

**San Joaquin Valley Unified Air Pollution Control District**

# **2023 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 \$2.3 billion 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 \$3.3 billion, for a total public/private investment of over \$5.7 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 252,000 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 (CARB) 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 (NO<sub>x</sub>), particulate matter (PM), and reactive organic gases (ROG). 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 Thursday April 9, 2015, EPA finalized a limited approval and limited disapproval of Rule 9610 as a revision to the California SIP<sup>1</sup>. The associated Technical Support Document<sup>2</sup> 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.

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<sup>1</sup> 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 April 9, 2015 from <https://www.regulations.gov/document?D=EPA-R09-OAR-2013-0754-0056>.

<sup>2</sup> 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 within the 2023 Annual Demonstration Report. The data also includes 764 District projects and 124 NRCS projects that were implemented during the timeframes covered under previous reports but were not included in those data sets at the time.

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

Current Reporting Period						
Year	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG
2009	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
2011	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00
2016	0.00	0.00	0.00	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00	0.00	0.00
2018	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
2020	9.44	0.49	0.47	0.03	0.00	0.00
2021	141.13	9.92	16.27	0.39	0.03	0.04
2022	753.92	49.57	85.43	2.07	0.14	0.23
2023	789.24	51.69	89.16	2.16	0.14	0.24
2024	789.24	51.69	89.16	2.16	0.14	0.24
2025	788.03	51.31	88.79	2.16	0.14	0.24
2026	786.03	51.22	87.73	2.15	0.14	0.24
2027	776.46	50.78	81.93	2.13	0.14	0.22
2028	774.56	50.68	81.50	2.12	0.14	0.22
2029	771.03	50.49	81.20	2.11	0.14	0.22
2030	768.26	50.25	80.75	2.10	0.14	0.22
2031	640.45	41.02	66.16	1.75	0.11	0.18
2032	50.72	2.57	3.96	0.14	0.01	0.01
2033	15.42	0.45	0.53	0.04	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 - 2023 Annual Demonstration Reports.

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

Cumulative Reporting Period						
Year	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG
2009	1098.99	35.78	116.17	3.01	0.10	0.32
2010	2655.71	82.02	237.29	7.28	0.22	0.65
2011	4112.25	141.11	364.96	11.27	0.39	1.00
2012	5804.68	210.38	477.51	15.90	0.58	1.31
2013	6699.86	248.37	572.27	18.36	0.68	1.57
2014	6494.06	243.85	564.13	17.79	0.67	1.55
2015	6528.68	252.86	620.84	17.89	0.69	1.70
2016	6491.76	256.09	673.48	17.79	0.70	1.85
2017	6142.10	250.86	719.09	16.83	0.69	1.97
2018	6689.96	288.29	784.01	18.33	0.79	2.15
2019	7038.71	339.65	850.61	19.28	0.93	2.33
2020	7245.45	384.75	872.13	19.85	1.05	2.39
2021	7273.49	409.55	861.36	19.93	1.12	2.36
2022	7165.04	416.53	830.43	19.63	1.14	2.28
2023	6553.23	390.78	751.67	17.95	1.07	2.06
2024	5936.97	363.76	649.65	16.27	1.00	1.78
2025	5308.92	335.92	570.27	14.54	0.92	1.56
2026	4873.16	311.89	512.44	13.35	0.85	1.40
2027	4252.87	279.50	441.28	11.65	0.77	1.21
2028	3563.03	235.23	369.63	9.76	0.64	1.01
2029	2630.49	172.79	271.69	7.21	0.47	0.74
2030	1567.25	101.96	159.99	4.29	0.28	0.44
2031	739.28	45.42	70.41	2.03	0.12	0.19
2032	149.55	0.00	0.00	0.41	0.00	0.00
2033	114.26	0.00	0.00	0.31	0.00	0.00

**I. ANNUAL DEMONSTRATION REPORT ELEMENTS**

This District-prepared report will demonstrate the quantity of emission reductions achieved through SIP-creditable incentive programs. District Rule 9610 has several requirements to demonstrate that the claimed incentive-based emission reductions are SIP-creditable. Section 4.0 of Rule 9610 presents the elements that this 2023 Annual Demonstration Report must include, which are summarized in Table 3 below.

**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 II of this report
Quantification of emission reductions generated through incentive programs, summarized by pollutant and by years and including: <ul style="list-style-type: none"> <li>• Cost-effectiveness</li> <li>• Funding amount</li> <li>• Incentive program guideline</li> <li>• Project type</li> </ul>	Section VI 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 III of this report
Project information, including the following, as applicable: <ul style="list-style-type: none"> <li>• Project identification number</li> <li>• Project location</li> <li>• Project type</li> <li>• Project life</li> <li>• Implementation date</li> <li>• Funding provided by the District, NRCS, or CARB</li> <li>• Guidelines used</li> <li>• Quantified emission reductions per year, and aggregated over the project life, by pollutant</li> <li>• Description of baseline and new equipment</li> <li>• Additional details as needed</li> </ul>	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: <ul style="list-style-type: none"> <li>• Identification of project audits, usage reports, inspections, and other monitoring activities</li> <li>• List of projects that do not satisfy contractual requirements and associated enforcement actions/remedies</li> </ul>	Section IV of this report
Incentive Program Evaluation: retrospective assessment of the incentive program performance and recommendations, if any, for future enhancements	Section V of this report



### Annual Demonstration Report Process

The Draft Annual Demonstration Report is released to the public for review and comment. Upon close of the comment period all comments received are addressed accordingly. The APCO then presents the Draft Annual Demonstration Report to the District Governing Board for review followed by submittal to CARB and EPA for concurrence prior to the August 31 deadline of each year. The public has an additional opportunity to comment on the draft report at the Governing Board public hearing. All 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](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).

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**II. INCENTIVE PROGRAM GUIDELINES**

**A. 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.

The District is also utilizing projects under the Funding Agricultural Replacement Measures for Emission Reductions (FARMER) program guidelines.

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:

- CARB 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)	2017 Guidelines (approved 4/27/2017)
Component	Component Option	Chapter	Chapter	Chapter	Chapter
On-Road Heavy-Duty Vehicle (On-Road)	New Vehicle Purchase	1	3	4	4
	Repower	1	3	4	4
	Retrofit	1	3	4	n/a
On-Road Heavy-Duty Vehicles (On-Road)	Fleet Modernization Replacement	2	4	5	n/a
Off-Road Compression-Ignition Equipment (Off-Road)	Vehicle Replacement	n/a	7	9	5
	Engine Repower	5	5	7	5
	Engine Retrofit	5	5	7	5
Portable and Stationary Agricultural Sources (Ag Engine)	Repower	10	10	10	5
	New Purchase	10	10	10	n/a
	Engine Retrofit	10	10	10	5

- CARB 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**

Component	Component Option	2008 Guidelines (approved 02/28/2008)	2010 Guidelines (approved 03/25/2010)	2013 Guidelines (approved 01/25/2013)	2015 Guidelines (approved 6/25/2015)
		Appendix	Appendix	Appendix	Appendix
On-Road Prop 1B	Repower	A	A	A	A
	Replacement (Vehicle Replacement)	A	A	A	A
	PM retrofit	A	A	A	n/a
	PM + NOx Retrofit	A	A	A	n/a
Locomotive Prop 1B	Locomotive Replacement	-	-	-	B

- 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.
- Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program Guidelines for incentive projects funded by the FARMER sources, for the project types listed in Table 6.

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**Table 6: FARMER Program Project Types by Component**

Component	Component Option	2018 Guidelines (approved 3/23/2018)
		Chapter
Ag UTV	Replacement (Vehicle Replacement)	3.2.2
On-Road Heavy-Duty Vehicle (On-Road)	Ag Truck Replacement	3.2.1
Off-Road Vehicle replacement	Ag Vehicle Replacement	3.2.1
Off-Road Vehicle Replacement (Cotton Pickers)	Ag Vehicle Replacement 2 for 1	3.2.1
Off-Road Compression-Ignition Equipment	Engine Repower	3.2.1
Ag Pump	Repower	3.2.1

The summaries of SIP-creditable incentive-based emission reductions claimed under Section 3.1 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. 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 above.

## **B. Description of SIP-Creditable Program Guidelines**

Sections B(1) through B(4) 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.

### **1. CARB 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 CARB, 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 CARB and air districts in California. As directed by the California Health and Safety Code, CARB'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-credibility 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 2017 Carl Moyer Program Guidelines ensure that the SIP-credibility integrity principle of "Surplus" is fulfilled:

- *Requirement that emission reductions generated by incentive programs are not required by other regulation*
  - (2011 Moyer Guidelines Chapter 2, Project Criteria A, H, I, MM)
  - (2017 Moyer Guidelines, Chapter 2, Project Criteria A, B, C, D, G, K).
- *Protocols for quantifying maximum project life and maximum emission reductions which account for upcoming regulatory deadlines for a given source category*
  - (2011 Moyer Guidelines Chapter 2, Project Criteria B, I and MM)
  - (2017 Moyer Guidelines Chapter 2, Project Criteria B, C, D).
- *Assurance that baseline equipment was in use*
  - (2011 Moyer Guidelines Chapter 3, Section Z.6(B) and AA.2.)
  - (2017 Moyer Guidelines, Chapter 3, Section V.6(B) and W.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, CARB 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*
  - (2011 Moyer Guidelines, Chapter 2, Section S and Chapter 3, Section Z.6.(B))
  - (2017 Moyer Guidelines, Chapter 2, Section S and Chapter 3 Section T.3 and V.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 CARB (certification or verification by the EPA or International Maritime Organization may be allowed for some source categories for which CARB does not have a certification or verification program). The summary below provides more detail about how the 2017 Carl Moyer Program Guidelines ensure that the SIP-credibility 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.*
  - 2011 Moyer Guidelines, Appendix D (Publicly Available) and Chapter 1, Section E.7 (Allows CARB Executive Officer to modify the Guidelines under a public process, to keep them effective and up-to-date.)
  - 2017 Moyer Guidelines, Appendix D (Publicly Available) and Chapter 1, (Guidelines modified 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*
  - 2011 and 2017 Moyer Guidelines, Appendix C (contains formulas and instructions)
  - 2011 and 2017 Moyer Guidelines, Supplemental document, “Sample Calculations” (contains formulas and instructions)
  - 2011 Moyer Guidelines, Appendix C, Section B.5, and Supplemental document, “Sample Calculations” (contains explicit instructions regarding inputs)
  - 2017 Moyer Guidelines, Appendix C, Section B.1(b), and Supplemental document, “Sample Calculations” (contains explicit instructions regarding inputs)
- *Requirement to provide activity data sufficient to determine actual emission reductions*
  - 2011 Moyer Guidelines, Chapter 3, Section Z.6.(B)
  - 2017 Moyer Guidelines, Chapter 3, Section V.6.
- *Requirement to demonstrate the percentage of emission reductions that occur in the geographic area of interest, and that emission reductions are therefore SIP creditable*
  - 2011 Moyer Guidelines, Chapter 2, Section S and Chapter 3, Section Z.6.(B)
  - 2017 Moyer Guidelines, Chapter 2, Section S
- *Requirement to periodically audit completed projects to verify emission reduction projections are fulfilled*
  - 2011 Moyer Guidelines Chapter 3, Sections Z.10 and EE.
  - 2017 Moyer Guidelines Chapter 3, Section V.10 and AA.

### **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 2017 Carl Moyer Program Guidelines ensure that the SIP-credibility integrity principle of “Enforceable” is fulfilled:

- *Require Grantees to provide all necessary recordkeeping and reporting needed to verify emission reductions*
  - 2011 Moyer Guidelines, Chapter 3, Section Z.9 and DD
  - 2017 Moyer Guidelines, Chapter 3, Section V.9 and Z
- *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 2017 Carl Moyer Program Guidelines ensure that the SIP-credibility integrity principle of “Permanent” is fulfilled:

- *Data needed to determine and track location of activity*
  - 2011 Moyer Guidelines, Chapter 3, Section DD
  - 2017 Moyer Guidelines, Chapter 3, Section Z
- *Provisions for ensuring that the project was completed, including the verification of disposition of baseline equipment.*
  - 2011 Moyer Guidelines Chapter 3, Sections AA and BB
  - 2017 Moyer Guidelines Chapter 3, Sections W and X

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](http://www.arb.ca.gov/msprog/moyer/guidelines/current.htm).

## **2. CARB 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.

CARB 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.

CARB, under direction from Executive Order S-02-07, established transparency and accountability measures for administering the bond funding. CARB 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.

The program is designed to supplement CARB'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-credibility 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.

### **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 CARB. The calculator is available to the public on CARB's website at <http://www.arb.ca.gov/bonds/gmbond/gmbond.htm> and is updated by CARB 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. Chapter 4 Section A and 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 VI of this report. The complete Proposition 1B Program Guidelines can be found online at:

<http://www.arb.ca.gov/bonds/gmbond/gmbond.htm>.

**3. FARMER Program Guidelines**

The Funding Agricultural Replacement Measures for Emission Reductions (FARMER) Program assists with the incremental cost of cleaner-than-required engines and equipment. Since its introduction in Fiscal Year 2017-2018, the FARMER program has continued to provide funding to local air districts to support the reduction of criteria, toxic, and greenhouse gas (GHG) emissions from the agricultural sector. To date, the District received over \$543.3 million through five phases of funding to implement the FARMER Program.

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

The FARMER 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 FARMER 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 FARMER Program Guidelines meet each SIP-credibility criterion:

**Surplus**

The FARMER 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. All calculated emissions are in excess of the baseline emission inventory, attainment year, and progress milestone year forecasts that include adopted regulations. Minimum project lives are established in each component’s guidelines to ensure that the program does not fund actions taken to comply with regulatory deadlines. The minimum project life requirement also ensures that the emission reductions are real for the life of the project.

**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 current Carl Moyer or FARMER 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 CARB (certification or verification by the EPA) or be verified to emit zero tailpipe emissions. The summary below provides more detail about how the 2018 FARMER Guidelines ensure that the SIP-credibility integrity principle of “Quantifiable” is fulfilled:

- The District has created enforceable contracts/vouchers, based on requirements in the FARMER 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/vouchers 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.

**Enforceable**

Enforceable means emission reductions are enforceable if the incentive program guidelines include provisions for ensuring the following:

- The emission reductions are independently and practicably verifiable through reporting, inspections, monitoring, and other mechanisms;
- Incentive program requirements are defined through legally binding contracts, including identifying the party or parties responsible for ensuring that emission reductions are achieved;

- Funding recipients are obligated to provide all records needed to demonstrate that emission reductions are achieved; and
- The air district provides public access to all emissions-related information for reductions claimed.

**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.

**4. 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-credibility criteria of being surplus, quantifiable, enforceable, and permanent. 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 PM<sub>2.5</sub>, PM<sub>10</sub>, 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 NO<sub>x</sub>, ROG, and PM that is projected to be reduced by funding the project.

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

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-credibility 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 National Air Quality Initiative Programs Description is posted on-line at:  
<http://www.nrcs.usda.gov/wps/portal/nrcs/detail/ca/programs/financial/eqip/?cid=stelprdb1247003>.

