San Joaquin Valley Unified Air Pollution Control District

2014 Annual Demonstration Report

SIP-Creditability of Emission Reductions Generated through Incentive Programs

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EXECUTIVE SUMMARY

The San Joaquin Valley Unified Air Pollution Control District (District) currently operates one of the largest and most well-respected incentive programs in California. Since 1992, the District's incentive programs have provided over $594 million in incentive funds. This has been matched by cost-sharing on the part of participating businesses, public agencies, and residents, who together have invested over $482 million, for a total public/private investment of well over $1 billion in low and zero emissions equipment and operations. These combined efforts have accelerated the adoption of cleaner technologies (beyond that achieved by stringent regulations alone) achieved over 108,000 tons of lifetime emission reductions, improved air quality and public health, and progressed the San Joaquin Valley (Valley) towards attainment of increasingly stringent federal air quality standards. In addition to District-administered incentive programs, the California Air Resources Board (ARB) and the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS) also implement highly effective incentive programs, further reducing emissions in the Valley.

Although incentive programs result in real air quality benefits, the emission reductions resulting from voluntary incentive programs have generally not been quantified for or provided credit in attainment plans to meet federal Clean Air Act (CAA) requirements. District Rule 9610 (State Implementation Plan Credit for Emission Reductions Generated through Incentive Programs) serves as an administrative mechanism for crediting emission reductions achieved in the Valley through incentive programs for use in state implementation plans (SIPs). The future year emission reductions claimed in District SIPs through Rule 9610 are to be quantified through annual demonstration reports, such as this Annual Demonstration Report.

The emission reductions quantified and claimed for SIP credit as part of this report are accounted for in Table 1 and table 2 below and include reductions of oxides of nitrogen (NOx), particulate matter (PM), and reactive organic gases (ROG). The SIP creditable emissions reductions noted below were achieved through the implementation of 1,009 projects. Extensive documentation of these reductions, related SIP commitments, and other Rule 9610 requirements are included in the remainder of this report and in supporting data provided in the Annual Demonstration Report Data Sheet that accompanies this report.

On Monday, May 19, 2014 EPA proposed to fully approve Rule 9610 as a revision to the California SIP[1]. The proposed rule is anticipated to be finalized after this annual demonstration report has been submitted. The associated Technical Support Document[2] contained recommendations for implementation for the Manual of Procedures (MOP) and the Annual Demonstration Report. The District evaluated these recommendations and incorporated them throughout this Annual Demonstration Report as appropriate.

[1] EPA. 40 CFR Part 52. *Revision to the California State Implementation Plan; San Joaquin Valley Unified Air Pollution Control District; Quantification of Emission Reductions From Incentive programs* Retrieved on June 19, 2014 from http://www.gpo.gov/fdsys/pkg/FR-2014-05-19/pdf/2014-11481.pdf.

[2] EPA. *EPA's Notice of Proposed Rulemaking for the California State Implementation Plan San Joaquin Valley Unified Air Pollution Control District's Rule 9610, State Implementation Plan Credit for Emission Reductions Generated through Incentive Programs*. Retrieved on June 19, 2014 from http://www.regulations.gov/.

Table 1 summarizes the total SIP-creditable incentive-based emission reductions generated through incentive programs, expressed in tons per year and tons per day, claimed in the 2014 Annual Demonstration Report. The data also includes 62 projects that were implemented during the timeframe covered under the 2013 report but were not included in that data set.

Table 1: Total SIP-Creditable Incentive-Based Emission Reductions Generated Through Incentive Programs

	Current Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	**PM**	**ROG**	**NOx**	**PM**	**ROG**
2009	3.50	0.07	0.39	0.01	0.00	0.00
2010	25.93	0.85	3.00	0.07	0.00	0.01
2011	28.77	0.94	3.35	0.08	0.00	0.01
2012	89.85	3.15	11.68	0.25	0.01	0.03
2013	731.44	30.02	78.35	2.00	0.08	0.21
2014	645.82	27.34	71.87	1.77	0.07	0.20
2015	634.85	27.09	71.58	1.74	0.07	0.20
2016	631.01	26.99	71.46	1.73	0.07	0.20
2017	620.12	26.52	71.15	1.70	0.07	0.19
2018	549.16	23.18	71.15	1.50	0.06	0.19
2019	545.66	23.11	70.76	1.49	0.06	0.19
2020	511.71	21.91	66.74	1.40	0.06	0.18
2021	508.87	21.81	66.39	1.39	0.06	0.18
2022	448.00	19.61	58.07	1.23	0.05	0.16
2023	64.73	2.84	8.08	0.18	0.01	0.02
2024	6.39	0.18	0.26	0.02	0.00	0.00

Table 2 summarizes the cumulative total SIP-creditable incentive-based emission reductions generated through incentive programs, expressed in tons per year and tons per day, claimed in the 2013 and 2014 Annual Demonstration Reports.

Table 2: Cumulative Total SIP-Creditable Incentive-Based Emission Reductions Generated Through Incentive Programs

	Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	**PM**	**ROG**	**NOx**	**PM**	**ROG**
2009	1106.94	36.36	116.62	3.03	0.10	0.32
2010	2686.24	84.40	239.79	7.36	0.23	0.66
2011	4202.49	145.83	369.37	11.51	0.40	1.01
2012	5770.51	209.45	464.20	15.81	0.57	1.27
2013	6456.87	238.12	532.22	17.69	0.65	1.46
2014	5372.58	204.95	453.70	14.72	0.56	1.24
2015	4650.15	189.68	441.60	12.74	0.52	1.21
2016	4063.91	166.14	435.49	11.13	0.46	1.19
2017	3182.06	132.44	429.20	8.72	0.36	1.18
2018	3021.89	125.67	422.25	8.28	0.34	1.16
2019	2624.66	112.18	354.39	7.19	0.31	0.97
2020	1877.81	82.57	254.54	5.14	0.23	0.70
2021	1073.06	48.33	144.10	2.94	0.13	0.39
2022	545.31	24.14	68.10	1.49	0.07	0.19
2023	147.53	6.75	16.35	0.40	0.02	0.04
2024	72.48	3.53	6.93	0.20	0.01	0.02

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I. BACKGROUND

In developing the *2007 Ozone Plan*, the District and ARB recognized the need for additional emission reductions from sources outside of the District's regulatory authority to meet the stringent 1997 8-hour ozone standard, particularly from mobile sources. Subsequently, the plan called for significantly increased incentive funding to help accelerate attainment of the standard. Since then, the District has advocated to increase incentive funding for the Valley, resulting in significantly increased funding. Recognizing the importance of incentive-based emission reductions in addressing increasingly stringent federal standards, the District and EPA have worked together to develop an administrative framework for providing federal SIP credit for incentive programs.

As part of developing new incentive programs aimed at reducing emissions from agricultural equipment, the District and the USDA NRCS work together to ensure that both agencies' incentive programs achieve emission reductions that can be credited in SIPs. Towards that end, in December 2010, the District, EPA, ARB, and USDA NRCS signed a memorandum of understanding (MOU) committing to establish a framework for providing such SIP credit. 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 federal criteria of surplus, quantifiable, enforceable, and permanent.

NRCS and EPA continued to work together to develop a mechanism pursuant to the CAA to quantify SIP credit for 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.

District Rule 9610 is the result of the collaborative efforts between EPA, ARB, NRCS, and the District. Rule 9610 provides the District with an administrative mechanism to claim SIP credit for incentive-based emission reductions achieved in the Valley. The key components of the District's Rule 9610 SIP-crediting process 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**, such as this report, to quantify the amount of emissions reductions achieved by incentive programs meeting the requirements in Rule 9610. More information on report components and process is included later in this report.

Throughout the SIP-crediting process, the goal is to quantify incentive-based emission reductions that satisfy the following EPA integrity principles (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, publicly available emission factors and calculation methodologies.

- **Enforceable:** based on the following provisions:
    - The emission reductions must be independently and practicably verifiable 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, as outlined in Section 4.0 of Rule 9610.

- **Permanent:** for the lifetime of the project, assured by actions taken to physically destroy, or permanently disable, baseline equipment or vehicles, or to permanently amend practices to ensure the reduction of emissions for the duration of the project life.

This report demonstrates that the incentive-based emission reductions quantified and claimed for SIP credit meet each of these four integrity principles and complies with requirements in Rule 9610.

II. ANNUAL DEMONSTRATION REPORT ELEMENTS

This District-prepared report will demonstrate the quantity of emission reductions achieved through SIP-creditable incentive programs. District Rule 9610 includes several requirements be met in order to demonstrate that the claimed incentive-based emission reductions are SIP-creditable. The elements described in Section 4.0 of Rule 9610 that this 2014 Annual Demonstration Report includes are summarized in Table 3.

Table 3: Annual Demonstration Report Requirements

Element	Where satisfied
Description of guidelines used, how the guidelines ensure that the claimed emission reductions are SIP-creditable, and a list of any procedures being used for the first time under the rule	Section III of this report
Quantification of emission reductions generated through incentive programs, summarized by pollutant and by years and including: • Cost-effectiveness • Funding amount • Incentive program guideline • Project type	Section VII of this report
Adjustments to reductions claimed in prior annual demonstration reports	NA
Identification of SIP commitments in District adopted SIP(s) which the District has satisfied in whole or in part through Rule 9610, including identification and quantification of, and remedies for, any shortfalls	Section IV of this report
Project information, including the following, as applicable: • Project identification number • Project location • Project type • Project life • Implementation date • Funding provided by the District, NRCS, or ARB • Guidelines used • Quantified emission reductions per year, and aggregated over the project life, by pollutant • Description of baseline and new equipment • Additional details as needed	Appendices A and B of this report, Manual of Procedures, and Annual Demonstration Report Data Sheet
Summary of monitoring and enforcement activities for the reporting period for incentive programs for which SIP-creditable emission reductions are being claimed, including: • Identification of project audits, usage reports, inspections, and other monitoring activities • List of projects that do not satisfy contractual requirements and associated enforcement actions/remedies	Section V of this report
Incentive Program Evaluation: retrospective assessment of the incentive program performance and recommendations, if any, for future enhancements	Section VI of this report

Annual Demonstration Report Process

Section 5.0 of Rule 9610 requires the following process for the annual demonstration report:

1. **The APCO shall submit the annual demonstration report and information described in Section 4.0 to ARB and EPA no later than August 31 of each year.**
   The APCO will present the Draft Annual Demonstration Report to the District Governing Board for review and then submit it to ARB and EPA for concurrence after the Governing Board public hearing, and prior to the August 31 deadline.

2. **The APCO shall release the draft annual demonstration report to the public and present it to the District Governing Board prior to submittal to ARB and EPA for concurrence.**
   The Draft Annual Demonstration Report was released to the public for review and comment on Tuesday, August 15, 2014. The public comment period ended at 5:00 PM on Sunday, August 31, 2014. Comments were received and addressed accordingly. The public had an additional opportunity to comment on the draft report at the August 21, 2014 Governing Board public hearing when it will be presented to the Governing Board.

3. **Previously submitted annual demonstration reports shall be made available on the District's website.**
   Previous versions of the Annual Demonstration Report, the Rule and the Manual of Procedures are available on the District's website.

Recordkeeping Requirements

Section 6.0 of Rule 9610 requires all documents created and/or used in implementing the requirements of Section 4.0 shall be kept and maintained as required by the applicable incentive program guidelines. Consistent with the California Public Records Act and other related requirements, such records shall be made available for public review. The public may request records through the District's Public Records Release Request, available on the District website at: http://www.valleyair.org/General_info/public_records_release_request.htm. However, the records related to implementation of the USDA NRCS Combustion Systems Improvement of Mobile Engines incentive program are prohibited from mandatory disclosure pursuant to the Food, Conservation, and Energy Act of 2008 (7 U.S.C. § 8791).

III. INCENTIVE PROGRAM GUIDELINES

A. District Administered Incentive Programs

Historically, the District has successfully administered a number of incentive programs aimed at reducing emissions across a wide variety of sectors in the Valley. These programs include:

- The Heavy-Duty Engine Program:
  - Agricultural tractor/mobile equipment
  - Stationary agricultural irrigation pumps
  - On-road trucks
  - Forklifts
  - Off-road construction equipment
  - Locomotives
  - School buses
- Proposition 1B: Goods Movement Emission Reduction Program
  - On-road trucks
  - Locomotives
- Public Benefits Grant Program
  - Light-duty advanced technology vehicles
  - Alternative fuel infrastructure
  - Advanced transit and transportation
- REMOVE Program
  - Bicycle Infrastructure
  - E-mobility
  - Vanpools
  - Commuter subsidies
  - Alternative fuel vehicle mechanics training
- Drive Clean! Rebate Program
- Clean Green Yard Machine Program

More information about the above mentioned programs is available on the District website at: http://www.valleyair.org/Grant_Programs/GrantPrograms.htm. Each of these programs is effective in assisting the Valley in reaching our air quality attainment goals and the benefits of these programs are reflected in a variety of ways, including advancing new technologies, accelerating fleet turnover with the adoption of new technologies, and influencing the behavior of Valley residents towards more air-friendly practices. The majority of the emissions reduced has been achieved through extremely cost-effective heavy-duty equipment replacement, retrofit and repower projects; it is these projects that make up the bulk of the claimed emission reductions claimed in this annual demonstration report.

B. SIP-Creditable Incentive Program Guidelines

Pursuant to Section 4.1 of Rule 9610, the annual demonstration report shall contain a list of any incentive program guidelines that are being used to claim SIP credit under this rule for the first time. As this is the first annual demonstration report, all incentive program guidelines listed in this report are being used for the first time. That is to say, this is not the first time these guidelines are being used, but the first time they are being used to claim SIP credit under the administrative mechanism created by Rule 9610.

Section 3.0 of Rule 9610 provides specific requirements for the District to follow with regard to incentive program guidelines. This section of the rule identifies pre-approved guidelines, guidelines for which EPA will need to make determinations on before granting credit in the SIP, and a requirement for maintaining a website whereby the incentive program guidelines are publicly available.

Section 3.1 of Rule 9610 identifies pre-approved incentive program guidelines from which the District can claim credit for incentive-based emission reductions. These guidelines include:

- ARB Carl Moyer Memorial Air Quality Standards Attainment Program (Carl Moyer Program) Guidelines for incentive projects funded by either the Carl Moyer Program or non Carl Moyer funding sources, for the project types listed in table 4.

Table 4: Carl Moyer Program Project Types by Component

		2005 Guidelines (approved 11/17/2005)	2008 Guidelines (approved 3/27/2008)	2011 Guidelines (approved 4/28/2011)
Component	**Component Option**	**Chapter**	**Chapter**	**Chapter**
On-Road Heavy-Duty Vehicle (On-Road)	New Vehicle Purchase	1	3	4
	Repower	1	3	4
	Retrofit	1	3	4
On-Road Heavy-Duty Vehicles (On-Road)	Fleet Modernization Replacement	2	4	5
Off-Road Compression-Ignition Equipment (Off-Road)	Vehicle Replacement	n/a	7	9
	Engine Repower	5	5	7
	Engine Retrofit	5	5	7
Portable and Stationary Agricultural Sources (Ag Engine)	Repower	10	10	10
	New Purchase	10	10	10
	Engine Retrofit	10	10	10

- NRCS Conservation Practice Standard 372 - Combustion System Improvement (approved September 2010); Conservation Practice Standard 723 – Combustion System Air Emission Management (approved May 2009); NRCS General Manual, Title 450, Part 401 – Conservation Practice Standards (approved October 18, 2009); NRCS General Manual, Title 450, Part 407 – Documentation, Certification, and Spot Checking (approved October 17, 2009); Conservation Practice Standard 372 Specification (approved September 2010); NRCS Interim Conservation Practice Standard 723 – Combustion System Air Emission management (approved May 2009); and associated NRCS Program Combustion System Improvement of Mobile Engines Guidelines for incentive projects funded by EQIP funds and accompanying calculation, emission factors, and destruction certification worksheets.

- ARB Proposition 1B Goods Movement Emission Reduction Program (Proposition 1B) Guidelines for Heavy-Duty Diesel Trucks, for the project types listed in table 5.

Table 5: Proposition 1B Program Project Types by Component

		2008 Guidelines (approved 02/28/2008)	2010 Guidelines (approved 03/25/2010)	2013 Guidelines (approved 01/25/2013)
Component	**Component Option**	**Appendix**	**Appendix**	**Appendix**
On-Road Prop 1B	Repower	A	A	A
	Replacement (Vehicle Replacement)	A	A	A
	PM retrofit	A	A	A
	PM + NOx Retrofit	A	A	A

The summaries of SIP-creditable incentive-based emission reductions claimed under Section 3.1 of Rule 9610 are included in Section VII of this annual demonstration report, and the detailed information for each project is presented in the Annual Demonstration Report Data Sheet that accompanies this report. To identify the specific guideline reference applicable to an individual project in the data sheet, reference the "Applicable Guideline", "Component" and "Component Option" fields from the data sheet to the corresponding list of pre-approved guidelines identified in the tables in section III (B) of this report.

Section 3.2 of Rule 9610 allows the District to quantify emission reductions under the rule in accordance with incentive program guidelines not specifically identified in Section 3.1, provided the District submits to EPA a demonstration that each such incentive program guideline provides for SIP-creditable emission reductions. Incentive program guidelines subject to Section 3.2 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 also allows for SIP-credit for case-by-case determinations under the Carl Moyer Program Guidelines if such determination is reviewed through a public process and

submitted to EPA for approval into the SIP. Any case-by-case determinations that have followed the above mentioned process during the report period will be identified in Section VII of this report.

The Annual Demonstration Report employs Section 3.2 of the rule by claiming SIP credit for incentive-based emission reductions from the ARB Carl Moyer Program Guidelines (2005, 2008, 2011) for locomotive alternative technology switchers and new electric forklift purchases. The summaries of these SIP-creditable incentive-based emission reductions claimed under Section 3.2 of Rule 9610 are included in Section VI of this annual demonstration report and the detailed information for each project is presented in the Annual Demonstration Report Data Sheet that accompanies this report.

The following discussion demonstrates that each such incentive program guideline provides for SIP-creditable emission reductions.

Locomotive Repower

Projects funded with the 2008 and 2011 Carl Moyer Program Guidelines followed all required steps to ensure SIP-creditability criteria were met as follows:

Surplus – There are currently no federal, state, or local rules or regulations pertaining to the emissions of locomotives in the state of California. Therefore, all incentive-based emission reductions are surplus.

Quantifiable – The Carl Moyer Guidelines provide calculation methodologies and emission factors for locomotive projects. These methodologies have been reviewed and adopted through a public process. All locomotive projects in this Annual Demonstration Report were quantified using these SIP-creditable calculation methodologies, as referenced on the Manual of Procedures website.

Enforceable – The District performed inspections pursuant to Carl Moyer Guideline requirements and satisfied enforceability requirements under Section 4.0 of Rule 9610. These inspections verified contractual requirements were followed thus ensuring projected emission reductions were achieved. These projects included legally binding contracts between the grantee and the District that identified the party or parties responsible for ensuring that the emission reductions were achieved. These contracts also obligated the grantee to provide all records needed to demonstrate the emissions reduced.

Permanent – Per contractual requirements, the cleaner locomotive is required to be operated for the duration of the project life.

Purchase of New Electric Forklifts

Projects funded with the 2008 Carl Moyer Program Guidelines followed all required steps to ensure SIP-creditability criteria were met, as follows:

Surplus – The current regulation for off-road mobile equipment has an exemption for agricultural-use vehicles. The forklifts that were funded are used solely for agricultural purposes, and therefore are surplus to the state regulation.

Quantifiable – The Carl Moyer Guidelines provide calculation methodologies and emission factors for forklift projects. These methodologies have been reviewed and adopted through a public process. All forklift projects in this report were quantified using these SIP-creditable calculation methodologies. This methodology assumes the baseline equipment to be a new diesel forklift. Therefore, new purchases of electric forklifts are calculated based on the difference in emissions between a new diesel forklift and a new electric forklift.

Enforceable – The District performed inspections pursuant to Carl Moyer Guideline requirements and satisfied enforceability requirements under Section 4.0 of Rule 9610. These inspections verified contractual requirements were followed thus ensuring projected emission reductions were achieved. These projects included legally binding contracts between the grantee and the District that identified the party or parties responsible for ensuring that the emission reductions were achieved. These contracts also obligated the grantee to provide all records needed to demonstrate the emissions reduced.

Permanent – Per contractual requirements, the new electric forklift is required to be operated for the duration of the project life.

Section 3.3 of Rule 9610 requires the District to develop and maintain a Manual of Procedures that includes all incentive program guidelines used to achieve SIP-creditable emission reductions from incentive programs. The rule requires the Manual of Procedures be made publicly available on the District's website and maintained on an ongoing basis as incentive program guidelines are adopted and includes a description of how incentive program guidelines ensure that emission reductions are SIP-creditable.

Sections C through E below describe the specific incentive program guidelines identified in Rule 9610 that were used to reduce emissions and calculate the emission reductions included in this annual demonstration report. These guidelines are developed and periodically revised through a public process with opportunity for public review and commenting. In cases where more than one version of an incentive program guideline was used for a given incentive project, the specific version is identified and included within the detailed project information provided in the Annual Demonstration Report Data Sheet. Based on EPA guidance and requirements of Rule 9610, the following descriptions include details about how each incentive program guideline ensures that the EPA integrity principles (also called SIP-creditability criteria) of being surplus, quantifiable, enforceable, and permanent are fulfilled.

C. ARB Carl Moyer Memorial Air Quality Standards Attainment Program Guidelines

The Carl Moyer Program is a grant program that funds the incremental cost of cleaner-than-required engines and equipment. Adopted in 1999 by ARB, this program was created through a public process and 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.

The Carl Moyer Program has been successfully implemented through the cooperative efforts of ARB and air districts in California. As directed by the California Health and Safety Code, ARB's role is to oversee the Carl Moyer Program by managing program funds, developing and maintaining guidelines, and determining cost-effectiveness methodologies. Air districts use the Carl Moyer Program Guidelines to select, fund, and monitor projects in their jurisdiction by providing grants to public and private entities.

The Carl Moyer Program guidelines include robust administrative requirements to ensure that emission reductions are enforceable and are achieved throughout the life of a project. The District has used the Carl Moyer Program Guidelines to develop the practices that are currently in place to ensure all EPA integrity principles of Surplus, Quantifiable, Enforceable, and Permanent are met. The following is a summary of how the Carl Moyer Program Guidelines meet each SIP-creditability criterion:

Surplus

The Carl Moyer Program Guidelines ensure that projects are surplus to regulations by only allowing projects to be selected that are not required by any federal, state, or local regulation, memorandum of agreement/understanding with a regulatory agency, settlement agreement, mitigation requirement, or other legal mandate. For example, the guidelines have accounted for each adopted regulation to determine the compliance dates of any affected engines and emission benefits claimed by each regulation have been determined. Minimum project lives are established in each component to ensure that the program does not fund actions taken to comply with regulatory deadlines. The minimum project life requirement also ensures the overall cost effectiveness of the program and that the emission reductions are real for the life of the project.

In some cases, a split project life methodology is utilized to properly account for all possible emission reductions while still ensuring that the emission reductions being claimed are surplus. In the case of split project life calculations, the first calculation captures the surplus between the baseline (tier 1 or tier 2) technology and a new tier 4 for the length of time until the rule compliance deadline. The second calculation captures the surplus from tier 4 (compliance requirement baseline) to electric for the remainder of the project life. Projects that are subject to the split life calculation methodology typically have a total project life of ten (10) years.

The District has utilized a split project life for tier 1 and tier 2 diesel agricultural irrigation pumps being replaced with new electric motors. These diesel engines

are required by the District's Rule 4702 to upgrade to a tier 4 diesel engine by 12/31/2013. The project life is split between the surplus time for Rule 4702 (baseline to tier 4) and the remainder of the allowable 10 years for the reduced technology to the electric motor (tier 4 to electric).

The summary below provides more detail about how the 2011 Carl Moyer Program Guidelines ensure that the SIP-creditability integrity principle of "Surplus" is fulfilled:

- *Requirement that emission reductions generated by incentive programs are not required by other regulation*
  - (Moyer Guidelines Chapter 2, Project Criteria A, H, I, MM).
- *Protocols for quantifying maximum project life and maximum emission reductions which account for upcoming regulatory deadlines for a given source category*
  - (Moyer Guidelines Chapter 2, Project Criteria B, I and MM).
- *Assurance that baseline equipment was in use*
  - (Moyer Guidelines Chapter 3, Section Z.6(B) and AA.2.).
- *Assurance that new/upgraded equipment is not already accounted for in future-year inventories underlying a SIP attainment demonstration by natural fleet turnover, finite equipment life or incentives*
  - The definition of surplus in the Moyer guidelines requires that the emission reductions achieved are above and beyond those required under existing regulations that are incorporated into a SIP. As part of the SIP development process, ARB reviews the Moyer project mix to ensure that the amount of emission reductions credited to the program are not included in the future year inventories specific to each individual attainment demonstration.
- *Procedures that ensure that old equipment was used in the geographic area of interest*
  - (Moyer Guidelines, Chapter 2, Section S and Chapter 3, Section Z.6.(B)).

Quantifiable

The District evaluates the potential emission reductions that would be achieved by replacing the old equipment with the new equipment using the established calculation methodologies and emissions factors in the program guidelines. The calculation methodology, including calculation formulas, assumptions, emission factors and sample calculations are part of the Carl Moyer Program Guidelines and have been approved through a public process. To ensure that real, quantifiable emission reductions are achieved over the life of a project, the program guidelines require that emission control technologies be certified or verified by ARB (certification or verification by the EPA or International Maritime Organization may be allowed for some source categories for which ARB does not have a certification or verification program). The summary below provides more detail about how the 2011 Carl Moyer Program Guidelines ensure that the SIP-creditability integrity principle of "Quantifiable" is fulfilled:

- *Emissions data needed to calculate emission reductions must be publicly available, current, and accurate. This should include appropriate emission factors, load factors, and other conversion factors.*
    - Moyer Guidelines, Appendix D (Publicly Available) and Chapter 1, Section E.7 (Allows ARB Executive Officer to modify the Guidelines under a public process, to keep them effective and up-to-date.)
- *Guidelines include necessary formulas and instructions to calculate emission reductions based on above data, and explicit instructions to ensure appropriate data are used in calculations*
    - Moyer Guidelines, Appendix C (contains formulas and instructions)
    - Moyer Guidelines, Supplemental document, "Sample Calculations" (contains formulas and instructions)
    - Moyer Guidelines, Appendix C, Section B.5, and Supplemental document, "Sample Calculations" (contains explicit instructions regarding inputs)
- *Requirement to provide activity data sufficient to determine actual emission reductions*
    - Moyer Guidelines, Chapter 3, Section Z.6.(B)
- *Requirement to demonstrate the percentage of emission reductions that occur in the geographic area of interest, and that emission reductions are therefore SIP creditable*
    - Moyer Guidelines, Section S.
    - Moyer Guidelines, Section Z.6.(B)
- *Requirement to periodically audit completed projects to verify emission reduction projections are fulfilled*
    - Moyer Guidelines Chapter 2, Sections Z.10.
    - Moyer Guidelines Chapter 3, Sections EE.

Enforceable

Emission reductions and other required actions are enforceable if: they are independently verifiable; program violations and those liable are defined; information needed to determine emission reductions is available to the public; and they are practicably enforceable in accordance with other EPA guidance on practicable enforceability. The summary below provides more detail about how the 2011 Carl Moyer Program Guidelines ensure that the SIP-creditability integrity principle of "Enforceable" is fulfilled:

- *Require Grantees to provide all necessary recordkeeping and reporting needed to verify emission reductions*
    - Moyer Guidelines, Chapter 3, Section Z.9 and DD
- *Require inspections to ensure incentive program information is consistent with actual operating equipment*
    - Moyer Guidelines Chapter 3, Sections AA and BB.

- *Identify liable parties and liability associated with contract noncompliance*
    - Moyer Guidelines Chapter 3, Section Z.11.

Permanent

To ensure that the SIP-creditable emission reductions are permanent, actions such as pre-inspections and post-inspections of the new equipment and verification that the baseline equipment has been destroyed through the required process as described in the program guidelines are performed. The summary below provides more detail about how the 2011 Carl Moyer Program Guidelines ensure that the SIP-creditability integrity principle of "Permanent" is fulfilled:

- *Data needed to determine and track location of activity*
    - Moyer Guidelines, Chapter 3, Section DD
- *Provisions for ensuring that the project was completed, including the verification of disposition of baseline equipment.*
    - Moyer Guidelines Chapter 3, Sections AA and BB

A summary of emission reductions achieved through the use of the Carl Moyer Program Guidelines is included in Section VII of this report. The complete Carl Moyer Program Guidelines can be found online at: www.arb.ca.gov/msprog/moyer/guidelines/current.htm.

