one the most successful incentive programs in the nation. These efforts combined with the investments of Valley businesses and residents are achieving significant air quality improvements, thus improving public health and progressing the Valley towards attainment of increasingly stringent federal air quality standards (National Ambient Air Quality Standards, or NAAQS). However, the Valley continues to experience unique and significant air quality challenges in attaining the NAAQS.

Incentive programs achieve emission reductions beyond those achieved by regulations alone by accelerating the adoption of cleaner technologies. Incentives allow the District to reduce emissions from mobile sources, and other sources for which the District has limited regulatory authority. The District currently operates one of the largest and most well-respected incentive programs in the state, providing over \$500 million in incentive funds resulting in over 100,000 tons of lifetime emission reductions since 1992. Each District incentive investment is matched by cost-sharing on the part of the participating businesses, public agencies, and residents, who together have also invested over \$400 million through these projects.

The District has been lauded for its efficient and effective use of incentive funding and programs, which have become a model for grant programs throughout the state. In

addition to locally-generated funding sources, support from federal and state sources has been critical in bringing much-needed incentive funds to the Valley.

Although incentive programs result in real air quality benefits, the U. S. Environmental Protection Agency (EPA) has not historically granted credit to the District for incentive-based emission reductions in State Implementation Plans (SIPs). When given SIP credit, incentive-based emission reductions can be used alongside regulatory-based emission reductions to meet certain federal Clean Air Act (CAA) requirements, such as demonstrating attainment, fulfilling commitments for long-term measures under CAA §182(e)(5) (“black box reductions”), meeting “reasonable further progress” emission reduction milestones, or satisfying contingency measure requirements. District Rule 9610 (State Implementation Plan Credit for Emission Reductions Generated through Incentive Programs) will establish a mechanism through which incentive-based emission reductions can receive SIP credit.

## **II. PROJECT BACKGROUND**

### **A. The Need for Incentive Programs in SIPs**

EPA periodically reviews and establishes health-based NAAQS for ozone, particulates, and other pollutants. Once a standard is set, EPA designates areas as attainment or nonattainment. EPA also adopts implementation rules which, with the CAA, establish required components for attainment plans (state implementation plans, or SIPs). By meeting planning and attainment requirements, local air districts avoid federal sanctions and improve public health.

Traditional regulatory controls are a core component of the District’s attainment strategies. Since 1992, the District has adopted over 500 new rules and amendments, reflecting technologies and methods far beyond minimum control levels. Although new opportunities for stronger regulatory controls continue to become increasingly scarce, the District evaluates all sources of air pollutant emissions for new emission reductions opportunities in each attainment plan.

Federal law requires reasonably available control technology (RACT), reasonably available control measures (RACM), best available control technology (BACT), and/or best available control measures (BACM), depending on the requirements associated with a particular attainment plan. In addition, an attainment plan as a whole must demonstrate sufficient emission reductions to achieve attainment, to meet reasonable further progress (RFP) milestones, and satisfy contingency measure emission reductions requirements.

Given the significant emission reductions already being achieved in the Valley through adopted regulatory strategies and the significant investment necessary to achieve new emission reductions from stationary sources, the Valley is at the point of diminishing

returns from achieving additional reductions through the adoption of new regulatory controls. Yet the Valley continues to face significant challenges under current and upcoming federal air quality standards. The District thus pursues comprehensive, multi-faceted strategies that reach beyond traditional regulations to include incentive programs, technology advancement efforts, and more.

Emission reductions from non-regulatory strategies, such as incentives, have generally not been accounted for or given full credit in attainment plans to meet federal CAA requirements. Establishing a framework for these programs to receive SIP credit is important for ensuring the continued success of both incentive programs and the District's attainment plans. While other mechanisms are available to account for incentive-based measures in SIPs, this rule establishes a clear framework to achieve this goal.

**B. Interagency Development of SIP Credit for Incentives**

The premise of this project was established during the development of the *2007 Ozone Plan*. The District recognized that to meet the stringent 1997 8-hour ozone standard, additional emission reductions were needed from sources outside of the District's regulatory authority, particularly from mobile sources, and the plan called for significantly increased incentive funding to help accelerate attainment of the standard. As part of this effort, the District and the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) collaborated to ensure that both agencies' incentive programs meet EPA's criteria for incentive based reductions to be SIP-creditable. In December 2010, the District, EPA, the California Air Resources Board (ARB), and USDA NRCS signed a memorandum of understanding (MOU) establishing a general framework to ensure that reductions in emissions resulting from the voluntary incentives receive SIP credit (Appendix A). All parties involved (EPA, NRCS, ARB and the District) agreed to work collaboratively to develop a mechanism to provide SIP credit for emission reductions from federal, state, and local incentive programs that meet the EPA integrity criteria of being surplus, quantifiable, enforceable, and permanent.

NRCS and EPA continued to work together to further refine the incentive program processes implemented by NRCS to provide a mechanism pursuant to the CAA to quantify for SIP credit emission reductions from farm equipment, achieved through voluntary incentive programs at the state/local level. As a result of these continued efforts, EPA and NRCS signed *Implementation Principles for Addressing Agricultural Equipment under the Clean Air Act*, in July 2012 (Appendix B).

The concept for a new District rule providing an administrative mechanism for SIP-credit for incentives continued to develop, and the District's *2012 PM2.5 Plan* contained a commitment to schedule the public hearing to consider the adoption of new Rule 9610 in 2013.

**C. Upcoming ARB Regulation for Agricultural Equipment**

The 2007 San Joaquin Valley 8-Hour Ozone State Implementation Plan, approved by EPA, contained an ARB commitment to present to their Board a regulation for off-road mobile agricultural equipment in 2013. The regulation would move California towards meeting ambient air quality standards for the San Joaquin Valley by utilizing the cleanest available technologies. Specifically, the approved SIP includes a goal to achieve emission reductions of 5-10 tons per day of oxides of nitrogen (NOx) from mobile agricultural equipment in the San Joaquin Valley by 2017 to accelerate progress toward attainment of EPA's 1997 ozone standard.

ARB's rulemaking, Proposed Regulation for State Implementation Plan Credit from Mobile Agricultural Equipment in the San Joaquin Valley, will be submitted for approval to their Board in October 2013. The proposed regulation will provide a mechanism to ensure that the agricultural industry's voluntary participation in incentive programs in the San Joaquin Valley is recognized by EPA. ARB's proposed regulation will define the criteria and process that ARB will use to determine that the reductions from the use of incentives generated from federal, state, and local funds spent on qualifying mobile agricultural equipment projects are surplus, quantifiable, enforceable, and permanent, and are therefore eligible for SIP credit. Although there are many similarities between ARB's and the District's approaches, ARB's regulation for mobile agricultural equipment is separate from District Rule 9610.

**D. Related EPA Guidance**

There are several EPA guidance documents related to SIP credit for innovative emission reductions programs. These documents are guidance, as opposed to regulatory mandates that must be followed. Also, some of this guidance primarily relates to purely voluntary programs with little or no enforcement mechanisms, not the enforceable incentive programs encompassed in Rule 9610. That said, these guidance documents provide important insight into the issues surrounding the use of innovative incentive programs in SIPs.

***Voluntary Mobile Source Emission Reduction Programs in State Implementation Plans (1997)***

In this guideline, EPA notes that SIP credit is appropriate for voluntary mobile source emission reduction programs (VMEPs) measures have the potential to contribute emission reductions needed for progress toward attainment and maintenance of the NAAQS. This guideline describes the terms and conditions for establishing and implementing VMEPs, and the basic framework for ensuring that VMEPs become eligible for SIP credit. Generally, a State would submit a SIP which:

- 1) Identifies and describes a VMEP;
- 2) Contains projections of emission reductions attributable to the program, along with relevant technical support documentation;

- 3) Commits to monitor, evaluate, and report the resulting emissions effect of the voluntary measure; and
- 4) Commits to remedy in a timely manner any SIP credit shortfall if the VMEP program does not achieve projected emission reductions.

Under this policy, EPA set a limit on the amount of emission reductions allowed for VMEPs in a SIP. The limit is set at three percent (3%) of the total projected future year emissions reductions required to attain the appropriate NAAQS. Further, where emissions reductions are expected to exceed the 3% limit, EPA would anticipate the state could use the Economic Incentive Program (EIP) to incorporate measures.

***Improving Air Quality with Economic Incentive Programs (2001)***

In this guidance, EPA encourages the development and submittal of discretionary EIPs to increase flexibility, stimulate the use of less costly, innovative emission reduction measures, and provide greater incentives for developing and implementing pollution prevention strategies, possibly with fewer resources. For incentive-based emission reductions to be given SIP credit, the EIP guidance requires emissions reductions from incentive projects to satisfy four SIP-credibility “integrity principles:” surplus, quantifiable, enforceable, and permanent. EIP measures are not subject to a SIP-credit limitation, as are voluntary measures.