The 2012 CA-NRCS program guidelines are posted on-line at:  
[http://www.nrcs.usda.gov/Internet/FSE\\_DOCUMENTS/nrcs144p2\\_063865.pdf](http://www.nrcs.usda.gov/Internet/FSE_DOCUMENTS/nrcs144p2_063865.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:

[https://efotg.sc.egov.usda.gov/references/public/CA/Section-IV-Practice-List-Lifespan\\_03-18.xlsx](https://efotg.sc.egov.usda.gov/references/public/CA/Section-IV-Practice-List-Lifespan_03-18.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 a CARB executive order that verifies the emission of every equipment engine. The NRCS calculation worksheets and emission factors are posted on-line at:

[https://efotg.sc.egov.usda.gov/references/public/CA/TN-AQ-04\\_CPS-372\\_Estimating\\_Emissions-SIP\\_Reporting.pdf](https://efotg.sc.egov.usda.gov/references/public/CA/TN-AQ-04_CPS-372_Estimating_Emissions-SIP_Reporting.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 Destruction Certification worksheet is posted on-line at:

[https://efotg.sc.egov.usda.gov/references/public/CA/CA\\_Destruction\\_Certification\\_Worksheet.docx](https://efotg.sc.egov.usda.gov/references/public/CA/CA_Destruction_Certification_Worksheet.docx)

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:

<https://efotg.sc.egov.usda.gov/references/public/CA/372-CA-PS-11-2018.docx>

Destruction certification worksheets are posted on-line at:

[https://efotg.sc.egov.usda.gov/references/public/CA/CA\\_Destruction\\_Certification\\_Worksheet.docx](https://efotg.sc.egov.usda.gov/references/public/CA/CA_Destruction_Certification_Worksheet.docx).

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 CARB 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 VI of this report. The NRCS Combustion System Improvement of Mobile Engines incentive program can be found online at:

Practice Standard:

- CPS 372, Sept 2010: [https://efotg.sc.egov.usda.gov/references/public/CA/Archived\\_372-std-09-2010.pdf](https://efotg.sc.egov.usda.gov/references/public/CA/Archived_372-std-09-2010.pdf)
- Interim 723, May 2009: <https://efotg.sc.egov.usda.gov/references/public/CA/723-std-5-09.pdf>

CPS 372 Specifications:

- Nov 2014: <https://efotg.sc.egov.usda.gov/references/public/CA/372-spec-11-14.doc>

- Aug 2013: <https://efotg.sc.egov.usda.gov/references/public/CA/372-spec-8-13.doc>
- Sept 2010: <https://efotg.sc.egov.usda.gov/references/public/CA/372-spec-09-10.doc>

CPS 372 O&M:

- Sept 2010: <https://efotg.sc.egov.usda.gov/references/public/CA/372-OM-09-10.doc>

## 5. Guidelines Used Under Section 3.2 of Rule 9610

The Annual Demonstration Report employs Section 3.2 of the Rule 9610 by claiming SIP credit for incentive-based emission reductions from the FARMER Guidelines for Agricultural UTV Replacement, Agricultural On-Road Heavy-Duty Truck Replacement and Off-Road Cotton Picker replacement. The CARB Carl Moyer Program Guidelines (2005, 2008, 2011) for locomotive alternative technology switchers and new electric forklift purchases and the reductions from the Proposition 1B Guidelines for Locomotive Replacement. 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.

### **Agricultural UTV Replacement**

Projects funded with the FARMER Guidelines followed all required steps to ensure SIP-credibility criteria were met as follows:

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

*Quantifiable* – The FARMER Guidelines provide calculation methodologies and emission factors for UTV projects. These methodologies have been reviewed and adopted through a public process. All UTV projects in this Annual Demonstration Report were quantified using these SIP-creditable calculation methodologies found in Appendix A.

*Enforceable* – 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 electric UTV is required to be operated for the duration of the project life and the old UTV is required to be permanently disabled at a District contracted dismantling facility.

### **Agricultural Heavy-Duty On-Road Truck Replacement**

Projects funded with the FARMER Guidelines followed all required steps to ensure SIP-credibility criteria were met as follows:

*Surplus* – The on-road trucks that were funded are used for agricultural purposes and were verified to be in compliance at the time of application, and therefore any emissions calculated are surplus to the final state regulation in 2024.

*Quantifiable* – The FARMER Guidelines refer to the current Carl Moyer guidelines that provide calculation methodologies and emission factors for on-road projects. These methodologies have been reviewed and adopted through a public process. All on-road projects in this Annual Demonstration Report were quantified using these SIP-creditable calculation methodologies.

*Enforceable* –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 truck is required to be operated for the duration of the project life and the old truck is required to be permanently disabled at a District contracted dismantling facility.

### **Cotton Pickers**

Projects funded with the FARMER Guidelines followed all required steps to ensure SIP-credibility criteria were met as follows:

*Surplus* – There are currently no federal, state, or local rules or regulations pertaining to the emissions of agriculturally used off-road cotton pickers in the state of California. Therefore, all incentive-based emission reductions are surplus.

*Quantifiable* – The FARMER Guidelines provide calculation methodologies and emission factors for cotton picker projects. These methodologies have been reviewed and adopted through a public process. All cotton picker projects in this Annual Demonstration Report were quantified using these SIP-creditable calculation methodologies found in Appendix A.

*Enforceable* –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 cotton picker is required to be operated for the duration of the project life and the old cotton picker(s) is/are required to be permanently disabled at a District contracted dismantling facility

### **Locomotive Repower**

Projects funded with the 2008 and 2011 Carl Moyer Program Guidelines followed all required steps to ensure SIP-credibility 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-credibility 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.

### **Proposition 1B Locomotive Replacement**

Projects funded with the Proposition 1B Program Guidelines followed all required steps to ensure SIP-credibility 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 Proposition 1B 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 Proposition 1B 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 locomotive(s) is/are required to be operated for the duration of the project life and the old locomotive(s) is/are required to be permanently disabled.

### III. RELEVANT SIP COMMITMENTS

Through Rule 9610, the District may rely on 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 which incentives are used to address those shortfalls.

#### A. SIP Commitments Satisfied

**2008 PM<sub>2.5</sub> Plan (Contingency Quantification, 2015):** The District met its *2008 PM<sub>2.5</sub> 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 fine particulate matter (PM<sub>2.5</sub>) NAAQS in the San Joaquin Valley.<sup>3</sup> 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. However, EPA then proposed to withdraw the approval of the *2008 PM<sub>2.5</sub> Plan* contingencies finding that the requirement had become moot because the District had already met the RFP requirements relevant to the *2008 PM<sub>2.5</sub> Plan* by the time of EPA's May 22, 2014 action.<sup>4</sup> Then, on May 12, 2016, EPA took final action to withdraw its approval of the 2008 PM<sub>2.5</sub> contingencies and disapproved the SIP submission<sup>5</sup> in response to a court case.<sup>6</sup> EPA determined the identified deficiency in the *2008 PM<sub>2.5</sub> Plan* has been addressed and permanently stopped associated sanctions clocks effective December 14, 2017.<sup>7</sup> However, it is important to note that this attainment plan is still not an approved plan in the California SIP.

<sup>3</sup> EPA, Approval and Promulgation of Implementation Plans; California; San Joaquin Valley; Contingency Measures for the 1997 PM<sub>2.5</sub> 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>

<sup>4</sup> EPA, Withdrawal of Approval and Disapproval of Air Quality Implementation Plans; California; San Joaquin Valley; Contingency Measures for the 1997 PM<sub>2.5</sub> Standards. 80 Fed. Reg. 158, pp. 49190-49193. (2015, August 17). <https://www.gpo.gov/fdsys/pkg/FR-2015-08-17/pdf/2015-20240.pdf>

<sup>5</sup> EPA, Withdrawal of Approval and Disapproval of Air Quality Implementation Plans; California, San Joaquin Valley; Contingency Measures for the 1997 PM<sub>2.5</sub> Standards; Final Rule. 81 Fed. Reg. 92, pp.29498-29501 (2016, May 12). (to be codified at 40 CFR Part 52) <https://www.gpo.gov/fdsys/pkg/FR-2016-05-12/pdf/2016-11125.pdf>

<sup>6</sup> U.S. Court of Appeals for the Ninth Circuit (*Committee for a Better Arvin v. EPA*, 786 F.3d 1169 (9<sup>th</sup> Cir. 2015))

<sup>7</sup> Contingency Measures for the 1997 PM<sub>2.5</sub> Standards; California; San Joaquin Valley; Correction of Deficiency; Final Rule. 82 Fed. Reg. 239, pp. 58747-58750. (2017, December 14). (to be codified at 40 CFR Part 52). <https://www.gpo.gov/fdsys/pkg/FR-2017-12-14/pdf/2017-26899.pdf>

**2007 Ozone Plan (Agricultural Equipment, 2017):** The District met its 2007 Ozone Plan commitment to achieve SIP-creditable emissions reductions from incentive reductions, as demonstrated in the 2018 annual demonstration report.

The 2007 San Joaquin Valley 8-Hour Ozone SIP (*2007 Ozone Plan*), approved by EPA, contained a commitment by CARB to achieve emissions reductions of 5 to 10 tpd of NO<sub>x</sub> from mobile agricultural equipment in the Valley by 2017 to accelerate progress toward attainment of the 1997 8-hour ozone standard. The attainment deadline for this standard is 2024, using data from 2021-2023. In October 2013, CARB adopted the *State Implementation Plan Credit from Mobile Agricultural Equipment Regulation* which provides the administrative mechanism for emission reductions resulting from mobile agricultural equipment program projects funded by the Carl Moyer Program to be eligible for SIP credit. The CARB Office of Administrative Law (OAL) approved the rulemaking and filed it with the Secretary of State on October 8, 2014. The rulemaking became effective on January 1, 2015.<sup>8</sup>

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 the 2018 Annual Demonstration Report and by CARB at their May 2017 Public Hearing<sup>9</sup>, agricultural equipment replacement projects implemented by the District and NRCS achieved SIP-creditable emissions reductions far in excess of the NO<sub>x</sub> commitment in the *2007 Ozone Plan* ahead of the 2017 target.

The District and NRCS are continuing to invest significant additional funding to replace agricultural equipment in support of continued reductions of criteria pollutants, and the total emissions reductions achieved will continue to grow substantially in the next several years. These emission reductions will support ongoing progress towards attainment of the federal ozone standards.

## B. Pending SIP Commitments

### **State Implementation Plans to Address the 1997, 2006, and 2012 PM<sub>2.5</sub>**

**Standards<sup>10</sup>:** On September 15, 2016, the District adopted the *2016 Moderate Area Plan for the 2012 PM<sub>2.5</sub> Standard (2016 PM<sub>2.5</sub> Plan)*. On November 15, 2018, the District adopted the *2018 Plan for the 1997, 2006, and 2012 PM<sub>2.5</sub> Standards (2018 PM<sub>2.5</sub> Plan)* to address the EPA federal 1997 annual PM<sub>2.5</sub> standard of 15 µg/m<sup>3</sup> and 24-hour PM<sub>2.5</sub> standard of 65 µg/m<sup>3</sup>; the 2006 24-hour PM<sub>2.5</sub> standard of 35 µg/m<sup>3</sup>; and the 2012 annual PM<sub>2.5</sub> standard of 12 µg/m<sup>3</sup>. On January 24, 2019, CARB approved these plans, and CARB submitted both plans to EPA for approval on May 9, 2019. On July 22, 2020,

<sup>8</sup> CARB, *State Implementation Plan Credit from Mobile Agricultural Equipment*. Resolution 12-42, Agenda Item No.: 13-9-7 (2013, October 25). <https://www.arb.ca.gov/regact/2013/sipmobileag2013/res13-42.pdf>

<sup>9</sup> CARB May 25, 2017 Public Hearing, <https://ww3.arb.ca.gov/board/books/2017/052517/17-5-3pres.pdf>

<sup>10</sup> SJVAPCD. *2018 PM<sub>2.5</sub> Plan for 1996, 2006, and 2012 PM<sub>2.5</sub> Standards* (2018, November 15) retrieved on 7/30/19 from: <http://valleyair.org/pmplans/documents/2018/pm-plan-adopted/2018-Plan-for-the-1997-2006-and-2012-PM2.5-Standards.pdf>

EPA took final action to approve the portions of the 2018 *PM2.5 Plan* that pertain to the 2006 24-hour *PM2.5* standard<sup>11</sup>. The 2018 *PM2.5 Plan* includes a comprehensive suite of regulatory and incentive-based measures for both stationary and mobile sources, and also includes a targeted Hot-Spot Strategy that achieves additional reductions from residential wood burning and commercial charbroiling. The plan includes commitments from the District and CARB to attain an aggregate amount of emissions reductions from local measures for stationary sources and mobile sources. District measures are anticipated to achieve emissions reductions of 1.30 tons per day of *PM2.5* and 1.88 tons per day of *NOx* by the applicable attainment deadlines of 2024 and 2025. Additionally, state measures implemented by CARB are anticipated to achieve 32.0 tons per day of *NOx* and 1.0 tons per day of *PM2.5*. To date, CARB's submittal of the San Joaquin Valley Agricultural Equipment Incentive Measure to EPA quantifies and ensures the emission reductions achieved from mobile agricultural equipment turnover to the cleanest engines are creditable towards the State's aggregate emissions reduction commitment in the California SIP for the San Joaquin Valley. CARB and the District are continuing to implement control measures, as outlined in the 2018 *PM2.5 Plan*, to achieve emission reductions in support of this aggregate commitment. The total emissions reductions achieved towards aforementioned SIP commitments will be documented in future annual demonstration reports.

### **C. SIP Commitment Shortfalls**

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

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<sup>11</sup> *Clean Air Plans; 2006 Fine Particulate Matter Nonattainment Area Requirements; San Joaquin Valley, California; Final Rule.* <https://www.govinfo.gov/content/pkg/FR-2020-07-22/pdf/2020-14471.pdf>

#### IV. 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 05/14/2009 – 05/21/2023. 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 or reviewed 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 7: 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	2034	1240
2015	521	1329
2016	1028	1021
2017	2032	1091
2018	2172	1597
2019	2164	3467
2020	2225	3773
2021	1806	3135
2022	2825	2498
2023	1058	1225

*\*As of May 22, 2023*

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.

**Table 8: 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	5421	4931
2015	5553	4631
2016	5683	5782
2017	6095	5270
2018	7460	5237
2019	6762	5439
2020	8821	6430
2021	10398	7698
2022	11869	10524
2023	4630	4164

*\*As of May 22, 2023*

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 monthly to 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 2023 reporting period were not received back by the District by the cut-off date for this report. These annual reports are accounted for in the 2023 Annual Demonstration Report. To date, the overall annual usage reported associated with the project categories included in this report are performing as expected, on average meeting more than 90% of their contracted annual usage. The District will continue to monitor annual usage and make any adjustments to claimed emission reductions in the future, as necessary.



**A. 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 20 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 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 remedies identified in section IV (A) above.