D. ARB Proposition 1B: Goods Movement Emission Reduction Program Guidelines

In November 2006, California voters approved Proposition 1B authorizing $1 billion in bond funding to reduce air pollution associated with the movement of freight along California's major trade corridors. Subsequent implementing 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* (Proposition 1B Guidelines),through a public process in consultation with stakeholders, including: air districts, metropolitan planning organizations, port authorities, shipping lines, railroad companies, trucking companies, harbor craft owners, freight distributors, terminal operators, local port community advisory groups, community interest groups, and airports. The Proposition 1B Guidelines ensure that the District funds qualifying projects that achieve the following results:

- Reduce emissions and health risks;
- Incorporate simplicity and efficiency;
- Ensure cost effectiveness;
- Leverage other funding sources; and
- Provide transparency and accountability.

ARB, under direction from Executive Order S-02-07, established transparency and accountability measures for administering the bond funding. ARB has made all program materials including, but not limited to; guidelines, Board Resolutions, Notice of Funding Availability, summary tables, recommendations for funding, materials from public workshops, and completed applications submitted by local and state agencies available on their website.

Through the Proposition 1B Program, the District provides incentive funds to reduce emissions from eligible heavy-duty trucks traveling through California's major trade corridors and locomotives with the following funding options:

- Retrofit of existing vehicles
- Repower of existing vehicles
- Replace an older vehicle with a newer, cleaner vehicle
- A tiered truck transaction, which involves retrofitting and replacing two different vehicles.

The program is designed to supplement ARB's diesel regulations by funding early compliance or providing extra emission reductions beyond those required by current rules.

The guidelines include robust administrative requirements to ensure that emission reductions are enforceable and are achieved throughout the life of a project. The District has used the Proposition 1B Guidelines to develop the practices that are currently in place to ensure all EPA integrity principles are met. The following is a summary of how the Proposition 1B Guidelines meet each SIP-creditability criterion:

Surplus

The Proposition 1B program supplements ARB's diesel regulations by funding early compliance or providing extra emission reductions beyond those required by current rules. The program guidelines require that the District ensure all trucks being considered to receive funding have had ARB verify compliance with the state's diesel regulations and further require that any trucks under contract with the District be noted as such in the state's online regulation reporting database. This ensures that the new truck will not be used towards compliance during the project life ensuring that the emission reductions are surplus. Chapter 6 Section E discusses the requirements that fleets remain in compliance with the Truck and Bus Regulation and that program funded equipment cannot be used towards compliance with the regulation.

Quantifiable

The District evaluates the potential reductions that would be achieved by replacing the old equipment with the new equipment using the Project Benefits Calculator created by ARB. The calculator is available to the public on ARB's website at http://www.arb.ca.gov/bonds/gmbond/gmbond.htm and is updated by ARB on a

regular basis. Chapter 2 Section C discusses Proposition 1B program emission reduction calculations.

Enforceable

The District has created enforceable contracts, based on requirements in the Proposition 1B Program Guidelines, which are signed by both District management and the Grantee to ensure that projects are fully accomplished and the integrity principles are met. The legally binding contracts include, but are not limited to, usage reporting requirements for the Grantee, operating location requirements for the new vehicle, the destruction requirements of the baseline equipment/engine, and an allowance for the District to conduct an audit of the project at any time during the project life. Appendix A of Proposition 1B Program guidelines details contract requirements for truck projects.

Permanent

To ensure that the SIP-creditable emission reductions are permanent, actions such as post-inspections of the new equipment and verification that the baseline equipment has been destroyed through the required process as described in the program guidelines are performed. Chapter 4 Section A of the Proposition 1B program discusses scrap and post inspection requirements.

A summary of emission reductions achieved through the use of the Proposition 1B Program Guidelines is included in Section VII of this report. The complete Proposition 1B Program Guidelines can be found online at: http://www.arb.ca.gov/bonds/gmbond/gmbond.htm.

E. USDA NRCS Combustion Systems Improvement of Mobile Engines Incentive Program Guidelines

Under the Food Conservation and Energy Act of 2008, the USDA Secretary provides eligible producers with program support to address serious air quality concerns from agricultural operations and help meet regulatory requirements through the Environmental Quality Incentives Program (EQIP). The National Air Quality Initiative (NAQI, once referred to as "CIG-b") is a voluntary incentive program with the primary goal to achieve and maintain the health-based National Ambient Air Quality Standards (NAAQS) within designated non-attainment areas of California. Financial assistance is targeted to counties that have been identified as having significant air quality resource concerns by being designated as non-attainment for Ozone and/or Particulate Matter (PM10 / PM2.5). These areas experience air pollution levels that persistently exceed the NAAQS established by the CAA.
http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/programs/financial/eqip/?cid=stelprdb1247012
Given its experience in running similar incentive programs, the District provided assistance to NRCS in developing this new program. Through this program, NRCS provides incentive funds to assist farmers in replacing diesel powered agricultural equipment with the goal of ensuring the resulting emission reductions meet the SIP-creditability criteria of being surplus, quantifiable, enforceable, and permanent. Since

2009, the NRCS program, in combination with the District's program, has provided over $129 million in incentives for agricultural equipment replacement, with significant continued investment currently ongoing. 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. The NRCS has specific expertise regarding agricultural practices and operations and works closely with agricultural stakeholders in reviewing applications for eligibility. 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 PM2.5, PM10, and/or 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 NOx, 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.

NRCS has created robust administrative requirements based on those in the Carl Moyer Program Guidelines to ensure that emission reductions are enforceable, are achieved throughout the life of a project, and ensure all EPA integrity principles are met. These requirements are contained in Conservation Practice Standard (CPS) 372 – Combustion System Improvement and associated specifications and procedures. The following is a summary of how the NRCS Guidelines meet each SIP-creditability criterion:

Surplus

Under the NAQI, page 3 of the CA-NRCS program guidelines specifies that SIP creditable emission reductions are "achieved from contracts or parts of contracts funded under the air quality initiative [that] are not required by any federal, state, or local regulation, settlement agreement, mitigation requirement, or other legal mandate." A rule or regulation does not currently exist for off-road mobile agricultural equipment, so the emission reductions resulting from replacing existing mobile off-road agricultural engines funded under the NAQI per CPS 372-Combustion Systems Improvement are surplus. The FY 2013 National Air Quality Initiative Programs Description is posted on-line at: ftp://ftp-fc.sc.egov.usda.gov/CA/programs/EQIP/2013/2013_EQIP_Air_Quality_Initiative_ProgDesc.pdf.

The 2012 CA-NRCS program guidelines are posted on-line at: ftp://ftp-fc.sc.egov.usda.gov/CA/programs/AQI/2012_Combustion_Systems_Improvement_Policy_and_Procedures.pdf

Quantifiable

The District provided technical assistance to CA-NRCS in developing their calculation methodologies. The methodologies from the Carl Moyer Program are the basis for components included in CPS-372 and its supporting documents for the NAQI, including the CA-NRCS program guidelines. The District provided technical assistance to CA-NRCS in developing their calculation methodologies, which are consistent with the Carl Moyer Program. The NRCS Field Office Technical Guide places a ten-year lifespan for projects implemented under CPS 372 – Combustion System Improvement, which is also consistent with the Carl Moyer program. A conservation practice lifespan is the minimum time (in years) the implemented practice is expected to be fully functional for its intended purpose (NRCS General Manual, Title 450, Part 401.15) http://directives.sc.egov.usda.gov/viewerFS.aspx?hid=19430. A list of California NRCS practice standard life-spans are posted on-line at: http://efotg.sc.egov.usda.gov/references/public/CA/List_of_Practices_Lifespans_2013-11_CA_Alpha.xlsx.

The emission reductions for each project, including projects with multiple old units for one new unit, are calculated using the methodologies outlined in the Carl Moyer Guidelines. All equipment engines are cross-referenced against an ARB executive order that verifies the emission of every equipment engine. The NRCS calculation worksheets and emission factors are posted on-line at: ftp://ftp-fc.sc.egov.usda.gov/CA/programs/EQIP/2013/2013_EQIP_Air_Quality_Initiative_Attachments.pdf

Enforceable

The NRCS inspects equipment in proposals prior to contract development to verify the existing mobile off-road agricultural equipment is operational per CPS-372 specifications. Destruction of existing equipment is certified by the disposal operator and participant and date-stamped photos are provided. The certification worksheet is posted on-line at: ftp://ftp-fc.sc.egov.usda.gov/CA/programs/EQIP/2013/2013_EQIP_Air_Quality_Initiative_Attachments.pdf.

On an annual basis NRCS reviews at least 5% of all active projects. From these project reviews NRCS verifies that the new equipment is still operational. http://directives.sc.egov.usda.gov/RollupViewer.aspx?hid=25728.

Per Subpart C, 512.22, participants have control of the land for the length of the proposed contract through deed, lease, or other written authorization. If the applicant does not own the land, the landowner must give written consent to install, operate, and maintain the practice through the lifespan of the practice. This is conducted through a partnership with the USDA Farm Service Agency, who is responsible for program eligibility support.

Subpart F covers Contract Administration and provides for recovering liquidated damages for certain deviations to a contract. Handling contract violations is addressed in Subpart H where violations of contract terms must be corrected by the participant within a reasonable period of time to comply. If the violation continues, the contract may be terminated and future program participation deferred.

Permanent

NRCS eligibility is based on the county that the tractor resides in; in this case, the tractor has to reside within one of the eight counties of the San Joaquin Valley. Under the NAQI, the NRCS prioritizes applications based on a county's non-attainment designation within California. Applications received from attainment areas are not eligible. Currently, only the emission reductions originating from within the eight San Joaquin Valley counties are seeking SIP credit under this proposal. The destruction of the existing mobile off-road engines and equipment are verified per CPS 372 specifications, posted on-line at: http://efotg.sc.egov.usda.gov/references/public/CA/372-spec-09-10.doc. Destruction certification worksheets are posted on-line at: ftp://ftp-fc.sc.egov.usda.gov/CA/programs/EQIP/2013/2013_EQIP_Air_Quality_Initiative_Attachments.pdf. The NRCS also has a stipulation that the tractor has to be tied to the land where it is in use. This requires that the tractor be used 100% of the time in the San Joaquin Valley. Under the NAQI, NRCS staff verifies by site visit the operational condition of the existing mobile off-road agricultural equipment. Destruction of the existing equipment and emissions certification verifications are performed to determine contract compliance.

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 under the Food, Conservation, and Energy Act of 2008 (7 U.S.C. § 8791). 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. However, in March 2014, NRCS, EPA, the District and ARB signed the "Addendum to the December 2010 Statement of Principles Regarding the Approach to State Implementation Plan Creditability of Agricultural Equipment Replacement Incentive Programs Implemented by the USDA NRCS and the San Joaquin Valley Air Pollution Control District" (Addendum). The purpose of this Addendum is to identify information that NRCS will make available to EPA and the District, consistent with NRCS's statutory responsibilities under Section 1619 of the Farm Bill, to ensure that both EPA and the District can carry out their respective implementation responsibilities under the CAA and Rule 9610.

A summary of emission reductions achieved through the use of the NRCS Combustion System Improvement of Mobile Engines incentive program guidelines is included in Section VII of this report. The NRCS Combustion System Improvement of Mobile Engines incentive program can be found online at:

- Conservation Practice Standard 372: http://efotg.sc.egov.usda.gov/references/public/CA/372-std-09-2010.pdf
- Conservation Practice Standard 372 Specification: http://efotg.sc.egov.usda.gov/references/public/CA/372B-OM-ca-8-13.doc
- Procedures: ftp://ftp-fc.sc.egov.usda.gov/CA/programs/AQI/2012_Combustion_Systems_Improvement_Policy_and_Procedures.pdf

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IV. RELEVANT SIP COMMITMENTS

Through Rule 9610, the District may rely on projections of SIP-creditable incentive-based emission reductions to satisfy federal CAA requirements, including the demonstration of attainment, Reasonable Further Progress, Rate of Progress, contingency measures, and/or black box reductions (Section 182(e)(5) of the CAA). For such SIP commitments, the District identifies specific amounts of SIP-creditable emission reductions by year in the relevant SIP. This annual demonstration report then identifies the SIP commitments included in District adopted SIPs (by year, pollutant, and magnitude) which the District has satisfied, in whole or in part, through SIP-creditable emission reductions. This annual demonstration report also identifies and quantifies any SIP commitment shortfalls and remedies for addressing those shortfalls.

A. SIP Commitments

The following table is a summary of SIP commitments to reduce emissions for which the District intends to claim credit for using District Rule 9610 as the administrative mechanism. The magnitude of the emission reductions are expressed in tons per day (tpd).

Table 6: Relevant Commitments in District-adopted SIPs

District-adopted SIP	Adoption date	Requirement	Year	Pollutant	Magnitude
2008 PM2.5 Plan	6/20/13	Contingency[3]	2015	NOx PM2.5	4.15 tpd 0.10 tpd
2007 Ozone Plan	9/27/07	ARB commitment to reduce ag equipment emissions[4]	2017	NOx	5-10 tpd
2013 Plan for the Revoked 1-Hour Ozone Standard	9/19/13	Contingency[5]	2018	NOx	3.5 tpd
2007 Ozone Plan	4/30/07	"Black Box"	2023[6]	NOx	TBD

***2008 PM2.5 Plan* (Contingency Quantification, 2015):** The District meets its *2008 PM2.5 Plan* commitment to quantify an adequate amount of contingency emissions reductions, including SIP-creditable emissions reductions from incentive programs quantified in this report. On May 22, 2014, EPA approved a SIP revision to address CAA nonattainment area contingency measure requirements for the 1997 annual and 24-hour

[3] SJVUAPCD, *Quantification of Contingency Reductions for the 2008 PM2.5 Plan* (June 20, 2013). Retrieved July 2014 at http://www.valleyair.org/Board_meetings/GB/agenda_minutes/Agenda/2013/June/items/11.pdf

[4] ARB, 2007 State Strategy Attachment B, pages 16-17 (September 27, 2007). Retrieved May 2013 at http://www.arb.ca.gov/planning/sip/2007sip/07-28_attachment_b.pdf

[5] SJVUAPCD, 2013 Plan for the Revoked 1-Hour Ozone Standard (September 19, 2013), Chapter 4, page 4-9. Retrieved July 2014 at http://www.valleyair.org/Air_Quality_Plans/Ozone-OneHourPlan-2013.htm

[6] Per CAA §182(e)(5), the District is required to, in 2019, identify specific control measures that will achieve the emissions reductions necessary to fulfill the "black box" identified in Chapter 11, page 11-1. http://www.valleyair.org/Air_Quality_Plans/docs/AQ_Ozone_2007_Adopted/16%20Chapter%2011%20April%202007.pdf

fine particulate matter (PM2.5) NAAQS in the San Joaquin Valley.[7] SIP Creditable incentive-based emission reductions accounted for by EPA in this proposed approval include on-road vehicle replacement projects that have been funded through the Prop 1B program and agricultural off-road vehicle replacement projects funded through the Carl Moyer Program.

***2007 Ozone Plan* (Agricultural Equipment, 2017):** The 2007 San Joaquin Valley 8-Hour Ozone SIP, approved by EPA, contained a commitment by the ARB 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 Valley by utilizing the cleanest available technologies. Specifically, the approved SIP includes a goal to achieve emissions reductions of 5 to 10 tons per day of NOx from mobile agricultural equipment in the Valley by 2017 to accelerate progress toward attainment of the ozone standard. The attainment deadline is 2023.

Beginning in 2009, the District and NRCS, in partnership with agricultural stakeholders, launched incentive programs aimed at reducing emissions from agricultural equipment. These programs have been well-funded and have achieved significant emission reductions since 2009. As documented in this report, projects implemented to date will achieve 6.68 tpd of NOx reductions in 2017 (see table 8), making significant progress, and in fact, already exceeding the minimum of 5tpd NOx commitment in the *2007 Ozone Plan*. While included in this report, ARB plans on reporting on overall progress made relative to this SIP commitment in the 3rd quarter of 2013 (see below description of ARB's ag equipment effort, and http://www.arb.ca.gov/ag/agtractor/agtractor.htm for further information).

In addition to these already implemented projects, the District has already executed an additional $12.6 million in contracts for 370 units, projecting to achieve an additional 0.56 tons of summertime NOx/day in 2017. Additionally, NRCS has also executed approximately $24 million in contracts for over 480 units, projecting to achieve an additional 1.92 tons of summertime NOx/day. Combined with the reductions documented in this report, these projects are **expected to achieve 10.74 tpd of NOx reductions in 2017**. The District and NRCS are continuing to invest significant additional funding to replace agricultural equipment, and the total emissions reductions achieved towards this commitment is continued to grow substantially in the next several years. This progress will be documented in future annual demonstration reports.

The agricultural equipment incentive-based emission reductions documented in this report have been summer-adjusted to allow for comparison with the *2007 Ozone Plan* commitment (based on summer ozone season), using the seasonal emissions inventory fractions included in the plan's emissions inventory as follows:

[7] EPA, Approval and Promulgation of Implementation Plans; California; San Joaquin Valley; Contingency Measures for the 1997 PM2.5 Standards, 79 Fed. Reg. 99, pp. 29327 - 29351. (2014, May 22). (to be codified at 40 CFR Part 52). Retrieved July 2014 at http://www.gpo.gov/fdsys/pkg/FR-2014-05-22/pdf/2014-11681.pdf

Table 7: 2007 Ozone Plan Agricultural Equipment Emissions Inventory Seasonal Fraction

Season	Seasonal Fraction
Winter	0.391
Summer	0.609

ARB Rulemaking: ARB's Regulation for State Implementation Plan Credit from Mobile Agricultural Equipment in the Valley was adopted by their Board in October 2013. The regulation provides a mechanism to ensure that the agriculture industry's voluntary participation in incentive programs in the Valley is recognized by the EPA. To meet EPA requirements, the emission reductions must be surplus, quantifiable, enforceable, and permanent. ARB's regulation defines 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.

***2013 Plan for the Revoked 1-Hour Ozone Standard*:** The District adopted this plan in September 2013 and included a commitment for 3.5 tpd of NOx reductions from SIP-creditable incentives in 2018 to satisfy part of the requirement of attainment year contingency reductions.

***2007 Ozone Plan* ("Black Box" 2023):** This commitment will be accounted for in future annual demonstration reports, since these reductions are necessary to be achieved in 2023.

***2012 PM2.5* Plan (Contingency Quantification, 2020)[8]:** The *2013 Annual Demonstration Report* included a commitment from the *2012 PM2.5 Plan* for 1.9 tpd of NOx reductions for contingency in 2020. However, the attainment year contingency measure commitment from this plan no longer applies.

Subsequent to the District's adoption of that plan, the DC Circuit court ruled that EPA should have been implementing the PM2.5 NAAQS under CAA subpart 4 instead of subpart 1; EPA then classified all nonattainment areas as moderate in June 2014[9]. The District is submitting documentation to EPA requesting reclassification as a serious nonattainment area through a demonstration that attainment by the moderate attainment deadline of 2015 is impracticable. After EPA reclassifies the Valley as serious, the District would then compile a new attainment plan for the 2006 PM2.5 standard to establish an attainment deadline within subpart 4, and to meet other requirements for serious nonattainment areas under subpart 4. As part of this new plan, the District will

[8] SJVUAPCD, 2012 PM2.5 Plan (December 20, 2012). Retrieved May 2013 at http://www.valleyair.org/Workshops/postings/2012/12-20-12PM25/FinalVersion/09%20Chapter%209%20RACM%20RFP%20Contingency.pdf

[9] EPA. 79 Fed. Reg. 105, pp. 31566-31782. *Identification of Nonattainment Classification and Deadlines for Submission of State Implementation Plan Provisions for the 1997 Fine Particle (PM2.5) National Ambient Air Quality Standard (NAAQS) and 2006 PM2.5 NAAQS,* codified at 40 CFR Chapter 1. Retrieved 7/21/2014 from http://www.gpo.gov/fdsys/pkg/FR-2014-06-02/pdf/2014-10395.pdf.

have to demonstrate sufficient contingency measures for its serious attainment year, and may commit to Rule 9610 Reductions to satisfy part of that requirement.

B. Progress/Achievement of SIP Commitments

Table 8 below provides a summary of progress made towards meeting the 2008 PM2.35 Plan SIP commitments approved by EPA. The projects and associated emissions reductions identified in Appendices A and B of EPA's, "Technical Support Document for EPA's Notice of Proposed Rulemaking for the California State Implementation Plan San Joaquin Valley Unified Air Pollution Control District's Rule 9610, State Implementation Plan Credit for Emission Reductions Generated through Incentive Programs," (TSD Project List) made available on May 19, 2014 and incorporated by reference, and claimed below for 2015 SIP commitments for the 2008 PM2.5 Plan, have been analyzed and verified as being current and active projects with no contractual violations, as documented by the District's monitoring activities described in section 5 of this report. The TSD Project List is available at the District's website at www.valleyair.org. Based on usage surveys received, at the time of this report, these agricultural off-road vehicle replacement projects were reporting an average usage at 96% of the contracted amount and the on-road vehicle replacement projects were reporting an average usage at 101% of their contracted amounts. This very low rate of noncompliance does not impact the District's emission reduction estimates for the projects identified in the Project List. The emissions reductions associated with those projects are on track and the District anticipates the 4.15 tpd NOx emission reductions and the 0.110 tpd PM2.5 reductions will be achieved through 2015.

Documents related to the projects being claimed for SIP credit can be obtained through the District's Public Records Request process. All requests for copies of public records must be made in writing. Requests will be processed in the order in which they are received. A Public Records Request Form can obtain by calling the District's Public Records Coordinator at (559) 230-6000. A form is also available on the District's web page at http://www.valleyair.org/General_info/public_records_release_request.htm. Requests may be submitted by facsimile to (559) 230-6061, or by mail to Public Records Request, 1990 East Gettysburg Avenue, Fresno, CA 93726-0244, or by email to public.records.coordinator@valleyair.org. A complete listing of instructions on how to obtain documents can be found at http://www.valleyair.org/General_info/pubdocs/PRRFormInstructions09-17-07.pdf

Table 8: Summary of Progress Made towards EPA Approved SIP Commitments

SIP Commitment	Incentive Program	Reductions (tpd)
2008 PM2.5 Plan: 4.15 tpd of NOx in 2015 0.10 tpd of PM2.5 in 2015	*All data for NOx, 2015. See Section II for more information.*	
	Agricultural Off-road vehicle replacement projects funded through "The Carl Moyer Program Guidelines," approved April 28, 2011, Chapter 9	1.33 tpd NOx 0.06 tpd PM2.5
	On-road vehicle replacement projects funded through "Proposition 1B: Goods Movement Emission Reduction Program, Final Guidelines for Implementation," adopted February 28, 2008, Appendix A, Vehicle Replacements and "Proposition 1B: Goods Movement Emission Reduction Program, Final 2010 Guidelines for Implementation," adopted March 25, 2010, Appendix A, Vehicle Replacements	3.78 tpd NOx 0.15 tpd PM2.5
	TOTAL (in 2015)	5.11 tpd NOx 0.21 tpd PM2.5
	Commitment met? **YES**	

Table 9 provides a summary of progress made towards SIP commitments that are under review and may be a focus in future reports at which time approval from EPA has been obtained

Table 9: Summary of Progress Made Towards Future SIP Commitments

SIP Commitment	Incentive Program	Reductions (tpd)
2007 Ozone Plan: 5-10 tpd of NOx from ag equipment in 2017	*All data for NOx, 2017. See Section II for more information.*	
	District Ag Equipment Replacement Program (Moyer)	2.71*
	NRCS Combustion System Improvement	5.55*
	TOTAL	8.26*
	Percentage of commitment met to date (Remaining reductions to be demonstrated in future annual reports)	165%
	Commitment met? **YES**	
2013 Plan for the Revoked 1-hour Ozone Standard: 3.5 tpd of NOx in 2018	Agricultural Off-road vehicle replacement and agricultural irrigation pump projects funded through the Carl Moyer Program	3.5** tpd NOx
	Commitment met? **YES**	
2007 Ozone Plan Black Box	To be demonstrated in future annual reports (by 2019), since these reductions are for 2023	

*Adjusted for summer-time emissions inventory, *2007 Ozone Plan*
***Adjusted for summer-time emissions inventory*

SIP Commitment Shortfalls

There are no shortfalls at this time; therefore, there are no remedy actions to be taken.

V. MONITORING AND ENFORCEMENT ACTIVITIES

Pursuant to Section 4.6 of Rule 9610 this annual demonstration report includes a summary of monitoring and enforcement activities that were conducted during the reporting period from 01/01/2009 – 05/10/2014. Monitoring is performed on all projects in the form of pre-inspections prior to contract, post-inspections prior to payment and annual usage surveys filled out by the grantee for the life of the project.

Inspections are performed by District staff and include visual verification and photographically document equipment information such as but not limited to:

- Make, model, and model year of the engine and/or vehicle or equipment,
- Vehicle, equipment, and/or engine identification and serial numbers,
- Operational condition of vehicle, equipment, and engine

The District reviews all inspection information to ensure that the submitted information is true and accurate prior to contracting a new project and prior to payment of reimbursement requests from grantees. The table below illustrates the number of pre-inspection and post-inspection that were conducted during the reporting period.

Table 10: Incentive Program Project Inspections

Year	Pre-Inspections	Post-Inspections
2009	924	147
2010	790	887
2011	1144	966
2012	2298	1372
2013	2184	1533
2014	984	362

District incentive project contractual agreements specify that Grantees must provide data to the District on an annual basis for the duration of their contract period. The required data includes usage data (mileage, hours of operation, percent utilization within the District, etc). The usage data is analyzed by the District to ensure that the incentive projects are achieving the projected emission reductions. The table below illustrates the quantity of usage report surveys distributed from the District to Grantees and the quantity of Grantee completed usage report surveys returned to the District through May 10, 2014.

Table 11: Incentive Program Annual Usage Reports

Year	Usage Report Surveys Distributed to Grantees	Completed Usage Report Surveys Returned to the District
2011	3245	2948
2012	3426	3668
2013	4591	4033
2014	1596	1620

The District maintains a robust process of collecting and analyzing annual usage data for incentive projects from grantees (e.g. – annual mileage, fuel usage, hours of operation, etc.) This information is collected for the duration of the project life of each individual project. Annual usage of individual projects can vary due to a variety of factors. For example, current drought conditions in the Valley significantly affect the use of agricultural irrigation pump engines causing usage to vary due to increased or decreased pumping needs, crop changes, surface water delivery, etc. Since annual variations can change over the course of the project life, any shortages/overages from the projected use on a yearly basis will likely be resolved when usage is quantified at the end of the project life. The District closely monitors and analyzes annual usage for each project over their respective project lives to ensure that the projects are achieving their expected overall usage and associated emission reductions. Annual usage reports are distributed to Grantees and received from Grantees on a daily basis throughout the year. Because of the variability in the number of annual reports distributed and received during the reporting period, the number of reports distributed and received will differ. For Example, a number of annual reports distributed towards the end of the 2014 reporting period were not received back by the District by the cut-off date for this report. These annual reports will be accounted for in the 2015 Annual Demonstration Report. To date, the overall annual usage associated with the project categories included in this report are performing as expected, meeting approximately 90% of their claimed annual usage. The District will continue to monitor annual usage and make any adjustments to claimed emission reductions in the future, as necessary.

A. Monitoring and Enforcement Activities Related to Projects included on the TSD Project List

Beginning in 2015, the District will conduct audits of specific projects included on the TSD Project List, including on-site inspections. These audits will include a random sample of 5% of the projects on the TSD List. Projects selected for auditing are reviewed to ensure contract terms are fulfilled; emission reduction calculations are verified and project information is confirmed against the District database for accuracy. An inspection is conducted for each project to verify that the equipment, vehicle or practice is still owned (or in practice) by the Grantee and operational in the same piece of equipment and/or intended use as was contracted. Inspections also verify engine/equipment serial numbers, operational condition and verification of functioning odometer, hour meter/usage device, fuel receipts, or electronic monitoring unit.

If deficiencies are discovered as part of an incentive project audit, the District utilizes several remedies, including:

Deficiency:	Underreporting usage on one or more annual report
Potential Remedies:	Extending project implementation phase Analyzing average usage over project implementation phase Demanding return of funds from Grantee
Deficiency:	Non-submittal of annual reports
Potential Remedies:	Demanding return of funds from Grantee Excluding Grantee from future incentive programs
Deficiency:	Grantee no longer owns equipment
Potential Remedies:	Assign contract to new equipment owner Demanding return of funds from Grantee

B. Carl Moyer Program Specific Monitoring and Enforcement Activities

Project specific audits are conducted in addition to the monitoring and enforcement activities mentioned above. The project specific audits are conducted between November and December each calendar year and cover all Carl Moyer Program projects that have been implemented and are at least one year into their contracted project life but have not concluded their contracted project life. Projects selected for audit review consist of a 5% random sample of active projects or 30 projects (whichever is less) and all projects that are at least 6 months past due with their most recent annual usage survey. These audits follow procedures set forth in the 2008 Carl Moyer Program Guidelines. Projects selected for auditing are reviewed to ensure contract terms are fulfilled; emission reduction calculations are verified and project information is confirmed against the District database for accuracy. An inspection is conducted for each project to verify that the equipment, vehicle or practice is still owned (or in practice) by the Grantee and operational in the same piece of equipment and/or intended use as was contracted. Inspections also verify engine/equipment serial numbers, operational condition and verification of functioning odometer, hour meter/usage device, fuel receipts, or electronic monitoring unit.