***Incorporating Emerging and Voluntary Measures in a State Implementation Plan (2004)***

This guidance encourages the development of voluntary and emerging measures to meet SIP requirements. A *voluntary measure* is a measure or strategy that (unlike traditional measures or EIPs) is not enforceable against an individual source. An *emerging measure* is a measure or strategy that (unlike traditional measures or EIPs) does not have a high level of certainty for quantification purposes. A measure can be both a voluntary and an emerging measure.

This guidance provides some flexibility in meeting established SIP requirements for enforceability and quantification; provides a clear process by which new approaches can be developed and evaluated; establishes appropriate limitations which govern the conditions under which these new approaches can be applied; and provides provisional pollutant reduction credit upfront for attainment, reasonable further progress (RFP), rate of progress (ROP), or maintenance requirements to encourage the substantial investment required to implement new pollutant reduction approaches.

EPA set a limit on the amount of SIP credit allowed to be claimed for these voluntary and/or emerging measures to 6% of the total amount of emission reductions required for the ROP, RFP, attainment, or maintenance demonstration purposes. The limit is presumptive in that EPA believes it may approve measures into a SIP in excess of 6% where a clear and convincing justification is made by the State as to why a higher limit should apply in their case. Any request for a higher limit will be reviewed by EPA on a case-by-case basis; any approval of emerging measures under this policy will be

conducted through full notice-and-comment rulemaking in the context of a particular state SIP revision.

***Incorporating Voluntary Stationary Source Emission Reduction Programs into State Implementation Plans (2001)***

This guideline is the EPA final policy regarding the granting of explicit SIP credits for voluntary stationary source emission reduction programs under section 110 of the Clean Air Act. This policy is a complement to the voluntary mobile source emissions reduction policy that has been in place since October, 1997. Voluntary measures are an alternative to traditional command and control approaches that have the potential to encourage new, untried and cost-effective approaches to reduce emissions.

Economic incentive programs differ from voluntary measures in that under a State's EIP, emission reductions (or actions leading to emission reductions) must either be identifiable and enforceable against a specific source or the EIP submittal must include fully adopted contingency measures and contains a State commitment to automatically implement contingency measures, if necessary; the State will only count emission reductions on a retrospective basis; or the State has used the control strategy in a similar situation, has achieved positive results, and gets preliminary approval from the relevant EPA Regional Office to use the provision.

EPA limits the amount of emission reductions allowed in a stationary source voluntary measures program to three percent (3%) of needed reductions for ROP, RFP, or attainment demonstration purposes. This is not 3% of an area's total emission inventory. For example, if a State projects emissions in the attainment year to be 100 tons per day over the emissions needed to show attainment, the State could take credit for emission reductions from stationary source voluntary measures of up to 3 tons per day. In the case of maintenance demonstrations, voluntary measures can account for no more than 3% of the reductions needed to demonstrate maintenance of the NAAQS. These maintenance-related voluntary measures would be in addition to those measures that were previously adopted for attainment or RFP/ROP determination purposes.

**E. Successful Incentive Programs Implemented in the Valley**

The District operates one of the largest and most well-respected incentive programs in the state. The District's incentive programs have been developed around several core principles, including cost-effectiveness, integrity, effective program administration, excellent customer service, efficient use of District resources, fiscal transparency, and public accountability.

To ensure public funds are spent appropriately and as intended, the District's incentive program is regularly audited by outside agencies, including professional accountancy corporations on behalf of the federal government, ARB, the California Department of Finance (DOF), and the California Bureau of State Audits. These comprehensive and rigorous independent audits focus on every aspect of District administered incentive

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programs, including internal programmatic and fiscal policies and procedures as well as field validation of projects. A recent California Air Resources Board (ARB) audit noted that the District's incentive program, one of the largest in the state, is efficiently and effectively achieving its emission reduction objectives.<sup>1</sup>

The District is thus a statewide leader in incentive programs, with several elements being held as models for other air districts throughout California. As a result, ARB has routinely called upon the District to administer statewide incentive programs on their behalf and on behalf of other local air districts. Recent examples include administering the Lower Emission School Bus Program on behalf of ARB and 18 other air districts, the statewide Agricultural Utility Terrain Vehicle (UTV) program and the statewide School Bus Retrofit Program.

The District also works closely with other agencies, such as USDA NRCS, to implement incentive programs in the Valley. The majority of the District's incentive grant programs are based on incentive program guidelines developed through a public process and adopted by ARB, such as the Carl Moyer Program and Proposition 1B: Goods Movement Emission Reduction Program (Prop 1B). The District also has a strong working relationship with USDA NRCS, with both agencies implementing programs to replace agricultural equipment.

The funding sources for District incentive programs include locally-generated funding sources as well as support from federal and state sources. 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 incentive program funding of \$25 million per year a decade ago to over \$100 million of funding per year in current funding. To date, the District's program has provided over \$500 million in incentive funds resulting in over 100,000 tons of lifetime emission reductions. Each District incentive investment is matched by cost-sharing on the part of the participating businesses, public agencies, and residents, who together have also invested over \$400 million on these projects. These combined efforts accelerate the adoption of cleaner technologies beyond what is achieved by stringent regulations alone, improving air quality, improving public health, and progressing the Valley towards attainment of increasingly stringent federal air quality standards.

Although the District's incentive program process can vary from program to program, per the applicable guidelines, the general incentive process is as follows:

- Application completeness: District reviews received application for completeness and mails a letter to the applicant regarding application status

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<sup>1</sup> ARB: 2011 San Joaquin Valley APCD Incentive Program Review and Audit Reports (January 2013). Retrieved May 2013 from [http://www.arb.ca.gov/msprog/moyer/audits/2011/san\\_joaquin\\_valley.htm](http://www.arb.ca.gov/msprog/moyer/audits/2011/san_joaquin_valley.htm)

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- Pre-inspection: Once the application is deemed complete, pre-inspection is conducted by the District or a contracted agent:
  - The engine and/or equipment is physically inspected to verify the condition of the engine and/or equipment, all unique identifiers such as Vehicle Identification Number (VIN) and Engine Serial Numbers (ESN) are recorded, and it is confirmed that the engine and/or equipment is operational.
  - Photographs are taken of the engine and/or equipment and an inspection report is completed.
  - The inspection report and photographs are then reviewed by District staff to verify the information on the application.
- Usage documentation: For applicable project types, usage documentation from the applicant is then requested and used to calculate the projected emissions reductions, cost-effectiveness, and incentive amount to be issued by the District.
- Resolve outstanding NOVs: Applicants found to be in violation of any District rules or that have any outstanding Notice of Violations (NOV) during the application process will not be issued a contract for an incentive project until such time that all outstanding issues are resolved.
- Execute contract: All parties sign the contract and the applicant, now referred to as the grantee, is notified to start their project. All activities related to the project are now covered under legally binding, enforceable contract provisions.
- Claim for Payment: The grantee purchases and/or installs the new engine/equipment and submits a Claim for Payment (CFP) packet. The District's receipt of the CFP triggers a post-inspection to be scheduled.
- Post-inspection: A District employee or contracted agent inspects the new engine/equipment in the applicant's possession and documents critical information with photographs. The dismantling facility is also inspected to confirm that the old engine/equipment has been properly destroyed, as illustrated in Figure 1.
- Payment: After the District reviews the inspection reports and verifies the old and new engine/equipment information, the CFP is paid.
- Contractual reporting requirements: The grantee is required to annually report to the District actual usage for the previous year, provide proof of insurance, and certify that they still own the engine/equipment for the duration of years required in the contract. The number of years required to report varies by project type, from one year to 20 years.

**Figure 1 Photographs of the dismantling of a tractor**



### **1. Carl Moyer Memorial Air Quality Standards Attainment (Carl Moyer) Program**

The Carl Moyer Program is a grant program that funds the incremental cost of installing/operating cleaner-than-required engines and equipment. Adopted in 1999 by ARB and governed by CH&SC §44275-44299.2, this program provides incentives to help obtain early or extra emission reductions, especially from emission sources in environmental justice communities and areas disproportionately impacted by air pollution with a primary objective of obtaining cost-effective and surplus emission reductions.

ARB's manages program funds, develops and maintains guidelines, and determines cost-effectiveness methodologies. The Carl Moyer Program Guidelines (developed publicly and available at <http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm>) ensure that emission reductions funded through the program are permanent, surplus, quantifiable, and enforceable (see Table 1 of this staff report).