**2013 – 2022 Calendar Year Carl Moyer Project Specific Audit:**

The following table shows audited projects that were determined to be in violation of their contractual terms and the enforcement actions that were taken by the District. For the current 2023 report, there are no new projects to report.

**Table 9: Carl Moyer Program Projects with Contractual Violations**

<b>Project Number</b>	<b>Annual Demonstration Report Year</b>	<b>Contractual Violation</b>	<b>Action Taken</b>
<b>C-2326</b>	2013	Did not meet minimum usage requirements	Extended contract term 1 additional year
<i>N/A</i>	2014	<i>No projects to report</i>	
<i>N/A</i>	2015	<i>No projects to report</i>	
<i>N/A</i>	2016	<i>No projects to report</i>	
<i>N/A</i>	2017	<i>No projects to report</i>	
<i>N/A</i>	2018	<i>No projects to report</i>	
<i>N/A</i>	2019	<i>No projects to report</i>	
<i>N/A</i>	2020	<i>No projects to report</i>	
<i>N/A</i>	2021	<i>No projects to report</i>	
<i>N/A</i>	2022	<i>No projects to report</i>	

## B. 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 CARB 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 through 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, CARB, 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 audited projects that were determined to be in violation of their contractual terms and the enforcement actions that were taken by the District. For the current 2023 report, there are no new projects to report.

**Table 10: Proposition 1B Program Projects with Contractual Violations**

Project Number	Annual Demonstration Report Year	Contractual Violation	Action Taken
P-0314-A	2013	<i>Unit 1 Annual Usage reports incomplete and/or missing. Unable to reach applicant, certified mail returned undeliverable.</i>	Sent to Legal for review and possible further action, associated reductions were removed from the cumulative totals in this report
P-0463-A	2013	<i>Units 11 &amp; 13 Annual Usage reports incomplete and/or missing. Unable to reach applicant, certified mail returned undeliverable</i>	Sent to Legal for review and possible further action, associated reductions were removed from the cumulative totals in this report

Project Number	Annual Demonstration Report Year	Contractual Violation	Action Taken
C-14326-A	2013	<i>Units 1-2 Annual Usage reports incomplete and/or missing. Unable to reach applicant, certified mail returned undeliverable</i>	Sent to Legal for review and possible further action, associated reductions were removed from the cumulative totals in this report
P-0610-A	2013	<i>Units 11, 14, 31, 37, 40, 49, 53, &amp; 67 Equipment was no longer owned by applicant due to re-possession</i>	Sent to Legal for review and possible further action, associated reductions were removed from the cumulative totals in this report
C-14254-A	2013	<i>Unit 1 Equipment was no longer owned by applicant due to re-possession</i>	Sent to Legal for review and possible further action, associated reductions were removed from the cumulative totals in this report
C-14348-A	2013	<i>Units 5 &amp; 10, No annual usage reports received, Unable to locate applicant or associated business.</i>	Sent to Legal for review and possible further action, associated reductions were removed from the cumulative totals in this report
P-0346	2013	Did not purchase eligible equipment as stated in contract	District took legal action, received judgment by court for amount funded
N/A	2014	<i>No projects to report</i>	
N/A	2015	<i>No projects to report</i>	
P-0368-A	2016	<i>Units 18-20, 24. Equipment was no longer owned by applicant due to re-possession</i>	Projects were closed and associated reductions were removed from the cumulative totals in this report
N/A	2017	<i>No projects to report</i>	
N/A	2018	<i>No projects to report</i>	
N/A	2019	<i>No projects to report</i>	
N/A	2020	<i>No projects to report</i>	
N/A	2021	<i>No projects to report</i>	
N/A	2022	<i>No projects to report</i>	

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

The USDA NRCS webpage at:

[https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/eqip/?cid=nr\\_cseprd1342638](https://www.nrcs.usda.gov/wps/portal/nrcs/detail/national/programs/financial/eqip/?cid=nr_cseprd1342638) 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:

<https://efotg.sc.egov.usda.gov/references/public/CA/372-std-11-2019.pdf>. The CPS 372 practice life is 10 years as described on the FOTG spreadsheet at:

[https://efotg.sc.egov.usda.gov/references/public/CA/Practices\\_Lifespans\\_2012-12\\_CA.xlsx](https://efotg.sc.egov.usda.gov/references/public/CA/Practices_Lifespans_2012-12_CA.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, CARB, 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.

**Table 11: Canceled NRCS Projects Previously Reported**

<b>Project Number</b>	<b>Annual Demonstration Report Year</b>	<b>Status</b>	<b>Related Emissions Reductions (total tons/year)</b>
836	2013	Sold Equipment	1.29
874	2013	Sold Equipment	1.49

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## **V. 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 CARB 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 CARB 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, CARB, the California DOF and the California Bureau of State Audits.<sup>12</sup> 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 CARB 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." CARB'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.

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<sup>12</sup> 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](http://www.arb.ca.gov/msprog/moyer/audits/2011/san_joaquin_valley.htm)

**VI. 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 05/22/2022 through 5/21/2023. The data also includes 764 District projects and 124 NRCS projects that were implemented during the timeframes covered under previous reports but were not included in those data sets at the time. 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 CARB, 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 CARB. 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 12: Total SIP-Creditable Incentive-Based Emission Reductions Generated Through Incentive Programs**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	1098.99	35.78	116.17	3.01	0.10	0.32
2010	0.00	0.00	0.00	0.00	0.00	0.00	2655.71	82.02	237.29	7.28	0.22	0.65
2011	0.00	0.00	0.00	0.00	0.00	0.00	4112.25	141.11	364.96	11.27	0.39	1.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	5804.68	210.38	477.51	15.90	0.58	1.31
2013	0.00	0.00	0.00	0.00	0.00	0.00	6699.86	248.37	572.27	18.36	0.68	1.57
2014	0.00	0.00	0.00	0.00	0.00	0.00	6494.06	243.85	564.13	17.79	0.67	1.55
2015	0.00	0.00	0.00	0.00	0.00	0.00	6528.68	252.86	620.84	17.89	0.69	1.70
2016	0.00	0.00	0.00	0.00	0.00	0.00	6491.76	256.09	673.48	17.79	0.70	1.85
2017	0.00	0.00	0.00	0.00	0.00	0.00	6142.10	250.86	719.09	16.83	0.69	1.97
2018	0.00	0.00	0.00	0.00	0.00	0.00	6689.96	288.29	784.01	18.33	0.79	2.15
2019	0.00	0.00	0.00	0.00	0.00	0.00	7038.71	339.65	850.61	19.28	0.93	2.33
2020	9.44	0.49	0.47	0.03	0.00	0.00	7245.45	384.75	872.13	19.85	1.05	2.39
2021	141.13	9.92	16.27	0.39	0.03	0.04	7273.49	409.55	861.36	19.93	1.12	2.36
2022	753.92	49.57	85.43	2.07	0.14	0.23	7165.04	416.53	830.43	19.63	1.14	2.28
2023	789.24	51.69	89.16	2.16	0.14	0.24	6553.23	390.78	751.67	17.95	1.07	2.06
2024	789.24	51.69	89.16	2.16	0.14	0.24	5936.97	363.76	649.65	16.27	1.00	1.78
2025	788.03	51.31	88.79	2.16	0.14	0.24	5308.92	335.92	570.27	14.54	0.92	1.56
2026	786.03	51.22	87.73	2.15	0.14	0.24	4873.16	311.89	512.44	13.35	0.85	1.40
2027	776.46	50.78	81.93	2.13	0.14	0.22	4252.87	279.50	441.28	11.65	0.77	1.21
2028	774.56	50.68	81.50	2.12	0.14	0.22	3563.03	235.23	369.63	9.76	0.64	1.01
2029	771.03	50.49	81.20	2.11	0.14	0.22	2630.49	172.79	271.69	7.21	0.47	0.74
2030	768.26	50.25	80.75	2.10	0.14	0.22	1567.25	101.96	159.99	4.29	0.28	0.44
2031	640.45	41.02	66.16	1.75	0.11	0.18	739.28	45.42	70.41	2.03	0.12	0.19
2032	50.72	2.57	3.96	0.14	0.01	0.01	149.55	0.00	0.00	0.41	0.00	0.00
2033	15.42	0.45	0.53	0.04	0.00	0.00	114.26	0.00	0.00	0.31	0.00	0.00



Tables 13 and 14 below are the subsets of the summary provided in Table 12. Table 13 identifies emission reductions claimed through incentive program guidelines pursuant to Section 3.1 of Rule 9610. Table 14 identifies emission reductions claimed through incentive program guidelines pursuant to Section 3.2 of Rule 9610.

**Table 13: Emission Reductions Claimed through use of Incentive Program Guidelines Pursuant to Section 3.1**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	1082.28	35.22	114.57	2.97	0.10	0.31
2010	0.00	0.00	0.00	0.00	0.00	0.00	2639.00	81.46	235.69	7.23	0.22	0.65
2011	0.00	0.00	0.00	0.00	0.00	0.00	4089.89	140.21	363.01	11.21	0.38	0.99
2012	0.00	0.00	0.00	0.00	0.00	0.00	5721.88	206.47	469.23	15.68	0.57	1.29
2013	0.00	0.00	0.00	0.00	0.00	0.00	6611.93	244.33	563.80	18.11	0.67	1.54
2014	0.00	0.00	0.00	0.00	0.00	0.00	6406.08	239.80	555.66	17.55	0.66	1.52
2015	0.00	0.00	0.00	0.00	0.00	0.00	6426.59	248.48	611.52	17.61	0.68	1.68
2016	0.00	0.00	0.00	0.00	0.00	0.00	6389.62	251.70	664.16	17.51	0.69	1.82
2017	0.00	0.00	0.00	0.00	0.00	0.00	5998.43	244.41	709.76	16.43	0.67	1.94
2018	0.00	0.00	0.00	0.00	0.00	0.00	6543.73	281.80	774.05	17.93	0.77	2.12
2019	0.00	0.00	0.00	0.00	0.00	0.00	6819.25	330.79	810.80	18.68	0.91	2.22
2020	2.77	0.24	0.45	0.01	0.00	0.00	6988.80	374.75	827.27	19.15	1.03	2.27
2021	134.01	9.61	15.32	0.37	0.03	0.04	7013.02	399.33	808.77	19.21	1.09	2.22
2022	734.14	48.64	78.55	2.01	0.13	0.22	6908.14	406.63	774.44	18.93	1.11	2.12
2023	769.43	50.75	81.99	2.11	0.14	0.22	6310.99	381.31	697.14	17.29	1.04	1.91
2024	769.43	50.75	81.99	2.11	0.14	0.22	5734.47	355.11	621.56	15.71	0.97	1.70
2025	769.43	50.75	81.99	2.11	0.14	0.22	5180.94	331.17	552.69	14.19	0.91	1.51
2026	767.85	50.68	81.85	2.10	0.14	0.22	4764.24	307.63	503.53	13.05	0.84	1.38
2027	760.99	50.29	81.11	2.08	0.14	0.22	4146.70	275.29	437.42	11.36	0.75	1.20
2028	759.11	50.19	80.96	2.08	0.14	0.22	3456.89	231.02	366.07	9.47	0.63	1.00

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
<b>2029</b>	755.58	50.00	80.67	2.07	0.14	0.22	2524.35	168.58	268.12	6.92	0.46	0.73
<b>2030</b>	752.81	49.76	80.22	2.06	0.14	0.22	1461.11	97.75	156.42	4.00	0.27	0.43
<b>2031</b>	625.03	40.57	65.63	1.71	0.11	0.18	633.17	41.26	66.85	1.73	0.11	0.18
<b>2032</b>	35.29	2.12	3.43	0.10	0.01	0.01	43.44	2.81	4.65	0.12	0.01	0.01

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Table 14: Emission Reductions Claimed through use of Incentive Program Guidelines Pursuant to Section 3.2

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	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	0.00	0.00	0.00	0.00	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2014	0.00	0.00	0.00	0.00	0.00	0.00	87.98	4.05	8.47	0.24	0.01	0.02
2015	0.00	0.00	0.00	0.00	0.00	0.00	102.09	4.38	9.32	0.28	0.01	0.03
2016	0.00	0.00	0.00	0.00	0.00	0.00	102.14	4.39	9.32	0.28	0.01	0.03
2017	0.00	0.00	0.00	0.00	0.00	0.00	143.67	6.45	9.33	0.39	0.02	0.03
2018	0.00	0.00	0.00	0.00	0.00	0.00	146.22	6.48	9.96	0.40	0.02	0.03
2019	0.00	0.00	0.00	0.00	0.00	0.00	219.46	8.85	39.82	0.60	0.02	0.11
2020	6.68	0.25	0.02	0.02	0.00	0.00	256.66	10.00	44.87	0.70	0.03	0.12
2021	7.12	0.31	0.95	0.02	0.00	0.00	260.47	10.22	52.59	0.71	0.03	0.14
2022	19.78	0.94	6.88	0.05	0.00	0.02	256.90	9.90	55.99	0.70	0.03	0.15
2023	19.81	0.94	7.17	0.05	0.00	0.02	242.24	9.47	54.53	0.66	0.03	0.15
2024	19.81	0.94	7.17	0.05	0.00	0.02	202.50	8.65	28.09	0.55	0.02	0.08
2025	18.60	0.56	6.80	0.05	0.00	0.02	127.98	4.75	17.57	0.35	0.01	0.05
2026	18.18	0.54	5.88	0.05	0.00	0.02	108.92	4.26	8.92	0.30	0.01	0.02
2027	15.47	0.49	0.82	0.04	0.00	0.00	106.16	4.21	3.86	0.29	0.01	0.01
2028	15.45	0.49	0.53	0.04	0.00	0.00	106.14	4.20	3.57	0.29	0.01	0.01
2029	15.45	0.49	0.53	0.04	0.00	0.00	106.14	4.20	3.57	0.29	0.01	0.01
2030	15.45	0.49	0.53	0.04	0.00	0.00	106.14	4.20	3.57	0.29	0.01	0.01
2031	15.42	0.45	0.53	0.04	0.00	0.00	106.12	4.16	3.56	0.29	0.01	0.01
2032	15.42	0.45	0.53	0.04	0.00	0.00	106.12	4.16	3.56	0.29	0.01	0.01
2033	15.42	0.45	0.53	0.04	0.00	0.00	106.12	4.16	3.56	0.29	0.01	0.01

1. Prop1B Locomotive projects are contracted with a 15 year project life, Ag Trucks have a 3 year project life, and Ag UTVs have a 5 year project life. Moyer locomotive projects were contracted with a 15-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, Proposition 1B, and FARMER 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 15 was calculated by dividing the Incentive Contribution by the total program reductions.