If deficiencies are discovered as part of an incentive project audit, the District utilizes several remedies, including:

Deficiency:	Underreporting usage on one or more annual report
Potential Remedies:	Extending project implementation phase Analyzing average usage over project implementation phase Demanding return of funds from Grantee
Deficiency:	Non-submittal of annual reports
Potential Remedies:	Demanding return of funds from Grantee Excluding Grantee from future incentive programs
Deficiency:	Grantee no longer owns equipment
Potential Remedies:	Assign contract to new equipment owner Demanding return of funds from Grantee

2010 Calendar Year Carl Moyer Project Specific Audit: This District conducted audit covered a project set of 408 projects which were at least 1 year into their project life. A 5% random sample of these projects was selected totaling 20 projects consisting primarily of diesel Ag irrigation engines being replaced with electric motors. Of these projects, 5 projects were found to be non-operational due to theft of copper wire, well failure, or closing of a business; 4 projects were found to have inaccurate reading, missing information or improper use of electric motor meters for recording hours of usage; and 2 projects were found to have inaccurate annual usage survey information. In all cases except for the closure of a business, the observed deficiencies were fully resolved with no expected impact on emissions reductions. To ensure that these deficiencies did not impact the claimed emissions reductions, projects were reevaluated based on existing circumstances at the time of the audit including recalculation of emissions reductions. For the one project that had a closure of the business, the equipment was repossessed by creditors and the business entity was no longer viable thus leaving no recourse for the District. The project was closed and emissions reductions were not claimed.

Of projects audited, discrepancies between actual and contracted usage were generally due to the cyclical nature of agricultural irrigation needs. Projects with past due annual usage surveys were monitored and if the grantee failed to submit a survey within 6 months of the due date an inspector was sent out to take a meter reading. The reported usage did not affect the original incentive amounts or expected emissions reductions. Projects were not at the end of contracted project lives; therefore grantees have one or more years to address any seasonal variation in usage and satisfy the terms of their agreements.

2011 Calendar Year Carl Moyer Project Specific Audit: This District conducted audit covered a project set of 534 projects which were at least 1 year into their project life. A 5% random sample of these projects was selected totaling 27 projects consisting primarily of diesel Ag irrigation engines being replaced with electric motors. Of these projects, 2 projects were found to have had the associated property sold. In both cases, the District took no further action against the grantee. The projects were closed and the related emissions reductions were not claimed.

Of projects audited, discrepancies between actual and contracted usage were generally due to the cyclical nature of agricultural irrigation needs. Projects with past due annual usage surveys were monitored and if the grantee failed to submit a survey within 6 months of the due date an inspector was sent out to take a meter reading. The reported usage did not affect the original incentive amounts or expected emissions reductions of the projects. Those that did have a reduction in emissions due to reduced usage still had two (2) or more years remaining of their contracted project lives; therefore grantees could run the equipment additional hours and satisfy the terms of the agreement.

One project had completed its implementation phase and had a reduction in emissions. In this case, it was determined that extending the contract term would allow the applicant to satisfy all contractual terms. The applicant signed a contract amendment extending the implementation phase. The option to extend the contract term in order to realize the projected reductions is an approved method described in the 2011 Carl Moyer Guidelines Chapter 3 section EE(4) and the 2008 Carl Moyer Guidelines Appendix H section XIV(B). The project mentioned above was originally contracted for a 5 year project life and was amended to include an extra 1 year. This project was initially reported in the 2013 Annual Demonstration Report with a 6 year project life so the claimed reductions were averaged appropriately over the full 6 years.

2012 Calendar Year Carl Moyer Project Specific Audit:

This District conducted audit covered a project set of 564 projects which were at least 1 year into their project life. A 5% random sample of these projects was selected totaling 28 projects, consisting primarily of diesel Ag irrigation engines being replaced with electric motors, and 17 projects with delinquent annual usage surveys were reviewed. Of these projects, two (2) projects were found to have had the associated property sold. In both cases, the District took no further action against the grantee. The projects were re-calculated for the amount of time in which valid annual usage surveys had been submitted and were found to still be cost effective at the reduced project life. The projects were closed and the related emissions reductions were not claimed.

Of the 45 projects reviewed, discrepancies between actual and contracted usage were generally due to the cyclical nature of agricultural irrigation needs. Projects with past due annual usage surveys were monitored and if the grantee failed to submit a survey within six (6) months of the due date an inspector was sent out to take a meter reading. The reported usage did not affect the original incentive amounts or expected emissions reductions of the projects. Those that did have a reduction in emissions due to reduced

usage still had two (2) or more years remaining of their contracted project lives; therefore grantees could run the equipment additional hours and satisfy the terms of the agreement.

One project had completed its implementation phase and had not met the contracted usage amount. The project was re-calculated at the actual usage which resulted in a reduced incentive amount. A letter was sent to the applicant requesting either repayment of the prorated amount or submittal of an Annual Usage Waiver. Currently, an Annual Usage Waiver is being processed for this project.

2013 Calendar Year Carl Moyer Project Specific Audit:

This District conducted audit covered a project set of 191 projects which were at least 1 year into their project life. A 5% random sample of these projects was selected totaling nine (9) projects, consisting primarily of off-road, mobile agricultural equipment, and six (6) projects with delinquent annual usage surveys were reviewed.

Of the 15 projects reviewed, discrepancies between actual and contracted usage were generally due to the water shortage famers have been facing. All projects with usage shortages still had eight (8) or more years remaining of their contracted project lives; therefore grantees could run the equipment additional hours and satisfy the terms of the agreement. Projects with past due annual usage surveys were monitored and if the grantee failed to submit a survey within six (6) months of the due date an inspector was sent out to take a meter reading. The reported usage did not affect the original incentive amounts or expected emissions reductions of the projects.

The following table shows projects that were determined to be in violation of their contractual terms and the enforcement actions that were taken by the District in 2013. For the current 2014 report, there are no new projects to report.

Table 12: Carl Moyer Program Projects with Contractual Violations

Project Number	Annual Demonstration Report Year	Contractual Violation	Action Taken
C-2326	2013	Did not meet minimum usage requirements	Extended contract term 1 additional year

C. Proposition 1B Program Monitoring and Enforcement Activities

In January 2007, Governor Schwarzenegger signed Executive Order S-02-07 which highlighted the importance of transparency and accountability in administering over $40 billion in bond funding approved by California voters in 2006. The Executive Order directs all State government entities responsible for expending bond proceeds to establish and document a three part accountability structure. In 2008 Department of Finance (DOF)

approved the accountability plan that ARB developed for the Proposition 1B Program which includes:

- Front-end accountability, which defines the criteria for expending bond funds as well as the outcomes that the funds are intended to achieve.
- In-progress accountability, which documents actions to ensure projects are staying within scope and cost, and requires semi-annual reports to the Department of Finance.
- Follow up accountability, which requires Program review or fiscal audits to ensure expenditures achieved the intended outcomes and were consistent with legal requirements.

The District evaluates Proposition 1B equipment projects on an ongoing basis though desk reviews of reports and equipment project updates provided by equipment owners, review of electronic monitoring unit data (as applicable), site inspections, equipment inspections, review of equipment maintenance and activity logs, and other measures deemed appropriate. In addition, equipment project contracts require that equipment owners permit the District, ARB, DOF, the Bureau of State Audits, or any authorize designees, access during normal business hours, to conduct ongoing evaluations for the purpose of monitoring the program. The following table shows projects that were determined to be in violation of their contractual terms and the enforcement actions that were taken by the District.

Table 13: Proposition 1B Program Projects with Contractual Violations

Project Number	Annual Demonstration Report Year	Contractual Violation	Action Taken
P-0346	2013	Did not purchase eligible equipment as stated in contract	District took legal action, received judgment by court for amount funded

One applicant participating in this program was paid, per contract, $50,000 for the purchase of a replacement truck. The District found that the truck was not actually purchased by the applicant and District requested the applicant to refund the incentive funding or to fulfill contractual obligations by purchasing the replacement truck. The applicant responded that he/she no longer had funds, refused to return funding or purchase suitable replacement truck. The District filed a case in court against the applicant and received a judgment for $50,000 in October of 2012. The applicant has since filed for Chapter 7 bankruptcy.

D. Combustion Systems Improvement of Mobile Engines Program Monitoring and Enforcement Activities

The USDA NRCS webpage at http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/programs/financial/eqip/?cid=nrcs144p2_063958 summarizes program eligibility. The guidelines state the following: The

Grantee has control of the land for the length of the proposed contract through deed, lease, or other written authorization. If the Grantee does not own the land, the landowner must give written consent to install, operate, and maintain the practice through the lifespan of the practice. Engine improvements are covered under Conservation Practice Standard 372 – Combustion System Improvement, posted on-line in the NRCS Field Office Technical Guide (FOTG) at: http://efotg.sc.egov.usda.gov/references/public/CA/372-std-09-2010.pdf. The CPS 372 practice life is 10 years as described on the FOTG spreadsheet at: http://efotg.sc.egov.usda.gov/references/public/CA/List_of_Practices_Lifespans_2013-11_CA_Alpha.xlsx . NRCS incentive program contracts state that if the tractor is not retained for 10-years then the Grantee will owe a pro-rated amount back to the NRCS.

With regards to the identification of project audits, usage reports, inspections, and other project monitoring activities including enforcement actions as required to Section 4.6 of Rule 9610, 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.

Under section 1619 of the Food Conservation, and Energy Act of 2008, Congress has prohibited the Secretary of the USDA and any officer or employee of the USDA from disclosing "information provided by an agricultural producer or owner of agricultural land concerning the agricultural operation, farming or conservation practices, or the land itself, in order to participate in" a USDA program. 7 U.S.C. 8791. Any contractor or cooperator of the USDA is similarly prohibited from disclosing such information. There are several exceptions to this prohibition, including that USDA may disclose information if it is transformed into a statistical or aggregate form without naming any individual owner, operator or producer or a specific data gathering site.

Taking these statutory prohibitions into account, in March 2014, NRCS, EPA, ARB, and the District signed the "Addendum to the December 2010 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" (2014 Addendum). The purpose of the 2014 Addendum is to identify information and documentation that NRCS will, consistent with its statutory responsibilities under 7 U.S.C. 8791, make publicly available to ensure that EPA and the District can carry out respective implementation responsibilities under the CAA and Rule 9610. Among other things, the 2014 Addendum states that NRCS will provide EPA and the District with an annual report that includes information regarding emission reductions achieved by individual EQIP projects and that will be certified by the NRCS California State Conservationist by March 31 of each year. Any information provided to the public specific to NRCS grant programs shall be in accordance with the 2014 Addendum.

VI. INCENTIVE PROGRAM EVALUATION

The District's incentive programs have been developed around several core principles, including cost-effectiveness, integrity, effective program administration, excellent customer service, the efficient use of District resources, fiscal transparency and public accountability. As a result of these focused efforts, the District has become a statewide leader in incentive programs with several elements of these programs being held as models for other air districts' incentive programs throughout California. In fact, the ARB routinely calls 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 School Bus Retrofit Program and administering the Carl Moyer Program on behalf of two other air districts.

The District is regularly audited by independent outside agencies including professional accountancy corporations on behalf of the federal government, ARB, the California DOF and the California Bureau of State Audits.[10] These comprehensive and rigorous independent audits focus on every aspect of our incentive programs including District programmatic and fiscal controls. These audits are conducted to ensure that the public funds to which the District has been entrusted are spent appropriately and in the manner in which they were intended. The District welcomes these opportunities to gain valuable feedback regarding implementation of these critical programs. Periodic evaluations such as these are important tools that the District uses to ensure continuous improvement in operation of these core emission reduction strategies. Towards that end, the District's incentive programs were audited by ARB and DOF in 2011, including a thorough review of several of the District's largest and most complex incentive programs totaling more than $215 million over a four year period. The audits focused on the District's implementation of the following programs:

- Carl Moyer Memorial Air Quality Standards Attainment Program,
- Air Quality Improvement Program,
- Proposition 1B: Goods Movement Emission Reduction Program,
- Proposition 1B: Lower Emission School Bus Program, and
- Federal Diesel Emission Reductions Act School Bus Program

These audits included an extensive desk review of specific projects, a thorough review of District internal programmatic and fiscal policies and procedures, and field validation of projects to ensure that the expected emission reductions were being achieved in practice. Overall, the results of the audits confirmed that the District's incentive programs are fiscally sound and are "efficiently and effectively achieving their emission reduction objectives." ARB's audit report concluded that the District is meeting or exceeding all requirements for the expenditure of funds and commended the District for administering the Proposition 1B Lower Emission School Bus Program on behalf of 18 other local air districts. However, the District is continually identifying opportunities to refine its incentive programs and improve the operational efficiency and effectiveness.

[10] The most recent audits of District administered incentive programs can be found online at http://www.arb.ca.gov/msprog/moyer/audits/2011/san_joaquin_valley.htm

VII. SUMMARY OF EMISSION REDUCTIONS AND COST EFFECTIVENESS

The SIP-creditable incentive-based emission reductions represented in this Annual Demonstration Report are from incentive projects implemented 05/14/2013 through 5/10/2014. The data also includes 62 projects that were implemented during the timeframe covered under the 2013 report but were not included in that data set. The data represented in these tables will continue to be updated through each annual demonstration report as more projects are implemented each year. Although the purpose of District Rule 9610 is to claim SIP credit for incentive-based emission reductions in the Valley through incentive programs administered by the District, NRCS, or ARB, this Annual Demonstration Report only claims SIP credit for those programs administered by the District and NRCS. Future annual demonstration reports may include programs administered by ARB. For the detailed data used to create the following summary tables, refer to the associated Annual Demonstration Report Data Sheet, available electronically with this annual demonstration report.

Program Summaries

The following table summarizes the total SIP-creditable incentive-based emission reductions generated through incentive programs, expressed in tons per year and tons per day, claimed in this Annual Demonstration Report. This summary includes SIP-creditable incentive-based emission reductions claimed through incentive program guidelines identified in Sections 3.1 and 3.2 of Rule 9610.

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Table 14: Total SIP-Creditable Incentive-Based Emission Reductions Generated Through Incentive Programs

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	**PM**	**ROG**	**NO_x**	**PM**	**ROG**	**NO_x**	**PM**	**ROG**	**NO_x**	**PM**	**ROG**
2009	3.50	0.07	0.39	0.01	0.00	0.00	1089.87	35.79	114.99	2.99	0.10	0.32
2010	25.93	0.85	3.00	0.07	0.00	0.01	2669.18	83.83	238.17	7.31	0.23	0.65
2011	28.77	0.94	3.35	0.08	0.00	0.01	4179.77	144.91	367.40	11.45	0.40	1.01
2012	89.85	3.15	11.68	0.25	0.01	0.03	5687.37	205.53	455.90	15.58	0.56	1.25
2013	726.31	29.58	76.81	1.99	0.08	0.21	6368.58	233.75	522.38	17.45	0.64	1.43
2014	640.69	27.21	71.68	1.76	0.07	0.20	5284.29	200.89	445.21	14.48	0.55	1.22
2015	629.71	26.95	71.38	1.73	0.07	0.20	4561.87	185.62	433.11	12.50	0.51	1.19
2016	625.88	26.86	71.26	1.71	0.07	0.20	3975.62	162.08	427.00	10.89	0.44	1.17
2017	614.99	26.39	70.96	1.68	0.07	0.19	3093.78	128.38	420.71	8.48	0.35	1.15
2018	544.02	23.05	70.96	1.49	0.06	0.19	2933.60	121.61	413.75	8.04	0.33	1.13
2019	540.52	22.98	70.57	1.48	0.06	0.19	2536.73	108.14	345.92	6.95	0.30	0.95
2020	506.57	21.77	66.55	1.39	0.06	0.18	1789.88	78.52	246.07	4.90	0.22	0.67
2021	503.73	21.67	66.20	1.38	0.06	0.18	985.13	44.29	135.64	2.70	0.12	0.37
2022	442.87	19.47	57.88	1.21	0.05	0.16	457.38	20.10	59.64	1.25	0.06	0.16
2023	59.65	2.72	7.89	0.16	0.01	0.02	59.65	2.72	7.89	0.16	0.01	0.02
2024	1.32	0.05	0.07	0.00	0.00	0.00	1.32	0.05	0.07	0.00	0.00	0.00

Tables 15 and 16 below are the subsets of the summary provided in Table 14. Table 15 identifies emission reductions claimed through incentive program guidelines pursuant to Section 3.1 of Rule 9610. Table 16 identifies emission reductions claimed through incentive program guidelines pursuant to Section 3.2 of Rule 9610.

Table 15: Emission Reductions Claimed through use of Incentive Program Guidelines Pursuant to Section 3.1

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG
2009	3.50	0.07	0.39	0.01	0.00	0.00	1089.87	35.79	114.99	2.99	0.10	0.32
2010	25.93	0.85	3.00	0.07	0.00	0.01	2669.18	83.83	238.17	7.31	0.23	0.65
2011	28.77	0.94	3.35	0.08	0.00	0.01	4179.77	144.91	367.40	11.45	0.40	1.01
2012	89.85	3.43	11.68	0.25	0.01	0.03	5687.37	205.80	455.90	15.58	0.56	1.25
2013	726.31	29.92	76.81	1.99	0.08	0.21	6368.58	234.09	522.38	17.45	0.64	1.43
2014	640.69	27.55	71.68	1.76	0.08	0.20	5284.29	201.23	445.21	14.48	0.55	1.22
2015	629.71	27.29	71.38	1.73	0.07	0.20	4561.87	185.96	433.11	12.50	0.51	1.19
2016	625.88	27.20	71.26	1.71	0.07	0.20	3975.62	162.42	427.00	10.89	0.44	1.17
2017	614.99	26.73	70.96	1.68	0.07	0.19	3093.78	128.72	420.71	8.48	0.35	1.15
2018	544.02	23.39	70.96	1.49	0.06	0.19	2933.60	121.95	413.75	8.04	0.33	1.13
2019	540.52	23.32	70.57	1.48	0.06	0.19	2536.73	108.48	345.92	6.95	0.30	0.95
2020	506.57	22.11	66.55	1.39	0.06	0.18	1789.88	78.87	246.07	4.90	0.22	0.67
2021	503.73	22.02	66.20	1.38	0.06	0.18	985.13	44.63	135.64	2.70	0.12	0.37
2022	442.87	19.54	57.88	1.21	0.05	0.16	457.38	20.17	59.64	1.25	0.06	0.16
2023	59.65	2.72	7.89	0.16	0.01	0.02	59.65	2.72	7.89	0.16	0.01	0.02
2024	1.32	0.05	0.07	0.00	0.00	0.00	1.32	0.05	0.07	0.00	0.00	0.00

Table 16: Emission Reductions Claimed through use of Incentive Program Guidelines Pursuant to Section 3.2.1

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.56	1.60	0.05	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.56	1.60	0.05	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	22.36	0.90	1.95	0.06	0.00	0.01
2012	0.00	0.00	0.00	0.00	0.00	0.00	82.80	3.91	8.28	0.23	0.01	0.02
2013	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2014	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2015	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2016	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2017	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2018	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2019	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2020	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2021	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2022	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2023	5.08	0.13	0.19	0.01	0.00	0.00	87.87	4.03	8.46	0.24	0.01	0.02
2024	5.08	0.13	0.19	0.01	0.00	0.00	71.16	3.48	6.86	0.19	0.01	0.02

1. Locomotive projects are contracted with a 20 year project life and Forklifts are contracted with a 10 year project life

Cost Effectiveness

The table below is a summary of the overall cost effectiveness (expressed as dollars per ton of emissions reduced), including incentive contributions, and total lifetime emission reductions, for District-administered incentive programs claimed in this annual demonstration report that utilized the Carl Moyer and Proposition 1B incentive program guidelines as identified in Sections 3.1 and 3.2 of Rule 9610. Because each incentive program guideline calculates cost effectiveness differently, the cost-effectiveness represented in Table 17 was calculated by first determining the cost effectiveness for each individual project and then averaging that number for all projects accounted for.

Table 17: Summary of District-Administered Incentive Programs

Project Type	Incentive Contribution Provided	Grantee Investment	Total Emissions Reductions (Lifetime tons)	Cost Effectiveness ($/tons)
Off-Road Mobile Equipment Replacement/Repower/Retrofit [1]	$25,907,938.30	$36,834,284.10	4073.66	$7,231.89
Agricultural Pump Repower[1]	$3,849,063.22	$5,905,779.71	536.22	$9,579.11
New Electric Agricultural Pump[1]	$83,354.59	$338,925.96	68.70	$1,362.31
Trucks Replacement[1]	$4,505,000.00	$5,193,460.39	371.51	$19,286.44
Locomotives Repower[2]	$1,445,000.00	$255,000.00	107.81	$13,403.83
New Off-Road Mobile Equipment[2,3]	$38,881.23	$143,952.75	0.69	$56,690.17

1. SIP-creditable incentive-based emission reductions claimed through incentive program guidelines identified in Section 3.1 of Rule 9610.
2. SIP-creditable incentive-based emission reductions claimed through incentive program guidelines identified in Section 3.2 of Rule 9610.
3. New Off-Road Mobile Equipment is specific to the new purchase of electric large spark ignition (LSI) forklifts.

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Carl Moyer Incentive Program Guidelines

The following set of tables summarizes the emission reductions claimed in the SIP under Rule 9610 for incentive programs administered by the District using the Carl Moyer Incentive Program Guidelines. Table 18 summarizes the total SIP-creditable incentive-based emission reductions claimed under Sections 3.1 and 3.2 of Rule 9610. Tables 19 through 21 summarize the emission reductions claimed in the SIP from incentive program guidelines identified in Section 3.1 of Rule 9610, while Table 23 summarizes emission reductions claimed in the SIP for locomotive alternative technology switcher projects and new electric forklift purchases, pursuant to Section 3.2 of the rule.

Table 18: Total Claimed SIP-Creditable Incentive-Based Emission Reductions Using the Carl Moyer Guidelines Pursuant to Section 3.1 and Section 3.2

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	**PM**	**ROG**	**NO_x**	**PM**	**ROG**	**NO_x**	**PM**	**ROG**	**NO_x**	**PM**	**ROG**
2009	0.00	0.00	0.00	0.00	0.00	0.00	865.21	22.52	96.41	2.37	0.06	0.26
2010	0.00	0.00	0.00	0.00	0.00	0.00	1179.70	31.19	124.29	3.23	0.09	0.34
2011	0.00	0.00	0.00	0.00	0.00	0.00	1568.04	46.24	170.21	4.30	0.13	0.47
2012	0.22	0.01	0.01	0.00	0.00	0.00	2105.25	69.28	236.50	5.77	0.19	0.65
2013	515.26	20.95	57.32	1.41	0.06	0.16	2626.55	90.80	295.16	7.20	0.25	0.81
2014	412.27	17.94	49.99	1.13	0.05	0.14	1616.09	65.81	215.79	4.43	0.18	0.59
2015	401.30	17.69	49.70	1.10	0.05	0.14	1465.84	62.76	203.70	4.02	0.17	0.56
2016	397.46	17.59	49.58	1.09	0.05	0.14	1401.45	61.05	197.58	3.84	0.17	0.54
2017	386.57	17.12	49.27	1.06	0.05	0.13	1338.43	58.02	191.29	3.67	0.16	0.52
2018	386.57	17.12	49.27	1.06	0.05	0.13	1288.41	55.77	184.34	3.53	0.15	0.51
2019	386.57	17.12	49.27	1.06	0.05	0.13	1041.12	47.77	136.69	2.85	0.13	0.37
2020	375.05	16.69	47.87	1.03	0.05	0.13	982.69	45.12	132.13	2.69	0.12	0.36
2021	375.05	16.69	47.87	1.03	0.05	0.13	788.11	36.58	105.36	2.16	0.10	0.29
2022	375.05	16.69	47.87	1.03	0.05	0.13	472.35	21.22	57.90	1.29	0.06	0.16
2023	47.36	2.20	5.80	0.13	0.01	0.02	130.15	6.11	14.08	0.36	0.02	0.04
2024	6.39	0.18	0.26	0.02	0.00	0.00	72.48	3.53	6.93	0.20	0.01	0.02

Table 19: SIP-Creditable Incentive-Based Emission Reductions for Off-Road Compression-Ignition Equipment Replacement Claimed Pursuant to Section 3.1

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	170.33	7.73	25.47	0.47	0.02	0.07
2012	0.00	0.00	0.00	0.00	0.00	0.00	469.96	22.81	72.08	1.29	0.06	0.20
2013	294.45	13.83	39.97	0.81	0.04	0.11	778.93	37.26	113.80	2.13	0.10	0.31
2014	326.90	15.50	44.47	0.90	0.04	0.12	811.37	38.93	118.31	2.22	0.11	0.32
2015	326.90	15.50	44.47	0.90	0.04	0.12	811.37	38.93	118.31	2.22	0.11	0.32
2016	326.90	15.50	44.47	0.90	0.04	0.12	811.37	38.93	118.31	2.22	0.11	0.32
2017	326.90	15.50	44.47	0.90	0.04	0.12	811.37	38.93	118.31	2.22	0.11	0.32
2018	326.90	15.50	44.47	0.90	0.04	0.12	811.37	38.93	118.31	2.22	0.11	0.32
2019	326.90	15.50	44.47	0.90	0.04	0.12	811.37	38.93	118.31	2.22	0.11	0.32
2020	326.90	15.50	44.47	0.90	0.04	0.12	811.37	38.93	118.31	2.22	0.11	0.32
2021	326.90	15.50	44.47	0.90	0.04	0.12	641.04	31.20	92.84	1.76	0.09	0.25
2022	326.90	15.50	44.47	0.90	0.04	0.12	341.40	16.12	46.23	0.94	0.04	0.13
2023	32.49	1.70	4.65	0.09	0.00	0.01	32.49	1.70	4.65	0.09	0.00	0.01
2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 20: SIP-Creditable Incentive-Based Emission Reductions for Off-Road Compression-Ignition Equipment Repower and Retrofit Claimed Pursuant to Section 3.1

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	57.54	1.57	6.30	0.16	0.00	0.02
2010	0.00	0.00	0.00	0.00	0.00	0.00	108.86	4.12	12.41	0.30	0.01	0.03
2011	0.00	0.00	0.00	0.00	0.00	0.00	158.88	6.38	19.36	0.44	0.02	0.05
2012	0.00	0.00	0.00	0.00	0.00	0.00	209.04	8.05	25.51	0.57	0.02	0.07
2013	14.25	0.53	1.79	0.04	0.00	0.00	227.46	8.77	27.87	0.62	0.02	0.08
2014	21.07	0.79	2.61	0.06	0.00	0.01	226.77	8.73	27.84	0.62	0.02	0.08
2015	21.07	0.79	2.61	0.06	0.00	0.01	223.87	8.56	27.45	0.61	0.02	0.08
2016	21.07	0.79	2.61	0.06	0.00	0.01	173.83	7.30	22.00	0.48	0.02	0.06
2017	21.07	0.79	2.61	0.06	0.00	0.01	126.25	4.97	16.34	0.35	0.01	0.04
2018	21.07	0.79	2.61	0.06	0.00	0.01	76.23	2.72	9.39	0.21	0.01	0.03
2019	21.07	0.79	2.61	0.06	0.00	0.01	26.49	1.04	3.24	0.07	0.00	0.01
2020	9.55	0.36	1.20	0.03	0.00	0.00	9.97	0.36	1.20	0.03	0.00	0.00
2021	9.55	0.36	1.20	0.03	0.00	0.00	9.97	0.36	1.20	0.03	0.00	0.00
2022	9.55	0.36	1.20	0.03	0.00	0.00	9.55	0.36	1.20	0.03	0.00	0.00
2023	6.82	0.26	0.82	0.02	0.00	0.00	6.82	0.26	0.82	0.02	0.00	0.00
2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 21: SIP-Creditable Incentive-Based Emission Reductions for Repower of Agricultural Pumps Engines Claimed Pursuant to Section 3.1

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	790.60	20.38	88.49	2.17	0.06	0.24
2010	0.00	0.00	0.00	0.00	0.00	0.00	1036.20	25.64	109.36	2.84	0.07	0.30
2011	0.00	0.00	0.00	0.00	0.00	0.00	1190.57	30.22	122.05	3.26	0.08	0.33
2012	0.22	0.01	0.01	0.00	0.00	0.00	1307.24	33.46	128.73	3.58	0.09	0.35
2013	194.83	6.42	15.03	0.53	0.02	0.04	1489.44	39.63	142.78	4.08	0.11	0.39
2014	52.35	1.47	2.38	0.14	0.00	0.01	446.99	13.01	58.92	1.22	0.04	0.16
2015	41.38	1.22	2.08	0.11	0.00	0.01	299.64	10.12	47.22	0.82	0.03	0.13
2016	37.54	1.12	1.96	0.10	0.00	0.01	285.29	9.68	46.56	0.78	0.03	0.13
2017	26.65	0.65	1.66	0.07	0.00	0.00	269.85	8.97	45.92	0.74	0.02	0.13
2018	26.65	0.65	1.66	0.07	0.00	0.00	269.85	8.97	45.92	0.74	0.02	0.13
2019	26.65	0.65	1.66	0.07	0.00	0.00	72.65	2.67	4.44	0.20	0.01	0.01
2020	26.65	0.65	1.66	0.07	0.00	0.00	48.31	1.55	2.83	0.13	0.00	0.01
2021	26.65	0.65	1.66	0.07	0.00	0.00	32.04	0.88	1.99	0.09	0.00	0.01
2022	26.65	0.65	1.66	0.07	0.00	0.00	26.65	0.65	1.66	0.07	0.00	0.00
2023	2.74	0.11	0.14	0.01	0.00	0.00	2.74	0.11	0.14	0.01	0.00	0.00
2024	1.32	0.05	0.07	0.00	0.00	0.00	1.32	0.05	0.07	0.00	0.00	0.00

Table 22: SIP-Creditable Incentive-Based Emission Reductions for Purchase of New Electric Agricultural Pump Motors Claimed Pursuant to Section 3.1

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	17.57	0.85	0.91	0.05	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	25.54	0.99	1.37	0.07	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	35.86	1.04	1.88	0.10	0.00	0.01
2013	6.59	0.04	0.33	0.02	0.00	0.00	42.45	1.08	2.21	0.12	0.00	0.01
2014	6.82	0.04	0.34	0.02	0.00	0.00	42.68	1.08	2.22	0.12	0.00	0.01
2015	6.82	0.04	0.34	0.02	0.00	0.00	42.68	1.08	2.22	0.12	0.00	0.01
2016	6.82	0.04	0.34	0.02	0.00	0.00	42.68	1.08	2.22	0.12	0.00	0.01
2017	6.82	0.04	0.34	0.02	0.00	0.00	42.68	1.08	2.22	0.12	0.00	0.01
2018	6.82	0.04	0.34	0.02	0.00	0.00	42.68	1.08	2.22	0.12	0.00	0.01
2019	6.82	0.04	0.34	0.02	0.00	0.00	42.68	1.08	2.22	0.12	0.00	0.01
2020	6.82	0.04	0.34	0.02	0.00	0.00	25.11	0.23	1.31	0.07	0.00	0.00
2021	6.82	0.04	0.34	0.02	0.00	0.00	17.14	0.09	0.85	0.05	0.00	0.00
2022	6.82	0.04	0.34	0.02	0.00	0.00	6.82	0.04	0.34	0.02	0.00	0.00
2023	0.23	0.00	0.01	0.00	0.00	0.00	0.23	0.00	0.01	0.00	0.00	0.00
2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Table 23: SIP-Creditable Incentive-Based Emission Reductions for Locomotives and New Electric Forklift Purchase Claimed Pursuant to Section 3.21

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.56	1.60	0.05	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	16.71	0.56	1.60	0.05	0.00	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	22.36	0.90	1.95	0.06	0.00	0.01
2012	0.00	0.00	0.00	0.00	0.00	0.00	82.80	3.91	8.28	0.23	0.01	0.02
2013	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2014	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2015	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2016	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2017	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2018	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2019	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2020	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2021	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2022	5.13	0.14	0.19	0.01	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2023	5.08	0.13	0.19	0.01	0.00	0.00	87.87	4.03	8.46	0.24	0.01	0.02
2024	5.08	0.13	0.19	0.01	0.00	0.00	71.16	3.48	6.86	0.19	0.01	0.02

1. Locomotive projects are contracted with a 20 year project life and Forklifts are contracted with a 10 year project life

Proposition 1B Incentive Program Guidelines

The following table is a summary of incentive-based emission reductions claimed in the SIP from incentive programs administered by the District using the Proposition 1B incentive program guidelines, as identified in Section 3.1 of Rule 9610.