Air districts use ARB's Carl Moyer Program Guidelines to select, fund, and monitor projects in their jurisdiction. The program guidelines allow for multiple funding options, and each air district is allowed to choose which options to administer each year. Currently, the District provides funding for the following options under the Carl Moyer Program:

- Heavy-Duty Off-Road Vehicles – repower, retrofit, and replacement options
- Stationary Agricultural Sources – repower and new electric purchase options
- Locomotives – repower and alternate technology switcher options
- Heavy-Duty On-Road Vehicles – retrofit and replacement options

As allowed in the Carl Moyer Program Guidelines, ARB can issue a case-by-case determination for a specific incentive project that follows alternative procedures, but still meets the four integrity requirements.

## **2. Proposition 1B: Goods Movement Emission Reduction Program**

In November 2006, California voter approval of Prop 1B authorized \$1 billion in bond funding to reduce air pollution associated with the movement of freight along California's major trade corridors. The program supplements ARB's diesel regulations by funding early compliance or providing extra emission reductions beyond those required by current rules. Subsequent legislation established standards and procedures for the expenditure of these funds. Governor Schwarzenegger's Executive Order S-02-07 provides further direction to ensure accountability and transparency in administering bond-funded programs.

ARB developed the *Proposition 1B: Goods Movement Emission Reduction Program Guidelines for Implementation* (Prop 1B Guidelines) (available at <http://www.arb.ca.gov/bonds/gmbond/gmbond.htm>) in consultation with stakeholders, including: air districts, metropolitan planning organizations, port authorities, industry, and community interest groups. The Prop 1B Guidelines' robust administrative requirements establish transparency and accountability measures, and ensure that emission reductions are enforceable throughout the project life.

Through the Prop 1B program, the District provides incentive funds to reduce emissions from eligible heavy-duty trucks traveling through California's major trade corridors and locomotives. Available funding options include retrofit, repower, replace, and a tiered truck transaction, which involves retrofitting and replacing two different trucks. The District has conducted a comprehensive outreach and marketing campaign for Prop 1B to ensure that the Valley's Prop 1B funds are fully liquidated and the emission reduction benefits of the program are realized.

## **3. Combustion Systems Improvement of Mobile Engines**

In 2009, the NRCS established the California Air Quality Initiative to provide financial assistance to address air quality concerns through the Environmental Quality Incentives Program. Through this initiative, NRCS provides incentive funds to assist farmers to replace, repower, or retrofit diesel powered agricultural equipment with the goal of ensuring the resulting reductions meet the SIP creditability criteria of being surplus, quantifiable, enforceable, and permanent (see Table 1 of this staff report).

NRCS based its robust administrative requirements on the Carl Moyer Program Guidelines to ensure that emission reductions are enforceable, are achieved throughout the life of a project, and all integrity criteria are met. The NRCS Combustion System Improvement of Mobile Engines incentive program guidelines are available at <ftp://ftp->

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[fc.sc.egov.usda.gov/CA/programs/AQI/2012\\_Combustion\\_Systems\\_Improvement\\_Policy\\_and\\_Procedures.pdf](http://fc.sc.egov.usda.gov/CA/programs/AQI/2012_Combustion_Systems_Improvement_Policy_and_Procedures.pdf).

The Combustion Systems Improvement of Mobile Engines incentive program is unique from other incentive programs in that NRCS is explicitly prohibited from identifying grantees by name. As directed by the Farm Bill (Food Security Act of 1985 (7 U.S.C. § 608d(2))), NRCS must maintain the confidentiality of information provided by an agricultural producer participating in the NRCS Combustion Systems Improvement of Mobile Engines incentive program. The information is exempt from mandatory disclosure and may not be used in judicial or administrative proceedings without the consent of the person involved.

Since 2009, the NRCS program, in combination with the District's program, has provided over \$105 million in incentives for agricultural equipment replacement. Eligible participants are owners of land in agricultural or forest production or persons who are engaged in livestock, agriculture, or forest production on eligible land and that have a natural resource concern on the land.

Applications are accepted on a continuous basis with periodic application ranking cut-offs. Applications are ranked for funding based upon ranking criteria developed with input from Local Work Groups, Stakeholders, and the State Technical Advisory Committee (STAC). The ranking score of a project is based on multiple factors including but not limited to:

- Whether or not the project location is in an area that has an EPA NAAQS non-attainment designation for PM<sub>2.5</sub>, PM<sub>10</sub> and Ozone and what type of designation that area has (for example "extreme" nonattainment).
- If there are currently any local or state agriculturally based air emission regulatory requirements for the area that the project is located.
- The emission level of the baseline equipment/engine and the emission factors of the new/replacement equipment/engine.
- The amount of NO<sub>x</sub>, ROG, and PM that is projected to be reduced by funding the project.

The ranking criteria ensure that the projects with the greatest amount of reductions, resulting in the highest air quality benefit will be selected for funding.

### III. REGULATORY APPROACH FOR RULE 9610

#### A. Overview

Rule 9610 would be the first rule in the nation to provide an air quality agency an administrative mechanism to take SIP credit for incentive-based emission reductions. The key components of the District's Rule 9610 SIP-crediting process would include:

- **Incentive Program Guidelines** for specific programs, developed through a public process with opportunity for public commenting and EPA concurrence.
- **A Manual of Procedures**, which assures that all incentive program guidelines used for SIP creditability are publicly available and maintained in a centralized location on the District's website.
- **Annual Demonstration Reports**, to quantify the amount of emissions reductions achieved by incentive programs meeting the requirements in Rule 9610 and compares these reductions to SIP commitments.

Throughout this SIP-crediting process, the goal is to quantify incentive-based emission reductions that satisfy four criteria (defined in Section 2.0 of Rule 9610):

- **Surplus:** emission reductions are not otherwise required by any federal, state, or local regulation or other legal mandate. These emission reductions must also be in excess of the baseline inventories underlying a SIP attainment demonstration.
- **Quantifiable:** emission reductions can be reliably determined and replicated through the use of well-established emission factors and calculation methodologies, as outlined in applicable incentive program guidelines.
- **Enforceable:** based on the following provisions:
  - The emission reductions must be independently and practicably verifiable for the duration of the project life through inspections, monitoring, and/or other mechanisms;
  - Incentive program violations are defined through legally binding contracts, including identifying party or parties responsible for ensuring that emission reductions are achieved;
  - Grantees are obligated to provide all records needed to demonstrate that emission reductions are achieved; and
  - The public has access to all emission-related information for reductions claimed in the annual demonstration report.
- **Permanent for the lifetime of the project**, assured by actions taken to physically destroy, or disable, baseline equipment, practices, or vehicles.

Table 1 provides a general summary of how key Valley incentive programs satisfy these four criteria.

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**Table 1: Incentive Program Demonstration of Integrity Criteria**

	<b>Carl Moyer</b>	<b>Prop 1B</b>	<b>NRCS</b>
<b>Surplus</b>	Accounts for compliance dates and emissions reductions claimed by adopted regulations. Minimum project life requirements (generally three years) ensure overall cost-effectiveness, that the program does not fund actions taken to comply with regulatory deadlines, and that emission reductions are real for the project life.	ARB verifies the project's compliance with state diesel regulations. Funded trucks noted as such in the state's online regulation reporting database to ensure that the new truck will not be used towards compliance during the project life.	Off-road agricultural equipment is not currently subject to regulations mandating use of cleaner engines.
<b>Quantifiable</b>	Calculation methodology, formulas, and emission factors in guidelines and approved through a public process. Emission control technologies certified or verified by ARB (or, for some categories, by EPA or the International Maritime Organization).	Reductions quantified with ARB's Project Benefits Calculator, publically available at <a href="http://www.arb.ca.gov/bonds/gmbond/gmbond.htm">http://www.arb.ca.gov/bonds/gmbond/gmbond.htm</a> and regularly updated by ARB.	NRCS quantifies emissions reductions using established Carl Moyer Program calculation methodologies and emission factors.
<b>Enforceable</b>	Enforceable contracts, based on program guideline requirements, signed by the District and grantee to ensure projects fully accomplished and integrity criteria met. Provisions include, but are not limited to, grantee usage reporting, destruction of the baseline equipment/engine, and allowance for District project audit at any time during project life.	Enforceable contracts, based on program guidelines, signed by the District and grantee to ensure projects fully accomplished and integrity criteria are met. Provisions include, but are not limited to, grantee usage reporting, operating location requirements for the new vehicle, destruction of baseline engine, and allowance for District project audit at any time during project life.	Enforceable contracts signed by both NRCS and grantee to ensure projects fully accomplished and integrity criteria are met. Provisions safeguard funding and reductions. Should a grantee breach, NRCS receives liquidated damages and funds another project.
<b>Permanent</b>	District post inspections of new equipment and verification that baseline equipment destroyed .	District post inspections of new equipment and verification that baseline equipment destroyed.	NRCS post inspections of new equipment and verification that baseline equipment destroyed.