**Table 15: 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 <sup>1, 2</sup>	\$84,624,602.05	\$86,187,905.39	6813.31	\$12,420.48
Agricultural Pump Repower <sup>1</sup>	\$117,540.00	\$186,841.31	42.96	\$2,736.03
Locomotive Replacement <sup>2</sup>	\$9,046,520.64	\$2,806,989.76	657.52	\$13,758.52
Off-Road Agricultural UTV Replacement <sup>2</sup>	\$3,143,601.00	\$1,276,371.17	47.68	\$65,933.03
Truck Replacement- Agricultural <sup>2</sup>	\$1,335,465.50	\$727,563.06	5.72	\$233,391.38
Yard Truck Replacement <sup>2</sup>	\$1,741,106.45	\$2,303,626.31	44.79	\$38,873.53
School Bus <sup>2</sup>	\$799,997.94	\$0.00	0.70	\$1,145,964.68
Emergency Vehicle <sup>2</sup>	\$67,147.00	\$331,349.73	2.25	\$29,829.85

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.

**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 16 summarizes the total SIP-creditable incentive-based emission reductions claimed under Sections 3.1 and 3.2 of Rule 9610. Tables 17 through 20 summarize the emission reductions claimed in the SIP from incentive program guidelines identified in Section 3.1 of Rule

9610, while Table 21 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 16: Total Claimed SIP-Creditable Incentive-Based Emission Reductions Using the Carl Moyer Guidelines Pursuant to Section 3.1 and Section 3.2**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	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	0.00	0.00	0.00	0.00	0.00	0.00	2105.25	69.28	236.50	5.77	0.19	0.65
2013	0.00	0.00	0.00	0.00	0.00	0.00	2626.55	90.80	295.16	7.20	0.25	0.81
2014	0.00	0.00	0.00	0.00	0.00	0.00	1971.03	81.41	258.71	5.40	0.22	0.71
2015	0.00	0.00	0.00	0.00	0.00	0.00	2119.97	90.28	281.55	5.81	0.25	0.77
2016	0.00	0.00	0.00	0.00	0.00	0.00	2334.71	100.68	307.80	6.40	0.28	0.84
2017	0.00	0.00	0.00	0.00	0.00	0.00	2613.00	113.87	336.06	7.16	0.31	0.92
2018	0.00	0.00	0.00	0.00	0.00	0.00	3074.35	142.98	378.74	8.42	0.39	1.04
2019	0.00	0.00	0.00	0.00	0.00	0.00	3681.41	189.34	416.98	10.09	0.52	1.14
2020	1.60	0.15	0.29	0.00	0.00	0.00	4594.64	250.16	511.66	12.59	0.69	1.40
2021	118.39	8.43	13.23	0.32	0.02	0.04	5124.83	290.45	561.69	14.04	0.80	1.54
2022	610.05	39.24	62.56	1.67	0.11	0.17	5250.62	303.77	559.18	14.39	0.83	1.53
2023	622.61	39.89	63.58	1.71	0.11	0.17	4911.82	288.87	515.55	13.46	0.79	1.41
2024	622.61	39.89	63.58	1.71	0.11	0.17	4527.78	271.68	466.68	12.40	0.74	1.28
2025	622.61	39.89	63.58	1.71	0.11	0.17	4159.45	256.05	424.82	11.40	0.70	1.16
2026	621.03	39.81	63.44	1.70	0.11	0.17	3845.22	242.46	389.69	10.53	0.66	1.07
2027	614.17	39.43	62.70	1.68	0.11	0.17	3463.78	224.43	352.43	9.49	0.61	0.97
2028	612.29	39.32	62.56	1.68	0.11	0.17	2951.41	192.97	302.68	8.09	0.53	0.83

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
<b>2029</b>	608.76	39.13	62.27	1.67	0.11	0.17	2947.87	192.78	302.38	8.08	0.53	0.83
<b>2030</b>	607.16	38.99	61.98	1.66	0.11	0.17	2946.27	192.64	302.09	8.07	0.53	0.83
<b>2031</b>	493.83	30.88	49.32	1.35	0.08	0.14	2832.94	184.53	289.44	7.76	0.51	0.79
<b>2032</b>	21.19	0.85	1.54	0.06	0.00	0.00	2360.30	154.49	241.66	6.47	0.42	0.66
<b>2033</b>	8.63	0.20	0.52	0.02	0.00	0.00	2347.74	153.85	240.64	6.43	0.42	0.66

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**Table 17: SIP-Creditable Incentive-Based Emission Reductions for Off-Road Compression-Ignition Equipment Replacement Claimed Pursuant to Section 3.1**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	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	0.00	0.00	0.00	0.00	0.00	0.00	778.93	37.26	113.80	2.13	0.10	0.31
2014	0.00	0.00	0.00	0.00	0.00	0.00	1045.82	50.83	152.58	2.87	0.14	0.42
2015	0.00	0.00	0.00	0.00	0.00	0.00	1268.58	60.89	181.90	3.48	0.17	0.50
2016	0.00	0.00	0.00	0.00	0.00	0.00	1536.31	72.62	212.55	4.21	0.20	0.58
2017	0.00	0.00	0.00	0.00	0.00	0.00	1885.13	88.77	246.43	5.16	0.24	0.68
2018	0.00	0.00	0.00	0.00	0.00	0.00	2375.32	119.00	293.54	6.51	0.33	0.80
2019	0.00	0.00	0.00	0.00	0.00	0.00	3135.48	169.05	370.09	8.59	0.46	1.01
2020	1.60	0.15	0.29	0.00	0.00	0.00	4054.11	230.20	465.04	11.11	0.63	1.27
2021	108.45	7.74	12.23	0.30	0.02	0.03	4598.64	270.53	515.22	12.60	0.74	1.41
2022	567.72	36.96	58.63	1.56	0.10	0.16	4758.36	284.96	515.57	13.04	0.78	1.41
2023	580.28	37.60	59.65	1.59	0.10	0.16	4461.09	271.13	474.89	12.22	0.74	1.30
2024	580.28	37.60	59.65	1.59	0.10	0.16	4193.00	257.48	436.05	11.49	0.71	1.19
2025	580.28	37.60	59.65	1.59	0.10	0.16	3974.14	247.49	406.96	10.89	0.68	1.11
2026	580.28	37.60	59.65	1.59	0.10	0.16	3709.51	235.83	376.35	10.16	0.65	1.03
2027	580.28	37.60	59.65	1.59	0.10	0.16	3361.62	219.73	342.59	9.21	0.60	0.94
2028	580.28	37.60	59.65	1.59	0.10	0.16	2875.31	189.59	295.58	7.88	0.52	0.81
2029	580.28	37.60	59.65	1.59	0.10	0.16	2875.31	189.59	295.58	7.88	0.52	0.81
2030	578.68	37.46	59.36	1.59	0.10	0.16	2873.71	189.44	295.29	7.87	0.52	0.81

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
<b>2031</b>	471.83	29.86	47.42	1.29	0.08	0.13	2766.87	181.84	283.35	7.58	0.50	0.78
<b>2032</b>	12.57	0.65	1.02	0.03	0.00	0.00	2307.60	152.63	236.95	6.32	0.42	0.65

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**Table 18: SIP-Creditable Incentive-Based Emission Reductions for Off-Road Compression-Ignition Equipment Repower and Retrofit Claimed Pursuant to Section 3.1**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	57.54	1.57	0.00	0.16	0.00	0.00
2010	0.00	0.00	0.00	0.00	0.00	0.00	108.86	4.12	0.00	0.30	0.01	0.00
2011	0.00	0.00	0.00	0.00	0.00	0.00	158.88	6.38	0.00	0.44	0.02	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	209.04	8.05	0.00	0.57	0.02	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	227.46	8.77	0.00	0.62	0.02	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	252.91	9.69	0.00	0.69	0.03	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	265.86	10.10	0.00	0.73	0.03	0.00
2016	0.00	0.00	0.00	0.00	0.00	0.00	223.23	9.13	0.00	0.61	0.03	0.00
2017	0.00	0.00	0.00	0.00	0.00	0.00	177.10	6.82	0.00	0.49	0.02	0.00
2018	0.00	0.00	0.00	0.00	0.00	0.00	130.15	4.62	0.00	0.36	0.01	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00	140.27	5.65	0.00	0.38	0.02	0.00
2020	0.00	0.00	0.00	0.00	0.00	0.00	147.38	6.38	0.00	0.40	0.02	0.00
2021	6.46	0.47	0.71	0.02	0.00	0.00	153.79	6.92	1.41	0.42	0.02	0.00
2022	20.55	1.33	2.16	0.06	0.00	0.01	117.26	5.37	4.32	0.32	0.01	0.01
2023	20.55	1.33	2.16	0.06	0.00	0.01	106.30	4.89	4.32	0.29	0.01	0.01
2024	20.55	1.33	2.16	0.06	0.00	0.01	73.39	3.67	4.32	0.20	0.01	0.01
2025	20.55	1.33	2.16	0.06	0.00	0.01	56.41	3.06	4.32	0.15	0.01	0.01
2026	20.55	1.33	2.16	0.06	0.00	0.01	44.11	2.60	4.32	0.12	0.01	0.01
2027	19.83	1.29	2.09	0.05	0.00	0.01	34.92	2.03	4.18	0.10	0.01	0.01
2028	19.83	1.29	2.09	0.05	0.00	0.01	30.30	1.86	4.18	0.08	0.01	0.01
2029	19.83	1.29	2.09	0.05	0.00	0.01	30.30	1.86	4.18	0.08	0.01	0.01
2030	19.83	1.29	2.09	0.05	0.00	0.01	30.30	1.86	4.18	0.08	0.01	0.01

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
2031	13.37	0.82	1.38	0.04	0.00	0.00	23.84	1.40	2.77	0.07	0.00	0.01

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**Table 19: SIP-Creditable Incentive-Based Emission Reductions for Repower of Agricultural Pumps Engines Claimed Pursuant to Section 3.1**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	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	0.00	0.00	0.00	0.00	0.00	0.00	1307.24	33.46	128.73	3.58	0.09	0.35
2013	0.00	0.00	0.00	0.00	0.00	0.00	1489.44	39.63	142.78	4.08	0.11	0.39
2014	0.00	0.00	0.00	0.00	0.00	0.00	530.19	15.52	63.33	1.45	0.04	0.17
2015	0.00	0.00	0.00	0.00	0.00	0.00	413.29	13.41	53.43	1.13	0.04	0.15
2016	0.00	0.00	0.00	0.00	0.00	0.00	397.03	12.95	52.88	1.09	0.04	0.14
2017	0.00	0.00	0.00	0.00	0.00	0.00	369.62	12.15	52.10	1.01	0.03	0.14
2018	0.00	0.00	0.00	0.00	0.00	0.00	383.01	13.20	54.15	1.05	0.04	0.15
2019	0.00	0.00	0.00	0.00	0.00	0.00	195.80	7.68	13.96	0.54	0.02	0.04
2020	0.00	0.00	0.00	0.00	0.00	0.00	176.74	6.90	12.92	0.48	0.02	0.04
2021	1.87	0.10	0.15	0.01	0.00	0.00	162.35	6.34	12.23	0.44	0.02	0.03
2022	5.41	0.29	0.44	0.01	0.00	0.00	160.49	6.30	12.18	0.44	0.02	0.03
2023	5.41	0.29	0.44	0.01	0.00	0.00	136.58	5.76	10.67	0.37	0.02	0.03
2024	5.41	0.29	0.44	0.01	0.00	0.00	81.64	4.21	7.28	0.22	0.01	0.02
2025	5.41	0.29	0.44	0.01	0.00	0.00	53.82	3.25	5.31	0.15	0.01	0.01
2026	5.41	0.29	0.44	0.01	0.00	0.00	36.76	2.25	3.64	0.10	0.01	0.01
2027	5.41	0.29	0.44	0.01	0.00	0.00	21.56	1.38	2.52	0.06	0.00	0.01
2028	3.53	0.19	0.29	0.01	0.00	0.00	19.69	1.28	2.38	0.05	0.00	0.01

**Table 20: SIP-Creditable Incentive-Based Emission Reductions for Purchase of New Electric Agricultural Pump Motors Claimed Pursuant to Section 3.1**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	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	0.00	0.00	0.00	0.00	0.00	0.00	42.45	1.08	2.21	0.12	0.00	0.01
2014	0.00	0.00	0.00	0.00	0.00	0.00	53.78	1.30	3.06	0.15	0.00	0.01
2015	0.00	0.00	0.00	0.00	0.00	0.00	69.80	1.47	4.05	0.19	0.00	0.01
2016	0.00	0.00	0.00	0.00	0.00	0.00	75.65	1.57	4.77	0.21	0.00	0.01
2017	0.00	0.00	0.00	0.00	0.00	0.00	78.61	1.72	5.49	0.22	0.00	0.02
2018	0.00	0.00	0.00	0.00	0.00	0.00	83.86	1.76	5.67	0.23	0.00	0.02
2019	0.00	0.00	0.00	0.00	0.00	0.00	83.86	1.76	5.67	0.23	0.00	0.02
2020	0.00	0.00	0.00	0.00	0.00	0.00	66.29	0.91	4.76	0.18	0.00	0.01
2021	0.00	0.00	0.00	0.00	0.00	0.00	58.32	0.77	4.30	0.16	0.00	0.01
2022	0.00	0.00	0.00	0.00	0.00	0.00	48.00	0.72	3.79	0.13	0.00	0.01
2023	0.00	0.00	0.00	0.00	0.00	0.00	41.41	0.68	3.46	0.11	0.00	0.01
2024	0.00	0.00	0.00	0.00	0.00	0.00	30.08	0.46	2.61	0.08	0.00	0.01
2025	0.00	0.00	0.00	0.00	0.00	0.00	14.06	0.29	1.62	0.04	0.00	0.00
2026	0.00	0.00	0.00	0.00	0.00	0.00	8.21	0.18	0.90	0.02	0.00	0.00
2027	0.00	0.00	0.00	0.00	0.00	0.00	5.25	0.04	0.19	0.01	0.00	0.00

**Table 21: SIP-Creditable Incentive-Based Emission Reductions for Locomotives, Yard Trucks, VIP Vehicle Replacement, New Electric Forklift Purchase Claimed Pursuant to Section 3.2**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	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	0.00	0.00	0.00	0.00	0.00	0.00	87.93	4.04	8.47	0.24	0.01	0.02
2014	0.00	0.00	0.00	0.00	0.00	0.00	87.98	4.05	8.47	0.24	0.01	0.02
2015	0.00	0.00	0.00	0.00	0.00	0.00	102.09	4.38	9.32	0.28	0.01	0.03
2016	0.00	0.00	0.00	0.00	0.00	0.00	102.14	5.18	9.32	0.28	0.01	0.03
2017	0.00	0.00	0.00	0.00	0.00	0.00	102.18	5.98	9.33	0.28	0.02	0.03
2018	0.00	0.00	0.00	0.00	0.00	0.00	102.18	5.98	9.33	0.28	0.02	0.03
2019	0.00	0.00	0.00	0.00	0.00	0.00	126.53	6.80	11.85	0.35	0.02	0.03
2020	0.00	0.00	0.00	0.00	0.00	0.00	150.64	7.36	13.22	0.41	0.02	0.04
2021	1.58	0.08	0.14	0.00	0.00	0.00	152.24	7.44	13.36	0.42	0.02	0.04
2022	17.53	1.00	1.68	0.05	0.00	0.00	168.19	8.36	14.90	0.46	0.02	0.04
2023	17.53	1.00	1.68	0.05	0.00	0.00	168.14	8.35	14.89	0.46	0.02	0.04
2024	17.53	1.00	1.68	0.05	0.00	0.00	151.37	7.79	13.28	0.41	0.02	0.04
2025	16.35	0.62	1.33	0.04	0.00	0.00	62.84	3.58	5.21	0.17	0.01	0.01
2026	14.77	0.55	1.19	0.04	0.00	0.00	47.14	2.38	4.23	0.13	0.01	0.01
2027	8.63	0.20	0.52	0.02	0.00	0.00	40.95	1.23	3.55	0.11	0.00	0.01
2028	8.63	0.20	0.52	0.02	0.00	0.00	40.95	1.23	3.55	0.11	0.00	0.01
2029	8.63	0.20	0.52	0.02	0.00	0.00	40.95	1.23	3.55	0.11	0.00	0.01
2030	8.63	0.20	0.52	0.02	0.00	0.00	40.95	1.23	3.55	0.11	0.00	0.01

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
2031	8.63	0.20	0.52	0.02	0.00	0.00	40.95	1.23	3.55	0.11	0.00	0.01
2032	8.63	0.20	0.52	0.02	0.00	0.00	40.95	1.23	3.55	0.11	0.00	0.01
2033	8.63	0.20	0.52	0.02	0.00	0.00	40.95	1.23	3.55	0.11	0.00	0.01

1. Locomotive projects are contracted with a 15-year project life and Forklifts are contracted with a 10-year project life

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**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 and 3.2 of Rule 9610.