Table 24: SIP-Creditable Incentive-Based Emission Reductions for On-Road Trucks

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	91.80	8.35	0.00	0.25	0.02	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	668.19	20.76	0.00	1.83	0.06	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	1185.92	41.43	0.00	3.25	0.11	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	2004.74	73.18	0.00	5.49	0.20	0.00
2013	70.96	3.34	0.00	0.19	0.01	0.00	2114.21	77.75	0.00	5.79	0.21	0.00
2014	70.96	3.34	0.00	0.19	0.01	0.00	2023.01	69.23	0.00	5.54	0.19	0.00
2015	70.96	3.34	0.00	0.19	0.01	0.00	1450.84	57.02	0.00	3.97	0.16	0.00
2016	70.96	3.34	0.00	0.19	0.01	0.00	928.98	35.18	0.00	2.55	0.10	0.00
2017	70.96	3.34	0.00	0.19	0.01	0.00	110.16	4.52	0.00	0.30	0.01	0.00
2018	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2020	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2021	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2023	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

NRCS Combustion Systems Improvement of Mobile Equipment Incentive Program Guidelines

The following table provides a summary of the SIP-creditable incentive-based emission reductions claimed in the SIP for incentive projects administered by the NRCS, as identified in Section 3.1 of Rule 9610.

Table 25: SIP-Creditable Incentive-Based Emission Reductions for Agricultural Equipment

	Current Reporting Period						Cumulative Reporting					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG	NO_x	PM	ROG
2009	3.50	0.07	0.39	0.01	0.00	0.00	148.58	5.42	19.76	0.41	0.01	0.05
2010	25.93	0.85	3.00	0.07	0.00	0.01	815.85	31.22	111.54	2.24	0.09	0.31
2011	28.77	0.94	3.35	0.08	0.00	0.01	1381.78	55.24	192.00	3.79	0.15	0.53
2012	89.63	3.14	11.67	0.25	0.01	0.03	1585.36	63.78	219.54	4.34	0.17	0.60
2013	145.22	5.42	19.60	0.40	0.01	0.05	1640.94	66.06	227.47	4.50	0.18	0.62
2014	162.59	6.06	21.87	0.45	0.02	0.06	1658.31	66.70	229.74	4.54	0.18	0.63
2015	162.59	6.06	21.87	0.45	0.02	0.06	1658.31	66.70	229.74	4.54	0.18	0.63
2016	162.59	6.06	21.87	0.45	0.02	0.06	1658.31	66.70	229.74	4.54	0.18	0.63
2017	162.59	6.06	21.87	0.45	0.02	0.06	1658.31	66.70	229.74	4.54	0.18	0.63
2018	162.59	6.06	21.87	0.45	0.02	0.06	1658.31	66.70	229.74	4.54	0.18	0.63
2019	159.09	5.99	21.48	0.44	0.02	0.06	1509.73	61.28	209.99	4.14	0.17	0.58
2020	136.66	5.21	18.88	0.37	0.01	0.05	842.46	35.48	118.20	2.31	0.10	0.32
2021	133.82	5.12	18.52	0.37	0.01	0.05	276.53	11.46	37.75	0.76	0.03	0.10
2022	72.95	2.92	10.21	0.20	0.01	0.03	72.95	2.92	10.21	0.20	0.01	0.03
2023	17.37	0.64	2.28	0.05	0.00	0.01	17.37	0.64	2.28	0.05	0.00	0.01
2024	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Case-By-Case Determinations

The following table provides a summary of the SIP-creditable incentive-based emission reductions for incentive projects that have been approved through a case-by-case process as identified in section 3.2.2 of Rule 9610. ARB may approve such projects project or other program element if this approval would not adversely impact achievement of real, surplus, quantifiable, enforceable, and cost-effective emission reductions, would not significantly reduce program transparency, and is not prohibited by statute.

These case-by-case decisions are based on CMP Guidelines and supplementary guidance (including emails and mail-outs) in effect on the date of the decision. Detailed information on case-by-case determinations can be reviewed at http://www.arb.ca.gov/msprog/moyer/case_by_case/case_by_case.htm

Table 26: Summary of Case-By-Case Determinations

Project Number	ARB Reference ID	ARB Moyer CBC Determination Category	9610 Annual Demonstration Report Year	Reason for CBC	Emissions Reductions NOx (Annual tons)	Emissions Reductions PM (Annual tons)
C-7478-A	2011-35	Off-Road Engines and Equipment	2013	New engine horsepower greater than 125% of the old engine	.44	.01
C-7477-A	2011-35	Off-Road Engines and Equipment	2013	New engine horsepower greater than 125% of the old engine	.74	.02
C-7859-A	2012-39	Off-Road Engines and Equipment	2013	New equipment was powered by an engine certified under the flexibility provision	.47	.03
C-8692-A	2012-39	Off-Road Engines and Equipment	2013	New equipment was powered by an engine certified under the flexibility provision	1.16	.04
C-8371-A	2012-42	Off-Road Engines and Equipment	2013	New equipment was powered by an engine certified under the flexibility provision	1.19	.04

The CBC determinations listed in table 25 did not have an impact on the projects projected emission reductions. On October 30, 2013 ARB adopted changes to the 2011 Carl Moyer Guidelines that allow both the flexibility engines and new engines that are greater than 125% horsepower increase from the old engine to be funded without the need for a CBC.

This change can be reviewed in ARB Mailout #MSC 13-27 at: http://www.arb.ca.gov/msprog/moyer/advisories_005/advisories_005.htm. Furthermore, these projects constitute 0.011 tpd of NOx and are not needed to meet the EPA approved SIP commitment for the 2008 PM2.5 Plan.

Appendix A
District Incentive Program Project Information

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Appendix B
NRCS Combustion System Improvement Program Project Information

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SJVAPCD Project Data

Project Type On-Road Prop 1B

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-14714-A	1	Aggregates	1987	400	-	2013	500	-	-	47214	-	5	Fresno
C-14695-A	1	Aggregates	1996	470	-	2013	485	-	-	78439	-	5	San Joaquin
C-14146-A	1	Agricultural	1999	470	-	2011	431	-	-	75513	-	5	Fresno
C-14015-A	1	Agricultural	1998	470	-	2009	455	-	-	30868	-	5	Kern
C-14465-A	1	Agricultural	2001	550	-	2013	500	-	-	80094	-	5	Tulare
C-14043-B	3	Agricultural	2002	339	-	2013	500	-	-	45414	-	5	Merced
C-14043-B	1	Agricultural	2002	339	-	2013	500	-	-	53066	-	5	Merced
C-14066-A	1	Agricultural	1998	500	-	2010	560	-	-	78897	-	5	Tulare
C-14088-A	1	Agricultural	1985	235	-	2013	330	-	-	16197	-	5	Tulare
C-14097-A	1	Agricultural	1995	430	-	2008	338	-	-	83274	-	5	Kern
C-13996-A	1	Agricultural	1998	470	-	2009	560	-	-	92935	-	5	Kern
C-14569-A	1	Agricultural	1992	425	-	2007	515	-	-	56048	-	5	Kern
C-14153-A	1	Agricultural	2000	470	-	2010	450	-	-	54612	-	5	Fresno
C-14355-A	1	Agricultural	1997	435	-	2011	485	-	-	32151	-	5	Merced
C-14496-A	1	Agricultural	1993	430	-	2013	550	-	-	82842	-	5	Kern
C-14356-A	12	Agricultural	2001	410	-	2010	400	-	-	55317	-	5	Fresno
C-14483-A	1	Agricultural	1992	410	-	2012	560	-	-	70066	-	5	Stanislaus
C-14365-A	1	Agricultural	1998	445	-	2013	485	-	-	101750	-	5	Fresno
C-14089-B	4	Agricultural	2002	370	-	2012	431	-	-	78019	-	5	Merced
C-14800-B	2	Agricultural	1993	400	-	2013	485	-	-	38233	-	5	Stanislaus
C-14711-B	2	Agricultural	1999	445	-	2009	450	-	-	25928	-	5	Kern
C-10095-A	1	Agricultural	1994	435	-	2013	525	-	-	31882	-	5	Stanislaus
C-13907-A	1	Agricultural	1994	330	-	2013	550	-	-	67306	-	5	Kern
C-14756-A	1	Agricultural	1994	435	-	2008	515	-	-	72745	-	5	Fresno
C-13731-A	1	Agricultural	1996	375	-	2007	515	-	-	101082	-	5	Fresno
C-13847-A	1	Agricultural	1998	450	-	2013	500	-	-	63294	-	5	Madera
C-14800-B	4	Agricultural	1994	290	-	2013	330	-	-	33237	-	5	Stanislaus
C-13368-A	1	Building or Construction Materials	1998	470	-	2011	500	-	-	69672	-	5	Merced
C-14542-A	1	Building or Construction Materials	1998	500	-	2013	500	-	-	73197	-	5	Kern
C-10123-A	1	Building or Construction Materials	1997	470	-	2010	450	-	-	72565	-	5	Kern
C-13355-A	1	Building or Construction Materials	1997	435	-	2008	485	-	-	47236	-	5	Fresno

SJVAPCD Project Data

Project Type On-Road Prop 1B

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-14715-A	1	Building or Construction Materials	1996	470	-	2008	515	-	-	47813	-	5	Kern
C-14475-A	1	Bulk or Break Bulk	1999	500	-	2010	435	-	-	59832	-	5	Santa Cruz
C-13994-A	1	Bulk or Break Bulk	1997	470	-	2011	500	-	-	58051	-	5	San Jose
C-14177-A	1	Bulk or Break Bulk	2000	470	-	2008	560	-	-	78043	-	5	Kings
C-13878-A	1	Bulk or Break Bulk	1999	430	-	2013	455	-	-	5922	-	5	San Joaquin
C-14133-A	1	Bulk or Break Bulk	1994	370	-	2008	515	-	-	90911	-	5	San Joaquin
C-14821-A	2	Concrete Mixer Truck	2002	425	-	2011	430	-	-	16156	-	5	Fresno
C-12743-A	1	Container	1994	350	-	2011	500	-	-	89673	-	5	Merced
C-13961-A	1	Container	1998	470	-	2010	485	-	-	66010	-	5	Merced
C-13771-A	1	Container	1996	435	-	2010	485	-	-	66909	-	5	Stanislaus
C-14199-A	1	Dairy	1997	475	-	2013	550	-	-	80110	-	5	Stanislaus
C-14457-C	8	Dairy	1994	300	-	2013	425	-	-	18960	-	5	Stanislaus
C-14457-C	9	Dairy	1994	300	-	2013	425	-	-	14738	-	5	Stanislaus
C-14362-A	1	Dump Truck	2002	370	-	2013	500	-	-	66561	-	5	Stanislaus
C-13776-A	1	Dump Truck	1992	425	-	2013	550	-	-	22489	-	5	San Joaquin
C-14510-A	1	Dump Truck	1995	370	-	2013	500	-	-	32154	-	5	Stanislaus
C-14571-A	1	Hazardous Materials	1993	475	-	2013	500	-	-	99050	-	5	San Joaquin
C-14150-A	2	Hazardous Materials	1998	370	-	2011	500	-	-	71134	-	5	Kings
C-14765-A	1	Long Haul Trucking	1996	470	-	2013	500	-	-	22055	-	5	Fresno
C-14838-D	6	Long Haul Trucking	1994	330	-	2013	500	-	-	32327	-	5	Fresno
C-14533-A	1	Long Haul Trucking	1999	330	-	2010	560	-	-	55211	-	5	San Joaquin
C-14686-A	1	Long Haul Trucking	2000	370	-	2010	560	-	-	46679	-	5	Kern
C-14307-A	1	Long Haul Trucking	1996	470	-	2013	505	-	-	67540	-	5	Fresno
C-14658-A	1	Other	2002	410	-	2013	500	-	-	43897	-	5	Fresno
C-13711-A	1	Other	2002	430	-	2008	560	-	-	26797	-	5	Stanislaus
C-13672-A	3	Other	1999	445	-	2012	425	-	-	41600	-	5	San Joaquin
C-13005-A	1	Other	1999	435	-	2008	515	-	-	64374	-	5	San Joaquin
C-13815-B	8	Other	2002	5000	-	2013	425	-	-	43394	-	5	San Joaquin
C-14771-A	1	Other	1987	400	-	2013	455	-	-	46814	-	5	Kern
C-14895-E	9	Other	1995	330	-	2013	370	-	-	42731	-	5	San Joaquin
C-14720-A	1	Other	2000	470	-	2009	560	-	-	114278	-	5	Kings
C-14673-A	18	Other	2001	400	-	2012	405	-	-	117291	-	5	San Joaquin
C-13735-A	1	Other	1998	360	-	2009	560	-	-	103835	-	5	Kern

SJVAPCD Project Data

Project Type On-Road Prop 1B

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-14556-A	2	Other	1998	470	-	2011	500	-	-	99337	-	5	Fresno
C-14607-A	1	Other	1994	470	-	2010	475	-	-	67292	-	5	Kern
C-14489-A	1	Other	2000	300	-	2013	370	-	-	38433	-	5	Stanislaus
C-14269-A	1	Other	1994	470	-	2010	425	-	-	32418	-	5	Stanislaus
C-14256-A	1	Other	1997	435	-	2008	525	-	-	85461	-	5	Santa Clara
C-14581-A	1	Other	1998	460	-	2013	525	-	-	87544	-	5	Tulare
C-14113-C	4	Other	2003	435	-	2013	425	-	-	37170	-	5	San Joaquin
C-16642-A	13	Poultry	2001	350	-	2012	385	-	-	96492	-	5	Merced
C-16642-A	12	Poultry	1997	300	-	2012	385	-	-	93785	-	5	Merced
C-14576-A	25	Poultry	2001	335	-	2012	385	-	-	83873	-	5	Merced
C-14576-A	24	Poultry	1995	300	-	2012	385	-	-	64861	-	5	Merced
C-14397-A	1	Produce Delivery	2001	400	-	2010	450	-	-	102950	-	5	Tulare
C-14866-A	3	Produce Delivery	1999	470	-	2010	560	-	-	121654	-	5	Tulare
C-14866-A	1	Produce Delivery	1997	475	-	2010	560	-	-	115741	-	5	Tulare
C-14623-A	1	Produce Delivery	1994	330	-	2010	500	-	-	66180	-	5	Kern
C-14874-A	1	Restaurant or Supermarket	1994	339	-	2008	435	-	-	34761	-	5	Merced
C-14713-A	1	Restaurant or Supermarket	2000	500	-	2007	515	-	-	65985	-	5	Merced
C-13892-A	1	Restaurant or Supermarket	2001	470	-	2008	560	-	-	53297	-	5	Stanislaus
C-14605-A	1	Restaurant or Supermarket	1998	470	-	2007	515	-	-	59338	-	5	Stanislaus
C-13917-A	1	Restaurant or Supermarket	1999	500	-	2013	485	-	-	129121	-	5	Stanislaus
C-14471-A	1	Restaurant or Supermarket	1996	300	-	2010	455	-	-	111165	-	5	Fresno
C-14628-A	1	Restaurant or Supermarket	1999	470	-	2008	515	-	-	61521	-	5	Stanislaus
C-14191-A	1	Restaurant or Supermarket	1999	500	-	2009	560	-	-	113176	-	5	Tulare
C-10124-A	2	Wood or Paper Products	1997	550	-	2013	550	-	-	35010	-	5	Stanislaus
C-13928-A	1	Wood or Paper Products	1999	470	-	2010	425	-	-	22230	-	5	Fresno

SJVAPCD Project Data

Project Type On-Road Prop 1B

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-13808-A	1	Wood or Paper Products	1992	430	-	2009	560	-	-	22956	-	5	Tulare

SJVAPCD Project Data

Project Type Off-Road

Description Engine Repower

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-15559-A	1	Agricultural Tractor	1979	249	Tier 0	2010	225	Tier 3	550	-	6600	10	San Joaquin
S-1767-A	5	Crane	1978	140	Tier 0	2011	139	Tier 3	1000	-	7000	7	Kern
C-19144-A	1	Dozer	2000	328	Tier 1	2010	354	Tier 3	889	-	9359	7	Stanislaus
C-18574-A	2	Dozer	1986	525	Tier 0	2012	600	Tier 4 Phase In/Alternate NOx	2000	-	60000	7	Kern
C-20790-A	1	Grape Harvester	1992	131	Tier 0	2012	124	Tier 4 Phase In/Alternate NOx	450	-	2000	10	San Joaquin
C-20792-A	1	Grape Harvester	1978	102	Tier 0	2012	124	Tier 4 Phase In/Alternate NOx	400	-	2000	10	San Joaquin
C-10090-A	1	Loader	1995	235	Tier 0	2010	230	Tier 3	200	-	800	7	Merced
C-20153-A	1	Motor Grader	2000	140	Tier 1	2010	196	Tier 3	1180	-	5500	10	Fresno
C-21676-A	1	Ripper	1984	700	Tier 0	2012	740	Tier 3	2000	-	-	10	Madera
C-21085-A	1	Ripper	1994	557	Tier 0	2010	597	Tier 3	2500	-	-	7	Tulare
C-20685-A	1	Soil Ripper	1988	557	Tier 0	2010	597	Tier 3	1000	-	35000	7	Merced
C-20445-A	3	Wheel Loader	1973	130	Tier 0	2011	174	Tier 3	1200	-	9300	10	Kern
C-20445-A	2	Wheel Loader	1994	159	Tier 0	2011	174	Tier 3	1200	-	9540	10	Kern
C-20445-A	1	Wheel Loader	1994	159	Tier 0	2011	174	Tier 3	1200	-	9540	10	Kern

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-23547-A	1	Ag Forage Harvester	1999	525	Tier 1	2013	536	Tier 3	800	-	20000	10	Tulare
C-23710-A	1	Ag Forage Harvester	2000	525	Tier 1	2013	536	Tier 3	800	-	20000	10	Tulare
C-23554-A	1	Ag Forage Harvester	1998	525	Tier 1	2013	536	Tier 3	750	-	18750	10	Tulare

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21925-A	1	Ag Forage Harvester	1994	375	Tier 0	2013	440	Tier 4 Phase In/Alternate NOx	500	-	8500	10	Fresno
C-21973-A	1	Ag Forage Harvester	1999	525	Tier 1	2012	653	Tier 4 Phase In/Alternate NOx	837	-	6696	10	Kern
C-8769-A	1	AG Tractor Crawler	1965	202	Tier 0	2013	335	Tier 4 Phase In/Alternate NOx	410	-	3690	10	San Joaquin
C-21829-A	1	Agricultural Backhoe	1992	85	Tier 0	2013	95	Tier 4 Phase In/Alternate NOx	500	-	2500	10	San Joaquin
C-22746-A	2	Agricultural Cotton Picker	2000	325	Tier 1	2013	530	Tier 4 Phase In/Alternate NOx	400	-	2400	10	Fresno
C-22859-A	1	Agricultural Loader	1999	135	Tier 1	2012	145	Tier 4 Phase In/Alternate NOx	2000	-	9000	10	Madera
C-21433-A	1	Agricultural Tractor	1998	99	Tier 1	2013	115	Tier 4 Phase In/Alternate NOx	1500	-	8000	10	Fresno

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21387-A	1	Agricultural Tractor	1980	108	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	850	-	4250	10	Kern
C-21743-A	2	Agricultural Tractor	1998	260	Tier 1	2013	284	Tier 4 Phase In/Alternate NOx	800	-	4000	10	Tulare
C-21361-A	1	Agricultural Tractor	1977	84	Tier 0	2012	105	Tier 4 Phase In/Alternate NOx	775	-	1500	10	Fresno
C-21917-A	1	Agricultural Tractor	1992	91	Tier 0	2011	120	Tier 3	700	-	1000	10	Fresno
C-21820-A	1	Agricultural Tractor	1982	300	Tier 0	2013	450	Tier 4 Phase In/Alternate NOx	1044	-	10440	10	Tulare
C-21850-A	1	Agricultural Tractor	1962	160	Tier 0	2011	105	Tier 3	500	-	2000	10	Stanislaus
C-8266-A	1	Agricultural Tractor	1985	90	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	309	-	1543	10	Merced
C-21157-A	1	Agricultural Tractor	2002	286	Tier 1	2013	335	Tier 4 Phase In/Alternate NOx	1500	-	29498	10	Fresno
C-21282-A	1	Agricultural Tractor	1997	270	Tier 1	2013	310	Tier 4 Phase In/Alternate NOx	1354	-	6269	10	Kings

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21836-A	1	Agricultural Tractor	1965	77	Tier 0	2013	99	Tier 4 Phase In/Alternate NOx	240	-	960	10	Fresno
C-21448-A	1	Agricultural Tractor	1979	133	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	1500	-	6000	10	Fresno
C-8331-A	1	Agricultural Tractor	1996	100	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	800	-	2560	10	Merced
C-21432-A	1	Agricultural Tractor	1999	99	Tier 1	2013	115	Tier 4 Phase In/Alternate NOx	1500	-	8000	10	Fresno
C-8426-A	1	Agricultural Tractor	1996	100	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	800	-	2480	10	Merced
C-21434-A	1	Agricultural Tractor	1999	110	Tier 1	2013	115	Tier 4 Phase In/Alternate NOx	1500	-	8000	10	Fresno
C-21564-A	1	Agricultural Tractor	1999	71	Tier 1	2013	85	Tier 4 Interim	1500	-	8000	10	Fresno
C-21673-A	1	Agricultural Tractor	1995	228	Tier 0	2013	260	Tier 4 Phase In/Alternate NOx	1950	-	16575	10	Merced

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22289-A	1	Agricultural Tractor	1996	135	Tier 0	2012	146	Tier 4 Phase In/Alternate NOx	2500	-	10000	10	Tulare
C-22663-A	1	Agricultural Tractor	1992	57	Tier 0	2011	72	Tier 3	1100	-	2500	10	Fresno
C-21333-A	1	Agricultural Tractor	1983	80	Tier 0	2012	115	Tier 4 Phase In/Alternate NOx	1400	-	1350	10	Fresno
C-8459-A	1	Agricultural Tractor	1991	178	Tier 0	2013	200	Tier 4 Phase In/Alternate NOx	800	-	4680	10	Merced
C-21467-A	1	Agricultural Tractor	2000	198	Tier 1	2012	235	Tier 4 Phase In/Alternate NOx	2473	-	15453	10	Tulare
C-8338-A	1	Agricultural Tractor	1996	100	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	800	-	2560	10	Merced
C-8347-A	1	Agricultural Tractor	1968	77	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	500	-	1950	10	Merced
C-22327-A	1	Agricultural Tractor	1981	84	Tier 0	2012	105	Tier 3	715	-	1	10	Fresno
C-21302-A	1	Agricultural Tractor	1994	114	Tier 0	2011	120	Tier 3	900	-	2340	10	Fresno
C-21278-A	1	Agricultural Tractor	1981	186	Tier 0	2013	230	Tier 4 Phase In/Alternate NOx	1140	-	4844	10	Kings

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21507-A	1	Agricultural Tractor	1976	151	Tier 0	2011	120	Tier 3	800	-	4800	10	Madera
C-21373-A	1	Agricultural Tractor	1956	212	Tier 0	2012	100	Tier 4 Phase In/Alternate NOx	300	-	6000	10	Stanislaus
C-22835-A	1	Agricultural Tractor	1986	82	Tier 0	2011	120	Tier 3	300	-	600	10	Fresno
C-21243-A	1	Agricultural Tractor	1997	269	Tier 1	2013	310	Tier 4 Phase In/Alternate NOx	797	-	4123	10	Kern
C-21977-A	1	Agricultural Tractor	1996	56	Tier 0	2012	71	Tier 4 Interim	199	-	1080	10	San Joaquin
C-22162-A	1	Agricultural Tractor	1992	81	Tier 0	2011	120	Tier 3	800	-	2500	10	Fresno
C-21981-A	1	Agricultural Tractor	2000	64	Tier 1	2012	71	Tier 4 Interim	115	-	1198	10	San Joaquin
C-21280-A	1	Agricultural Tractor	1980	186	Tier 0	2013	230	Tier 4 Phase In/Alternate NOx	894	-	4216	10	Kings
C-21279-A	1	Agricultural Tractor	1981	186	Tier 0	2013	230	Tier 4 Phase In/Alternate NOx	1064	-	5152	10	Kings
C-21277-A	1	Agricultural Tractor	1981	186	Tier 0	2013	230	Tier 4 Phase In/Alternate NOx	1060	-	4347	10	Kings
C-21263-A	1	Agricultural Tractor	1979	280	Tier 0	2013	230	Tier 4 Phase In/Alternate NOx	500	-	5000	10	Kings