**B. Use of Projected Incentive Program Reductions SIPs**

Within individual attainment plans, the District may identify an incentive-based emissions reduction commitment for a specific future year or years, and utilize Rule 9610 as a potential administrative mechanism for demonstrating progress towards such a commitment. Depending on the need, this commitment may represent the emissions reductions needed for attainment, RFP, contingency, or other Clean Air Act

requirements. This Rule 9610 commitment will be limited to an amount of emissions reductions deemed reasonable in light of secured or reasonably anticipated funding and the estimated availability of emissions reductions projects and willing participants, based on historical participation and estimates of remaining equipment. The Rule 9610 emissions reductions need and the reasonableness of Rule 9610 emissions reductions projection will be documented within the attainment plan.

The District will identify all relevant attainment plan(s) commitments for Rule 9610 in annual demonstration reports compiled pursuant to Rule 9610. The District will show that the total emissions reductions from SIP-creditable incentive programs meets, at a minimum, the attainment plan commitments for each year for which there is such a commitment. In this way, the District will, in a transparent process, verify that all attainment plan needs associated with Rule 9610 have been met.

Emission reductions credited through Rule 9610 will not replace the need for or CAA requirements associated with regulatory controls. In each attainment plan, the District will continue to evaluate regulatory opportunities to satisfy any applicable RACT/RACM or BACT/BACM requirements. However, once all reasonable regulatory options are exhausted, crediting incentive-based reductions through Rule 9610 will help the District assure that the attainment plan as a whole achieves sufficient SIP-creditable emissions reductions to achieve attainment, to meet RFP milestones, and satisfy contingency measure emissions reductions requirements.

In addition, where Rule 9610 emissions reductions from on-road mobile sources are credited in a SIP for RFP or attainment, federal transportation conformity requirements (40 CFR 93 Subpart A) will continue to be met.

### **C. Proposed Rule 9610**

The following is a summary of rule language with explanations on intent, and interpretation of rule language.

#### **Section 1.0 Purpose**

The purpose of Rule 9610 is to serve as an administrative mechanism for the District to receive SIP credit for emission reductions achieved in the Valley through incentive-based programs. The purpose statement in the first draft rule further clarified that the incentive programs may be administered by the District or by other public agencies, which could include, but would not be limited to, NRCS and ARB. Proposed rule language has been updated to specify that programs must be administered by the District, ARB, or NRCS to be considered for SIP credit under Rule 9610. Any incentive-based emission reductions submitted for SIP credit must meet the requirements for SIP-credibility as defined in rule language.

## **Section 2.0 Definitions**

The Definitions section of this rule provides clarity and support for the requirements presented within the rule. While some definitions come from existing District regulations and state and federal guidance documents, many of the definitions are unique to this rule. To assist with the understanding of rule terminology, the following is a discussion of the definitions that may be unique to this rule.

Case-by-Case Determinations. Case-by-case determinations are alternative procedures approved by ARB for specific projects, as authorized under the Carl Moyer Program Guidelines. An air district may request ARB review of a project or other Carl Moyer Program element on a case-by-case determination as provided for in the guidelines. ARB may approve such a project or other program element if the outcome of this approval would result in emission reductions that are surplus, quantifiable, enforceable, and permanent, and is not prohibited by law.

All case-by-case determinations submitted for review to ARB are made available to the public via web posting at ARB's Carl Moyer Program website, and the District is required by the Carl Moyer guidelines to keep a copy of the determination in the project file. Less than one percent of District administered incentive programs involve case-by-case project.

Funding Source. As defined by Rule 9610, is a source of funding used to implement incentive programs, including but not limited to federal, state, and local sources. Funding sources for District-administered incentive-based projects include, but are not limited to Prop 1B, the Carl Moyer Program, the federal Diesel Emissions Reductions Act (DERA), AB 923 (which authorized a \$2-per vehicle DMV fee), AB 118 (Air Quality Improvement Program (AQIP)). Another funding source is the NRCS Combustion Systems Improvement of Mobile Engines incentive program. The District is engaged at the state and federal levels to craft policy and funding targets that account for the Valley's unique challenges and need to accelerate emission reductions, particularly from sources not under the District's regulatory authority. Toward that end, the District works 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 region as a whole.

Grantee. A grantee is a person, business, association, public agency, or other entity that enters into a contract with the District, NRCS, or ARB to reduce emissions under an incentive program. An example of a grantee could be a truck fleet business that contracts with the District to retrofit an older truck engine, or perhaps a small farmer who enters into a contract to replace an agricultural irrigation pump engine.

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Implementation Date. For the purposes of this rule, the implementation date for a project is the date on which the new or replacement equipment, vehicle, or practice funded through an incentive program is put into service. For incentive projects administered by the District, this date is determined and verified by the final sales invoice provided by the grantee to the District during the incentive project process.

Incentive Program. An incentive program is a program that reduces emissions by promoting the adoption of lower emitting equipment, vehicles, or practices through the distribution of financial incentives to a grantee. Examples of incentive programs include, but are not limited to, the Carl Moyer Program, the NRCS Combustion Systems Improvement of Mobile Engines incentive program, the Prop 1B Program, and other District administered incentive programs. Additionally, incentive programs may be administered by a public agency other than the one that originated the program; for example, the District administers incentive programs using funds and ARB developed guidelines from the Carl Moyer Program.

Incentive Program Guidelines. Incentive program guidelines are administrative procedures, quantification methodologies, eligibility criteria for projects, cost-effectiveness criteria, reporting practices, and other procedures and methodologies used to implement incentive programs. For incentive-based emission reductions to qualify as SIP creditable the incentive program guidelines must meet the criteria as presented in Section 3.0 of Rule 9610.

Inspection. For purposes of this rule, an inspection refers to a physical inspection of the equipment, vehicle, or practice. This definition clarifies requirements under the definitions of Contract and Enforceable, as well as annual report requirements under Section 4.6 (Project Monitoring and Enforcement).

Permanent. Draft rule language defined permanent as being ensured by permanently (for the project life) disabling, physically destroying, or otherwise ensuring the reduction of emissions in the Valley from existing or baseline equipment or vehicles. Proposed rule language has been updated to remove ambiguous language in order to avoid a potential misunderstanding that incentive programs could allow higher emitting equipment to move outside the Valley. Proposed rule language now clarifies that the baseline equipment or vehicles must be physically destroyed or permanently disabled, or practices must be permanently amended to ensure reductions of emissions for the duration of the project life.

SIP. State Implementation Plan; the draft rule language provided a definition specific for this rule. Proposed rule language has been updated to be consistent with CAA Section 110(a).

SIP-Creditable Emission Reduction. For purposes of this rule, reductions of emissions through incentive programs that are Surplus, Quantifiable, Enforceable, and Permanent, in accordance with Rule 9610.

SIP Shortfall. The definition of SIP Shortfall has been updated in the proposed rule to point to Section 7.0 requirements for SIP commitments.

Surplus. Emission reductions are surplus when they are not otherwise required by regulations and are in excess of the baseline emission inventories underlying a SIP attainment demonstration.

### **Section 3.0 Incentive Program Guidelines**

Section 3.0 of the rule provides incentive program guidelines used for SIP-creditable incentive-based emission reductions. Section 3.1 had each subsection dedicated to a specific incentive program guideline and identified specific units within each guideline that would qualify for SIP-creditable incentive-based emission reductions; including a section that allowed for the future use of incentive program guidelines not identified in the rule provided such guidelines are reviewed through a public process with a specification that guidelines developed to reduce emissions from mobile sources are developed in consultation with ARB. And Section 3.2 of draft rule language provided requirements for the Manual of Procedures.

Proposed rule language has been updated as described below.

Section 3.1 specifies that the SIP-creditable emission reductions will be quantified in accordance with incentive program guidelines that provide for SIP-creditable emission reductions. This section specifically identifies project types and associated guidelines that are pre-qualified by EPA as meeting SIP-credibility requirements. Section 3.1 is divided into the following subsections, with each subsection identifying the specific versions of the approved incentive program guidelines including date of guideline amendment or adoption:

- Section 3.1.1 is specific to the use of Carl Moyer Program Guidelines for incentive projects funded by either the Carl Moyer Program or non Carl Moyer funding sources and lists project types that qualify under these guidelines including On-Road Heavy-Duty Vehicle replacement, new vehicle purchase, repower, or retrofit; On-Road Heavy-Duty Vehicle fleet modernization; Off-Road Compression-Ignition Equipment repower, retrofit, or replacement; and Portable and Stationary Agricultural Source repower, new purchase or electric motor or retrofit.
- Section 3.1.2 is specific to the NRCS Combustion System Improvement Conservation Practice Standard 372 and associated NRCS Program Combustion System Improvement of Mobile Engines Guidelines for incentive projects funded by EQIP funds.