**Table 22: SIP-Creditable Incentive-Based Emission Reductions for On-Road Trucks**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	Nox	PM	ROG	Nox	PM	ROG	Nox	PM	ROG	Nox	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	1170.35	41.17	0.00	3.21	0.11	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	1986.48	72.93	0.00	5.44	0.20	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	2095.95	77.49	0.00	5.74	0.21	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	2351.60	72.73	0.00	6.44	0.20	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	1968.05	61.07	0.00	5.39	0.17	0.00
2016	0.00	0.00	0.00	0.00	0.00	0.00	1508.28	39.50	0.00	4.13	0.11	0.00
2017	0.00	0.00	0.00	0.00	0.00	0.00	694.20	8.83	0.00	1.90	0.02	0.00
2018	0.00	0.00	0.00	0.00	0.00	0.00	600.74	4.31	0.00	1.65	0.01	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00	270.36	0.55	0.00	0.74	0.00	0.00
2020	0.00	0.00	0.00	0.00	0.00	0.00	70.33	0.00	0.00	0.19	0.00	0.00
2021	0.00	0.00	0.00	0.00	0.00	0.00	23.82	0.00	0.00	0.07	0.00	0.00
2022	0.00	0.00	0.00	0.00	0.00	0.00	21.77	0.00	0.00	0.06	0.00	0.00
2023	0.00	0.00	0.00	0.00	0.00	0.00	4.16	0.00	0.00	0.01	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
2025	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2026	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 Locomotive Replacement

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	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	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00	0.00	0.00	41.49	2.05	0.00	0.11	0.01	0.00
2018	0.00	0.00	0.00	0.00	0.00	0.00	41.49	2.05	0.00	0.11	0.01	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00	51.77	2.44	0.00	0.14	0.01	0.00
2020	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2021	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2022	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2023	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2024	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2025	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2026	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2027	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2028	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2029	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2030	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2031	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00



Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
2032	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00
2033	6.65	0.25	0.00	0.02	0.00	0.00	65.02	2.93	0.00	0.18	0.01	0.00

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**Funding Agricultural Replacement Measures for Emission Reductions (FARMER) 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 FARMER program guidelines, as identified in 3.2 of Rule 9610.

**Table 24: SIP-Creditable Incentive-Based Emission Reductions for Agricultural UTV and Truck Replacement Claimed Pursuant to Section 3.2**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	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	0.00	0.00	0.00	0.00	0.00	0.00
2012	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2013	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2014	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2015	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2016	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2017	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2018	0.00	0.00	0.00	0.00	0.00	0.00	2.54	0.02	0.64	0.01	0.00	0.00
2019	0.00	0.00	0.00	0.00	0.00	0.00	41.16	1.20	27.97	0.11	0.00	0.08
2020	0.03	0.00	0.02	0.00	0.00	0.00	57.14	1.64	32.51	0.16	0.00	0.09
2021	0.45	0.02	0.94	0.00	0.00	0.00	60.92	1.82	40.23	0.17	0.00	0.11
2022	4.10	0.44	6.13	0.01	0.00	0.02	48.34	1.29	42.88	0.13	0.00	0.12
2023	4.12	0.44	6.42	0.01	0.00	0.02	33.74	0.86	41.42	0.09	0.00	0.11
2024	4.12	0.44	6.42	0.01	0.00	0.02	10.76	0.61	16.59	0.03	0.00	0.05
2025	2.91	0.06	6.05	0.01	0.00	0.02	7.43	0.19	12.93	0.02	0.00	0.04

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
<b>2026</b>	2.49	0.04	5.13	0.01	0.00	0.01	2.49	0.04	5.13	0.01	0.00	0.01
<b>2027</b>	0.02	0.00	0.29	0.00	0.00	0.00	0.02	0.00	0.29	0.00	0.00	0.00

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**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**

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
2009	0.00	0.00	0.00	0.00	0.00	0.00	141.98	4.91	19.76	0.39	0.01	0.05
2010	0.00	0.00	0.00	0.00	0.00	0.00	807.82	30.07	113.00	2.21	0.08	0.31
2011	0.00	0.00	0.00	0.00	0.00	0.00	1373.86	53.70	194.75	3.76	0.15	0.53
2012	0.00	0.00	0.00	0.00	0.00	0.00	1712.94	68.17	241.01	4.69	0.19	0.66
2013	0.00	0.00	0.00	0.00	0.00	0.00	1977.35	80.08	277.11	5.42	0.22	0.76
2014	0.00	0.00	0.00	0.00	0.00	0.00	2183.73	89.71	305.42	5.98	0.25	0.84
2015	0.00	0.00	0.00	0.00	0.00	0.00	2440.13	101.50	339.29	6.69	0.28	0.93
2016	0.00	0.00	0.00	0.00	0.00	0.00	2648.23	115.91	365.67	7.26	0.32	1.00
2017	0.00	0.00	0.00	0.00	0.00	0.00	2792.87	126.10	383.02	7.65	0.35	1.05
2018	0.00	0.00	0.00	0.00	0.00	0.00	2970.30	138.92	404.63	8.14	0.38	1.11
2019	0.00	0.00	0.00	0.00	0.00	0.00	2993.48	146.13	405.66	8.20	0.40	1.11
2020	1.17	0.09	0.16	0.00	0.00	0.00	2458.33	130.01	327.96	6.74	0.36	0.90
2021	15.65	1.22	2.10	0.04	0.00	0.01	1998.90	114.35	259.44	5.48	0.31	0.71
2022	132.74	9.64	16.51	0.36	0.03	0.05	1778.91	108.52	228.15	4.87	0.30	0.63
2023	155.47	11.11	18.93	0.43	0.03	0.05	1538.11	98.10	194.47	4.21	0.27	0.53
2024	155.47	11.11	18.93	0.43	0.03	0.05	1333.04	88.53	166.16	3.65	0.24	0.46
2025	155.47	11.11	18.93	0.43	0.03	0.05	1076.64	76.74	132.29	2.95	0.21	0.36
2026	155.47	11.11	18.93	0.43	0.03	0.05	868.53	62.33	105.90	2.38	0.17	0.29
2027	155.47	11.11	18.93	0.43	0.03	0.05	723.89	52.14	88.55	1.98	0.14	0.24

Year	Current Reporting Period						Cumulative Reporting Period					
	Emissions Reduced (tons per year)			Emissions Reduced (tons per day)			Emissions Reduced (tons per year)			Emissions Reduced (tons per day)		
	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG	NOx	PM	ROG
<b>2028</b>	155.47	11.11	18.93	0.43	0.03	0.05	546.46	39.32	66.95	1.50	0.11	0.18
<b>2029</b>	155.47	11.11	18.93	0.43	0.03	0.05	546.46	39.32	66.95	1.50	0.11	0.18
<b>2030</b>	154.30	11.02	18.77	0.42	0.03	0.05	545.29	39.23	66.79	1.49	0.11	0.18
<b>2031</b>	139.82	9.89	16.83	0.38	0.03	0.05	530.82	38.10	64.85	1.45	0.10	0.18
<b>2032</b>	22.73	1.47	2.42	0.06	0.00	0.01	413.72	29.69	50.44	1.13	0.08	0.14

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**Appendix A**  
**District Incentive Program Project Information**

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-93938-A1	Sweeper	Diesel	2006	80	Tier 2	2019	142	Tier 4 Final	1200	0	0	10	Kern
G-92856-A1	Agricultural Tractor	Diesel	1989	25	Tier 0	2018	35	Tier 4 Final	500	0	0	10	Kern
G-92854-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2020	35	Tier 4 Final	250	0	0	10	Kern
G-92846-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2018	35	Tier 4 Final	250	0	0	10	Kern
G-92845-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2018	35	Tier 4 Final	250	0	0	10	Kern
G-91897-A1	Sweeper	Diesel	1988	40	Tier 0	2020	74	Tier 4 Final	350	0	0	10	Kings
G-70164-A1	Agricultural Tractor	Diesel	2006	100	Tier 2	2020	123	Tier 4 Final	265	0	0	10	Fresno
G-70162-A1	Agricultural Tractor	Diesel	1983	63	Tier 0	2019	51	Tier 4 Final	200	0	0	10	Fresno
G-91896-A1	Shaker	Diesel	1981	104	Tier 0	2020	148	Tier 4 Final	500	0	0	10	Kings
G-69348-A1	Agricultural Tractor	Diesel	2005	92	Tier 2	2019	106	Tier 4 Phase In/Alt NOx	500	0	0	10	Tulare
G-79574-A1	Agricultural Tractor	Diesel	1984	67	Tier 0	2020	74	Tier 4 Final	750	0	0	10	Fresno
G-81798-A1	Shaker	Diesel	2002	115	Tier 1	2016	115	Tier 4 Final	1000	0	0	10	Fresno
G-81797-A1	Pistachio Catcher	Diesel	2002	115	Tier 1	2019	115	Tier 4 Final	1000	0	0	10	Fresno
G-81793-A1	Shaker	Diesel	2002	115	Tier 1	2019	115	Tier 4 Final	1000	0	0	10	Fresno
G-66568-A1	Agricultural Tractor	Diesel	1994	103	Tier 0	2020	100	Tier 4 Final	1200	0	0	10	Kern
G-66565-A1	Agricultural Tractor	Diesel	1996	108	Tier 0	2020	100	Tier 4 Final	1200	0	0	10	Kern
G-66560-A1	Agricultural Tractor	Diesel	1994	103	Tier 0	2020	100	Tier 4 Final	1200	0	0	10	Kern
G-66714-A1	Agricultural Tractor	Diesel	1979	81	Tier 0	2020	123	Tier 4 Final	400	0	0	10	Madera
G-67624-A1	Agricultural Tractor	Diesel	1974	47	Tier 0	2020	56	Tier 4 Final	400	0	0	10	Fresno
G-67572-A1	Agricultural Tractor	Diesel	1971	47	Tier 0	2020	56	Tier 4 Final	300	0	0	10	Fresno
G-66858-A1	Agricultural Tractor	Diesel	1991	33	Tier 0	2020	33	Tier 4 Final	700	0	0	10	Fresno
G-72048-A1	Back Hoe	Diesel	1996	79	Tier 0	2019	93	Tier 4 Final	400	0	0	10	Stanislaus
G-74408-A1	Back Hoe	Diesel	2001	94	Tier 1	2020	105	Tier 4 Final	400	0	0	10	Stanislaus
G-66208-A1	Agricultural Tractor	Diesel	1975	215	Tier 0	2020	230	Tier 4 Final	400	0	0	10	Fresno
G-82836-A1	Agricultural Tractor	Diesel	1996	102	Tier 0	2020	99	Tier 4 Final	350	0	0	10	Fresno
G-81805-A1	Agricultural Tractor	Diesel	1979	108	Tier 0	2020	99	Tier 4 Final	350	0	0	10	Fresno
G-94058-A1	Agricultural Tractor	Diesel	1998	89	Tier 1	2019	106	Tier 4 Phase In/Alt NOx	1500	0	0	10	Madera
G-94055-A1	Agricultural Tractor	Diesel	1988	51	Tier 0	2019	53	Tier 4 Final	1500	0	0	10	Madera
G-94051-A1	Agricultural Tractor	Diesel	1984	81	Tier 0	2019	106	Tier 4 Phase In/Alt NOx	1500	0	0	10	Madera
G-94048-A1	Agricultural Tractor	Diesel	1994	81	Tier 0	2019	106	Tier 4 Phase In/Alt NOx	1500	0	0	10	Madera
G-93876-A1	Shaker	Diesel	2006	130	Tier 2	2016	174	Tier 4 Final	500	0	0	10	Stanislaus



**Description Vehicle Replacement**

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
C-54478-1-A1	Agricultural Tractor	Diesel	1977	74	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	1000	0	0	10	Fresno
G-80051-A1	Agricultural Tractor	Diesel	1977	60	Tier 0	2018	42	Tier 4 Final	120	0	0	10	Fresno
G-66109-A1	Agricultural Tractor	Diesel	1994	110	Tier 0	2021	120	Tier 4 Final	1613	0	0	10	Kern
G-66106-A1	Agricultural Tractor	Diesel	1995	120	olled Tier	2021	120	Tier 4 Final	1633	0	0	10	Kern
C-57171-1-A1	Agricultural Tractor	Diesel	2007	93	Tier 2	2020	106	Tier 4 Phase In/Alt NOx	500	0	0	10	Kern
G-89276-A1	Agricultural Tractor	Diesel	2005	225	Tier 2	2021	188	Tier 4 Final	750	0	0	10	Stanislaus
G-80926-A1	Agricultural Tractor	Diesel	1993	100	Tier 0	2020	123	Tier 4 Final	600	0	0	10	Fresno
G-99415-A1	Excavator	Diesel	2003	180	Tier 2	2019	172	Tier 4 Final	1000	0	0	10	Kern
G-91257-A1	Shaker	Diesel	2005	135	Tier 2	2020	139	Tier 4 Final	500	0	0	10	Fresno
G-70888-A1	Agricultural Tractor	Diesel	1983	77	Tier 0	2021	114	Tier 4 Final	900	0	0	10	Madera
G-65795-A1	Agricultural Tractor	Diesel	1975	89	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	1100	0	0	10	Tulare
G-97747-A1	Agricultural Tractor	Diesel	2003	50	Tier 1	2020	48	Tier 4 Final	400	0	0	10	Kern
G-94059-A1	Agricultural Tractor	Diesel	1988	34	Tier 0	2021	35	Tier 4 Final	1500	0	0	10	Madera
G-101534-A1	Agricultural Tractor	Diesel	1979	31	Tier 0	2018	35	Tier 4 Final	100	0	0	10	Tulare
G-80563-A1	Agricultural Tractor	Diesel	1998	91	Tier 1	2019	138	Tier 4 Final	300	0	0	10	Fresno
G-87839-A1	Sweeper	Diesel	1988	125	Tier 0	2020	74	Tier 4 Final	250	0	0	10	San Joaquin
G-92124-A1	Wheel Loader	Diesel	2001	230	Tier 1	2021	249	Tier 4 Final	1500	0	0	10	Merced
G-98899-A1	Agricultural Tractor	Diesel	1978	56	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	1000	0	0	10	Tulare
G-93091-A1	Agricultural Tractor	Diesel	2004	90	Tier 2	2020	123	Tier 4 Final	600	0	0	10	Kings
G-96114-A1	Almond Sweeper	Diesel	2005	80	Tier 2	2021	74	Tier 4 Final	1132	0	0	10	Kern
G-96113-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1166	0	0	10	Kern
G-96112-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1095	0	0	10	Kern
G-96111-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1170	0	0	10	Kern
G-96110-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1172	0	0	10	Kern
G-95748-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	767	0	0	10	Kern
G-95747-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1048	0	0	10	Kern
G-95746-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1143	0	0	10	Kern
G-95745-A1	Almond Sweeper	Diesel	2005	80	Tier 2	2021	74	Tier 4 Final	1056	0	0	10	Kern
G-95744-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1025	0	0	10	Kern
G-95738-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1385	0	0	10	Kern
G-95721-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1481	0	0	10	Kern