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21173-A	1	Agricultural Tractor	1995	350	Tier 0	2013	360	Tier 4 Phase In/Alternate NOx	2300	-	40940	10	Fresno
C-22054-A	1	Agricultural Tractor	1969	58	Tier 0	2012	80	Tier 4 Interim	300	-	384	10	Fresno
C-21239-A	1	Agricultural Tractor	1997	269	Tier 1	2013	310	Tier 4 Phase In/Alternate NOx	1272	-	6755	10	Kern
C-22074-A	1	Agricultural Tractor	1988	375	Tier 0	2012	560	Tier 4 Phase In/Alternate NOx	657	-	7886	10	Stanislaus
C-21328-A	1	Agricultural Tractor	1994	174	Tier 0	2013	200	Tier 4 Phase In/Alternate NOx	497	-	5165	10	San Joaquin
C-8536-A	1	Agricultural Tractor	1984	80	Tier 0	2012	85	Tier 4 Phase In/Alternate NOx	330	-	1155	10	Madera
C-22330-A	1	Agricultural Tractor	1993	27	Tier 0	2011	28	Tier 4 Interim	500	-	375	10	Tulare
C-22329-A	1	Agricultural Tractor	1993	27	Tier 0	2011	28	Tier 4 Interim	500	-	375	10	Tulare
C-22531-A	1	Agricultural Tractor	1981	98	Tier 0	2011	120	Tier 3	151	-	1208	10	Fresno
C-21924-A	1	Agricultural Tractor	1974	84	Tier 0	2011	97	Tier 3	1000	-	1000	10	Tulare
C-22075-A	1	Agricultural Tractor	1992	335	Tier 0	2012	560	Tier 4 Phase In/Alternate NOx	460	-	5520	10	Stanislaus

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21386-A	1	Agricultural Tractor	1979	108	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	925	-	4100	10	Madera
C-21712-A	1	Agricultural Tractor	1990	72	Tier 0	2012	120	Tier 3	1000	-	2400	10	Kings
C-21711-A	1	Agricultural Tractor	1973	120	Tier 0	2012	120	Tier 3	1000	-	2400	10	Kings
C-21435-A	1	Agricultural Tractor	1999	110	Tier 1	2013	115	Tier 4 Phase In/Alternate NOx	1500	-	8000	10	Fresno
C-21720-A	1	Agricultural Tractor	1988	228	Tier 0	2013	285	Tier 4 Phase In/Alternate NOx	1041	-	10824	10	Kings
C-21851-A	1	Agricultural Tractor	1992	81	Tier 0	2012	100	Tier 4 Phase In/Alternate NOx	1000	-	2000	10	Stanislaus
C-21990-A	1	Agricultural Tractor	1999	64	Tier 1	2012	71	Tier 4 Interim	142	-	1476	10	San Joaquin
C-22508-A	1	Agricultural Tractor	1977	157	Tier 0	2012	160	Tier 4 Phase In/Alternate NOx	700	-	1400	10	Merced
C-21255-A	1	Agricultural Tractor	1981	186	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	424	-	1259	10	Kern

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Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22625-A	1	Agricultural Tractor	1974	151	Tier 0	2013	185	Tier 4 Phase In/Alternate NOx	285	-	1721	10	Kern
C-21722-A	1	Agricultural Tractor	1983	98	Tier 0	2012	120	Tier 3	390	-	2438	10	Kings
C-21998-A	1	Agricultural Tractor	2001	96	Tier 1	2012	100	Tier 4 Phase In/Alternate NOx	200	-	1095	10	San Joaquin
C-21902-A	1	Agricultural Tractor	1962	56	Tier 0	2012	74	Tier 4 Interim	300	-	624	10	Fresno
C-21397-A	1	Agricultural Tractor	1999	108	Tier 0	2013	125	Tier 4 Phase In/Alternate NOx	3000	-	4400	10	Kern
C-21622-A	1	Agricultural Tractor	1976	50	Tier 0	2012	42	Tier 4 Interim	250	-	750	10	Fresno
C-21261-A	1	Agricultural Tractor	1979	186	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	615	-	1415	10	Kern
C-21894-A	1	Agricultural Tractor	1976	50	Tier 0	2012	42	Tier 4 Interim	250	-	750	10	Fresno
C-21253-A	1	Agricultural Tractor	1984	198	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	433	-	1081	10	Kern
C-21237-A	1	Agricultural Tractor	1999	425	Tier 1	2013	360	Tier 4 Phase In/Alternate NOx	494	-	5780	10	Kings

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Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-23490-A	1	Agricultural Tractor	1989	180	Tier 0	2012	215	Tier 4 Phase In/Alternate NOx	750	-	8250	10	Madera
C-21344-A	1	Agricultural Tractor	2001	396	Tier 1	2013	460	Tier 4 Phase In/Alternate NOx	1200	-	18000	10	Fresno
C-21260-A	1	Agricultural Tractor	1979	156	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	394	-	2623	10	Fresno
C-21586-A	1	Agricultural Tractor	1981	132	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	285	-	2850	10	Fresno
C-21349-A	1	Agricultural Tractor	1980	38	Tier 0	2012	45	Tier 4 Interim	1288	-	2576	10	Madera
C-21262-A	1	Agricultural Tractor	1981	186	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	942	-	4513	10	Kings
C-21292-A	1	Agricultural Tractor	1997	270	Tier 1	2013	235	Tier 4 Phase In/Alternate NOx	951	-	4705	10	Kings
C-21291-A	1	Agricultural Tractor	1997	270	Tier 1	2013	235	Tier 4 Phase In/Alternate NOx	1222	-	5042	10	Kings

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Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21290-A	1	Agricultural Tractor	1997	270	Tier 1	2013	235	Tier 4 Phase In/Alternate NOx	1419	-	5802.5	10	Kings
C-21288-A	1	Agricultural Tractor	1997	270	Tier 1	2013	235	Tier 4 Phase In/Alternate NOx	1658	-	9264	10	Kings
C-21286-A	1	Agricultural Tractor	1997	270	Tier 1	2013	235	Tier 4 Phase In/Alternate NOx	1482	-	8008	10	Kings
C-21816-A	1	Agricultural Tractor	1975	68	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	400	-	1000	10	Tulare
C-21275-A	1	Agricultural Tractor	1981	186	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	1086	-	4068	10	Kings
C-21613-A	1	Agricultural Tractor	1976	50	Tier 0	2012	52	Tier 4 Interim	475	-	1852	10	Fresno
C-21242-A	1	Agricultural Tractor	1997	269	Tier 1	2013	235	Tier 4 Phase In/Alternate NOx	434	-	2027	10	Kern
C-8297-A	1	Agricultural Tractor	1975	84	Tier 0	2013	95	Tier 4 Phase In/Alternate NOx	600	-	1800	10	Stanislaus
C-21837-A	1	Agricultural Tractor	1980	38	Tier 0	2012	62	Tier 3	200	-	-	10	Fresno

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Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21568-A	1	Agricultural Tractor	1990	204	Tier 0	2013	215	Tier 4 Phase In/Alternate NOx	700	-	6790	10	Tulare
C-21588-A	1	Agricultural Tractor	1983	130	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	486	-	4860	10	Fresno
C-22507-A	1	Agricultural Tractor	1985	80	Tier 0	2011	99	Tier 3	400	-	4000	10	Fresno
C-21276-A	1	Agricultural Tractor	1978	216	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	1717	-	3038	10	Kings
C-23749-A	2	Agricultural Tractor	1983	98	Tier 0	2012	108	Tier 3	150	-	240	10	Fresno
C-23364-A	1	Agricultural Tractor	1991	63	Tier 0	2011	87	Tier 3	250	-	800	10	Fresno
C-21875-A	1	Agricultural Tractor	1960	300	Tier 0	2012	120	Tier 3	600	-	9000	10	Stanislaus
C-21565-A	1	Agricultural Tractor	2000	110	Tier 1	2012	164	Tier 4 Phase In/Alternate NOx	1200	-	2250	10	Merced
C-21297-A	1	Agricultural Tractor	1973	76	Tier 0	2013	105	Tier 4 Phase In/Alternate NOx	250	-	550	10	Fresno
C-21978-A	1	Agricultural Tractor	1975	275	Tier 0	2013	284	Tier 4 Phase In/Alternate NOx	1000	-	13000	10	Kings

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Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22140-A	1	Agricultural Tractor	2003	135	Tier 1	2013	150	Tier 4 Phase In/Alternate NOx	780	-	5304	10	Stanislaus
C-21180-A	1	Agricultural Tractor	1977	72	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	500	-	2125	10	Fresno
C-22263-A	1	Agricultural Tractor	2000	121	Tier 1	2012	135	Tier 3	1422	-	4693	10	Stanislaus
C-22349-A	1	Agricultural Tractor	1992	88	Tier 0	2012	120	Tier 3	500	-	4000	10	Kings
C-22313-A	1	Agricultural Tractor	1990	156	Tier 0	2013	160	Tier 4 Phase In/Alternate NOx	557	-	4350	10	Merced
C-21185-A	1	Agricultural Tractor	1993	90	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	250	-	1500	10	Kern
C-22186-A	1	Agricultural Tractor	1990	72	Tier 0	2013	60	Tier 4 Final	200	-	250	10	Merced
C-21657-A	1	Agricultural Tractor	1983	228	Tier 0	2012	120	Tier 3	1232	-	9856	10	Merced
C-22279-A	1	Agricultural Tractor	1998	64	Tier 0	2012	71	Tier 4 Interim	1000	-	3200	10	Fresno
C-21697-A	1	Agricultural Tractor	1970	65	Tier 0	2012	71	Tier 4 Interim	300	-	1925	10	Stanislaus
C-22219-A	1	Agricultural Tractor	1967	63	Tier 0	2013	76	Tier 4 Phase In/Alternate NOx	200	-	5000	10	Stanislaus

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21284-A	1	Agricultural Tractor	1998	270	Tier 1	2013	235	Tier 4 Phase In/Alternate NOx	1146	-	5695	10	Kings
C-22820-A	1	Agricultural Tractor	1990	180	Tier 0	2012	228	Tier 4 Phase In/Alternate NOx	1400	-	5600	10	Fresno
C-21591-A	1	Agricultural Tractor	1983	94	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	1000	-	5000	10	Kings
C-21188-A	1	Agricultural Tractor	1975	151	Tier 0	2013	170	Tier 4 Phase In/Alternate NOx	300	-	2500	10	Kern
C-22530-A	1	Agricultural Tractor	1965	76	Tier 0	2012	84	Tier 3	300	-	1000	10	Fresno
C-22130-A	1	Agricultural Tractor	1996	120	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	983	-	5898	10	Stanislaus
C-21363-A	1	Agricultural Tractor	1996	156	Tier 0	2013	190	Tier 4 Phase In/Alternate NOx	1300	-	8724	10	Kern
C-22265-A	1	Agricultural Tractor	1978	48	Tier 0	2012	71	Tier 4 Interim	800	-	1850	10	Fresno
C-21694-A	1	Agricultural Tractor	1988	27	Tier 0	2012	30	Tier 4 Interim	1825	-	2372	10	Merced

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21370-A	1	Agricultural Tractor	1974	68	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	1250	-	6250	10	Kings
C-22278-A	1	Agricultural Tractor	2000	64	Tier 0	2012	71	Tier 4 Interim	205	-	667	10	Fresno
C-22272-A	1	Agricultural Tractor	2000	64	Tier 0	2012	71	Tier 4 Interim	311	-	995	10	Fresno
C-21878-A	1	Agricultural Tractor	1981	84	Tier 0	2013	84	Tier 4 Phase In/Alternate NOx	650	-	1400	10	Stanislaus
C-22264-A	1	Agricultural Tractor	1999	121	Tier 1	2012	135	Tier 3	569	-	3528	10	Stanislaus
C-21409-A	1	Agricultural Tractor	1989	178	Tier 0	2013	190	Tier 4 Phase In/Alternate NOx	3650	-	34790	10	Kern
C-21214-A	1	Agricultural Tractor	1978	84	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	503	-	2515	10	Fresno
C-21377-A	1	Agricultural Tractor	1961	37	Tier 0	2012	28	Tier 4 Interim	300	-	500	10	Fresno
C-21585-A	1	Agricultural Tractor	1981	72	Tier 0	2012	74	Tier 4 Interim	550	-	1800	10	Tulare
C-21583-A	1	Agricultural Tractor	1994	115	Tier 0	2011	111	Tier 3	550	-	2000	10	Tulare
C-21581-A	1	Agricultural Tractor	1981	101	Tier 0	2011	111	Tier 3	550	-	1500	10	Tulare
C-21519-A	1	Agricultural Tractor	1972	47	Tier 0	2011	55	Tier 4 Interim	600	-	500	10	Fresno
C-21993-A	1	Agricultural Tractor	1988	26	Tier 0	2013	30	Tier 4 Interim	400	-	500	10	Fresno
C-21597-A	1	Agricultural Tractor	1993	81	Tier 0	2012	120	Tier 3	330	-	7500	10	Fresno
C-8450-A	1	Agricultural Tractor	1975	80	Tier 0	2011	85	Tier 3	550	-	550	10	Fresno

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21903-A	1	Agricultural Tractor	1996	74	Tier 0	2011	95	Tier 3	500	-	2100	10	Fresno
C-21818-A	1	Agricultural Tractor	1996	74	Tier 0	2011	95	Tier 3	500	-	2100	10	Fresno
C-21250-A	1	Agricultural Tractor	1996	104	Tier 0	2013	105	Tier 4 Phase In/Alternate NOx	483	-	3000	10	Fresno
C-22501-A	1	Agricultural Tractor	1995	282	Tier 0	2013	327	Tier 4 Phase In/Alternate NOx	800	-	11000	10	Fresno
C-22500-A	1	Agricultural Tractor	1996	335	Tier 1	2012	350	Tier 4 Phase In/Alternate NOx	800	-	12000	10	Fresno
C-21466-A	1	Agricultural Tractor	1986	80	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	550	-	1000	10	Fresno
C-21598-A	1	Agricultural Tractor	1999	105	Tier 1	2012	120	Tier 3	1200	-	6000	10	Fresno
C-8499-A	1	Agricultural Tractor	1996	28	Tier 0	2012	33	Tier 4 Interim	473	-	500	10	San Joaquin
C-21385-A	1	Agricultural Tractor	1987	97	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	600	-	3000	10	Madera
C-21298-A	1	Agricultural Tractor	1992	300	Tier 0	2013	360	Tier 4 Phase In/Alternate NOx	1200	-	12000	10	Merced
C-22325-A	1	Agricultural Tractor	1979	84	Tier 0	2012	105	Tier 3	750	-	-	10	Fresno
C-21404-A	1	Agricultural Tractor	1994	95	Tier 0	2012	120	Tier 3	280	-	840	10	Madera
C-21380-A	1	Agricultural Tractor	1997	95	Tier 0	2012	120	Tier 3	500	-	1500	10	Fresno

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21602-A	1	Agricultural Tractor	1985	144	Tier 0	2011	87	Tier 4 Phase In/Alternate NOx	800	-	6000	10	Kern
C-21460-A	1	Agricultural Tractor	1996	90	Tier 0	2011	120	Tier 3	500	-	2500	10	Fresno
C-21273-A	1	Agricultural Tractor	1987	79	Tier 0	2012	85	Tier 3	710	-	1420	10	Fresno
C-8497-A	1	Agricultural Tractor	1994	28	Tier 0	2012	33	Tier 4 Interim	273	-	500	10	San Joaquin
C-22626-A	1	Agricultural Tractor	1998	270	Tier 0	2013	265	Tier 4 Phase In/Alternate NOx	1500	-	16200	10	Kern
C-21389-A	1	Agricultural Tractor	1978	132	Tier 0	2012	120	Tier 3	683	-	6830	10	Fresno
C-21388-A	1	Agricultural Tractor	1973	120	Tier 0	2012	120	Tier 3	679	-	6107	10	Fresno
C-21346-A	1	Agricultural Tractor	1979	108	Tier 0	2012	120	Tier 3	616	-	4928	10	Fresno
C-21337-A	1	Agricultural Tractor	1997	114	Tier 0	2012	120	Tier 3	538	-	5913	10	Fresno
C-21625-A	1	Agricultural Tractor	1981	84	Tier 0	2013	108	Tier 3	475	-	2322	10	Fresno
C-21153-A	1	Agricultural Tractor	1980	60	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	1800	-	6300	10	Fresno
C-21819-A	1	Agricultural Tractor	1965	58	Tier 0	2012	65	Tier 4 Interim	336	-	200	10	Fresno
C-21842-A	1	Agricultural Tractor	1997	100	Tier 1	2012	188	Tier 4 Phase In/Alternate NOx	950	-	4100	10	Fresno
C-21478-A	1	Agricultural Tractor	1971	46	Tier 0	2012	56	Tier 4 Interim	400	-	2000	10	Fresno
C-21659-A	1	Agricultural Tractor	1964	115	Tier 0	2012	120	Tier 3	1035	-	4655	10	Merced

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21299-A	1	Agricultural Tractor	1980	98	Tier 0	2013	105	Tier 4 Phase In/Alternate NOx	217	-	1085	10	Fresno
C-21285-A	1	Agricultural Tractor	1978	186	Tier 0	2011	120	Tier 3	1036	-	10776	10	Kings
C-22246-A	1	Agricultural Tractor	1989	43	Tier 0	2012	46	Tier 4 Interim	505	-	1010	10	Kings
C-21305-A	1	Agricultural Tractor	1997	114	Tier 0	2011	120	Tier 3	593	-	2669	10	Kings
C-21152-A	1	Agricultural Tractor	1979	69	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	840	-	2268	10	Fresno
C-21600-A	1	Agricultural Tractor	1970	121	Tier 0	2012	170	Tier 4 Phase In/Alternate NOx	750	-	6000	10	Fresno
C-8220-A	1	Agricultural Tractor	1994	210	Tier 0	2012	215	Tier 4 Phase In/Alternate NOx	434	-	4334	10	Tulare
C-8206-A	1	Agricultural Tractor	1982	98	Tier 0	2013	115	Tier 4 Interim	475	-	2850	10	Fresno
C-21232-A	1	Agricultural Tractor	1974	180	Tier 0	2012	120	Tier 3	500	-	4500	10	Kings
C-21225-A	1	Agricultural Tractor	1997	102	Tier 0	2012	120	Tier 3	500	-	3000	10	Kings
C-22248-A	1	Agricultural Tractor	1989	43	Tier 0	2011	46	Tier 4 Interim	777	-	1554	10	Kings
C-22794-A	1	Agricultural Tractor	1997	170	Tier 1	2013	200	Tier 4 Phase In/Alternate NOx	3620	-	29200	10	Tulare
C-8709-A	1	Agricultural Tractor	1986	139	Tier 0	2013	115	Tier 4 Interim	645	-	2219	10	Merced

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Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-8149-A	1	Agricultural Tractor	1976	72	Tier 0	2012	86	Tier 4 Interim	89	-	111	10	Fresno
C-7433-A	1	Agricultural Tractor	1994	95	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	900	-	3200	10	Fresno
C-21578-A	1	Agricultural Tractor	1990	88	Tier 0	2011	95	Tier 3	600	-	1800	10	Madera
C-21574-A	1	Agricultural Tractor	1982	98	Tier 0	2012	120	Tier 3	1000	-	5000	10	Fresno
C-21129-A	1	Agricultural Tractor	1998	100	Tier 0	2013	108	Tier 3	2000	-	3000	10	Tulare
C-7499-A	1	Agricultural Tractor	1964	115	Tier 0	2013	140	Tier 4 Phase In/Alternate NOx	520	-	2828	10	Tulare
C-7886-A	1	Agricultural Tractor	1980	156	Tier 0	2012	200	Tier 4 Phase In/Alternate NOx	1460	-	14600	10	Fresno
C-21640-A	1	Agricultural Tractor	1997	39	Tier 0	2011	42	Tier 4 Interim	1028	-	2570	10	Fresno
C-21610-A	1	Agricultural Tractor	1997	32	Tier 0	2011	42	Tier 4 Interim	1038	-	2596	10	Merced
C-21608-A	1	Agricultural Tractor	1997	39	Tier 0	2011	42	Tier 4 Interim	1021	-	2553	10	Merced
C-21605-A	1	Agricultural Tractor	1997	39	Tier 0	2011	42	Tier 4 Interim	1057	-	2642	10	Merced
C-21563-A	1	Agricultural Tractor	1987	26	Tier 0	2011	28	Tier 4 Interim	400	-	2000	10	Fresno
C-21306-A	1	Agricultural Tractor	1985	198	Tier 0	2011	120	Tier 3	551	-	3306	10	Kings
C-8314-A	1	Agricultural Tractor	1976	80	Tier 0	2013	105	Tier 4 Phase In/Alternate NOx	110	-	330	10	Fresno

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Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21390-A	1	Agricultural Tractor	1990	109	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	745	-	7445	10	Fresno
C-21480-A	1	Agricultural Tractor	1998	89	Tier 0	2011	101	Tier 3	300	-	1500	10	Kern
C-21268-A	1	Agricultural Tractor	1998	114	Tier 1	2013	100	Tier 4 Phase In/Alternate NOx	586	-	2928	10	Fresno
C-21259-A	1	Agricultural Tractor	1986	90	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	370	-	1850	10	Fresno
C-21256-A	1	Agricultural Tractor	1997	99	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	278	-	1390	10	Fresno
C-21584-A	1	Agricultural Tractor	1994	216	Tier 0	2011	120	Tier 3	800	-	5600	10	Fresno
C-21399-A	1	Agricultural Tractor	1976	62	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	200	-	600	10	Fresno
C-21175-A	1	Agricultural Tractor	1997	90	Tier 0	2013	105	Tier 4 Phase In/Alternate NOx	600	-	2700	10	Fresno
C-22710-A	1	Agricultural Tractor	1999	89	Tier 1	2013	100	Tier 4 Phase In/Alternate NOx	140	-	698	10	Fresno

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21327-A	1	Agricultural Tractor	1976	151	Tier 0	2013	170	Tier 4 Phase In/Alternate NOx	1200	-	6000	10	Fresno
C-21317-A	1	Agricultural Tractor	1985	130	Tier 0	2013	125	Tier 4 Phase In/Alternate NOx	600	-	2400	10	Fresno
C-21240-A	1	Agricultural Tractor	1979	97	Tier 0	2012	115	Tier 4 Phase In/Alternate NOx	452	-	1581	10	Fresno
C-21678-A	1	Agricultural Tractor	1999	45	Tier 1	2013	46	Tier 4 Interim	2800	-	6000	1	Kings
C-21396-A	1	Agricultural Tractor	1967	47	Tier 0	2012	46	Tier 4 Interim	322	-	950	10	Fresno
C-21465-A	1	Agricultural Tractor	1977	72	Tier 0	2012	85	Tier 4 Phase In/Alternate NOx	400	-	800	10	Fresno
C-21176-A	1	Agricultural Tractor	2001	90	Tier 1	2013	105	Tier 4 Phase In/Alternate NOx	885	-	3983	10	Fresno
C-21523-A	1	Agricultural Tractor	1972	115	Tier 0	2013	105	Tier 4 Phase In/Alternate NOx	600	-	500	10	Fresno
C-22505-A	1	Agricultural Tractor	1991	80	Tier 0	2011	99	Tier 3	400	-	4000	10	Fresno
C-22502-A	1	Agricultural Tractor	1991	80	Tier 0	2011	97	Tier 3	400	-	4000	10	Fresno

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21330-A	1	Agricultural Tractor	1983	130	Tier 0	2013	125	Tier 4 Phase In/Alternate NOx	1200	-	4800	10	Fresno
C-21562-A	1	Agricultural Tractor	1964	58	Tier 0	2012	50	Tier 4 Interim	210	-	420	10	Stanislaus
C-8535-A	1	Agricultural Tractor	1990	97	Tier 0	2012	120	Tier 3	600	-	2400	10	Madera
C-21289-A	1	Agricultural Tractor	1990	97	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	434	-	2168	10	Fresno
C-21567-A	1	Agricultural Tractor	1966	66	Tier 0	2011	101	Tier 3	150	-	450	10	Fresno
C-21187-A	1	Agricultural Tractor	1979	32	Tier 0	2012	28	Tier 4 Interim	300	-	900	10	Fresno
C-8195-A	1	Agricultural Tractor	1978	285	Tier 0	2013	360	Tier 4 Phase In/Alternate NOx	800	-	15000	10	Kings
C-22429-A	1	Agricultural Tractor	1994	400	Tier 0	2013	460	Tier 4 Phase In/Alternate NOx	378	-	7560	10	Stanislaus
C-21910-A	1	Agricultural Tractor	1981	60	Tier 0	2013	71	Tier 4 Phase In/Alternate NOx	1000	-	3000	10	Merced
C-8429-A	1	Agricultural Tractor	1973	151	Tier 0	2013	190	Tier 4 Phase In/Alternate NOx	1727	-	14392	10	Stanislaus

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Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-7559-A	1	Agricultural Tractor	1974	76	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	300	-	600	10	Fresno
C-7555-A	1	Agricultural Tractor	1976	80	Tier 0	2013	105	Tier 4 Phase In/Alternate NOx	300	-	600	10	Fresno
C-22064-A	1	Agricultural Tractor	1992	30	Tier 0	2012	32	Tier 4 Interim	999	-	999	10	Kings
C-21976-A	1	Agricultural Tractor	1977	38	Tier 0	2012	42	Tier 4 Interim	400	-	170	10	Fresno
C-8427-A	1	Agricultural Tractor	1979	132	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	2470	-	18529	10	Stanislaus
C-8058-A	1	Agricultural Tractor	1986	90	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	1000	-	5000	10	Fresno
C-21887-A	1	Agricultural Tractor	1997	370	Tier 1	2013	474	Tier 3	1100	-	16245	10	Merced
C-21384-A	1	Agricultural Tractor	1987	97	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	600	-	3000	10	Madera
C-21383-A	1	Agricultural Tractor	1961	56	Tier 0	2012	60	Tier 4 Interim	475	-	2200	10	Madera
C-21398-A	1	Agricultural Tractor	1983	78	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	1800	-	7200	10	Madera
C-21354-A	1	Agricultural Tractor	1998	99	Tier 1	2011	120	Tier 3	800	-	3200	10	Fresno

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Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21757-A	1	Agricultural Tractor	1979	80	Tier 0	2012	81	Tier 3	200	-	500	10	Fresno
C-21322-A	1	Agricultural Tractor	1980	158	Tier 0	2013	190	Tier 4 Phase In/Alternate NOx	766	-	6583	10	Fresno
C-8530-A	1	Agricultural Tractor	1984	80	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	450	-	1890	10	Fresno
C-21473-A	1	Agricultural Tractor	1969	47	Tier 0	2011	50	Tier 4 Interim	2028	-	5500	10	Fresno
C-21472-A	1	Agricultural Tractor	1987	72	Tier 0	2012	86	Tier 4 Phase In/Alternate NOx	2028	-	5500	10	Fresno
C-21471-A	1	Agricultural Tractor	1999	95	Tier 1	2012	108	Tier 3	2028	-	5500	10	Fresno
C-21470-A	1	Agricultural Tractor	1997	110	Tier 1	2012	108	Tier 3	2028	-	5500	10	Fresno
C-21357-A	1	Agricultural Tractor	1996	102	Tier 0	2011	120	Tier 3	800	-	3200	10	Fresno
C-22579-A	1	Agricultural Tractor	1985	48	Tier 0	2013	55	Tier 4 Interim	100	-	60	10	Kings
C-21186-A	1	Agricultural Tractor	1983	32	Tier 0	2012	28	Tier 4 Interim	300	-	900	10	Fresno
C-21184-A	1	Agricultural Tractor	1979	25	Tier 0	2012	28	Tier 4 Interim	300	-	900	10	Fresno
C-21181-A	1	Agricultural Tractor	1979	25	Tier 0	2012	28	Tier 4 Interim	300	-	900	10	Fresno
C-21379-A	1	Agricultural Tractor	1995	234	Tier 0	2013	257	Tier 4 Phase In/Alternate NOx	2500	-	12000	10	San Joaquin
C-22326-A	1	Agricultural Tractor	1978	84	Tier 0	2013	105	Tier 3	735	-	1000	10	Fresno

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-8059-A	1	Agricultural Tractor	1986	90	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	1000	-	5000	10	Fresno
C-8795-A	1	Agricultural Tractor	1989	69	Tier 0	2012	70	Tier 4 Interim	1009	-	2521	10	San Joaquin
C-22506-A	1	Agricultural Tractor	1991	80	Tier 0	2011	97	Tier 3	400	-	4000	10	Fresno
C-21764-A	1	Agricultural Tractor	1975	74	Tier 0	2012	71	Tier 4 Interim	650	-	3700	10	Fresno
C-22269-A	1	Agricultural Tractor	1984	80	Tier 0	2013	95	Tier 3	300	-	3600	10	Fresno
C-22165-A	1	Agricultural Tractor	1979	79	Tier 0	2012	71	Tier 4 Interim	409	-	1600	10	San Joaquin
C-21365-A	1	Agricultural Tractor	1990	55	Tier 0	2012	56	Tier 4 Interim	200	-	400	10	Fresno
C-23647-A	1	Agricultural Tractor	1991	81	Tier 0	2012	100	Tier 4 Phase In/Alternate NOx	226	-	1600	10	Fresno
C-21999-A	1	Agricultural Tractor	1984	97	Tier 0	2013	95	Tier 3	734	-	2644	10	Tulare
C-21723-A	1	Agricultural Tractor	1998	89	Tier 0	2011	87	Tier 3	400	-	1200	10	Fresno
C-23191-A	1	Agricultural Tractor	2001	95	Tier 1	2013	111	Tier 3	700	-	2100	10	Madera
C-21898-A	1	Agricultural Tractor	1995	60	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	350	-	1225	10	Fresno
C-22945-A	1	Agricultural Tractor	1989	139	Tier 0	2011	112	Tier 3	600	-	2400	10	Stanislaus
C-22005-A	1	Agricultural Tractor	1987	81	Tier 0	2013	95	Tier 3	400	-	720	10	Fresno
C-22003-A	1	Agricultural Tractor	1974	58	Tier 0	2013	34	Tier 4 Interim	400	-	720	10	Fresno
C-23271-A	1	Agricultural Tractor	1976	80	Tier 0	2012	74	Tier 4 Interim	300	-	250	10	Tulare