- Section 3.1.3 is specific to the Proposition 1B Goods Movement Emission Reduction Program Guidelines for incentive projects funded by Proposition 1B funds or non-Proposition 1B funds, for Heavy-Duty Diesel Trucks repower, replacement, PM retrofit, or PM + NOx retrofit.

Section 3.2 is a new section to the proposed rule. Under this section the District may quantify emissions under this rule in accordance with incentive program guidelines not specifically identified in Section 3.1, provided the District submits to EPA, pursuant to Section 7.0, a demonstration that each such guideline provides for SIP-Creditable Emission Reductions. Incentive program guidelines subject to these procedures may include ARB Carl Moyer Program Guidelines, NRCS Combustion System Improvement Conservation Practice Standard 372 and associated NRCS Program Combustion System Improvement of Mobile Engines Guidelines, and ARB Proposition 1B Goods Movement Emission Reduction Program Guidelines:

- Section 3.2.1 requires that incentive program guidelines developed to reduce emissions from mobile sources be developed in consultation with ARB.
- Section 3.2.2 states that notwithstanding Sections 3.1 and 3.2, case-by-case determinations may be used to quantify SIP-creditable emission reductions, provided that they are reviewed through a public process and submitted to EPA for approval into the SIP, as outlined in Section 7.0.

Section 3.3 provides requirements for the development and maintenance of a Manual of Procedures for SIP-creditable incentive-based emission reductions claimed pursuant to this rule. The Manual of Procedures assures that all incentive program guidelines used for SIP creditability are publicly available, and maintained in a centralized location on the District's website. To increase public understanding and awareness of the guidelines and the role they play in SIP-creditable of emission reductions, the website will also contain a description of how each incentive program guideline ensures that the incentive program emission reductions are SIP-creditable.

#### **Section 4.0 Annual Demonstration Report**

Section 4.0 provides specific requirements and guidelines for the content of the annual demonstration report that the APCO will submit to ARB and EPA to claim SIP credit for incentive-based emission reductions.

Section 4.1 requires that the annual demonstration report contain a description of the incentive program guidelines used for implementation of incentive programs generating claimed SIP-creditable emission reductions. The required description will include a discussion of how the incentive program guidelines ensure that the emission reductions are SIP-creditable. This description will include a list of any guidelines that are being used for the first time under this rule. This level of transparency is further supported by Section 3.3, whereby a Manual of Procedures that includes all incentive program guidelines in it is maintained on the District's website; and Section 5.3, whereby

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

previously submitted annual demonstration reports containing this description shall also be maintained on the District's website.

Section 4.2 requires the reporting of SIP-creditable emission reductions generated through incentive programs, as implemented in preceding years. This accounting of SIP-creditable emission reductions would be summarized by pollutant, years the emission reductions are occurring (project life), cost effectiveness, funding amount, incentive program guideline, and project type. This requirement is intended to include all SIP-creditable emission reductions being claimed in the SIP for that annual demonstration report. The term "preceding years" is not intended to include SIP-creditable emission reductions from past annual demonstration reports that are no longer applicable. For example, if a project life of a SIP project has ended in 2015 and the final reporting of those SIP-creditable emission reductions are accounted for in the 2016 annual demonstration report, then the 2017 annual demonstration report would not include the reductions from that project.

Section 4.3 provides the requirement that any adjustments to emission reductions claimed in prior annual demonstration reports be reported in the annual demonstration report for the year the adjustments are made and shall provide the cause for the adjustments. An example may include the adoption of new local, state, or federal requirements that might affect the surplus nature of emission reductions achieved by incentive programs.

Section 4.4 requires the annual demonstration report to identify SIP commitments identified in District adopted SIPs (by year, pollutant, and magnitude), which the District has satisfied, in whole or in part, through SIP-creditable emission reductions. Section 4.4 also requires the District to identify and quantify SIP commitment shortfalls, if any, and remedies for addressing said shortfalls.

Section 4.5 (Project Information) outlines incentive project specific information to be provided in the annual demonstration report. The annual demonstration report will include the following information as applicable:

- **Project identification:** this is a unique project identifier as established by the District, NRCS, or ARB.
- **Project location:** the location of the new equipment, practice, or vehicle as contracted for the incentive project.
- **Project type:** as defined in the rule.
- **Project life:** as defined in this rule, the project life shall not exceed the useful life of the equipment, practice, or vehicle funded through incentive programs.
- **Implementation date:** as defined in this rule, the implementation date is the date which new or replacement equipment or vehicles funded through incentive programs are put into service.
- **Funding amount:** is the amount of funding provided by the District, NRCS, or ARB.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

- **Incentive program guideline(s):** used to implement the project, including the revision date.
- **Quantified emissions:** per year and aggregated over the project life by pollutant.
- **Description of both the baseline and the new equipment, vehicles, or practices:** the annual demonstration report shall include the description of both the baseline and new equipment, vehicles, or practices as applicable:
  - **Make and model** of equipment or vehicle
  - **Equipment or vehicle rating or horsepower**
  - **Model year**
  - **Historical and projected annual usage**
- **Additional project details:** as necessary to demonstrate the SIP-creditable emission reductions claimed in the annual demonstration report. This additional information may vary based on the incentive program guidelines used to administer the project, and provides the District with a mechanism to request any additional information to ensure the demonstration that the emission reductions are SIP-creditable prior to claiming the emission reductions in the annual demonstration report.

Section 4.6 (Project Monitoring and Enforcement) includes requirements for reporting of monitoring and enforcement of incentive project contracts. Incentive program guidelines have specific, and sometimes unique, requirements for project monitoring and enforcement practices to be implemented by the public agency administering the incentive program; however, incentive projects that result in SIP-creditable incentive-based emission reductions at least contain portions that fulfill the requirements of this rule. Section 4.6 requires the annual demonstration report to contain a summary of monitoring and enforcement activities conducted, including a summary of project audits, usage reports, inspections, and other project monitoring activities; and an identification of projects that do not satisfy contractual requirements including enforcement actions and remedies such as penalties and additional contractual requirements. This rule requirement ensures transparency on behalf of the public agency administering the incentive program with regards to confirming that incentive-based emission reductions claimed in the annual demonstration report are enforceable and permanent as defined in the rule.

Section 4.7 (Incentive Program Evaluation) requires the District to perform a retrospective assessment of the performance of its incentive program to evaluate overall incentive program performance and develop recommendations for future enhancements to incentive program implementation. The *EPA Improving Air Quality with Economic Incentive Programs* guideline suggests that air districts taking SIP credit for incentive-based emission reductions perform this assessment and report to EPA on at least a triennial basis. By incorporating this process, requirements, and report into the annual demonstration report, the District is going above and beyond EPA guidance. The District has incorporated the other requirements of the EPA guidance throughout the rule. These requirements include: a public process (incorporated into Section 5.0),

reporting of the amount of emission reductions actually realized through the incentive program (incorporated into Sections 4.2 and 4.3), and reporting of the effects on incentive-based emission reductions in attainment of SIP commitments (incorporated into Section 4.4).

**Section 5.0 Annual Demonstration Report Process**

Section 5.0 provides the framework for the frequency, deadlines, and public process of the annual demonstration report. The APCO is required to submit an annual demonstration report to ARB and EPA for concurrence no later than August 31 of each year after releasing the draft annual demonstration report to the public and presenting it to the District Governing Board. Rule language also provides the requirement that previously submitted annual demonstration reports shall be made available on the District's website. Refer to Section 3.3 for more details about the on-line documentation of incentive program guidelines.

The draft rule required that the most recent three final annual demonstration reports be available on the Districts website, as appropriate. Proposed rule language has been updated to remove this three report minimum. See the proposed rule for specific language.

**Section 6.0 Recordkeeping Requirements**

Section 6.1 requires that all documents created and/or used in implementing the requirements for the annual demonstration report be kept and maintained as required by the applicable incentive program guidelines. Additionally, consistent with the California Public Records Act and other related requirements, such records shall be made available for public review, as will be discussed in the annual demonstration report.

Section 6.2 provides language acknowledging the legal limitations placed on the NRCS Program Combustion System Improvement of Mobile Engines incentive program by the Federal Food Security Act of 1985 (7 U.S.C. §608d(2)). This limitation specifically prohibits NRCS from disclosure of records.