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-95719-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1488	0	0	10	Kern
G-95717-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	1155	0	0	10	Kern
G-95716-A1	Sweeper	Diesel	2007	80	Tier 2	2021	74	Tier 4 Final	661	0	0	10	Kern
G-99845-A1	Agricultural Tractor	Diesel	1966	58	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	1000	0	0	10	Tulare
G-71653-A1	Wheel Loader	Diesel	1999	48	Tier 1	2020	73	Tier 4 Final	1000	0	0	10	Stanislaus
G-99279-A1	Agricultural Tractor	Diesel	1988	75	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	600	0	0	10	Kern
G-99280-A1	Agricultural Tractor	Diesel	2006	86	Tier 2	2020	115	Tier 4 Final	600	0	0	10	Kern
G-99278-A1	Agricultural Tractor	Diesel	2006	86	Tier 2	2020	115	Tier 4 Final	600	0	0	10	Kern
G-77997-A1	Almond Shaker	Diesel	1986	87	Tier 0	2020	148	Tier 4 Final	300	0	0	10	Madera
G-82712-A1	Agricultural Tractor	Diesel	1994	134	Tier 0	2021	175	Tier 4 Final	700	0	0	10	Merced
G-100664-A1	Shaker	Diesel	2003	155	Tier 2	2022	173	Tier 4 Final	425	0	0	10	Stanislaus
G-97565-A1	Back Hoe	Diesel	1985	52	Tier 0	2019	74	Tier 4 Final	500	0	0	10	Kern
C-59507-1-A1	Agricultural Tractor	Diesel	2004	98	Tier 2	2021	114	Tier 4 Final	1000	0	0	10	Madera
C-59505-1-A1	Agricultural Tractor	Diesel	1998	108	Tier 1	2021	114	Tier 4 Final	1000	0	0	10	Madera
G-100897-A1	Back Hoe	Diesel	1997	79	Tier 0	2021	92	Tier 4 Final	1500	0	0	10	Tulare
G-74023-A1	Agricultural Tractor	Diesel	2004	89	Tier 2	2021	114	Tier 4 Final	700	0	0	10	Merced
C-55060-1-A1	Wheel Loader	Diesel	2002	118	Tier 1	2021	120	Tier 4 Final	900	0	0	10	Tulare
G-93577-A1	Forklift	Diesel	2005	74	Tier 2	2021	74	Tier 4 Final	630	0	0	10	Fresno
G-80913-A1	Wheel Loader	Diesel	2005	149	Tier 2	2021	192	Tier 4 Final	1200	0	0	10	Madera
G-99987-A1	Agricultural Tractor	Diesel	2006	75	Tier 2	2020	106	Tier 4 Final	1500	0	0	10	San Joaquin
G-92308-A1	Forklift	Diesel	1989	71	Tier 0	2021	55	Tier 4 Final	1200	0	0	10	Fresno
G-95796-A1	Skid Loader	Diesel	1988	101	Tier 0	2021	73	Tier 4 Final	125	0	0	10	San Joaquin
C-63248-1-A1	Agricultural Tractor	Diesel	2007	40	Tier 2	2020	37	Tier 4 Final	500	0	0	10	Merced
G-91031-A1	Agricultural Tractor	Diesel	1992	95	Tier 0	2019	106	Tier 4 Final	250	0	0	10	Stanislaus
G-97159-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2020	33	Tier 4 Final	600	0	0	10	Kern
G-97158-A1	Agricultural Tractor	Diesel	1993	25	Tier 0	2020	33	Tier 4 Final	600	0	0	10	Kern
G-98145-A1	Agricultural Tractor	Diesel	1991	300	Tier 0	2021	626	Tier 4 Final	750	0	0	10	Merced
G-82705-A1	Wheel Loader	Diesel	1990	90	Tier 0	2021	99	Tier 4 Final	500	0	0	10	Fresno
G-104551-A1	Skid Loader	Diesel	1999	38	Tier 1	2021	49	Tier 4 Final	1440	0	0	10	Kern
G-95477-A1	Agricultural Tractor	Diesel	1995	170	Tier 0	2021	123	Tier 4 Final	600	0	0	10	Merced
G-95177-A1	Agricultural Tractor	Diesel	1994	325	Tier 0	2021	410	Tier 4 Final	1000	0	0	10	Fresno

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-97007-A1	Skid Loader	Diesel	2003	75	Tier 1	2021	73	Tier 4 Final	400	0	0	10	Merced
C-64044-1-A1	Agricultural Tractor	Diesel	1974	47	Tier 0	2020	73	Tier 4 Final	750	0	0	10	Fresno
G-97590-A1	Agricultural Tractor	Diesel	2005	115	Tier 2	2020	115	Tier 4 Final	1000	0	0	10	Kings
G-96846-A1	Agricultural Tractor	Diesel	2006	37	Tier 1	2020	33	Tier 4 Final	1200	0	0	10	San Joaquin
G-95421-A1	Agricultural Tractor	Diesel	1978	60	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	500	0	0	10	Tulare
G-100916-A1	Forklift	Diesel	1992	71	Tier 0	2021	74	Tier 4 Final	700	0	0	10	Kings
G-97172-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2020	33	Tier 4 Final	600	0	0	10	Kern
G-97134-A1	Agricultural Tractor	Diesel	1996	25	Tier 0	2020	33	Tier 4 Final	600	0	0	10	Kern
G-110840-A1	Shaker	Diesel	1987	121	Tier 0	2020	148	Tier 4 Final	618	0	0	10	Fresno
G-97176-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2020	33	Tier 4 Final	600	0	0	10	Kern
G-97169-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2020	33	Tier 4 Final	600	0	0	10	Kern
G-76476-A1	Back Hoe	Diesel	1985	72	Tier 0	2021	100	Tier 4 Final	400	0	0	10	Stanislaus
G-66110-A1	Agricultural Tractor	Diesel	2001	396	Tier 2	2021	520	Tier 4 Final	2095	0	0	10	Kern
G-66108-A1	Agricultural Tractor	Diesel	2002	155	Tier 1	2021	155	Tier 4 Final	1795	0	0	10	Kern
G-98028-A1	Agricultural Tractor	Diesel	2001	90	Tier 1	2021	114	Tier 4 Final	500	0	0	10	Kern
G-97166-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2020	33	Tier 4 Final	600	0	0	10	Kern
G-97163-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2020	33	Tier 4 Final	600	0	0	10	Kern
G-99607-A1	Motor Grader	Diesel	1970	150	Tier 0	2021	215	Tier 4 Final	500	0	0	10	Fresno
G-85289-A1	Agricultural Tractor	Diesel	1998	120	Tier 1	2021	155	Tier 4 Final	1021	0	0	10	Merced
G-74897-A1	Agricultural Tractor	Diesel	1988	114	Tier 0	2020	123	Tier 4 Final	1200	0	0	10	Fresno
G-103989-A1	Nut Shuttle Vehicle	Diesel	2002	125	Tier 1	2020	142	Tier 4 Final	500	0	0	10	Stanislaus
G-101607-A1	Harvester	Diesel	1981	70	Tier 0	2021	174	Tier 4 Final	150	0	0	10	Stanislaus
G-97608-A1	Sweeper	Diesel	1989	32	Tier 0	2021	48	Tier 4 Final	150	0	0	10	Merced
G-100914-A1	Agricultural Tractor	Diesel	1975	160	Tier 0	2020	123	Tier 4 Final	500	0	0	10	Tulare
G-112180-A1	Shaker	Diesel	1998	120	Tier 1	2020	148	Tier 4 Final	523	0	0	10	Fresno
G-106987-A1	Shaker	Diesel	1981	104	Tier 0	2021	148	Tier 4 Final	708	0	0	10	Fresno
G-98588-A1	Agricultural Tractor	Diesel	1997	114	Tier 1	2021	123	Tier 4 Final	700	0	0	10	Fresno
G-102545-A1	Agricultural Tractor	Diesel	2007	32	Tier 2	2021	33	Tier 4 Final	200	0	0	10	Stanislaus
G-100448-A1	Agricultural Tractor	Diesel	2005	97	Tier 2	2021	69	Tier 4 Final	1000	0	0	10	Kings
G-103084-A1	Agricultural Tractor	Diesel	1994	69	Tier 0	2021	69	Tier 4 Final	500	0	0	10	Merced
G-89922-A1	Agricultural Tractor	Diesel	2005	200	Tier 2	2021	230	Tier 4 Final	900	0	0	10	Tulare

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-110837-A1	Sweeper	Diesel	1993	80	Tier 0	2020	74	Tier 4 Final	483	0	0	10	Fresno
G-102224-A1	Agricultural Tractor	Diesel	1997	102	Tier 1	2020	106	Tier 4 Phase In/Alt NOx	425	0	0	10	San Joaquin
G-102212-A1	Agricultural Tractor	Diesel	2006	91	Tier 2	2020	106	Tier 4 Phase In/Alt NOx	300	0	0	10	San Joaquin
C-54743-1-A1	Agricultural Tractor	Diesel	1997	425	Tier 1	2020	620	Tier 4 Final	650	0	0	10	Merced
G-107441-A1	Nut Shuttle Vehicle	Diesel	1997	125	Tier 1	2020	134	Tier 4 Final	538	0	0	10	Fresno
G-107440-A1	Nut Shuttle Vehicle	Diesel	2001	125	Tier 1	2020	134	Tier 4 Final	608	0	0	10	Fresno
G-107031-A1	Agricultural Tractor	Diesel	1975	97	Tier 0	2020	114	Tier 4 Final	483	0	0	10	Fresno
G-85204-A1	Wheel Loader	Diesel	1995	125	Tier 0	2021	166	Tier 4 Final	1250	0	0	10	San Joaquin
C-63077-1-A1	Agricultural Tractor	Diesel	1970	66	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	300	0	0	10	Fresno
C-57796-1-A1	Agricultural Tractor	Diesel	1992	120	Tier 0	2020	123	Tier 4 Final	500	0	0	10	Fresno
G-99857-A1	Agricultural Tractor	Diesel	2004	92	Tier 2	2020	123	Tier 4 Final	400	0	0	10	Fresno
G-99848-A1	Agricultural Tractor	Diesel	2000	92	Tier 1	2020	123	Tier 4 Final	400	0	0	10	Fresno
C-58272-1-A1	Agricultural Tractor	Diesel	1995	91	Tier 0	2021	195	Tier 4 Final	500	0	0	10	Fresno
G-110607-A1	Shaker	Diesel	1988	104	Tier 0	2020	148	Tier 4 Final	418	0	0	10	Fresno
G-110600-A1	Shaker	Diesel	1996	115	Tier 0	2020	148	Tier 4 Final	623	0	0	10	Fresno
G-107103-A1	Sweeper	Diesel	1983	70	Tier 0	2021	74	Tier 4 Final	398	0	0	10	Fresno
G-102579-A1	Agricultural Tractor	Diesel	2006	115	Tier 2	2020	106	Tier 4 Phase In/Alt NOx	600	0	0	10	Fresno
G-102231-A1	Agricultural Tractor	Diesel	1995	108	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	630	0	0	10	Fresno
G-102221-A1	Agricultural Tractor	Diesel	1999	114	Tier 1	2020	106	Tier 4 Phase In/Alt NOx	460	0	0	10	Fresno
G-102217-A1	Agricultural Tractor	Diesel	1999	114	Tier 1	2020	106	Tier 4 Phase In/Alt NOx	580	0	0	10	Fresno
G-102215-A1	Agricultural Tractor	Diesel	1994	108	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	630	0	0	10	Fresno
C-64514-1-A1	Agricultural Tractor	Diesel	1996	103	Tier 0	2020	106	Tier 4 Final	450	0	0	10	Merced
G-92722-A1	Agricultural Tractor	Diesel	1982	98	Tier 0	2021	120	Tier 4 Final	500	0	0	10	Kern
G-105025-A1	Agricultural Tractor	Diesel	2005	86	Tier 2	2020	114	Tier 4 Final	600	0	0	10	San Joaquin
G-92720-A1	Agricultural Tractor	Diesel	1982	98	Tier 0	2021	120	Tier 4 Final	500	0	0	10	Kern
G-100451-A1	Agricultural Tractor	Diesel	1984	90	Tier 0	2021	106	Tier 4 Final	300	0	0	10	Stanislaus
G-100446-A1	Agricultural Tractor	Diesel	1984	67	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	300	0	0	10	Tulare
G-107949-A1	Agricultural Tractor	Diesel	2005	89	Tier 2	2021	101	Tier 4 Final	1000	0	0	10	Kern
G-102799-A1	Agricultural Tractor	Diesel	1996	120	Tier 0	2021	115	Tier 4 Final	600	0	0	10	Merced
G-109124-A1	Wheel Loader	Diesel	1996	124	Tier 0	2018	74	Tier 4 Final	500	0	0	10	Kings
G-104552-A1	Agricultural Tractor	Diesel	1974	151	Tier 0	2021	123	Tier 4 Final	500	0	0	10	Tulare