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22031-A	1	Agricultural Tractor	1982	132	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	350	-	1400	10	Kern
C-21607-A	1	Agricultural Tractor	1972	76	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	600	-	1800	10	Fresno
C-21734-A	1	Agricultural Tractor	1991	72	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	800	-	2400	10	Fresno
C-22767-A	1	Agricultural Tractor	2000	96	Tier 1	2011	112	Tier 3	350	-	300	10	Merced
C-21974-A	1	Agricultural Tractor	1997	95	Tier 0	2012	105	Tier 3	350	-	1575	10	Fresno
C-21721-A	1	Agricultural Tractor	1973	63	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	500	-	1700	10	Fresno
C-22069-A	1	Agricultural Tractor	1979	25	Tier 0	2012	32	Tier 4 Interim	200	-	200	10	Kings
C-22068-A	1	Agricultural Tractor	1988	31	Tier 0	2012	32	Tier 4 Interim	200	-	200	10	Kings
C-22066-A	1	Agricultural Tractor	1993	25	Tier 0	2012	32	Tier 4 Interim	981	-	981	10	Kings
C-21896-A	1	Agricultural Tractor	1981	98	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	600	-	1800	10	Fresno
C-21762-A	1	Agricultural Tractor	1974	69	Tier 0	2012	85	Tier 4 Phase In/Alternate NOx	350	-	600	10	Fresno

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22939-A	1	Agricultural Tractor	1999	108	Tier 1	2013	140	Tier 4 Phase In/Alternate NOx	3000	-	9000	10	Madera
C-21414-A	1	Agricultural Tractor	1960	58	Tier 0	2013	80	Tier 4 Phase In/Alternate NOx	1000	-	1000	10	Fresno
C-21413-A	1	Agricultural Tractor	1988	81	Tier 0	2013	80	Tier 4 Phase In/Alternate NOx	1000	-	1000	10	Fresno
C-23527-A	1	Agricultural Tractor	1990	73	Tier 0	2012	89	Tier 4 Phase In/Alternate NOx	225	-	350	10	Fresno
C-22495-A	1	Agricultural Tractor	1987	72	Tier 0	2011	105	Tier 3	250	-	2500	10	Stanislaus
C-22492-A	1	Agricultural Tractor	1997	175	Tier 1	2013	190	Tier 4 Phase In/Alternate NOx	800	-	5600	10	Kings
C-21899-A	1	Agricultural Tractor	1995	60	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	350	-	1225	10	Fresno
C-22048-A	1	Agricultural Tractor	1999	95	Tier 0	2013	95	Tier 3	1396	-	3490	10	Kings
C-22159-A	1	Agricultural Tractor	1967	115	Tier 0	2012	120	Tier 3	250	-	1250	10	Fresno
C-21686-A	1	Agricultural Tractor	1988	81	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	164	-	328	10	Fresno

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21382-A	1	Agricultural Tractor	1989	97	Tier 0	2013	103	Tier 4 Phase In/Alternate NOx	223	-	892	10	Fresno
C-23153-A	1	Agricultural Tractor	1989	97	Tier 0	2012	120	Tier 3	488	-	2440	10	Fresno
C-22654-A	1	Agricultural Tractor	1963	44	Tier 0	2012	49	Tier 4 Interim	75	-	100	10	Fresno
C-22156-A	1	Agricultural Tractor	1989	80	Tier 0	2012	103	Tier 4 Phase In/Alternate NOx	356	-	1405	10	Stanislaus
C-22058-A	1	Agricultural Tractor	1990	26	Tier 0	2012	32	Tier 4 Interim	200	-	1500	10	Kings
C-22052-A	1	Agricultural Tractor	1998	95	Tier 1	2012	95	Tier 3	1500	-	2000	10	Kings
C-21375-A	1	Agricultural Tractor	1979	163	Tier 0	2013	232	Tier 4 Phase In/Alternate NOx	1000	-	2000	10	Merced
C-22062-A	1	Agricultural Tractor	1992	30	Tier 0	2012	32	Tier 4 Interim	200	-	1500	10	Kings
C-8595-A	1	Agricultural Tractor	1994	97	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	1000	-	3500	10	Madera
C-22947-A	1	Agricultural Tractor	1962	96	Tier 0	2013	140	Tier 4 Phase In/Alternate NOx	800	-	8000	10	Fresno
C-22267-A	1	Agricultural Tractor	1997	360	Tier 1	2013	410	Tier 4 Phase In/Alternate NOx	1250	-	10000	10	Tulare

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-23449-A	1	Agricultural Tractor	1981	60	Tier 0	2013	84	Tier 4 Phase In/Alternate NOx	120	-	200	10	Fresno
C-22141-A	1	Agricultural Tractor	1999	217	Tier 1	2013	260	Tier 4 Phase In/Alternate NOx	1045	-	10869	10	Stanislaus
C-21235-A	1	Agricultural Tractor	2000	425	Tier 1	2013	360	Tier 4 Phase In/Alternate NOx	500	-	8000	10	Kings
C-22103-A	1	Agricultural Tractor	1997	100	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	1223	-	5797	10	Stanislaus
C-21693-A	1	Agricultural Tractor	1986	63	Tier 0	2013	71	Tier 4 Interim	1100	-	4620	10	Fresno
C-21371-A	1	Agricultural Tractor	1979	80	Tier 0	2011	87	Tier 3	400	-	600	10	Tulare
C-21353-A	1	Agricultural Tractor	1983	72	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	1200	-	3500	10	Fresno
C-21355-A	1	Agricultural Tractor	1983	97	Tier 0	2013	118	Tier 3	500	-	2000	10	Fresno
C-22606-A	1	Agricultural Tractor	1999	91	Tier 1	2012	100	Tier 4 Phase In/Alternate NOx	1700	-	9000	10	Tulare

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21882-A	1	Agricultural Tractor	1998	110	Tier 1	2013	135	Tier 4 Phase In/Alternate NOx	1400	-	21000	10	Stanislaus
C-21675-A	1	Agricultural Tractor	1989	180	Tier 0	2013	200	Tier 4 Phase In/Alternate NOx	1950	-	15600	10	Merced
C-22105-A	1	Agricultural Tractor	1999	104	Tier 1	2013	100	Tier 4 Phase In/Alternate NOx	1447	-	7930	10	Stanislaus
C-23313-A	1	Agricultural Tractor	1985	210	Tier 0	2012	235	Tier 4 Phase In/Alternate NOx	1179	-	12000	10	Tulare
C-22605-A	1	Agricultural Tractor	1992	156	Tier 0	2012	139	Tier 4 Phase In/Alternate NOx	1200	-	4500	10	Kern
C-22055-A	1	Agricultural Tractor	1990	26	Tier 0	2012	32	Tier 4 Interim	200	-	1500	10	Kings
C-21684-A	1	Agricultural Tractor	1990	81	Tier 0	2011	112	Tier 3	2190	-	10074	10	Merced
C-21683-A	1	Agricultural Tractor	1990	81	Tier 0	2011	112	Tier 3	1391	-	5460	10	Merced
C-21817-A	1	Agricultural Tractor	1983	81	Tier 0	2013	103	Tier 4 Phase In/Alternate NOx	500	-	750	10	Madera
C-23447-A	1	Agricultural Tractor	1971	58	Tier 0	2013	65	Tier 4 Interim	1000	-	3500	10	Merced

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-23248-A	1	Agricultural Tractor	1986	94	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	883	-	9184	10	Fresno
C-23315-A	1	Agricultural Tractor	1999	105	Tier 1	2013	115	Tier 4 Phase In/Alternate NOx	600	-	3000	10	Kern
C-22060-A	1	Agricultural Tractor	1986	26	Tier 0	2012	32	Tier 4 Interim	200	-	1500	10	Kings
C-22182-A	1	Agricultural Tractor	1988	61	Tier 0	2013	73	Tier 4 Final	1100	-	1500	10	Stanislaus
C-22179-A	1	Agricultural Tractor	1981	98	Tier 0	2012	100	Tier 4 Phase In/Alternate NOx	950	-	1600	10	Stanislaus
C-22142-A	1	Agricultural Tractor	2000	247	Tier 1	2013	285	Tier 4 Phase In/Alternate NOx	792	-	9900	10	Stanislaus
C-22420-A	1	Agricultural Tractor	1976	84	Tier 0	2013	105	Tier 4 Phase In/Alternate NOx	1800	-	5400	10	Fresno
C-21995-A	1	Agricultural Tractor	1996	134	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	2200	-	15000	10	Madera
C-21595-A	1	Agricultural Tractor	1987	210	Tier 0	2013	230	Tier 4 Phase In/Alternate NOx	467	-	3740	10	Kings

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-23383-A	1	Agricultural Tractor	1973	67	Tier 0	2012	74	Tier 4 Interim	283	-	566	10	Stanislaus
C-21604-A	1	Agricultural Tractor	1997	102	Tier 0	2013	101	Tier 3	1200	-	3500	10	Fresno
C-25913-A	1	Agricultural Tractor	1980	98	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	800	-	1600	10	Madera
C-23312-A	1	Agricultural Tractor	1977	98	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	800	-	1600	10	Madera
C-22578-A	1	Agricultural Tractor	1982	63	Tier 0	2013	75	Tier 4 Phase In/Alternate NOx	225	-	100	10	Kings
C-23270-A	1	Agricultural Tractor	1979	80	Tier 0	2012	74	Tier 4 Interim	300	-	250	10	Tulare
C-23446-A	1	Agricultural Tractor	1997	81	Tier 0	2013	95	Tier 3	652	-	2608	10	Fresno
C-21737-A	1	Agricultural Tractor	1979	60	Tier 0	2011	55	Tier 4 Interim	550	-	550	10	Kings
C-21731-A	1	Agricultural Tractor	1995	210	Tier 0	2013	260	Tier 4 Phase In/Alternate NOx	1200	-	8400	10	Kings
C-25965-A	1	Agricultural Tractor	1998	89	Tier 1	2013	101	Tier 3	1000	-	7000	10	Kern
C-21596-A	1	Agricultural Tractor	1997	102	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	1102	-	3500	10	Fresno

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22305-A	1	Agricultural Tractor	2002	110	Tier 1	2013	125	Tier 4 Phase In/Alternate NOx	977	-	5471	10	Stanislaus
C-22260-A	1	Agricultural Tractor	1999	104	Tier 1	2013	125	Tier 4 Phase In/Alternate NOx	289	-	1588	10	Stanislaus
C-22258-A	1	Agricultural Tractor	1999	104	Tier 1	2013	125	Tier 4 Phase In/Alternate NOx	1885	-	10366	10	Stanislaus
C-22107-A	1	Agricultural Tractor	1999	104	Tier 1	2013	125	Tier 4 Phase In/Alternate NOx	1093	-	5990	10	Stanislaus
C-22496-A	1	Agricultural Tractor	1996	83	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	838	-	3350	10	San Joaquin
C-22334-A	1	Agricultural Tractor	1963	70	Tier 0	2011	101	Tier 3	700	-	5000	10	Fresno
C-7673-A	1	Agricultural Tractor	1986	81	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	1000	-	4500	10	Madera
C-23830-A	1	Agricultural Tractor	1998	425	Tier 1	2012	507	Tier 4 Phase In/Alternate NOx	450	-	9450	10	Merced

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-23207-A	1	Agricultural Tractor	1997	270	Tier 0	2014	310	Tier 4 Phase In/Alternate NOx	1000	-	13000	10	Kings
C-21587-A	1	Agricultural Tractor	1964	58	Tier 0	2014	75	Tier 4 Interim	99	-	100	10	Fresno
C-21623-A	1	Agricultural Tractor	1981	45	Tier 0	2013	46	Tier 4 Interim	475	-	1710	10	Fresno
C-21905-A	1	Agricultural Tractor	1996	74	Tier 0	2013	95	Tier 4 Phase In/Alternate NOx	500	-	4620	10	Fresno
C-24100-A	1	Agricultural Tractor	1984	228	Tier 0	2013	260	Tier 4 Phase In/Alternate NOx	1600	-	10000	10	Fresno
C-25962-A	1	Agricultural Tractor	1998	89	Tier 1	2013	101	Tier 3	1000	-	7000	10	Kern
C-22946-A	1	Agricultural Tractor	1977	98	Tier 0	2012	74	Tier 4 Interim	370	-	550	10	Fresno
C-25964-A	1	Agricultural Tractor	1998	89	Tier 1	2013	101	Tier 3	1000	-	7000	10	Kern
C-21508-A	1	Agricultural Tractor	1982	63	Tier 0	2013	74	Tier 4 Interim	500	-	500	10	Fresno
C-23576-A	1	Agricultural Tractor	1997	81	Tier 0	2011	85	Tier 3	250	-	2000	10	Tulare
C-23160-A	1	Agricultural Tractor	1987	52	Tier 0	2013	71	Tier 4 Interim	325	-	800	10	Fresno
C-21763-A	1	Agricultural Tractor	2001	129	Tier 1	2013	141	Tier 4 Phase In/Alternate NOx	1800	-	3600	10	San Joaquin
C-22803-A	1	Agricultural Tractor	1992	173	Tier 0	2013	210	Tier 4 Phase In/Alternate NOx	700	-	4599	10	Fresno

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Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21269-A	1	Agricultural Tractor	1981	186	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	1414	-	4694	10	Kings
C-21759-A	1	Agricultural Tractor	1981	73	Tier 0	2013	106	Tier 4 Phase In/Alternate NOx	600	-	2200	10	Fresno
C-22498-A	1	Agricultural Tractor	1994	108	Tier 0	2012	150	Tier 4 Phase In/Alternate NOx	500	-	2950	10	Fresno
C-22275-A	1	Agricultural Tractor	1976	98	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	700	-	1400	10	Fresno
C-23195-A	1	Agricultural Tractor	1983	90	Tier 0	2013	101	Tier 3	232	-	348	10	San Joaquin
C-9009-A	1	Agricultural Tractor	1982	100	Tier 0	2011	125	Tier 3	150	-	400	10	Stanislaus
C-23649-A	1	Agricultural Tractor	1997	120	Tier 1	2013	170	Tier 4 Phase In/Alternate NOx	1000	-	4000	10	Fresno
C-22992-A	1	Agricultural Tractor	1997	100	Tier 0	2011	105	Tier 3	350	-	2100	10	Kern
C-22991-A	1	Agricultural Tractor	2000	104	Tier 1	2011	105	Tier 3	350	-	2100	10	Kern
C-21464-A	1	Agricultural Tractor	2000	265	Tier 1	2013	200	Tier 4 Phase In/Alternate NOx	2000	-	30000	10	Kings

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Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22499-A	1	Agricultural Tractor	1969	69	Tier 0	2013	125	Tier 4 Phase In/Alternate NOx	400	-	1600	10	Fresno
C-23499-A	1	Agricultural Tractor	1993	102	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	500	-	2000	10	Madera
C-21907-A	1	Agricultural Tractor	1991	109	Tier 0	2013	110	Tier 4 Phase In/Alternate NOx	500	-	2000	10	Fresno
C-21906-A	1	Agricultural Tractor	1991	109	Tier 0	2013	110	Tier 4 Phase In/Alternate NOx	750	-	3000	10	Fresno
C-21376-A	1	Agricultural Tractor	1980	194	Tier 0	2013	258	Tier 4 Phase In/Alternate NOx	800	-	8000	10	Stanislaus
C-21251-A	1	Agricultural Tractor	1997	270	Tier 1	2013	285	Tier 4 Phase In/Alternate NOx	1373	-	8118	10	Kings
C-21246-A	1	Agricultural Tractor	1997	270	Tier 1	2013	285	Tier 4 Phase In/Alternate NOx	1366	-	5844	10	Kings
C-23475-A	1	Agricultural Tractor	1992	71	Tier 0	2013	105	Tier 3	205	-	615	10	San Joaquin

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Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22806-A	1	Agricultural Tractor	1997	240	Tier 0	2013	260	Tier 4 Phase In/Alternate NOx	500	-	4500	10	Kern
C-23503-A	1	Agricultural Tractor	1995	83	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	500	-	2000	10	Madera
C-25963-A	1	Agricultural Tractor	1998	89	Tier 1	2013	101	Tier 3	1000	-	7000	10	Kern
C-21265-A	1	Agricultural Tractor	1981	186	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	1303	-	5863	10	Kings
C-23577-A	1	Agricultural Tractor	1986	81	Tier 0	2012	95	Tier 3	174	-	522	10	Tulare
C-22611-A	1	Agricultural Tractor	2000	282	Tier 1	2013	335	Tier 4 Phase In/Alternate NOx	1100	-	15400	10	Kings
C-22609-A	1	Agricultural Tractor	1964	76	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	559	-	1700	10	Merced
C-22602-A	1	Agricultural Tractor	1965	86	Tier 0	2013	105	Tier 3	400	-	2000	10	Stanislaus
C-22308-A	1	Agricultural Tractor	1994	77	Tier 0	2012	102	Tier 4 Phase In/Alternate NOx	220	-	330	10	San Joaquin
C-23504-A	1	Agricultural Tractor	1988	51	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	500	-	2000	10	Madera

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21274-A	1	Agricultural Tractor	1981	186	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	1207	-	4225	10	Kings
C-23502-A	1	Agricultural Tractor	1997	102	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	500	-	2000	10	Madera
C-23498-A	1	Agricultural Tractor	1996	102	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	500	-	2000	10	Madera
C-23497-A	1	Agricultural Tractor	1986	102	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	500	-	2000	10	Madera
C-23495-A	1	Agricultural Tractor	1986	81	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	500	-	2000	10	Madera
C-23501-A	2	Agricultural Tractor	1972	76	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	250	-	1000	10	Madera
C-23500-A	1	Agricultural Tractor	1997	102	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	500	-	2000	10	Madera
C-21446-A	1	Agricultural Tractor	1990	97	Tier 0	2013	99	Tier 3	955	-	6685	10	Stanislaus

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21258-A	1	Agricultural Tractor	1979	186	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	527	-	1826	10	Kern
C-21368-A	1	Agricultural Tractor	1996	230	Tier 1	2013	235	Tier 4 Phase In/Alternate NOx	1200	-	35040	10	Tulare
C-22143-A	1	Agricultural Tractor	2000	283	Tier 1	2013	335	Tier 4 Phase In/Alternate NOx	1744	-	19010	10	Stanislaus
C-21823-A	1	Agricultural Tractor	1996	216	Tier 1	2013	260	Tier 4 Phase In/Alternate NOx	1500	-	21000	10	Kings
C-21431-A	1	Agricultural Tractor	1980	77	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	800	-	1500	10	Fresno
C-23274-A	1	Agricultural Tractor	1981	77	Tier 0	2012	108	Tier 3	294	-	3062	10	Fresno
C-22273-A	1	Agricultural Tractor	1979	132	Tier 0	2013	136	Tier 4 Phase In/Alternate NOx	1100	-	6050	10	Fresno
C-22627-A	1	Agricultural Tractor	1970	115	Tier 0	2012	120	Tier 3	546	-	1000	10	Fresno
C-22350-A	1	Agricultural Tractor	1973	180	Tier 0	2012	200	Tier 4 Phase In/Alternate NOx	181	-	1810	10	Kings
C-23445-A	1	Agricultural Tractor	1995	110	Tier 0	2011	139	Tier 3	2400	-	4000	10	Tulare

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-23443-A	1	Agricultural Tractor	1996	99	Tier 0	2013	113	Tier 3	2400	-	3500	10	Tulare
C-21980-A	1	Agricultural Tractor	1964	115	Tier 0	2013	86	Tier 4 Phase In/Alternate NOx	300	-	1500	10	Kings
C-7641-A	1	Agricultural Tractor	1978	62	Tier 0	2012	120	Tier 3	1260	-	7560	10	Fresno
C-25291-A	1	Agricultural Tractor	1992	88	Tier 0	2012	120	Tier 4 Phase In/Alternate NOx	597	-	2388	10	Fresno
C-21897-A	1	Agricultural Tractor	1975	180	Tier 0	2012	115	Tier 4 Phase In/Alternate NOx	1000	-	3000	10	Fresno
C-22661-A	1	Agricultural Tractor	1998	425	Tier 1	2013	507	Tier 4 Phase In/Alternate NOx	592	-	8250	10	Merced
C-22819-A	1	Agricultural Tractor	2002	108	Tier 1	2011	108	Tier 3	1000	-	3000	10	Fresno
C-22271-A	1	Agricultural Tractor	1976	84	Tier 0	2012	100	Tier 4 Phase In/Alternate NOx	850	-	3825	10	Fresno
C-21879-A	1	Agricultural Tractor	1998	88	Tier 1	2011	105	Tier 3	410	-	1230	10	Stanislaus
C-21747-A	1	Agricultural Tractor	1981	173	Tier 0	2013	215	Tier 4 Phase In/Alternate NOx	350	-	2800	10	Fresno

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Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22628-A	1	Agricultural Tractor	1984	400	Tier 0	2013	450	Tier 4 Phase In/Alternate NOx	500	-	10000	10	Merced
C-22324-A	1	Agricultural Tractor	1998	92	Tier 1	2013	100	Tier 4 Phase In/Alternate NOx	500	-	1500	10	Stanislaus
C-21701-A	1	Agricultural Tractor	1980	109	Tier 0	2013	125	Tier 4 Phase In/Alternate NOx	123	-	1200	10	Fresno
C-21425-A	1	Agricultural Tractor	1978	98	Tier 0	2012	100	Tier 4 Interim	500	-	1250	10	Tulare
C-21350-A	1	Agricultural Tractor	1983	90	Tier 0	2013	103	Tier 4 Phase In/Alternate NOx	178	-	611	10	Fresno
C-21824-A	1	Agricultural Tractor	1988	168	Tier 0	2013	200	Tier 4 Phase In/Alternate NOx	1973	-	9863	10	Tulare
C-21590-A	1	Agricultural Tractor	1978	38	Tier 0	2012	46	Tier 4 Interim	800	-	1200	10	Fresno
C-21589-A	1	Agricultural Tractor	1978	38	Tier 0	2011	46	Tier 4 Interim	800	-	1200	10	Fresno
C-21367-A	1	Agricultural Tractor	1997	260	Tier 1	2013	257	Tier 4 Phase In/Alternate NOx	2920	-	35040	10	Tulare

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Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21252-A	1	Agricultural Tractor	1984	198	Tier 0	2013	235	Tier 4 Phase In/Alternate NOx	499	-	1546	10	Kern
C-21249-A	1	Agricultural Tractor	1997	270	Tier 1	2013	285	Tier 4 Phase In/Alternate NOx	1362	-	5673	10	Kings
C-22317-A	1	Agricultural Tractor	2001	115	Tier 1	2013	100	Tier 4 Phase In/Alternate NOx	1500	-	5000	10	Merced
C-21682-A	1	Agricultural Tractor	1979	98	Tier 0	2011	113	Tier 3	300	-	700	10	Fresno
C-8517-A	1	Agricultural Tractor	1980	132	Tier 0	2013	170	Tier 4 Phase In/Alternate NOx	1500	-	12500	10	Stanislaus
C-22164-A	1	Agricultural Tractor	1997	367	Tier 0	2013	375	Tier 4 Phase In/Alternate NOx	2309	-	27413	10	Kern
C-21727-A	1	Agricultural Tractor	1991	28	Tier 0	2012	30	Tier 4 Interim	300	-	600	10	Fresno
C-7497-A	1	Agricultural Tractor	1996	156	Tier 0	2013	232	Tier 4 Phase In/Alternate NOx	720	-	4896	10	Tulare
C-22193-A	1	Agricultural Tractor	1973	103	Tier 0	2011	120	Tier 3	161	-	1670	10	Kings
C-21436-A	1	Agricultural Tractor	1989	81	Tier 0	2013	108	Tier 3	1500	-	8000	10	Fresno

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Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-8473-A	1	Agricultural Tractor	1988	97	Tier 0	2013	140	Tier 4 Phase In/Alternate NOx	900	-	4500	10	Fresno
C-21916-A	1	Agricultural Tractor	1984	335	Tier 0	2013	410	Tier 4 Phase In/Alternate NOx	486	-	6318	10	Kings
C-22161-A	1	Agricultural Tractor	1985	97	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	800	-	2100	10	Fresno
C-22431-A	1	Agricultural Tractor	1977	120	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	1400	-	5250	10	Kings
C-22242-A	1	Agricultural Tractor	1987	144	Tier 0	2012	105	Tier 3	700	-	4200	10	Kings
C-21207-A	1	Agricultural Tractor	1979	124	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	1000	-	6500	10	Fresno
C-22544-A	1	Agricultural Tractor	1970	67	Tier 0	2011	101	Tier 3	1038	-	4150	10	Fresno
C-8097-A	1	Agricultural Tractor	1998	132	Tier 1	2013	150	Tier 4 Phase In/Alternate NOx	1500	-	3990	10	Stanislaus
C-24094-A	1	Agricultural Tractor	1989	212	Tier 0	2011	111	Tier 3	250	-	2500	10	Fresno
C-21748-A	1	Agricultural Tractor	1977	74	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	400	-	1650	10	Fresno

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Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22323-A	1	Agricultural Tractor	1987	80	Tier 0	2012	100	Tier 4 Phase In/Alternate NOx	300	-	900	10	Stanislaus
C-21674-A	1	Agricultural Tractor	1991	180	Tier 0	2012	215	Tier 4 Phase In/Alternate NOx	1950	-	15600	10	Merced
C-23436-A	1	Agricultural Tractor	1999	110	Tier 1	2013	113	Tier 3	2400	-	3000	10	Tulare
C-22035-A	1	Agricultural Tractor	1980	126	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	375	-	2625	10	Kings
C-21710-A	1	Agricultural Tractor	1986	77	Tier 0	2013	130	Tier 4 Phase In/Alternate NOx	1000	-	2400	10	Kings
C-21374-A	1	Agricultural Tractor	1978	98	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	335	-	1005	10	Stanislaus
C-8067-A	1	Agricultural Tractor	1990	77	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	1000	-	5000	10	Fresno
C-22948-A	1	Agricultural Tractor	1996	95	Tier 0	2011	120	Tier 3	300	-	500	10	Fresno
C-21331-A	1	Agricultural Tractor	1972	64	Tier 0	2012	74	Tier 4 Interim	400	-	600	10	Fresno

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Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-8303-A	1	Agricultural Tractor	1988	70	Tier 0	2012	100	Tier 4 Phase In/Alternate NOx	792	-	285	10	Merced
C-21474-A	1	Agricultural Tractor	1971	162	Tier 0	2012	150	Tier 4 Phase In/Alternate NOx	750	-	3500	10	Fresno
C-8846-A	1	Agricultural Tractor	1984	90	-	2011	101	Tier 3	300	-	500	10	San Joaquin
C-22346-A	1	Agricultural Tractor	2000	108	Tier 1	2011	105	Tier 3	1000	-	2500	10	Kern
C-21247-A	1	Agricultural Tractor	1981	158	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	1800	-	10800	10	Kings
C-22270-A	1	Agricultural Tractor	1973	151	Tier 0	2012	120	Tier 3	600	-	4500	10	Kings
C-21815-A	1	Agricultural Tractor	1967	58	Tier 0	2012	74	Tier 4 Interim	600	-	1500	10	Fresno
C-8191-A	1	Agricultural Tractor	1974	180	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	1238	-	12375	10	Kings
C-8953-A	1	Agricultural Tractor	1997	84	Tier 0	2011	95	Tier 3	750	-	2950	10	Stanislaus
C-23314-A	1	Agricultural Tractor	1985	73	Tier 0	2011	72	Tier 3	850	-	3800	10	Kern
C-21620-A	1	Agricultural Tractor	1968	76	Tier 0	2012	100	Tier 4 Phase In/Alternate NOx	250	-	1300	10	Fresno
C-21833-A	1	Agricultural Tractor	1962	55	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	125	-	500	10	Kings