**Section 7.0 Use of Projected Incentive Program Reductions in SIPs**

Draft rule language previously called this section "Use of Projected Incentive Program Reductions as Control Strategies in SIPs." In draft rule language Section 7.0 stated that the District may identify SIP-creditable emission reduction commitments in District adopted SIPs to address federal CAA requirements with the caveat that the commitments shall be limited to the amount of emission reductions that the District reasonably projects to be achieved and that such commitments shall be accounted for in the annual demonstration report.

Proposed rule language has an updated section title and also has been updated to clarify that where the District intends to rely on projections of SIP-creditable emission reductions under Rule 9610 to satisfy federal CAA SIP requirements the District shall

identify the specific amounts of SIP-creditable emission reductions for a particular year or years in the relevant SIP. Each SIP submission in which the District relies on such projections shall contain a demonstration that the applicable incentive program guidelines continues to provide for SIP-creditable emission reductions. In addition to this clarification, new Section 7.4 requires that if either the District or EPA find that there is a SIP shortfall for a particular year, the District will adopt and submit to EPA, by specified dates, substitute rules and measures that will achieve equivalent emission reductions as expeditiously as practicable and no later than any applicable implementation deadline in the CAA or EPA's implementing regulations. Rules and measures may include a variety of means of identifying and quantifying additional needed emissions reductions, including additional control strategies; surplus and not-yet-credited reductions from adopted control strategies; or incentive-based reductions.

#### **IV. RULE DEVELOPMENT PROCESS AND RELATED REQUIREMENTS**

##### **A. Public Workshop for Rule 9610**

The District hosted a public workshop to present, discuss, and hear comments on the draft rule and draft staff report on April 9, 2013. The draft rule and staff report were made available on the District's website prior to the public workshop, and a two week comment period followed the public workshop. Comments received on or before 5:00 PM on April 23, 2013 were considered and incorporated into the draft rule or staff report as appropriate.

##### **B. Public Hearing for Rule 9610**

In accordance with California Health and Safety Code (CH&SC) Section 40725, the proposed rule and final draft staff report were publicly noticed prior to the Governing Board public hearing to consider adoption of proposed New Rule 9610. The proposed rule and final draft staff report will be made available for public comment no later than May 21, 2013. Comments received 5 PM June 4, 2013 will be ensured consideration before the public hearing. The public is also welcome to provide comments directly to the Governing Board at the public hearing. The District's *2012 PM<sub>2.5</sub> Plan* contains a commitment to schedule the public hearing to consider the adoption of new Rule 9610 in 2013; the public hearing is scheduled for June 20, 2013.

##### **C. CEQA**

Pursuant to California Code of Regulations (CCR) Section 15060(c)(3), this project is not subject to California Environmental Quality Act (CEQA) because it is not a project as defined in Section 15378.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

Final Draft Staff Report: Rule 9610

May 21, 2013

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## V. REFERENCES

- California Air Resources Board [ARB], (2013, January 2), *Incentive Program; Program Review Report, San Joaquin Valley Air Pollution Control District Fiscal Years 2006-07 through 2009-10*, Sacramento: CA
- California Air Resources Board [ARB], 2010, *Proposition 1B: Goods Movement Emission Reduction Program Proposed Update to Guidelines for Implementation Staff Report*, Sacramento: CA.
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- San Joaquin Valley Air Pollution Control District [SJVAPCD], (2012, December 20). *2012 PM2.5 Plan [Pm2.5 Plan]*, Fresno: CA.
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- United States Environmental Protection Agency [EPA], San Joaquin Valley Air Pollution Control District [SJVAPCD], United States Department of Agriculture [USDA], and California Air Resources Board [ARB], 2010, *Statement of Principles*

**SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT**

Final Draft Staff Report: Rule 9610

May 21, 2013

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# Appendix A

## **Statement of Principles Outlining the Approach to SIP-Creditability of Voluntary Incentive Programs**

**May 21, 2013**

**SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT**

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**Statement of Principles Regarding the Approach to State  
Implementation Plan Creditability of Agricultural Equipment  
Replacement Incentive Programs Implemented by the  
USDA Natural Resources Conservation Service and the  
San Joaquin Valley Air Pollution Control District**

**December 2010**

*Statement of Principles*  
*December 2010*

### Introduction

The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) is implementing an Environmental Quality Incentive Program in California to help achieve federal air quality standards and meet emission reduction goals of the State Implementation Plans (SIP) for the San Joaquin Valley. This federal incentive program complements existing State and local incentive programs in California. The NRCS program is modeled after California's Carl Moyer Incentive Program, which was developed as part of California's 1994 Ozone SIP approved by U.S. Environmental Protection Agency (U.S. EPA) in 1997. The San Joaquin Valley Air Pollution Control District (District) is also implementing a program to achieve SIP creditable reductions through the early introduction of cleaner agricultural equipment. Both agencies are applying strict criteria to ensure the emission reductions achieved are surplus, quantifiable, enforceable, and permanent.

### Relationship to San Joaquin Valley 2007 Ozone SIP

The San Joaquin Valley faces significant challenges in achieving attainment with the U.S. EPA's ambient air quality standards. The District has many of the nation's toughest air pollution rules already in place, and many new regulations are in progress under the District's most recent attainment plans, such as the *2007 Ozone Plan*. However, regulations alone will not bring the Valley into attainment of federal air quality standards.

When the Air Resources Board (ARB) approved the District's *2007 Ozone Plan* on June 14, 2007, ARB committed to investigate additional control measures before transmitting the plan to the U.S. EPA. When ARB adopted the 2007 State Strategy on September 27, 2007, ARB committed to reducing emissions from agricultural equipment in the Valley beginning in 2014, with five to ten tons per day of NO<sub>x</sub> reductions in the Valley by 2017. This measure would accelerate fleet turnover to equipment with engines meeting cleaner new engine NO<sub>x</sub> standards as quickly as possible. ARB committed to meeting this reduction target through regulatory or voluntary incentive measures, stating that it would be "*supporting efforts to secure federal funds and other mechanisms to achieve near-term reductions that can be credited to the SIP.*"

This statement of principles establishes a general framework for ensuring that reductions in air emissions resulting from voluntary incentives to replace off-road agricultural equipment receive credit in State Implementation Plans (SIPs). Given the heavy investment from the public sector and agricultural community 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. These voluntary incentives are administered by the District and NRCS.

Statement of Principles  
December 2010

**Statement of Principles**

1. The District, NRCS, ARB, and U.S. EPA will work collaboratively to develop a mechanism to provide SIP credit for emissions reductions from the federal, state, and local incentive programs that meet the criteria of ensuring the reductions are surplus, quantifiable, enforceable, and permanent
2. The District and NRCS will each submit annual reports of the prior year's completed projects and associated emission reductions to U.S. EPA and ARB.
3. U.S. EPA will expeditiously review the submitted annual report. If EPA determines that the emissions reductions are consistent with the mechanism and criteria in Principle 1, EPA would credit the emission reductions toward the SIP.
4. The District and NRCS will ensure ongoing accountability by maintaining databases of project data, application information, funded-project data, and emissions reductions; and record retention of application forms, inspection documentation, destruction verification, and other project-relevant documentation.

Signed for U.S. EPA By,

Signed for SJVUAPCD By,

*for* 



Deborah Jordan  
Director, Air Division, Region IX

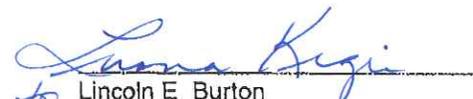
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Executive Director/Air Pollution Control Officer

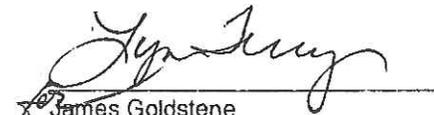
Date: 12-15-10

Date: 12/15/10

Signed for USDA, NRCS By,

Signed for ARB By,

*for* 

*for* 

Lincoln E. Burton  
State Conservationist for California

James Goldstene  
Executive Officer

Date: 12-16-10

Date: 12/15/10

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## Appendix B

### **Implementation Principles for Addressing Agriculture Equipment under the Clean Air Act**

**May 21, 2013**

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UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

WASHINGTON, D.C. 20460

JUL 13 2012

OFFICE OF  
AIR AND RADIATION

The Honorable Dave White  
Chief, Natural Resources Conservation Service  
U.S. Department of Agriculture, Natural Resources Conservation Service  
Office of the Chief  
1400 Independence Avenue SW, Room 5105-A  
Washington, D.C. 20250

Dear Mr. White:

Enclosed for your signature is the Agricultural Equipment Implementation of Principles that was discussed during your meeting with Janet McCabe on June 5, 2012. As you may recall, the Statement of Principles was developed at the request of the agriculture industry stakeholders seeking support for programs to assist farmers seeking to invest in cleaner agricultural equipment, including engines. The U.S. Environmental Protection Agency and the U.S. Department of Agriculture signed a memorandum of understanding (MOU) in 1998 that formalized a working relationship between the two agencies relative to air quality in the agricultural industry. The MOU set forth joint responsibilities for both agencies regarding agricultural air quality issues. It also provided considerable assurance to the agricultural sector that the exchange of air quality information, the review of research and the design of implementation measures would be jointly coordinated. To date, the two agencies have worked cooperatively to identify mutually agreeable solutions to address air quality concerns in areas dominated with agricultural-related emissions. The following implementation principles are consistent with the objectives outlined in the 1998 MOU and will guide future coordination efforts between USDA and the EPA on air quality issues related to agricultural equipment.

If you have any questions concerning this document, please feel free to contact me or your staff may contact Ms. Robin Dunkins at 919-541-5335.

Sincerely,

A handwritten signature in blue ink, appearing to read "Gina McCarthy".

Gina McCarthy  
Assistant Administrator

Enclosure

# Implementation Principles for Addressing Agriculture Equipment under the Clean Air Act

## Introduction

The U.S. Environmental Protection Agency and the U.S. Department of Agriculture signed a memorandum of understanding (MOU) in 1998 that formalized a working relationship between the two agencies relative to air quality in the agricultural industry. The MOU set forth joint responsibilities for both agencies regarding agricultural air quality issues. It also provided considerable assurance to the agricultural sector that the exchange of air quality information, the review of research and the design of implementation measures would be jointly coordinated. To date, the two agencies have worked cooperatively to identify mutually agreeable solutions to address air quality concerns in areas dominated with agricultural-related emissions contributing to the problem. The following implementation principles are consistent with the objectives outlined in the 1998 MOU and will guide future coordination efforts as the agency focuses on air quality impacts for agricultural equipment and implements used in the U.S. agricultural sector.

Cooperation in the past has involved efforts to ensure that when measures are taken in the agricultural sector to improve air quality, they are both technologically and economically feasible for individual landowners and users and are based on the best and most recent science.

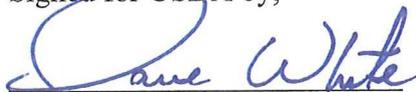
## Statement of Principles

1. The two agencies will work together to develop priorities based on their most recent activities and agency regulations and guidelines. In particular, under the MOU, the two agencies will cooperatively seek to address the issue of farm equipment compliance with all applicable federal air quality regulations using the tools available to each agency. Farm equipment includes both stationary and mobile equipment used in farming or agricultural operations. This type of equipment includes, but is not limited to: tractors and harvesters, irrigation equipment, product processing equipment and boilers and precision application technologies. An example of a recent federal regulation that applies to farm equipment compliance is the National Emission Standards for Hazardous Air Pollutants for Reciprocating Internal Combustion Engines, promulgated in 2010, but currently under reconsideration in 2012.
2. The two agencies will work together to determine how to best assist the agricultural sector in meeting its compliance requirements with applicable state air quality rules and regulations for farm equipment. The agencies will also encourage voluntary efforts permitted under the Clean Air Act (CAA) to improve air quality through replacement or retrofit of engines or equipment with newer, more efficient technologies. Priority should also be given to areas where reductions from agricultural emissions are needed for attaining National Ambient Air Quality Standards.
3. USDA will continue to develop new and/or improve existing technical standards and best management practices to meet air quality objectives across the nation. The EPA will work with USDA to identify air quality areas or rules that may have an impact on

agriculture to ensure USDA's ability to prioritize the development of new and/or improved measures. The EPA will continue to consult with the technical experts at the USDA on regulatory matters that may impact agriculture.

4. The EPA and USDA will work together in a coordinated manner on all air quality regulatory issues that affect agricultural production. The two agencies will also work together to provide a mechanism pursuant to the CAA to quantify for state implementation plan credit emissions reductions from farm equipment, achieved through voluntary incentive programs at the state/local level. These programs and reductions must meet all criteria (i.e., surplus, quantifiable, enforceable and permanent) for creditable emission reductions and be consistent with the CAA as interpreted in various written policies including the EPA's Economic Incentive Program and/or voluntary measures policies.

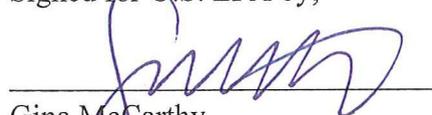
Signed for USDA by,



Dave White  
Chief, NRCS

7-26-12  
Date

Signed for U.S. EPA by,



Gina McCarthy  
Assistant Administrator, OAR

7/12/12  
Date

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# **Appendix C**

## **Summary of Significant Comments and Responses**

**May 21, 2013**

**SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT**

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**SUMMARY OF SIGNIFICANT COMMENTS FOR THE  
DRAFT NEW RULE 9610  
DATED APRIL 9, 2013**

**EPA REGION IX STAFF COMMENTS**

1. **COMMENT:** Please revise rule language to remove the statement “and other public agencies” and replace it with “NRCS and CARB.” The existing language could allow program implementation by agencies with insufficient resources and air pollution authority, or that otherwise fail to fulfill federal requirements such as those in CAA §110(a)(2)(E).

**RESPONSE:** Proposed rule language and final draft staff report have been updated.

2. **COMMENT:** To avoid the misunderstanding that incentive programs could allow higher emitting equipment to move outside the Valley, please revise the definition of permanent to specify that equipment or vehicles would be permanently retrofit, and limit applicability to equipment and vehicles.

**RESPONSE:** The term “permanently retrofit” was not added to rule language because the contracts between the District, ARB, or NRCS and the grantee include provisions to ensure that the installed equipment for retrofits remains installed and in operating condition on the equipment or vehicle during the duration of the project life.

3. **COMMENT:** Definition of the term “SIP” is inconsistent with the Federal definition in CAA section 302(q). One way to address this would be to define “Adopted SIP” (instead of “SIP”) here, add a separate definition for “Applicable SIP” consistent with CAA section 302(q), and ensure appropriate use of these two terms throughout the rule.

**RESPONSE:** To be consistent with the CAA, the District has updated the definition of “SIP” to be consistent with CAA Section 110(a).

4. **COMMENT:** For clarity, please revise the definition of Surplus to clarify the emission reductions are not accounted for in future baseline inventories underlying a SIP attainment demonstration. Then delete the definition 2.25 because it would no longer be necessary.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

**RESPONSE:** Proposed rule language regarding baseline inventories has been updated and Section 2.25 has been removed from rule language accordingly.

5. **COMMENT:** Please ensure that the latest California program guidelines, emission factors and assumptions are used when reductions are quantified, and that the calculation of emission reductions specifies the geographic areas (since, e.g., counties have separate emissions budgets) and time period for which they apply.

**RESPONSE:** Proposed rule language has been updated to clarify that the latest program guidelines will be used relevant to when the contract is entered into. See Section 3.0 for specific language. Incentive Program Guidelines dictate the calculation methodologies including assumptions; therefore, it would be redundant to add that language to rule language.

However, “geographic areas” is not being added to rule language. Any need for geographic information would be limited to reductions credited in the plan for RFP or attainment for on-road mobile only, so requiring geographic information for all incentive programs would be overbroad. In addition, any future use of on-road mobile incentive program reductions in the SIP will be governed by 40 CFR 93 Subpart A, so there is no need to replicate those requirements in 9610. In fact, California Health and Safety Code §40727 requires air districts to make a finding of “nonduplication” before adopting regulations; i.e., the District is prohibited from duplicating existing federal requirements in its rules. However, the District has updated the staff report to note that the requirements of 40 CFR 93 Subpart A will continue to be met.

6. **COMMENT:** EPA may need assistance clarifying that the guidelines identified in Section 3.0 demonstrate that they fulfill relevant national requirements.

**RESPONSE:** The District, ARB, and NRCS are committed to work with EPA on this task.

7. **COMMENT:** The use of alternative incentive program guidelines in Sections 3.1.4, 3.1.1.11, and 3.1.3.6 provide broad director’s discretion inconsistent with long-standing national policy as recently reiterated, for example, in EPA’s proposed rulemaking regarding excess emissions (78 FR 12460, February 22, 2013). These paragraphs could be deleted; caveated as subject to 3%/6% limits for voluntary/emerging measures; or modified to add the requirement that program guidelines must be approved by EPA into the SIP.

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**RESPONSE:** Based on continuing discussions with EPA on these issues, rule language has been updated in Sections 3.0 and 7.0. Beyond Rule 9610, 3%/6% limits for voluntary/emerging measures are also available per EPA guidance (see discussion in the staff report). Section 3.1.1.11 and 3.1.3.6 have been deleted from rule language.