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Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22621-A	1	Agricultural Tractor	1988	72	Tier 0	2011	88	Tier 4 Interim	1200	-	800	10	Merced
C-22622-A	1	Agricultural Tractor	1988	72	Tier 0	2011	88	Tier 4 Interim	1200	-	800	10	Merced
C-21441-A	1	Agricultural Tractor	1981	69	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	800	-	5600	10	Stanislaus
C-22434-A	1	Agricultural Tractor	1982	102	Tier 0	2013	101	Tier 3	600	-	3600	10	Fresno
C-22073-A	1	Agricultural Tractor	1991	375	Tier 0	2013	545	Tier 4 Phase In/Alternate NOx	800	-	9600	10	Stanislaus
C-22798-A	1	Agricultural Tractor	1987	115	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	1000	-	800	10	Tulare
C-22619-A	1	Agricultural Tractor	1988	72	Tier 0	2011	88	Tier 4 Interim	1200	-	1000	10	Merced
C-22314-A	1	Agricultural Tractor	1999	360	Tier 1	2013	375	Tier 4 Phase In/Alternate NOx	1200	-	21600	10	Kern
C-22795-A	1	Agricultural Tractor	2000	92	Tier 1	2012	108	Tier 3	500	-	3200	10	San Joaquin
C-21909-A	1	Agricultural Tractor	1998	92	Tier 1	2012	120	Tier 3	1800	-	4500	10	Fresno
C-21679-A	1	Agricultural Tractor	1998	240	Tier 1	2013	230	Tier 4 Phase In/Alternate NOx	2796	-	27964	10	Tulare
C-21300-A	1	Agricultural Tractor	1981	98	Tier 0	2011	95	Tier 3	800	-	2200	10	Fresno

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Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-23363-A	1	Agricultural Tractor	1981	72	Tier 0	2013	90	Tier 4 Phase In/Alternate NOx	300	-	1000	10	Tulare
C-22226-A	1	Agricultural Tractor	1996	162	Tier 0	2012	200	Tier 4 Phase In/Alternate NOx	1250	-	6700	10	Fresno
C-8828-A	1	Agricultural Tractor	1983	144	Tier 0	2013	150	Tier 4 Phase In/Alternate NOx	991	-	8919	10	Kern
C-8827-A	1	Agricultural Tractor	1989	97	Tier 0	2013	105	Tier 4 Phase In/Alternate NOx	618	-	3711	10	Kern
C-22813-A	1	Agricultural Tractor	1965	58	Tier 0	2011	79	Tier 3	280	-	746	10	Tulare
C-22610-A	1	Agricultural Tractor	2000	282	Tier 1	2013	360	Tier 4 Phase In/Alternate NOx	1100	-	15400	10	Kings
C-22306-A	1	Agricultural Tractor	1994	87	Tier 0	2012	108	Tier 3	500	-	2454	10	Fresno
C-22322-A	1	Agricultural Tractor	1990	69	Tier 0	2011	95	Tier 3	400	-	1200	10	Merced
C-22620-A	1	Agricultural Tractor	1988	72	Tier 0	2011	88	Tier 4 Interim	1200	-	1000	10	Merced
C-21891-A	1	Agricultural Tractor	1998	360	Tier 1	2013	410	Tier 4 Phase In/Alternate NOx	1100	-	16660	10	Kings

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Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21631-A	1	Agricultural Tractor	1986	95	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	300	-	1200	10	Fresno
C-22158-A	1	Agricultural Tractor	1991	79	Tier 0	2013	115	Tier 4 Phase In/Alternate NOx	450	-	1218	10	Kings
C-21628-A	1	Agricultural Tractor	1987	81	Tier 0	2013	85	Tier 4 Phase In/Alternate NOx	350	-	1400	10	Fresno
C-22802-A	1	Agricultural Tractor	1983	94	Tier 0	2011	105	Tier 3	1500	-	16000	10	Kings
C-22623-A	1	Agricultural Tractor	1988	72	Tier 0	2011	88	Tier 4 Interim	1200	-	800	10	Merced
C-22232-A	1	Agricultural Tractor	1984	87	Tier 0	2013	71	Tier 4 Interim	500	-	1750	10	Fresno
C-22791-A	1	Agricultural Tractor	2000	55	Tier 1	2012	65	Tier 4 Interim	400	-	800	10	Merced
C-21672-A	1	Agricultural Tractor	1988	180	Tier 0	2013	215	Tier 4 Phase In/Alternate NOx	1950	-	15600	10	Merced
C-21192-A	1	Agricultural Tractor	1990	95	Tier 0	2012	105	Tier 3	250	-	1250	10	Fresno
C-22669-A	1	Agricultural Tractor	2002	120	Tier 1	2011	108	Tier 3	800	-	800	10	Stanislaus
C-21554-A	1	Agricultural Tractor	1982	98	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	450	-	1500	10	Fresno
C-21987-A	1	Agricultural Tractor	1998	240	Tier 1	2010	220	Tier 3	2200	-	26400	10	Merced

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21236-A	1	Agricultural Tractor	1999	425	Tier 1	2013	360	Tier 4 Phase In/Alternate NOx	500	-	8000	10	Kern
C-22629-A	1	Agricultural Tractor	2001	168	Tier 1	2013	242	Tier 4 Phase In/Alternate NOx	2500	-	20000	10	Merced
C-22670-A	1	Agricultural Tractor	1993	88	Tier 0	2012	108	Tier 3	800	-	1600	10	Stanislaus
C-21415-A	1	Agricultural Tractor	1989	97	Tier 0	2013	108	Tier 3	500	-	1750	10	Tulare
C-22810-A	1	Agricultural Tractor	1994	103	Tier 0	2013	105	Tier 3	1000	-	3000	10	Tulare
C-22675-A	1	Agricultural Tractor	1984	81	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	500	-	500	10	Stanislaus
C-21215-A	1	Agricultural Tractor	1995	216	Tier 0	2013	260	Tier 4 Phase In/Alternate NOx	500	-	5000	10	Kings
C-22673-A	1	Agricultural Tractor	1984	81	Tier 0	2013	100	Tier 4 Phase In/Alternate NOx	500	-	500	10	Stanislaus
C-22497-A	1	Agricultural Tractor	1980	186	Tier 0	2013	190	Tier 4 Phase In/Alternate NOx	300	-	2940	10	Kings
C-21216-A	1	Agricultural Tractor	1983	228	Tier 0	2013	260	Tier 4 Phase In/Alternate NOx	500	-	5000	10	Kings

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-7674-A	1	Almond Shaker	1979	100	Tier 0	2011	139	Tier 3	500	-	2500	10	Madera
C-21813-A	1	Almond Shaker	1987	121	Tier 0	2012	129	Tier 3	484	-	1800	10	San Joaquin
C-21308-A	1	Almond Sweeper	2001	80	Tier 1	2012	74	Tier 4 Interim	400	-	1200	10	Fresno
C-23704-A	1	Balers	1994	160	Tier 0	2012	173	Tier 3	1354	-	17325	10	Tulare
C-23528-A	1	Combine	1997	280	Tier 1	2013	450	Tier 4 Interim	700	-	9800	10	Fresno
C-22440-A	1	Combine	1997	280	Tier 0	2010	373	Tier 3	738	-	7500	10	Fresno
C-23531-A	1	Combine	1999	280	Tier 1	2013	450	Tier 4 Interim	700	-	9800	10	Fresno
C-21830-A	1	Swathers	1992	165	Tier 0	2013	220	Tier 4 Phase In/Alternate NOx	926	-	4630	10	Kings
C-22076-A	1	Swathers	1992	95	Tier 0	2012	220	Tier 4 Phase In/Alternate NOx	450	-	3150	10	Stanislaus
C-22092-A	1	Swathers	1990	95	Tier 0	2012	220	Tier 4 Phase In/Alternate NOx	700	-	4900	10	Stanislaus
C-21848-A	1	Swathers	1998	100	Tier 1	2012	188	Tier 4 Phase In/Alternate NOx	900	-	4100	10	Fresno
C-21828-A	1	Swathers	1999	152	Tier 1	2012	220	Tier 4 Phase In/Alternate NOx	970	-	4850	10	Kings
C-23889-A	1	Swathers	1988	110	Tier 0	2011	148	Tier 3	225	-	1350	10	Kings
C-24096-A	1	Tomato Harvester	1997	200	Tier 1	2010	225	Tier 3	1250	-	10000	10	Fresno

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22034-A	1	Wheel Loader	1995	125	Tier 0	2013	163	Tier 4 Phase In/Alternate NOx	1676	-	5866	10	Fresno
C-8306-A	2	Wheel Loader	1989	165	Tier 0	2013	212	Tier 4 Phase In/Alternate NOx	3000	-	12000	10	San Joaquin
C-8793-A	1	Wheel Loader	1997	170	Tier 0	2013	163	Tier 4 Phase In/Alternate NOx	2500	-	8000	10	Kern
C-24360-A	1	Wheel Loader	1999	170	Tier 1	2013	186	Tier 4 Phase In/Alternate NOx	2500	-	10000	10	Madera
C-21690-A	1	Wheel Loader	1997	257	Tier 1	2013	232	Tier 4 Phase In/Alternate NOx	1900	-	28500	10	Merced
C-22437-A	1	Wheel Loader	2000	158	Tier 1	2013	186	Tier 4 Phase In/Alternate NOx	1500	-	4714	10	Fresno
C-22042-A	1	Wheel Loader	1982	43	Tier 0	2012	173	Tier 4 Phase In/Alternate NOx	700	-	1750	10	Kings

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-24361-A	1	Wheel Loader	1998	170	Tier 1	2013	186	Tier 4 Phase In/Alternate NOx	1531	-	6122	10	Madera
C-22811-A	1	Wheel Loader	1990	110	Tier 0	2013	186	Tier 4 Phase In/Alternate NOx	898	-	9337	10	Stanislaus
C-21570-A	1	Wheel Loader	1993	138	Tier 0	2012	144	Tier 4 Phase In/Alternate NOx	550	-	5000	10	Madera
C-21886-A	1	Wheel Loader	1999	138	Tier 1	2011	145	Tier 3	3650	-	9125	10	Madera
C-22277-A	1	Wheel Loader	1999	114	Tier 1	2012	130	Tier 3	2000	-	8000	10	Stanislaus
C-21475-A	1	Wheel Loader	1999	135	Tier 1	2012	141	Tier 4 Phase In/Alternate NOx	908	-	4541	10	Kings
C-23766-A	1	Wheel Loader	1999	135	Tier 1	2013	148	Tier 4 Phase In/Alternate NOx	2000	-	8000	10	San Joaquin
C-21692-A	1	Wheel Loader	1994	149	Tier 0	2013	186	Tier 4 Phase In/Alternate NOx	2100	-	15540	10	Merced
C-21698-A	1	Wheel Loader	1974	160	Tier 0	2013	186	Tier 4 Phase In/Alternate NOx	1500	-	6375	10	Tulare
C-23448-A	1	Wheel Loader	1979	103	Tier 0	2011	173	Tier 3	1040	-	5044	10	Fresno

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21321-A	1	Wheel Loader	1978	102	Tier 0	2013	141	Tier 4 Phase In/Alternate NOx	2500	-	10000	10	Kings
C-21364-A	1	Wheel Loader	1964	130	Tier 0	2012	131	Tier 4 Phase In/Alternate NOx	1000	-	1000	10	Kings
C-23530-A	1	Wheel Loader	2001	129	Tier 1	2013	141	Tier 4 Phase In/Alternate NOx	1900	-	7600	10	Merced
C-23194-A	1	Wheel Loader	2002	137	Tier 1	2013	173	Tier 4 Phase In/Alternate NOx	2000	-	6000	10	Fresno
C-21677-A	1	Wheel Loader	1986	110	Tier 0	2012	141	Tier 4 Phase In/Alternate NOx	1601	-	8200	10	Tulare
C-21821-A	1	Wheel Loader	1996	161	Tier 0	2012	186	Tier 4 Phase In/Alternate NOx	2086	-	10428	10	Kings
C-21316-A	1	Wheel Loader	1988	95	Tier 0	2013	124	Tier 4 Phase In/Alternate NOx	2200	-	9000	10	Kings

SJVAPCD Project Data

Project Type **Off-Road**

Description **Vehicle Replacement**

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-23977-A	1	Wheel Loader	2002	185	Tier 1	2012	186	Tier 4 Phase In/Alternate NOx	1400	-	12600	10	Madera
C-22281-A	1	Wheel Loader	1996	135	Tier 0	2012	146	Tier 4 Phase In/Alternate NOx	2500	-	10000	10	Tulare
C-22942-A	1	Wheel Loader	1980	110	Tier 0	2011	173	Tier 3	600	-	2400	10	Stanislaus
C-22438-A	1	Wheel Loader	1980	80	Tier 0	2013	158	Tier 4 Phase In/Alternate NOx	2500	-	12000	10	Madera
C-21392-A	1	Wheel Loader	1986	157	Tier 0	2013	186	Tier 4 Phase In/Alternate NOx	2000	-	10200	10	Kern
C-8307-A	1	Wheel Loader	1997	195	Tier 0	2013	225	Tier 4 Phase In/Alternate NOx	3000	-	12000	10	San Joaquin
C-22745-A	1	Wheel Loader	1972	141	Tier 0	2012	149	Tier 3	500	-	1500	10	Stanislaus
C-22630-A	1	Wheel Loader	2001	103	Tier 1	2012	141	Tier 4 Phase In/Alternate NOx	800	-	4000	10	Merced
C-24856-A	1	Wheel Loader	1998	130	Tier 0	2012	160	Tier 4 Phase In/Alternate NOx	2000	-	9000	10	Kern

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-21822-A	1	Wheel Loader	1996	130	Tier 0	2012	163	Tier 4 Phase In/Alternate NOx	2501	-	12503	10	Kings
C-23653-A	1	Wheel Loader	1996	90	Tier 0	2011	130	Tier 3	800	-	2000	10	Merced
C-21704-A	1	Wheel Loader	1999	135	Tier 1	2012	154	Tier 4 Phase In/Alternate NOx	1200	-	7200	10	Tulare
C-21761-A	1	Wheel Loader	1995	210	Tier 0	2013	173	Tier 4 Phase In/Alternate NOx	1700	-	11900	10	Stanislaus
C-22282-A	1	Wheel Loader	1998	135	Tier 1	2012	146	Tier 4 Phase In/Alternate NOx	2500	-	10000	10	Tulare
C-25369-A	1	Wheel Loader	1979	100	Tier 0	2012	154	Tier 4 Phase In/Alternate NOx	1000	-	3000	10	Tulare
C-21459-A	1	Wheel Loader	2001	137	Tier 1	2013	163	Tier 4 Phase In/Alternate NOx	1693	-	14700	10	Kern
C-9004-A	1	Wheel Loader	1994	138	Tier 0	2013	163	Tier 4 Phase In/Alternate NOx	2000	-	6200	10	Kern

SJVAPCD Project Data

Project Type Off-Road

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-8813-A	1	Wheel Loader	1992	135	Tier 0	2013	186	Tier 4 Phase In/Alternate NOx	1500	-	5000	10	Kern
C-21151-A	1	Wheel Loader	1978	57	Tier 0	2013	59	Tier 4 Final	1500	-	3750	10	Fresno
C-21391-A	1	Wheel Loader	1992	126	Tier 0	2013	141	Tier 4 Phase In/Alternate NOx	1000	-	5000	10	Kern
C-24311-A	1	Wheel Loader	1969	103	Tier 0	2013	158	Tier 4 Phase In/Alternate NOx	1025	-	6500	10	Fresno
C-24303-A	1	Wheel Loader	1987	130	Tier 0	2013	158	Tier 4 Phase In/Alternate NOx	1050	-	7200	10	Fresno
C-23978-A	1	Wheel Loader	1999	151	Tier 1	2013	186	Tier 4 Phase In/Alternate NOx	1134	-	9072	10	Madera
C-21702-A	1	Wheel Loader	2000	130	Tier 1	2013	163	Tier 4 Phase In/Alternate NOx	850	-	3600	10	Stanislaus
C-22943-A	1	Wheel Loader	1970	113	Tier 0	2013	149	Tier 3	300	-	1500	10	Stanislaus

SJVAPCD Project Data

Project Type **Locomotive**

Description **New Vehicle Purchase**

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-10105-A	1	Switcher (Locomotive)	-	-	-	2013	2000	T3	-	-	27715	20	Stanislaus

SJVAPCD Project Data

Project Type **Forklift**

Description **New Electric**

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-24797-A	2	Forklift	-	-	-	2013	25	-	1600	-	-	10	Fresno
C-24797-A	3	Forklift	-	-	-	2013	25	-	1600	-	-	10	Fresno
C-24797-A	1	Forklift	-	-	-	2013	25	-	1600	-	-	10	Fresno
C-25851-A	2	Forklift	-	-	-	2013	18	-	2000	-	-	10	Kings
C-25851-A	3	Forklift	-	-	-	2013	18	-	2000	-	-	10	Kings
C-25851-A	1	Forklift	-	-	-	2013	18	-	2000	-	-	10	Kings

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-26327-A	18	Irrigation Pump	2002	180	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-25359-A	4	Irrigation Pump	1998	130	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	600	-	-	1	Fresno
C-25359-A	5	Irrigation Pump	1998	130	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	900	-	-	1	Fresno
C-25359-A	6	Irrigation Pump	1998	130	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	850	-	-	1	Fresno
C-25359-A	7	Irrigation Pump	2002	120	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	600	-	-	1	Fresno
C-25359-A	1	Irrigation Pump	1998	120	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	1200	-	-	1	Fresno
C-25359-A	8	Irrigation Pump	2002	120	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	600	-	-	1	Fresno

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-26327-A	5	Irrigation Pump	1999	120	Tier 1	2013	148	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	2	Irrigation Pump	1997	130	Tier 1	2012	148	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	6	Irrigation Pump	1999	120	Tier 1	2012	148	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	3	Irrigation Pump	1998	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	14	Irrigation Pump	1998	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	7	Irrigation Pump	2002	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	11	Irrigation Pump	2002	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-26327-A	13	Irrigation Pump	1998	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	16	Irrigation Pump	2000	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	4	Irrigation Pump	1998	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	17	Irrigation Pump	2002	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-22809-A	3	Irrigation Pump	2005	250	Tier 2	2012	275	Tier 4 Phase In/Alternate NOx	2300	-	-	4	Merced
C-25359-A	3	Irrigation Pump	1998	130	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	600	-	-	1	Fresno
C-26327-A	15	Irrigation Pump	2001	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-24216-A	7	Irrigation Pump	2003	80	Tier 1	2012	140	Tier 4 Phase In/Alternate NOx	750	-	-	1	Fresno
C-22812-A	5	Irrigation Pump	2002	80	Tier 1	2013	174	Tier 4 Phase In/Alternate NOx	2400	-	-	1	Merced
C-24077-A	1	Irrigation Pump	2003	35	Tier 1	2012	38	Tier 4 Interim	800	-	-	10	Merced
C-25359-A	12	Irrigation Pump	2002	120	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	600	-	-	1	Fresno
C-22809-A	1	Irrigation Pump	2005	174	Tier 2	2012	202	Tier 4 Phase In/Alternate NOx	2300	-	-	4	Merced
C-22809-A	4	Irrigation Pump	2005	250	Tier 2	2012	275	Tier 4 Phase In/Alternate NOx	2300	-	-	4	Merced
C-22809-A	2	Irrigation Pump	2005	250	Tier 2	2012	275	Tier 4 Phase In/Alternate NOx	2300	-	-	4	Merced
C-24216-A	3	Irrigation Pump	2002	155	Tier 1	2012	140	Tier 4 Phase In/Alternate NOx	2000	-	-	1	Fresno

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-24216-A	2	Irrigation Pump	2002	155	Tier 1	2012	140	Tier 4 Phase In/Alternate NOx	2000	-	-	1	Fresno
C-24216-A	9	Irrigation Pump	1996	28	Tier 0	2012	48	Tier 4 Interim	500	-	-	10	Fresno
C-22809-A	5	Irrigation Pump	2005	250	Tier 2	2012	275	Tier 4 Phase In/Alternate NOx	2300	-	-	4	Merced
C-24216-A	6	Irrigation Pump	2002	80	Tier 1	2012	140	Tier 4 Phase In/Alternate NOx	750	-	-	1	Fresno
C-25359-A	2	Irrigation Pump	1998	130	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	600	-	-	1	Fresno
C-24216-A	8	Irrigation Pump	2004	80	Tier 2	2012	140	Tier 4 Phase In/Alternate NOx	750	-	-	2	Fresno
C-24216-A	1	Irrigation Pump	2002	155	Tier 1	2012	140	Tier 4 Phase In/Alternate NOx	2000	-	-	1	Fresno
C-24216-A	4	Irrigation Pump	2002	155	Tier 1	2012	140	Tier 4 Phase In/Alternate NOx	2000	-	-	1	Fresno

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-24415-A	1	Irrigation Pump	2006	174	Tier 2	2012	174	Tier 4 Phase In/Alternate NOx	1500	-	-	4	Kings
C-24322-A	1	Irrigation Pump	2002	230	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	1500	-	-	1	Kings
C-24322-A	2	Irrigation Pump	2002	230	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	1500	-	-	1	Kings
C-24708-A	1	Irrigation Pump	2002	125	Tier 1	2012	85	Tier 4 Phase In/Alternate NOx	3000	-	-	1	Madera
C-24708-A	2	Irrigation Pump	2000	185	Tier 1	2013	250	Tier 4 Phase In/Alternate NOx	3000	-	-	1	Madera
C-26015-A	1	Irrigation Pump	1999	300	Tier 1	2012	250	Tier 4 Phase In/Alternate NOx	1825	-	-	1	Madera
C-24216-A	5	Irrigation Pump	2002	155	Tier 1	2012	140	Tier 4 Phase In/Alternate NOx	2000	-	-	1	Fresno

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-26773-A	1	Irrigation Pump	2002	109	Tier 1	2013	121	Tier 4 Phase In/Alternate NOx	2000	-	-	1	Fresno
C-20716-A	6	Irrigation Pump	2002	80	Tier 1	2013	174	Tier 4 Phase In/Alternate NOx	3000	-	-	1	Merced
C-22812-A	3	Irrigation Pump	2001	225	Tier 1	2013	174	Tier 4 Phase In/Alternate NOx	1200	-	-	1	Merced
C-26327-A	12	Irrigation Pump	1998	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	8	Irrigation Pump	2002	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	9	Irrigation Pump	2002	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-26327-A	10	Irrigation Pump	2002	190	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22812-A	4	Irrigation Pump	1999	155	Tier 1	2013	174	Tier 4 Phase In/Alternate NOx	2300	-	-	1	Merced
C-24891-A	1	Irrigation Pump	2002	75	Tier 1	2012	74	Tier 4 Interim	450	-	-	1	Merced
C-27836-A	3	Irrigation Pump	1997	150	Tier 1	2012	173	Tier 4 Phase In/Alternate NOx	500	-	-	1	Fresno
C-26772-A	1	Irrigation Pump	2002	109	Tier 1	2013	121	Tier 4 Phase In/Alternate NOx	2000	-	-	1	Fresno
C-27836-A	2	Irrigation Pump	2000	230	Tier 1	2013	250	Tier 4 Phase In/Alternate NOx	1000	-	-	1	Fresno
C-27959-A	1	Irrigation Pump	2001	115	Tier 1	2012	85	Tier 4 Phase In/Alternate NOx	1300	-	-	1	Merced
C-27959-A	2	Irrigation Pump	2001	115	Tier 1	2012	85	Tier 4 Phase In/Alternate NOx	1300	-	-	1	Merced
C-27351-A	1	Irrigation Pump	1997	215	Tier 1	2011	225	Tier 4 Phase In/Alternate NOx	1800	-	-	1	Kern

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-27408-A	1	Irrigation Pump	2004	280	Tier 2	2012	300	Tier 4 Phase In/Alternate NOx	2000	-	-	2	Kings
C-28155-A	1	Irrigation Pump	2003	260	Tier 2	2013	220	Tier 4 Phase In/Alternate NOx	1200	-	-	1	Kern
C-28155-A	2	Irrigation Pump	2003	290	Tier 2	2013	220	Tier 4 Phase In/Alternate NOx	1300	-	-	1	Kern
C-27836-A	1	Irrigation Pump	2002	230	Tier 1	2013	250	Tier 4 Phase In/Alternate NOx	1000	-	-	1	Fresno
C-25359-A	16	Irrigation Pump	2002	82	Tier 1	2012	85	Tier 4 Phase In/Alternate NOx	600	-	-	1	Fresno
C-26463-A	1	Irrigation Pump	2002	46	Tier 1	2012	48	Tier 4 Interim	1000	-	-	10	Kern
C-24891-A	2	Irrigation Pump	2001	80	Tier 1	2012	85	Tier 4 Phase In/Alternate NOx	1500	-	-	1	Merced
C-25071-A	2	Irrigation Pump	2002	155	Tier 1	2012	124	Tier 4 Phase In/Alternate NOx	1100	-	-	1	Kern

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-26327-A	1	Irrigation Pump	1996	170	Tier 1	2013	202	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-25071-A	3	Irrigation Pump	2001	155	Tier 1	2012	124	Tier 4 Phase In/Alternate NOx	1100	-	-	1	Kern
C-25071-A	1	Irrigation Pump	2002	155	Tier 1	2012	124	Tier 4 Phase In/Alternate NOx	1100	-	-	1	Kern
C-25071-A	6	Irrigation Pump	2001	155	Tier 1	2012	124	Tier 4 Phase In/Alternate NOx	1100	-	-	1	Kern
C-26327-A	20	Irrigation Pump	2000	225	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-25071-A	8	Irrigation Pump	2000	155	Tier 1	2012	124	Tier 4 Phase In/Alternate NOx	1100	-	-	1	Kern
C-25071-A	5	Irrigation Pump	2000	155	Tier 1	2012	124	Tier 4 Phase In/Alternate NOx	1100	-	-	1	Kern

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Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-25071-A	4	Irrigation Pump	2001	155	Tier 1	2012	124	Tier 4 Phase In/Alternate NOx	1100	-	-	1	Kern
C-25359-A	9	Irrigation Pump	2002	120	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	900	-	-	1	Fresno
C-25359-A	11	Irrigation Pump	2002	120	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	1000	-	-	1	Fresno
C-27313-A	1	Irrigation Pump	2000	225	Tier 1	2012	140	Tier 4 Phase In/Alternate NOx	600	-	-	1	Stanislaus
C-26327-A	21	Irrigation Pump	2002	99	Tier 1	2012	115	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings
C-25071-A	7	Irrigation Pump	2000	155	Tier 1	2012	124	Tier 4 Phase In/Alternate NOx	1100	-	-	1	Kern
C-26327-A	19	Irrigation Pump	2000	225	Tier 1	2013	225	Tier 4 Phase In/Alternate NOx	900	-	-	1	Kings

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Diesel

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-25359-A	13	Irrigation Pump	2002	120	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	1000	-	-	1	Fresno
C-26012-A	1	Irrigation Pump	2001	325	Tier 1	2011	325	Tier 4 Phase In/Alternate NOx	1600	-	-	1	Stanislaus
C-22812-A	1	Irrigation Pump	1999	170	Tier 1	2013	174	Tier 4 Phase In/Alternate NOx	800	-	-	1	Merced
C-20716-A	5	Irrigation Pump	1999	80	Tier 1	2013	174	Tier 4 Phase In/Alternate NOx	3000	-	-	1	Merced
C-25359-A	15	Irrigation Pump	2002	120	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	900	-	-	1	Fresno
C-25359-A	10	Irrigation Pump	2002	120	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	1000	-	-	1	Fresno
C-25359-A	14	Irrigation Pump	2002	120	Tier 1	2012	125	Tier 4 Phase In/Alternate NOx	1100	-	-	1	Fresno

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Elec

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-25137-A	2	Irrigation Pump	2001	67	Tier 1	2013	50	-	2500	-	-	1	Merced
C-24710-B	3	Irrigation Pump	2003	217	Tier 2	2013	200	-	2640	-	-	2	Fresno
C-24710-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24710-A	1	Irrigation Pump	2003	217	Tier 2	2013	200	-	2640	-	-	1	Fresno
C-25759-A	2	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-25759-A	2	Irrigation Pump	2000	165	Tier 1	2013	25	-	628	-	-	1	San Joaquin
C-25759-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24710-B	3	Irrigation Pump	-	-	-	-	-	-	-	-	-	8	
C-25759-A	1	Irrigation Pump	1999	135	Tier 1	2013	25	-	349	-	-	1	San Joaquin
C-24810-A	3	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24810-A	3	Irrigation Pump	2001	110	Tier 1	2013	60	-	1500	-	-	1	Kings
C-24810-A	2	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24810-A	2	Irrigation Pump	2001	85	Tier 1	2013	75	-	1200	-	-	1	Kings
C-24810-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24810-A	1	Irrigation Pump	2001	85	Tier 1	2013	75	-	1000	-	-	1	Kings
C-25606-A	1	Irrigation Pump	2004	345	Tier 2	2012	100	-	1800	-	-	2	Kern
C-24323-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24978-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-25606-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	8	
C-24323-A	2	Irrigation Pump	2003	300	Tier 2	2012	150	-	2500	-	-	1	Kings
C-24223-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	8	
C-24978-A	1	Irrigation Pump	1998	230	Tier 1	2013	150	-	3000	-	-	1	Kern
C-24643-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	7	
C-24643-A	1	Irrigation Pump	2004	290	Tier 2	2013	200	-	1500	-	-	3	Stanislaus
C-24080-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24080-A	1	Irrigation Pump	2003	99	Tier 1	2012	60	-	2400	-	-	1	Stanislaus
C-26574-A	3	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-25706-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	7	
C-24323-A	2	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-25137-A	2	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24323-A	1	Irrigation Pump	2003	205	Tier 2	2012	100	-	2000	-	-	1	Kings
C-25706-A	1	Irrigation Pump	2004	275	Tier 2	2013	300	-	1200	-	-	3	Tulare
C-25706-A	2	Irrigation Pump	-	-	-	-	-	-	-	-	-	7	
C-25706-A	2	Irrigation Pump	2004	275	Tier 2	2013	300	-	1200	-	-	3	Tulare