8. **COMMENT:** Because they rely on director's discretion, the rule must clarify that projects with case-by-case determinations do not generate SIP-creditable emission reductions.

**RESPONSE:** Section 3.2 has been updated to describe the process by which the District will submit case-by-case determinations to EPA for approval into the SIP.

9. **COMMENT:** To clarify the obligation to address any shortfalls consistent with national policy, please update Section 4.4 to state the District will identify specific commitments in adopted SIPs and/or applicable SIPs which the District has satisfied in whole or in part through SIP creditable emission reductions achieved in accordance to Section 4.2. Clarify that such commitments may include emission reductions commitments to meet CAA requirements. The District shall identify and quantify SIP shortfalls from incentive program commitments, describe the specific remedies to be implemented by the District consistent with associated SIP creditable emission reductions commitments to remedy the shortfall.

**RESPONSE:** Based on continuing discussions with EPA on these issues, rule language (Section 7.0) has been updated.

10. **COMMENT:** We suggest a new subsection, such as a Section 4.8 clarifying that SIP-creditable emission reductions from on-road mobile sources as identified in the annual demonstration report may be available for use in transportation conformity determinations if such SIP-creditable emission reductions satisfy the requirements of Rule 9610 and are included in a motor vehicle emissions budget that EPA has approved into a SIP or found to be adequate or otherwise meet federal conformity requirements pursuant to 40 CFR part 93.

**RESPONSE:** The suggested section has not been added to the rule, since this situation is already governed by 40 CFR 93.122(a)(3 and 4) and other sections of the federal transportation conformity regulation. See also the response to Comment 5.

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11. **COMMENT:** To clarify the obligation to address any shortfalls consistent with national policy, please revise Section 7.0 to replace ambiguous language regarding the identification of SIP-creditable emission reductions in SIPs with specific language requiring the District to identify specific SIP-creditable emission reductions for specific year(s), and language clarifying that if EPA finds a SIP shortfall, the District will adopt and submit to EPA, no later than two years after any such finding, substitute rules and/or measures that will achieve equivalent emission reductions in a timely manner and no later than any applicable implementation deadline and no later than any applicable implementation deadline in the CAA or EPA's implementing regulations.

**RESPONSE:** Based on continuing discussions with EPA on these issues, rule language (Section 7.4) has been updated with more specific language about how and when shortfalls are to be remedied.

12. **COMMENT:** We recommend adding language to Section 1.0 clarifying that emissions reduced from incentive programs will become creditable for SIP purposes upon EPA approval of a SIP submission that satisfies the provisions of Rule 9610 and identifies specific amounts of emission reductions to be credited toward a specific SIP purpose.

**RESPONSE:** The rule identifies the process for identifying and receiving SIP-credit for incentive-based emissions reductions.

13. **COMMENT:** We recommend that the definition of "SIP shortfall" be revised to link it to Section 7.0 requirements.

**RESPONSE:** The definition of SIP Shortfall has been updated. Please see proposed rule language.

14. **COMMENT:** We recommend clarifying that paragraph 4.5.9 requires separate reporting for each piece of equipment even if a project consists of many pieces of equipment.

**RESPONSE:** Section 4.5.9 of proposed rule language has been updated to include this clarification.

15. **COMMENT:** For clarity, please include all "Project Types" in each Carl Moyer chapter which are eligible for SIP credit. For example, paragraph 3.1.1.4 lists "repower," "retrofit" or "replacement," while Carl Moyer chapter 7 also lists "new equipment purchase." As written, we understand that "new equipment purchase"

would not be eligible for SIP credit under Rule 9610. Note that the Carl Moyer guidelines define “Project Type” within the Carl Moyer Program which does not correspond to the definition of “Project Type” in Section 2.21 of Rule 9610.

**RESPONSE:** The definition of Project Type is specific to this rule language to provide consistency between various incentive program guidelines in the District’s annual demonstration report. Section 2.21 clarifies that the project type is defined in each applicable incentive program guideline.

16. **COMMENT:** We recommend deleting paragraph 3.2.3 since case-by-case determinations are, by definition, case-by-case, and thus are not appropriate as generally-applicable guidelines.

**RESPONSE:** Case-by-case is defined in Section 2.4 and is now addressed in Section 3.2.

17. **COMMENT:** Project information should identify each case-by-case determination.

**RESPONSE:** See response to Comment 16.

18. **COMMENT:** We recommend clarifying Section 4.7 to explain that assessing the ability of the program to provide reductions that are initially anticipated and to require that a summary of the public comments and District responses about the draft report be included.

**RESPONSE:** Section 4.7 includes a retrospective assessment of the performance of the District’s incentive programs to evaluate overall performance and develop recommendations for future enhancements. Additionally, a summary of the public process for the Annual Demonstration Report will be included in the assessment.

19. **COMMENT:** For further transparency, consider requiring all reports be made available online.

**RESPONSE:** Rule language has been updated to remove the three report minimum requirement.

**STAKEHOLDER COMMENTS**

Comments were submitted during the public workshop and for a two-week commenting period following the public workshop. Comments were submitted by the following stakeholders:

Coalition for Clean Air (CCA)  
Earth Justice<sup>1</sup> (EJ)  
E & B Natural Resources (E&B)  
West Kern Water (WKW)

20. **COMMENT:** What was the process for developing the definition of SIP creditable emission reductions? Is it based on EPA guidance or language in the Clean Air Act? (EJ)

**RESPONSE:** The definition of SIP-creditable emission reductions is based on the Clean Air Act and EPA guidance. The District has worked closely with EPA to develop a process under Rule 9610 that ensures the SIP-credibility of reductions claimed under Rule 9610. Refer to the References section of the final draft staff report for the list of EPA guidance documents.

21. **COMMENT:** How can the public participate in the process to ensure that emissions reductions occur? What role can the public play in this process (i.e. enforcement) if emissions reductions do not occur as anticipated? (CCA, EJ)

**RESPONSE:** As noted in the rule, program guidelines and the Manual of Procedures will be publically available. Incentive guidelines are updated through a public process, whereby the public has opportunities to provide comments and participate in the development of said guidelines. In addition, the annual demonstration reports will provide all emissions-related information for reductions claimed in the report, so that all emissions reductions can be independently verified. The annual demonstration reports will compare achieved reductions to SIP commitments and will identify remedies for addressing any shortfalls. The annual demonstration report will be made available to the public before submittal to ARB and EPA.

22. **COMMENT:** Are the emission reductions claimed in the annual demonstration report for SIP credit based on actual emission reductions or estimations of the emission reductions based on funding? (WKW)

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<sup>1</sup> On behalf of the National Parks Conservation Association and Medical Advocates for Healthy Air.

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**RESPONSE:** Emission reductions claimed for SIP-credit in the annual demonstration reports would be based on actual emission reductions.

23. **COMMENT:** Will the SIP-creditable emission reductions be from incentive programs for agricultural sources only, or will other sources be allowed to participate?

**RESPONSE:** SIP-creditable emission reductions are not limited to agricultural sources; many emission reductions from incentive program would be from mobile sources.

24. **COMMENT:** The Clean Air Act does not allow SIPs to be built upon emission reductions that are not enforceable. These incentive-based emission reductions do not meet the CAA's longstanding requirement that emission reductions relied upon in SIPs be enforceable. CAA statutory requirements are not open for redefinition by the District, or even EPA. The annual demonstration report offered as a backstop to assure emission reductions are achieved is similarly unenforceable. (EJ)

**RESPONSE:** Economic incentive programs are enforced through legally-binding contracts, as noted in EPA guidance (such as the 2001 Improving Air Quality with Economic Incentive Programs). In addition, as explained in the rule (Section 2.8 and related requirements), Rule 9610 insures that SIP-creditable incentive-based reductions can be independently verified and that all emissions-related information is publically available.

25. **COMMENT:** The District is proposing that SIPs could be merely a description of the amount of money that is available to subsidize emission reductions. Instead of trying to make the incentive programs creditable by changing the definition of what is required for such credit and using incentives as a substitute for regulatory requirements, the District should promulgate the regulatory requirements and use subsidies to incentivize early adoption/compliance. (EJ)

**RESPONSE:** The commenter appears to misunderstand the concept of Rule 9610 with relation to SIPs. As explained in the final draft staff report, incentive-based emission reductions would not be used to replace regulatory requirements. In fact, the District has adopted and implemented many of the nation's toughest regulations, exceeding minimum federal requirements. Incentives and regulations are not an either-or scenario – both are playing an important role in providing cost-effective emissions reductions and improving Valley air quality.

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26. **COMMENT:** The District insists on pursuing these emission reductions on a project-by-project basis; instead, it can adopt source-specific rules that are subject to enforcement by EPA and the public. (EJ)

**RESPONSE:** See response to Comment 25.