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Elec

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-25218-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-25218-A	1	Irrigation Pump	2001	475	Tier 1	2013	500	-	3000	-	-	1	Fresno
C-25137-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-25137-A	1	Irrigation Pump	2001	85	Tier 1	2013	60	-	2500	-	-	1	Merced
C-26574-A	3	Irrigation Pump	2002	185	Tier 1	2013	125	-	2200	-	-	1	Merced
C-21177-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24813-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	8	
C-24223-A	1	Irrigation Pump	2004	120	Tier 2	2012	75	-	3000	-	-	2	Tulare
C-24635-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24635-A	1	Irrigation Pump	1997	125	Tier 1	2012	75	-	1500	-	-	1	Fresno
C-25118-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	8	
C-25118-A	1	Irrigation Pump	2004	184	Tier 2	2013	125	-	700	-	-	2	Fresno
C-24522-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24522-A	1	Irrigation Pump	1997	125	Tier 1	2013	50	-	500	-	-	1	Fresno
C-24813-A	1	Irrigation Pump	2003	343	Tier 2	2012	250	-	2000	-	-	2	Kern
C-24371-A	1	Irrigation Pump	1996	320	Tier 1	2013	250	-	1900	-	-	1	Kern
C-24370-A	1	Irrigation Pump	2000	385	Tier 1	2013	300	-	2000	-	-	1	San Joaquin
C-21177-A	1	Irrigation Pump	2002	155	Tier 1	2012	150	-	3200	-	-	1	Tulare
C-23532-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-23532-A	1	Irrigation Pump	2001	185	Tier 1	2013	125	-	1200	-	-	1	Merced
C-24414-A	2	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24414-A	2	Irrigation Pump	2001	100	Tier 1	2013	200	-	3500	-	-	1	Kings
C-23145-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-23145-A	1	Irrigation Pump	1998	116	Tier 1	2012	60	-	2200	-	-	1	Fresno
C-22358-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24371-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-26574-A	4	Irrigation Pump	2005	150	Tier 2	2013	125	-	1000	-	-	3	Merced
C-25360-A	1	Irrigation Pump	2001	185	Tier 1	2012	75	-	1800	-	-	1	San Joaquin
C-24878-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24878-A	1	Irrigation Pump	2001	230	Tier 1	2013	150	-	1500	-	-	1	Fresno
C-26332-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-26332-A	1	Irrigation Pump	2002	173	Tier 1	2012	300	-	1500	-	-	1	Kings
C-26574-A	2	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-26574-A	2	Irrigation Pump	1999	170	Tier 1	2013	125	-	2600	-	-	1	Merced

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Project Type Ag Engine
Description Ag Diesel to Elec

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-26574-A	5	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-20185-A	4	Irrigation Pump	2006	158	Tier 2	2012	125	-	1200	-	-	4	Tulare
C-26574-A	4	Irrigation Pump	-	-	-	-	-	-	-	-	-	7	
C-25360-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-26574-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-26574-A	1	Irrigation Pump	2003	150	Tier 2	2012	125	-	2500	-	-	1	Merced
C-24325-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	8	
C-24325-A	1	Irrigation Pump	2004	330	Tier 2	2012	300	-	1800	-	-	2	Kings
C-24707-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	8	
C-24707-A	1	Irrigation Pump	2004	205	Tier 2	2013	125	-	1000	-	-	2	Madera
C-25357-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-25357-A	1	Irrigation Pump	2000	325	Tier 1	2013	200	-	1600	-	-	1	Stanislaus
C-26574-A	5	Irrigation Pump	2003	135	Tier 2	2013	125	-	2500	-	-	1	Merced
C-18846-A	7	Irrigation Pump	2004	300	Tier 2	2012	250	-	2000	-	-	3	Tulare
C-23615-A	1	Irrigation Pump	2002	85	Tier 1	2013	50	-	1000	-	-	10	Merced
C-21653-A	2	Irrigation Pump	2003	230	Tier 2	2012	300	-	1500	-	-	2	Kings
C-21653-A	1	Irrigation Pump	2002	230	Tier 1	2012	300	-	1800	-	-	1	Kings
C-22573-A	1	Irrigation Pump	2002	510	Tier 2	2012	200	-	1000	-	-	10	Madera
C-14221-A	2	Irrigation Pump	2004	630	Tier 2	2011	400	-	3000	-	-	1	Fresno
C-24374-A	1	Irrigation Pump	2007	240	Tier 3	2013	150	-	1500	-	-	10	Fresno
C-19106-A	4	Irrigation Pump	2008	173	Tier 3	2011	100	-	1200	-	-	10	Merced
C-22259-A	1	Irrigation Pump	2000	225	Tier 1	2013	125	Tier 3	600	-	-	10	Merced
C-18846-A	16	Irrigation Pump	2002	330	Tier 1	2012	300	-	2000	-	-	1	Tulare
C-22259-A	2	Irrigation Pump	2000	225	Tier 1	2012	60	Tier 3	300	-	-	10	Merced
C-18846-A	5	Irrigation Pump	2002	330	Tier 1	2012	300	-	2000	-	-	1	Tulare
C-18846-A	4	Irrigation Pump	2002	330	Tier 1	2012	300	-	2000	-	-	1	Tulare
C-25118-A	2	Irrigation Pump	2010	197	Tier 3	2013	125	-	700	-	-	10	Fresno
C-21026-A	1	Irrigation Pump	2002	513	Tier 2	2012	400	-	1600	-	-	1	Stanislaus
C-20721-A	1	Irrigation Pump	2008	99	Tier 3	2013	100	-	1500	-	-	10	Madera
C-18193-A	1	Irrigation Pump	2002	425	Tier 1	2013	200	-	1000	-	-	1	Kern
C-22572-A	2	Irrigation Pump	2007	225	Tier 3	2012	125	-	500	-	-	10	Kings
C-22572-A	1	Irrigation Pump	2007	225	Tier 3	2012	125	-	500	-	-	10	Kings
C-20293-A	1	Irrigation Pump	2003	125	Tier 2	2012	125	-	1200	-	-	10	Fresno
C-18846-A	2	Irrigation Pump	2002	330	Tier 1	2010	300	-	2000	-	-	1	Tulare

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Project Type Ag Engine

Description Ag Diesel to Elec

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-22358-A	1	Irrigation Pump	2001	83	Tier 1	2013	50	-	1400	-	-	1	Madera
C-15883-A	1	Irrigation Pump	2005	85	Tier 2	2011	-	-	750	-	-	2	Merced
C-25607-A	1	Irrigation Pump	2008	173	Tier 3	2013	125	-	3200	-	-	10	Kings
C-24374-B	2	Irrigation Pump	2007	110	Tier 3	2013	100	-	1500	-	-	10	Fresno
C-20686-A	1	Irrigation Pump	2009	440	Tier 3	2013	300	-	1800	-	-	11	Fresno
C-26701-A	1	Irrigation Pump	2000	190	Tier 1	2013	75	-	1312	-	-	10	San Joaquin
C-20338-A	1	Irrigation Pump	2004	190	Tier 2	2011	200	-	1200	-	-	4	Tulare
C-24710-A	2	Irrigation Pump	2010	255	Tier 3	2013	200	-	2640	-	-	10	Fresno
C-18846-A	3	Irrigation Pump	2002	330	Tier 1	2010	300	-	2000	-	-	1	Tulare
C-20650-A	1	Irrigation Pump	2002	200	Tier 1	2012	150	-	2500	-	-	1	Tulare
C-3575-A	1	Irrigation Pump	2000	230	Tier 1	2012	150	-	2000	-	-	1	Kings
C-22259-A	4	Irrigation Pump	2000	425	Tier 1	2013	250	-	1150	-	-	10	Merced
C-24936-A	2	Irrigation Pump	2006	80	Tier 2	2012	40	-	1200	-	-	10	Stanislaus
C-24936-A	1	Irrigation Pump	2007	99	Tier 2	2012	50	-	1200	-	-	10	Stanislaus
C-26701-A	3	Irrigation Pump	1998	190	Tier 1	2013	75	-	506	-	-	10	San Joaquin
C-26701-A	2	Irrigation Pump	2000	85	Tier 1	2013	25	-	370	-	-	10	San Joaquin
C-22163-A	1	Irrigation Pump	2002	230	Tier 1	2012	150	-	1000	-	-	1	Kings
C-22259-A	3	Irrigation Pump	2000	225	Tier 1	2012	60	Tier 3	500	-	-	10	Merced
C-18846-A	1	Irrigation Pump	2002	300	Tier 1	2012	300	-	2000	-	-	1	Tulare
C-20185-A	1	Irrigation Pump	2006	300	Tier 3	2012	150	-	1200	-	-	10	Tulare
C-24370-A	2	Irrigation Pump	2002	385	Tier 2	2013	300	-	2000	-	-	1	San Joaquin
C-24370-A	2	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24414-A	1	Irrigation Pump	2003	240	Tier 2	2013	200	-	4000	-	-	1	Kings
C-24414-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-24566-A	1	Irrigation Pump	2005	200	Tier 2	2013	60	-	1800	-	-	3	Fresno
C-24566-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	7	
C-19073-A	2	Irrigation Pump	2007	360	Tier 3	2012	300	-	2000	-	-	10	Madera
C-16110-A	2	Irrigation Pump	1999	115	Tier 1	2011	250	-	2500	-	-	1	Tulare
C-24370-A	1	Irrigation Pump	-	-	-	-	-	-	-	-	-	9	
C-20185-A	2	Irrigation Pump	2006	300	Tier 3	2012	150	-	1200	-	-	10	Tulare
C-20185-A	3	Irrigation Pump	2006	300	Tier 3	2012	150	-	1200	-	-	10	Tulare
C-22571-A	1	Irrigation Pump	2000	230	Tier 1	2011	400	-	1500	-	-	10	Kings
C-22571-A	2	Irrigation Pump	2000	230	Tier 1	2011	400	-	1500	-	-	10	Kings
C-21021-A	1	Irrigation Pump	2005	630	Tier 3	2012	500	-	1750	-	-	10	Fresno

SJVAPCD Project Data

Project Type Ag Engine

Description Ag Diesel to Elec

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-20867-A	1	Irrigation Pump	2001	230	Tier 1	2012	150	-	1500	-	-	1	Merced
C-19473-A	1	Irrigation Pump	2003	180	Tier 2	2013	200	-	1200	-	-	2	Tulare
C-20504-A	1	Irrigation Pump	2005	500	Tier 2	2012	400	-	2160	-	-	4	Fresno
C-20120-A	1	Irrigation Pump	2002	155	Tier 1	2012	125	-	2750	-	-	1	San Joaquin
C-19073-A	1	Irrigation Pump	2007	335	Tier 3	2012	200	-	2000	-	-	10	Madera
C-19106-A	3	Irrigation Pump	2008	173	Tier 3	2011	100	-	1200	-	-	10	Merced
C-20230-A	1	Irrigation Pump	2002	230	Tier 1	2011	250	-	1200	-	-	2	Kings
C-22321-A	2	Irrigation Pump	2002	475	Tier 1	2012	300	-	1000	-	-	1	Kings
C-22321-A	3	Irrigation Pump	2000	475	Tier 1	2012	300	-	1000	-	-	1	Kings
C-19468-A	1	Irrigation Pump	2001	300	Tier 1	2011	200	-	1200	-	-	1	Tulare
C-24168-A	1	Irrigation Pump	2005	115	Tier 2	2012	75	-	2000	-	-	3	Stanislaus
C-19106-A	2	Irrigation Pump	2008	173	Tier 3	2011	100	-	1200	-	-	10	Merced

Description Ag New Electric Motor

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Years)	Location (County)
C-18087-A	5	Irrigation Pump	-	-	-	2012	125	-	1500	-	-	10	Kern
C-22465-A	1	Irrigation Pump	-	-	-	2012	250	-	1800	-	-	10	Fresno
C-24014-A	1	Irrigation Pump	-	-	-	2013	50	-	1000	-	-	10	Madera
C-25072-A	1	Irrigation Pump	-	-	-	2013	75	-	1500	-	-	10	Fresno
C-18087-A	4	Irrigation Pump	-	-	-	2012	100	-	1500	-	-	10	Kern
C-18087-A	3	Irrigation Pump	-	-	-	2012	100	-	1500	-	-	10	Kern
C-18087-A	2	Irrigation Pump	-	-	-	2012	125	-	1500	-	-	10	Kern
C-26373-A	1	Irrigation Pump	-	-	-	2012	200	-	1500	-	-	10	Madera
C-24979-A	1	Irrigation Pump	-	-	-	2012	300	-	1500	-	-	10	Kings
C-18087-A	6	Irrigation Pump	-	-	-	2012	125	-	1500	-	-	10	Kern
C-21244-A	1	Irrigation Pump	-	-	-	2013	300	-	2880	-	-	10	Fresno
C-24940-A	1	Irrigation Pump	-	-	-	2013	400	-	3000	-	-	10	Kings
C-25704-A	1	Irrigation Pump	-	-	-	2013	25	-	4000	-	-	10	Tulare
C-18087-A	1	Irrigation Pump	-	-	-	2012	125	-	1500	-	-	10	Kern

NRCS Project Data

Project Type NRCS EQIP

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Uasage (Miles)	Annual Usage (Fuel)	Project Life (years)	Location (County)
952	2292	Tractor	1983	98	Tier 0	2012	235	Tier 4 Alt NOx	1300			10	Tulare
952	2293	Tractor	1977	205	Tier 0				2600			10	Tulare
954	2693	Tractor	1969	116	Tier 0	2011	120	Tier 3	1000			10	Tulare
954	2692	Tractor	1974	144	Tier 0				1000			10	Tulare
955	2573	Tractor	1999	88	Tier 1	2013	100	Tier 4 Alt NOx	350			10	San Joaquin
955	2574	Tractor	1971	73	Tier 0				350			10	San Joaquin
972	2655	Crawler Tractor or Dozer	1978	106	Tier 0	2012	133	Tier 4 Alt NOx	1095			10	Madera
972	2654	Crawler Tractor or Dozer	1975	65	Tier 0				1095			10	Madera
973	2651	Tractor	1967	115	Tier 0	2012	180	Tier 4 Alt NOx	750			10	Madera
973	2652	Tractor	1980	150	Tier 0				750			10	Madera
1041	2797	Tractor	1977	157	Tier 0	2011	335	Tier 4 Alt NOx	1000			10	San Joaquin
1041	2798	Tractor	1990	280	Tier 0				1000			10	San Joaquin
47	213	Tractor	1978	120	Tier 0	2009	109	Tier 3	3000			10	Fresno
262	221	Other Agriculture	1998	540	Tier 1	2008	625	Tier 3	1000			10	Merced
267	250	Other Agriculture	1980	120	Tier 0	2010	125	Tier 3	750			10	San Joaquin
268	26	Other Agriculture	1982	65	Tier 0	2010	80	Tier 3	700			10	San Joaquin
269	433	Other Agriculture	1990	163	Tier 0	2009	156	Tier 3	2000			10	San Joaquin
270	434	Other Agriculture	1998	130	Tier 1	2009	139	Tier 3	2000			10	San Joaquin
271	273	Other Agriculture	1998	80	Tier 1	2008	85	Tier 3	750			10	San Joaquin
616	1679	Tractor	1979	700	Tier 0	2009	173	Tier 3	3600			10	Madera
784	1095	Tractor	1983	142	Tier 0	2010	173	Tier 3	3500			10	Fresno
857	2485	Tractor	1974	81	Tier 0	2012	100	Tier 4 Alt NOx	1000			10	Kings
858	2488	Tractor	1988	112	Tier 0	2012	108	Tier 3	2000			10	Tulare
859	2497	Tractor	1978	58	Tier 0	2011	53	Tier 4 Interim	1100			10	Tulare
860	2490	Loader, Rubber-Tires	1970	190	Tier 0	2013	134	Tier 4 Alt NOx	550			10	Tulare
861	2492	Tractor	1998	150	Tier 1	2011	188	Tier 4 Alt NOx	1000			10	Tulare
862	2495	Tractor	1968	99	Tier 0	2013	125	Tier 4 Alt NOx	700			10	Tulare
881	2499	Tractor	1978	145	Tier 0	2013	150	Tier 4 Alt NOx	1200			10	Tulare
939	2501	Tractor	1979	180	Tier 0	2013	210	Tier 4 Alt NOx	2500			10	Tulare
945	2482	Loader, Rubber-Tires	1975	150	Tier 0	2012	157	Tier 4 Interim	1825			10	Merced
946	2508	Tractor	1975	94	Tier 0	2012	85	Tier 4 Alt NOx	900			10	Fresno
947	2514	Tractor	1988	144	Tier 0	2013	110	Tier 4 Alt NOx	2000			10	Fresno
948	2516	Tractor	1994	186	Tier 0	2012	180	Tier 4 Alt NOx	2500			10	Fresno
949	2619	Tractor	1981	186	Tier 0	2012	215	Tier 4 Alt NOx	800			10	Tulare
950	2563	Tractor	1986	80	Tier 0	2011	340	Tier 4 Alt NOx	1600			10	Merced
951	2565	Tractor	1983	80	Tier 0	2012	105	Tier 3	750			10	Tulare
953	2571	Tractor	1979	207	Tier 0	2011	224	Tier 3	2900			10	Tulare
956	2630	Crawler Tractor or Dozer	1970	100	Tier 0	2012	132	Tier 3	2400			10	Tulare
957	2628	Tractor	1998	110	Tier 0	2012	130	Tier 4 Interim	3285			10	Tulare
958	2625	Tractor	1979	305	Tier 0	2012	290	Tier 4 Alt NOx	1200			10	Tulare
959	2622	Tractor	1982	150	Tier 0	2011	115	Tier 3	1920			10	Tulare
960	2616	Tractor	1995	250	Tier 0	2012	310	Tier 4 Alt NOx	1500			10	Tulare
961	2614	Tractor	1980	175	Tier 0	2012	200	Tier 4 Alt NOx	1200			10	Tulare
962	2612	Tractor	1958	130	Tier 0	2011	130	Tier 3	500			10	Tulare
963	2609	Tractor	1980	250	Tier 0	2012	354	Tier 4 Alt NOx	3000			10	Tulare
964	2604	Tractor	1983	110	Tier 0	2013	129	Tier 4 Alt NOx	900			10	Tulare
965	2601	Tractor	1989	116	Tier 0	2012	103	Tier 4 Alt NOx	1200			10	Tulare

NRCS Project Data

Project Type NRCS EQIP

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Uasage (Miles)	Annual Usage (Fuel)	Project Life (years)	Location (County)
966	2599	Tractor	1976	78	Tier 0	2012	53	Tier 4 Interim	1100			10	Tulare
967	2639	Tractor	2002	173	Tier 1	2013	215	Tier 4 Alt NOx	1400			10	Kings
968	2642	Crawler Tractor or Dozer	1995	240	Tier 0	2013	285	Tier 4 Alt NOx	1400			10	Kings
969	2671	Tractor	1972	109	Tier 0	2011	120	Tier 3	1000			10	Madera
970	2661	Tractor	1992	230	Tier 0	2012	285	Tier 4 Alt NOx	1000			10	Madera
971	2658	Tractor	1983	80	Tier 0	2012	100	Tier 4 Alt NOx	1000			10	Madera
974	2649	Tractor	1978	192	Tier 0	2012	115	Tier 4 Alt NOx	2200			10	Madera
975	2647	Tractor	1987	81	Tier 0	2011	99	Diesel, Tier 3	1350			10	Madera
976	2584	Crawler Tractor or Dozer	1974	130	Tier 0	2012	158	Tier 4 Alt NOx	2920			10	Kings
977	2607	Tractor	1980	70	Tier 0	2011	95	Tier 3	600			10	Tulare
978	2582	Tractor	1965	79	Tier 0	2011	83	Tier 4 Interim	1200			10	Kings
979	2580	Tractor	1970	104	Tier 0	2010	108	Tier 3	2000			10	Kings
980	2576	Tractor	1994	103	Tier 0	2013	125	Tier 4 Alt NOx	2000			10	San Joaquin
981	2578	Tractor	1978	149	Tier 0	2012	112	Tier 3	2000			10	Kings
982	2637	Tractor	1984	73	Tier 0	2012	74	Tier 4 Interim	1500			10	Tulare
983	2634	Crawler Tractor or Dozer	1972	410	Tier 0	2012	500	Tier 4 Alt NOx	800			10	Tulare
984	2632	Tractor	1982	310	Tier 0	2012	285	Tier 4 Alt NOx	2000			10	Tulare
985	2697	Tractor	1979	75	Tier 0	2012	85	Tier 4 Alt NOx	1500			10	Merced
986	2699	Tractor	1978	210	Tier 0	2013	260	Tier 4 Alt NOx	1200			10	Stanislaus
988	2709	Tractor	1980	207	Tier 0	2012	235	Tier 4 Alt NOx	1700			10	Stanislaus
989	2711	Tractor	1977	81	Tier 0	2012	100	Tier 4 Alt NOx	400			10	Stanislaus
991	2715	Tractor	1977	470	Tier 0	2012	460	Tier 4 Alt NOx	900			10	Stanislaus
992	2705	Crawler Tractor or Dozer	1959	235	Tier 0	2012	135	Tier 4 Alt NOx	1000			10	Stanislaus
993	2680	Loader, Rubber-Tires	1982	112	Tier 0	2011	130	Tier 3	2200			10	Kings
994	2678	Tractor	1980	207	Tier 0	2012	184	Tier 3	2555			10	Kings
995	2746	Tractor	1964	72	Tier 0	2011	85	Tier 4 Interim	800			10	Fresno
996	2748	Tractor	1997	95	Tier 0	2011	119	Tier 3	1500			10	Fresno
997	2750	Tractor	1978	95	Tier 0	2012	85	Tier 4 Alt NOx	1000			10	Fresno
998	2752	Tractor	1964	58	Tier 0	2012	65	Tier 4 Alt NOx	1200			10	Fresno
999	2754	Tractor	1979	129	Tier 0	2012	155	Tier 4 Alt NOx	1825			10	Fresno
1000	2756	Tractor	1975	100	Tier 0	2010	92	Tier 3	400			10	Fresno
1001	2758	Tractor	1973	65	Tier 0	2012	65	Tier 4 Alt NOx	500			10	Fresno
1002	2766	Crawler Tractor or Dozer	1962	128	Tier 0	2010	150	Tier 3	1000			10	Kings
1003	2685	Tractor	1974	180	Tier 0	2012	200	Tier 4 Alt NOx	1000			10	Kings
1004	2770	Tractor	1981	261	Tier 0	2012	115	Tier 4 Alt NOx	200			10	San Joaquin
1005	2772	Tractor	1973	145	Tier 0	2013	170	Tier 4 Alt NOx	800			10	San Joaquin
1006	2775	Tractor	1990	165	Tier 0	2012	125	Tier 3	2500			10	Kings
1007	2777	Tractor	1976	185	Tier 0	2013	115	Tier 4 Alt NOx	400			10	San Joaquin
1008	2779	Tractor	1978	92	Tier 0	2011	115	Tier 3	200			10	San Joaquin
1009	2781	Tractor	1979	250	Tier 0	2010	337	Tier 4 Alt NOx	1300			10	San Joaquin
1010	2787	Tractor	1966	80	Tier 0	2011	65	Tier 4 Interim	800			10	Merced
1011	2789	Tractor	1977	150	Tier 0	2012	115	Tier 4 Alt NOx	300			10	Merced
1012	2791	Tractor	1975	102	Tier 0	2013	115	Tier 4 Alt NOx	1200			10	San Joaquin
1013	2904	Tractor	1975	310	Tier 0	2012	215	Tier 4 Alt NOx	210			10	San Joaquin
1014	2901	Crawler Tractor or Dozer	1986	174	Tier 0	2011	215	Tier 4 Alt NOx	1500			10	San Joaquin
1015	2898	Tractor	1976	52	Tier 0	2012	75	Tier 4 Interim	800			10	San Joaquin
1016	2894	Tractor	1990	235	Tier 0	2012	260	Tier 4 Alt NOx	1800			10	San Joaquin

NRCS Project Data

Project Type NRCS EQIP

Description Vehicle Replacement

Project #	Unit ID	Primary Function	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Uasage (Miles)	Annual Usage (Fuel)	Project Life (years)	Location (County)
1017	2891	Tractor	1984	91	Tier 0	2011	95	Tier 3	800			10	San Joaquin
1018	2889	Tractor	1987	155	Tier 0	2012	152	Tier 4 Alt NOx	700			10	San Joaquin
1019	2881	Tractor	1971	156	Tier 0	2011	155	Tier 3	800			10	San Joaquin
1020	2879	Tractor	1961	50	Tier 0	2010	64	Tier 4 Interim	1000			10	San Joaquin
1021	2866	Tractor	1974	145	Tier 0	2011	155	Tier 3	800			10	San Joaquin
1022	2864	Tractor	2001	325	Tier 1	2012	354	Tier 4 Alt NOx	1250			10	San Joaquin
1023	2855	Tractor	1984	79	Tier 0	2011	98	Tier 3	900			10	San Joaquin
1024	2851	Crawler Tractor or Dozer	2000	259	Tier 1	2013	360	Tier 4 Alt NOx	900			10	San Joaquin
1025	2849	Tractor	1978	93	Tier 0	2012	117	Tier 3	600			10	San Joaquin
1026	2845	Tractor	1970	110	Tier 0	2012	115	Tier 4 Alt NOx	250			10	San Joaquin
1027	2843	Tractor	1980	70	Tier 0	2011	83	Tier 3	1000			10	San Joaquin
1028	2839	Crawler Tractor or Dozer	1960	120	Tier 0	2011	105	Tier 3	500			10	San Joaquin
1029	2836	Tractor	1992	241	Tier 0	2012	170	Tier 4 Alt NOx	500			10	San Joaquin
1030	2834	Tractor	1975	72	Tier 0	2012	85	Tier 4 Alt NOx	500			10	San Joaquin
1031	2831	Tractor	1974	252	Tier 0	2010	280	Tier 3	700			10	San Joaquin
1032	2828	Tractor	1974	94	Tier 0	2012	115	Tier 4 Alt NOx	540			10	San Joaquin
1033	2825	Crawler Tractor or Dozer	1942	91	Tier 0	2011	105	Tier 3	400			10	San Joaquin
1034	2823	Other Agriculture	1990	80	Tier 0	2012	80	Tier 4 Interim	750			10	San Joaquin
1035	2820	Other Agriculture	1977	63	Tier 0	2012	79	Tier 4 Alt NOx	300			10	San Joaquin
1036	2816	Tractor	1972	122	Tier 0	2011	112	Tier 3	800			10	San Joaquin
1037	2814	Crawler Tractor or Dozer	1965	59	Tier 0	2012	71	Tier 4 Interim	500			10	San Joaquin
1038	2808	Tractor	1965	130	Tier 0	2012	135	Tier 4 Alt NOx	800			10	San Joaquin
1039	2804	Tractor	2000	88	Tier 1	2011	95	Tier 3	500			10	San Joaquin
1040	2800	Tractor	1981	178	Tier 0	2012	215	Tier 4 Alt NOx	1000			10	San Joaquin
1042	2794	Tractor	1987	270	Tier 0	2013	310	Tier 4 Alt NOx	2800			10	Tulare
1043	2870	Tractor	1980	150	Tier 0	2011	105	Tier 3	1000			10	San Joaquin
1044	2927	Tractor	1976	186	Tier 0	2013	215	Tier 4 Alt NOx	1200			10	San Joaquin
1045	2924	Tractor	1971	152	Tier 0	2012	190	Tier 4 Interim	1200			10	Fresno
1046	2922	Tractor	1985	82	Tier 0	2012	95	Tier 3	1800			10	Fresno
1047	2918	Tractor	1971	110	Tier 0	2011	120	Tier 3	850			10	Fresno
1048	2915	Crawler Tractor or Dozer	2000	425	Tier 1	2011	360	Tier 4 Interim	900			10	Fresno
1049	2913	Tractor	1991	91	Tier 0	2012	91	Tier 4 Interim	2000			10	Fresno
1050	2910	Tractor	1990	161	Tier 0	2011	190	Tier 4 Alt NOx	1200			10	Fresno
1051	2884	Tractor	1989	215	Tier 0	2012	510	Tier 4 Alt NOx	1500			10	San Joaquin