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-94993-A1	Agricultural Tractor	Diesel	1991	81	Tier 0	2018	106	Tier 4 Final	1000	0	0	10	Fresno
G-90236-A1	Agricultural Tractor	Diesel	1972	209	Tier 0	2020	123	Tier 4 Final	800	0	0	10	Fresno
G-95271-A1	Agricultural Tractor	Diesel	1972	116	Tier 0	2021	114	Tier 4 Final	240	0	0	10	Fresno
G-95270-A1	Agricultural Tractor	Diesel	1971	116	Tier 0	2021	114	Tier 4 Final	240	0	0	10	Fresno
G-94118-A1	Back Hoe	Diesel	1990	71	Tier 0	2021	97	Tier 4 Final	300	0	0	10	Stanislaus
G-94209-A1	Agricultural Tractor	Diesel	1974	68	Tier 0	2021	114	Tier 4 Final	500	0	0	10	Merced
G-81861-A1	Agricultural Tractor	Diesel	1978	216	Tier 0	2021	155	Tier 4 Final	400	0	0	10	Fresno
G-91030-A1	Bulk Carrier	Diesel	1981	70	Tier 0	2020	134	Tier 4 Final	300	0	0	10	San Joaquin
G-104402-A1	Wheel Loader	Diesel	1990	141	Tier 0	2021	192	Tier 4 Final	1200	0	0	10	Kings
G-105865-A1	Forklift	Diesel	1987	52	Tier 0	2021	74	Tier 4 Final	700	0	0	10	Tulare
G-106143-A1	Wheel Loader	Diesel	2006	129	Tier 2	2021	163	Tier 4 Final	2000	0	0	10	San Joaquin
G-106752-A1	Agricultural Tractor	Diesel	1982	97	Tier 0	2021	72	Tier 4 Final	200	0	0	10	Tulare
G-96993-A1	Forklift	Diesel	1980	65	Tier 0	2021	74	Tier 4 Final	200	0	0	10	Kern
G-78649-A1	Agricultural Tractor	Diesel	2005	86	Tier 2	2021	114	Tier 4 Final	450	0	0	10	Merced
G-75855-A1	Agricultural Tractor	Diesel	2006	86	Tier 2	2021	114	Tier 4 Final	450	0	0	10	Madera
G-101549-A1	Wheel Loader	Diesel	2006	160	Tier 2	2021	183	Tier 4 Final	800	0	0	10	Tulare
G-88790-A1	Agricultural Tractor	Diesel	2006	115	Tier 2	2021	114	Tier 4 Final	700	0	0	10	Merced
G-88789-A1	Agricultural Tractor	Diesel	2001	114	Tier 1	2021	123	Tier 4 Final	700	0	0	10	Merced
G-80503-A1	Agricultural Tractor	Diesel	2002	105	Tier 1	2021	125	Tier 4 Final	450	0	0	10	San Joaquin
G-106577-A1	Shaker	Diesel	2006	130	Tier 2	2022	173	Tier 4 Final	650	0	0	10	San Joaquin
C-45864-1-A1	Agricultural Tractor	Diesel	1973	58	Tier 0	2021	114	Tier 4 Final	200	0	0	10	Stanislaus
G-100126-A1	Agricultural Tractor	Diesel	2006	105	Tier 2	2019	114	Tier 4 Final	750	0	0	10	Stanislaus
C-65211-1-A1	Agricultural Tractor	Diesel	1975	54	Tier 0	2019	53	Tier 4 Final	300	0	0	10	Merced
G-96874-A1	Agricultural Tractor	Diesel	2005	129	Tier 2	2021	175	Tier 4 Final	1000	0	0	10	San Joaquin
G-96868-A1	Agricultural Tractor	Diesel	2002	130	Tier 1	2021	175	Tier 4 Final	1000	0	0	10	San Joaquin
C-65203-1-A1	Agricultural Tractor	Diesel	1998	100	Tier 1	2020	115	Tier 4 Final	300	0	0	10	Merced
C-65200-1-A1	Agricultural Tractor	Diesel	1978	69	Tier 0	2019	93	Tier 4 Final	300	0	0	10	Merced
G-88605-A1	Agricultural Tractor	Diesel	2005	283	Tier 2	2021	310	Tier 4 Final	850	0	0	10	Kern
G-105439-A1	Tractor	Diesel	1983	69	Tier 0	2021	115	Tier 4 Final	350	0	0	10	Stanislaus
G-98301-A1	Wheel Loader	Diesel	2004	267	Tier 2	2021	325	Tier 4 Final	1000	0	0	10	San Joaquin
G-103925-A1	Skid Loader	Diesel	2002	72	Tier 1	2020	74	Tier 4 Final	350	0	0	10	Stanislaus

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-97342-A1	Agricultural Tractor	Diesel	1999	114	Tier 1	2021	114	Tier 4 Final	400	0	0	10	San Joaquin
G-97160-A1	Agricultural Tractor	Diesel	1993	25	Tier 0	2020	33	Tier 4 Final	600	0	0	10	Kern
G-106139-A1	Wheel Loader	Diesel	2000	170	Tier 1	2020	164	Tier 4 Final	1700	0	0	10	San Joaquin
G-75859-A1	Agricultural Tractor	Diesel	1999	202	Tier 1	2021	250	Tier 4 Final	600	0	0	10	Merced
G-106280-A1	Agricultural Tractor	Diesel	2007	89	Tier 2	2020	74	Tier 4 Final	500	0	0	10	San Joaquin
G-96892-A1	Back Hoe	Diesel	1990	75	Tier 0	2020	74	Tier 4 Final	1100	0	0	10	Fresno
G-106563-A1	Agricultural Tractor	Diesel	1994	156	Tier 0	2021	162	Tier 4 Final	1000	0	0	10	San Joaquin
G-106279-A1	Agricultural Tractor	Diesel	1999	135	Tier 1	2021	172	Tier 4 Final	1000	0	0	10	San Joaquin
G-96627-A1	Agricultural Tractor	Diesel	1979	216	Tier 0	2021	123	Tier 4 Final	500	0	0	10	Fresno
G-95398-A1	Agricultural Tractor	Diesel	2005	283	Tier 2	2021	340	Tier 4 Final	500	0	0	10	Madera
G-95264-A1	Bale Wagon	Diesel	2001	166	Tier 1	2021	190	Tier 4 Final	821	0	0	10	Merced
G-106206-A1	Agricultural Tractor	Diesel	2005	115	Tier 2	2021	114	Tier 4 Final	500	0	0	10	Tulare
G-102207-A1	Agricultural Tractor	Diesel	1999	29	Tier 1	2021	50	Tier 4 Final	900	0	0	10	Fresno
G-103475-A1	Agricultural Tractor	Diesel	2004	105	Tier 2	2021	114	Tier 4 Final	550	0	0	10	Madera
G-102216-A1	Agricultural Tractor	Diesel	1999	91	Tier 1	2021	114	Tier 4 Final	400	0	0	10	San Joaquin
G-102211-A1	Agricultural Tractor	Diesel	1992	96	Tier 0	2021	114	Tier 4 Final	400	0	0	10	San Joaquin
G-91709-A1	Agricultural Tractor	Diesel	1982	84	Tier 0	2021	123	Tier 4 Final	500	0	0	10	Madera
G-92822-A1	Agricultural Tractor	Diesel	1980	69	Tier 0	2021	123	Tier 4 Final	100	0	0	10	Fresno
G-88252-A1	Shaker	Diesel	2001	125	Tier 1	2019	148	Tier 4 Final	500	0	0	10	Stanislaus
G-71765-A1	Agricultural Tractor	Diesel	1997	81	Tier 0	2019	106	Tier 4 Phase In/Alt NOx	700	0	0	10	Fresno
G-66885-A1	Agricultural Tractor	Diesel	2005	85	Tier 2	2021	106	Tier 4 Phase In/Alt NOx	700	0	0	10	Fresno
G-66813-A1	Agricultural Tractor	Diesel	1997	81	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	700	0	0	10	Fresno
G-105699-A1	Agricultural Tractor	Diesel	2005	92	Tier 2	2021	123	Tier 4 Final	500	0	0	10	Fresno
G-105698-A1	Agricultural Tractor	Diesel	2001	85	Tier 1	2021	123	Tier 4 Final	500	0	0	10	Fresno
G-102528-A1	Back Hoe	Diesel	2002	98	Tier 1	2021	102	Tier 4 Final	1200	0	0	10	Kings
G-101038-A1	Skid Loader	Diesel	2004	90	Tier 2	2021	74	Tier 4 Final	750	0	0	10	Kings
G-113687-A1	Agricultural Tractor	Diesel	2006	113	Tier 2	2020	115	Tier 4 Final	1000	0	0	10	Merced
G-76593-A1	Agricultural Tractor	Diesel	1994	110	Tier 0	2021	123	Tier 4 Final	1000	0	0	10	Merced
G-102523-A1	Wheel Loader	Diesel	1997	135	Tier 1	2021	166	Tier 4 Final	1200	0	0	10	Tulare
G-82766-A1	Windrower	Diesel	2002	182	Tier 1	2020	266	Tier 4 Final	1500	0	0	10	Fresno
G-82786-A1	Windrower	Diesel	2001	172	Tier 1	2020	266	Tier 4 Final	1500	0	0	10	Fresno

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
C-61118-1-A1	Windrower	Diesel	2000	110	Tier 1	2020	197	Tier 4 Final	1000	0	0	10	Tulare
G-104496-A1	Wheel Loader	Diesel	1998	105	Tier 1	2021	120	Tier 4 Final	600	0	0	10	Merced
G-96542-A1	Agricultural Tractor	Diesel	2005	72	Tier 2	2021	73	Tier 4 Final	1000	0	0	10	Tulare
G-84720-A1	Agricultural Tractor	Diesel	1997	196	Tier 1	2021	310	Tier 4 Final	1500	0	0	10	Merced
G-75359-A1	Agricultural Tractor	Diesel	1993	102	Tier 0	2021	123	Tier 4 Final	500	0	0	10	Fresno
G-94354-A1	Agricultural Tractor	Diesel	1978	80	Tier 0	2021	114	Tier 4 Final	300	0	0	10	Stanislaus
G-100273-A1	Agricultural Tractor	Diesel	1994	72	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	900	0	0	10	Kern
G-91063-A1	Agricultural Tractor	Diesel	1997	108	Tier 1	2021	121	Tier 4 Final	300	0	0	10	Merced
G-92842-A1	Agricultural Tractor	Diesel	1980	97	Tier 0	2021	123	Tier 4 Final	358	0	0	10	Fresno
G-89291-A1	Agricultural Tractor	Diesel	1979	73	Tier 0	2021	114	Tier 4 Final	300	0	0	10	Madera
G-89288-A1	Agricultural Tractor	Diesel	1979	73	Tier 0	2021	114	Tier 4 Final	300	0	0	10	Madera
G-89286-A1	Agricultural Tractor	Diesel	1994	100	Tier 0	2021	114	Tier 4 Final	300	0	0	10	Madera
G-89284-A1	Agricultural Tractor	Diesel	1992	100	Tier 0	2021	114	Tier 4 Final	300	0	0	10	Madera
G-89283-A1	Agricultural Tractor	Diesel	1995	100	Tier 0	2021	114	Tier 4 Final	300	0	0	10	Madera
G-89281-A1	Agricultural Tractor	Diesel	1993	100	Tier 0	2021	114	Tier 4 Final	300	0	0	10	Madera
G-89279-A1	Agricultural Tractor	Diesel	1994	108	Tier 0	2021	114	Tier 4 Final	300	0	0	10	Madera
G-102651-A1	Forklift	Diesel	2004	75	Tier 2	2021	74	Tier 4 Final	500	0	0	10	San Joaquin
C-59280-1-A1	Agricultural Tractor	Diesel	1999	114	Tier 1	2021	123	Tier 4 Final	550	0	0	10	San Joaquin
G-106094-A1	Agricultural Tractor	Diesel	1999	110	Tier 1	2020	178	Tier 4 Final	400	0	0	10	Merced
G-106205-A1	Agricultural Tractor	Diesel	1989	81	Tier 0	2021	114	Tier 4 Final	500	0	0	10	Tulare
G-98590-A1	Agricultural Tractor	Diesel	1998	104	Tier 1	2021	123	Tier 4 Final	700	0	0	10	Fresno
G-90517-A1	Agricultural Tractor	Diesel	1998	240	Tier 1	2021	236	Tier 4 Final	400	0	0	10	San Joaquin
G-90775-A1	Agricultural Tractor	Diesel	1977	60	Tier 0	2021	72	Tier 4 Final	250	0	0	10	Fresno
G-90773-A1	Agricultural Tractor	Diesel	1979	97	Tier 0	2021	72	Tier 4 Final	250	0	0	10	Fresno
G-100504-A1	Grader	Diesel	1979	150	Tier 0	2018	164	Tier 4 Final	1500	0	0	10	Tulare
G-97001-A1	Back Hoe	Diesel	2005	99	Tier 2	2021	116	Tier 4 Final	1000	0	0	10	Fresno
G-94983-A1	Agricultural Tractor	Diesel	2005	210	Tier 2	2021	202	Tier 4 Final	700	0	0	10	Merced
G-94982-A1	Agricultural Tractor	Diesel	2004	54	Tier 2	2021	115	Tier 4 Final	250	0	0	10	Merced
G-106146-A1	Agricultural Tractor	Diesel	1983	97	Tier 0	2021	114	Tier 4 Final	200	0	0	10	Stanislaus
G-79843-A1	Wheel Loader	Diesel	1995	160	Tier 0	2021	194	Tier 4 Final	800	0	0	10	Stanislaus
G-105856-A1	Agricultural Tractor	Diesel	1989	156	Tier 0	2021	213	Tier 4 Final	400	0	0	10	Kings



Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-109473-A1	Agricultural Tractor	Diesel	1965	44	Tier 0	2021	121	Tier 4 Final	150	0	0	10	Merced
G-117084-A1	Chopper	Diesel	2007	838	Tier 2	2021	838	Tier 4 Final	600	0	0	10	Kern
G-113784-A1	Harvester	Diesel	2013	872	Tier 2	2021	838	Tier 4 Final	600	0	0	10	Kern
G-103072-A1	Agricultural Tractor	Diesel	1992	88	Tier 0	2021	114	Tier 4 Final	250	0	0	10	Fresno
G-95174-A1	Agricultural Tractor	Diesel	2005	113	Tier 2	2021	130	Tier 4 Final	1000	0	0	10	Fresno
G-95173-A1	Agricultural Tractor	Diesel	2005	113	Tier 2	2021	130	Tier 4 Final	1000	0	0	10	Fresno
G-95170-A1	Agricultural Tractor	Diesel	2004	113	Tier 2	2021	130	Tier 4 Final	1000	0	0	10	Fresno
G-95169-A1	Agricultural Tractor	Diesel	2004	113	Tier 2	2021	130	Tier 4 Final	1000	0	0	10	Fresno
G-107020-A1	Wheel Loader	Diesel	2006	149	Tier 2	2021	256	Tier 4 Final	3000	0	0	10	Merced
G-106150-A1	Agricultural Tractor	Diesel	1987	97	Tier 0	2021	197	Tier 4 Final	1500	0	0	10	Stanislaus
G-75685-A1	Agricultural Tractor	Diesel	1995	81	Tier 0	2021	114	Tier 4 Final	350	0	0	10	Merced
G-103985-A1	Chopper	Diesel	2003	601	Tier 2	2021	779	Tier 4 Final	740	0	0	10	Stanislaus
G-65543-A1	Wheel Loader	Diesel	2001	235	Tier 1	2021	331	Tier 4 Final	1000	0	0	10	Madera
G-108574-A1	Agricultural Tractor	Diesel	1972	68	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	250	0	0	10	Madera
G-92238-A1	Wheel Loader	Diesel	1974	100	Tier 0	2021	120	Tier 4 Final	2000	0	0	10	Madera
G-107105-A1	Agricultural Tractor	Diesel	1996	120	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	400	0	0	10	Tulare
C-62495-1-A1	Agricultural Tractor	Diesel	2003	98	Tier 1	2021	114	Tier 4 Final	300	0	0	10	Merced
G-109225-A1	Shaker	Diesel	1979	121	Tier 0	2020	139	Tier 4 Final	150	0	0	10	Merced
G-68545-A1	Forklift	Diesel	1991	80	Tier 0	2021	55	Tier 4 Final	400	0	0	10	Fresno
G-108946-A1	Back Hoe	Diesel	1990	95	Tier 0	2021	107	Tier 4 Final	800	0	0	10	Merced
G-106763-A1	Agricultural Tractor	Diesel	1997	118	Tier 1	2021	101	Tier 4 Final	800	0	0	10	Kern
G-101310-A1	Agricultural Tractor	Diesel	1980	200	Tier 0	2021	250	Tier 4 Final	1000	0	0	10	Madera
G-97365-A1	Agricultural Tractor	Diesel	1995	83	Tier 0	2021	73	Tier 4 Final	500	0	0	10	Fresno
G-97367-A1	Agricultural Tractor	Diesel	1972	80	Tier 0	2021	73	Tier 4 Final	500	0	0	10	Fresno
G-92319-A1	Agricultural Tractor	Diesel	2000	50	Tier 1	2021	110	Tier 4 Final	500	0	0	10	Fresno
G-92312-A1	Agricultural Tractor	Diesel	1996	74	Tier 0	2021	110	Tier 4 Final	500	0	0	10	Fresno
G-100534-A1	Wheel Loader	Diesel	2006	80	Tier 2	2021	166	Tier 4 Final	1000	0	0	10	San Joaquin
G-81259-A1	Agricultural Tractor	Diesel	1995	325	Tier 0	2021	250	Tier 4 Final	500	0	0	10	Kern
G-92254-A1	Agricultural Tractor	Diesel	1990	300	Tier 0	2021	114	Tier 4 Final	600	0	0	10	Madera
G-92251-A1	Agricultural Tractor	Diesel	1990	375	Tier 0	2021	114	Tier 4 Final	650	0	0	10	Madera
G-96303-A1	Wheel Loader	Diesel	2000	90	Tier 1	2019	139	Tier 4 Final	600	0	0	10	Merced

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-69618-A1	Agricultural Tractor	Diesel	1981	216	Tier 0	2021	196	Tier 4 Final	400	0	0	10	Fresno
G-102609-A1	Agricultural Tractor	Diesel	1981	60	Tier 0	2021	73	Tier 4 Final	400	0	0	10	Merced
G-97372-A1	Windrower	Diesel	2002	182	Tier 1	2021	260	Tier 4 Final	500	0	0	10	Madera
G-82117-A1	Agricultural Tractor	Diesel	2005	115	Tier 2	2021	99	Tier 4 Final	325	0	0	10	Madera
G-111752-A1	Agricultural Tractor	Diesel	1973	121	Tier 0	2021	125	Tier 4 Final	750	0	0	10	Kern
G-103080-A1	Wheel Loader	Diesel	1984	125	Tier 0	2021	168	Tier 4 Final	1500	0	0	10	Kings
G-95469-A1	Agricultural Tractor	Diesel	1998	120	Tier 1	2021	175	Tier 4 Final	2000	0	0	10	Merced
G-92780-A1	Wheel Loader	Diesel	1979	102	Tier 0	2021	163	Tier 4 Final	1800	0	0	10	Merced
G-108618-A1	Agricultural Tractor	Diesel	1961	96	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	300	0	0	10	Kern
G-108477-A1	Agricultural Tractor	Diesel	2003	89	Tier 1	2021	106	Tier 4 Phase In/Alt NOx	500	0	0	10	Kern
G-103437-A1	Agricultural Tractor	Diesel	2002	108	Tier 1	2021	114	Tier 4 Final	250	0	0	10	Stanislaus
G-99913-A1	Agricultural Tractor	Diesel	1992	100	Tier 0	2021	114	Tier 4 Final	800	0	0	10	Stanislaus
G-103921-A1	Agricultural Tractor	Diesel	1981	60	Tier 0	2021	73	Tier 4 Final	200	0	0	10	Stanislaus
G-99565-A1	Agricultural Tractor	Diesel	1968	69	Tier 0	2019	95	Tier 4 Final	100	0	0	10	Stanislaus
G-103436-A1	Agricultural Tractor	Diesel	2001	119	Tier 1	2021	114	Tier 4 Final	250	0	0	10	Stanislaus
G-66946-A1	Agricultural Tractor	Diesel	1994	156	Tier 0	2021	213	Tier 4 Final	1300	0	0	10	Tulare
G-109115-A1	Agricultural Tractor	Diesel	1988	72	Tier 0	2016	74	Tier 4 Final	400	0	0	10	Tulare
G-109125-A1	Wheel Loader	Diesel	1999	142	Tier 1	2021	183	Tier 4 Final	1590	0	0	10	Stanislaus
G-94822-A1	Agricultural Tractor	Diesel	1990	109	Tier 0	2021	130	Tier 4 Final	500	0	0	10	Kern
G-114435-A1	Sweeper	Diesel	2002	80	Tier 1	2021	74	Tier 4 Final	500	0	0	10	Fresno
G-104023-A1	Agricultural Tractor	Diesel	2006	113	Tier 2	2021	114	Tier 4 Final	250	0	0	10	Kern
G-99070-A1	Back Hoe	Diesel	1979	80	Tier 0	2021	90	Tier 4 Final	300	0	0	10	Merced
G-88476-A1	Agricultural Tractor	Diesel	1986	460	Tier 0	2021	617	Tier 4 Final	210	0	0	10	Madera
G-106893-A1	Agricultural Tractor	Diesel	1993	97	Tier 0	2020	115	Tier 4 Final	1050	0	0	10	Fresno
G-113396-A1	Back Hoe	Diesel	1999	90	Tier 1	2019	96	Tier 4 Final	500	0	0	10	Kern
G-110923-A1	Agricultural Tractor	Diesel	1988	180	Tier 0	2021	123	Tier 4 Final	400	0	0	10	Kern
C-59281-1-A1	Agricultural Tractor	Diesel	1989	168	Tier 0	2021	155	Tier 4 Final	700	0	0	10	San Joaquin
G-96727-A1	Agricultural Tractor	Diesel	2005	227	Tier 2	2021	233	Tier 4 Final	2000	0	0	10	Kern
G-97360-A1	Agricultural Tractor	Diesel	1981	108	Tier 0	2021	73	Tier 4 Final	500	0	0	10	Kern
G-97363-A1	Agricultural Tractor	Diesel	2004	115	Tier 2	2021	115	Tier 4 Final	500	0	0	10	Kern
G-97361-A1	Agricultural Tractor	Diesel	2004	115	Tier 2	2021	115	Tier 4 Final	500	0	0	10	Kern

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-97359-A1	Agricultural Tractor	Diesel	1993	91	Tier 0	2021	73	Tier 4 Final	500	0	0	10	Kern
G-91833-A1	Agricultural Tractor	Diesel	1998	263	Tier 1	2021	310	Tier 4 Final	600	0	0	10	Merced
G-105733-A1	Agricultural Tractor	Diesel	2003	92	Tier 1	2020	101	Tier 4 Final	850	0	0	10	Stanislaus
G-91647-A1	Agricultural Tractor	Diesel	2006	109	Tier 2	2021	123	Tier 4 Final	500	0	0	10	Madera
G-105737-A1	Agricultural Tractor	Diesel	1972	58	Tier 0	2021	71	Tier 4 Final	650	0	0	10	Stanislaus
G-92019-A1	Agricultural Tractor	Diesel	2005	92	Tier 2	2021	114	Tier 4 Final	300	0	0	10	Merced
G-105736-A1	Agricultural Tractor	Diesel	1997	81	Tier 0	2021	101	Tier 4 Final	850	0	0	10	Stanislaus
G-96287-A1	Agricultural Tractor	Diesel	1992	96	Tier 0	2021	121	Tier 4 Final	400	0	0	10	Stanislaus
G-107439-A1	Agricultural Tractor	Diesel	2005	98	Tier 2	2021	114	Tier 4 Final	360	0	0	10	Stanislaus
G-114053-A1	Agricultural Tractor	Diesel	1978	80	Tier 0	2021	155	Tier 4 Final	900	0	0	10	Merced
G-96896-A1	Agricultural Tractor	Diesel	1998	109	Tier 1	2021	125	Tier 4 Final	500	0	0	10	Fresno
C-62479-1-A1	Agricultural Tractor	Diesel	2005	50	Tier 1	2019	73	Tier 4 Final	800	0	0	10	Fresno
G-92840-A1	Agricultural Tractor	Diesel	1981	126	Tier 0	2021	145	Tier 4 Final	1200	0	0	10	Tulare
G-96272-A1	Agricultural Tractor	Diesel	1976	151	Tier 0	2021	155	Tier 4 Final	500	0	0	10	Merced
G-111449-A1	Agricultural Tractor	Diesel	1977	80	Tier 0	2021	55	Tier 4 Final	500	0	0	10	Tulare
G-92246-A1	Agricultural Tractor	Diesel	1975	74	Tier 0	2021	89	Tier 4 Final	600	0	0	10	San Joaquin
G-114740-A1	Agricultural Tractor	Diesel	1999	89	Tier 1	2020	106	Tier 4 Final	300	0	0	10	Stanislaus
G-111722-A1	Forklift	Diesel	1983	52	Tier 0	2021	56	Tier 4 Final	2000	0	0	10	Kern
G-109738-A1	Agricultural Tractor	Diesel	1964	46	Tier 0	2020	121	Tier 4 Final	400	0	0	10	Tulare
G-106073-A1	Agricultural Tractor	Diesel	2005	99	Tier 2	2020	74	Tier 4 Final	275	0	0	10	San Joaquin
G-104509-A1	Agricultural Tractor	Diesel	1998	62	Tier 1	2021	73	Tier 4 Final	100	0	0	10	Tulare
G-107135-A1	Agricultural Tractor	Diesel	1998	89	Tier 1	2021	114	Tier 4 Final	400	0	0	10	Tulare
G-107134-A1	Agricultural Tractor	Diesel	2003	89	Tier 1	2021	114	Tier 4 Final	400	0	0	10	Tulare
G-107132-A1	Agricultural Tractor	Diesel	2003	89	Tier 1	2021	114	Tier 4 Final	400	0	0	10	Tulare
G-107130-A1	Agricultural Tractor	Diesel	2003	89	Tier 1	2021	114	Tier 4 Final	400	0	0	10	Tulare
G-100333-A1	Wheel Loader	Diesel	1987	157	Tier 0	2021	225	Tier 4 Final	1800	0	0	10	San Joaquin
G-103992-A1	Agricultural Tractor	Diesel	1986	156	Tier 0	2020	110	Tier 4 Final	350	0	0	10	Kern
G-101471-A1	Forklift	Diesel	1982	52	Tier 0	2021	74	Tier 4 Final	300	0	0	10	Kern
G-95166-A1	Agricultural Tractor	Diesel	1980	87	Tier 0	2021	106	Tier 4 Final	200	0	0	10	Stanislaus
G-98709-A1	Agricultural Tractor	Diesel	2006	86	Tier 2	2021	100	Tier 4 Final	350	0	0	10	Tulare
G-98876-A1	Skid Loader	Diesel	2007	66	Tier 2	2021	63	Tier 4 Final	500	0	0	10	Stanislaus

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-106970-A1	Shredder	Diesel	2004	300	Tier 2	2021	456	Tier 4 Final	1000	0	0	10	Fresno
G-90238-A1	Agricultural Tractor	Diesel	2001	110	Tier 1	2021	120	Tier 4 Final	1650	0	0	10	San Joaquin
G-97848-A1	Wheel Loader	Diesel	1985	93	Tier 0	2021	120	Tier 4 Final	1500	0	0	10	Stanislaus
G-81699-A1	AG Tractor Crawler	Diesel	1995	355	Tier 0	2019	409	Tier 4 Final	400	0	0	10	Madera
G-101812-A1	Back Hoe	Diesel	2006	93	Tier 2	2021	113	Tier 4 Final	600	0	0	10	San Joaquin
G-97471-A1	Agricultural Tractor	Diesel	1985	66	Tier 0	2021	73	Tier 4 Final	1000	0	0	10	Kern
G-97399-A1	Agricultural Tractor	Diesel	2004	153	Tier 2	2021	155	Tier 4 Final	1000	0	0	10	San Joaquin
G-107921-A1	Agricultural Tractor	Diesel	1991	72	Tier 0	2021	121	Tier 4 Final	500	0	0	10	Madera
G-106125-A1	Agricultural Tractor	Diesel	2005	99	Tier 2	2020	189	Tier 4 Final	1200	0	0	10	Kings
G-100545-A1	Forklift	Diesel	1996	52	Tier 0	2021	74	Tier 4 Final	800	0	0	10	Tulare
G-100569-A1	Agricultural Tractor	Diesel	1971	63	Tier 0	2021	123	Tier 4 Final	800	0	0	10	Tulare
G-94353-A1	Agricultural Tractor	Diesel	1996	76	Tier 0	2021	114	Tier 4 Final	300	0	0	10	Stanislaus
G-97396-A1	Agricultural Tractor	Diesel	1991	210	Tier 0	2021	310	Tier 4 Final	1000	0	0	10	San Joaquin
G-76304-A1	Wheel Loader	Diesel	1975	65	Tier 0	2021	99	Tier 4 Final	800	0	0	10	Tulare
G-75356-A1	Agricultural Tractor	Diesel	1990	61	Tier 0	2021	121	Tier 4 Final	300	0	0	10	Stanislaus
G-109122-A1	Agricultural Tractor	Diesel	1992	96	Tier 0	2021	114	Tier 4 Final	237	0	0	10	San Joaquin
G-96999-A1	Back Hoe	Diesel	2003	99	Tier 1	2021	113	Tier 4 Final	1000	0	0	10	Fresno
G-73151-A1	Wheel Loader	Diesel	2003	177	Tier 2	2021	192	Tier 4 Final	1500	0	0	10	Tulare
G-101475-A1	Tractor	Diesel	2002	101	Tier 1	2020	123	Tier 4 Final	400	0	0	10	Fresno
G-107100-A1	Agricultural Tractor	Diesel	1974	97	Tier 0	2021	106	Tier 4 Final	300	0	0	10	Merced
G-97374-A1	Forklift	Diesel	1980	175	Tier 0	2021	74	Tier 4 Final	200	0	0	10	Kern
G-106121-A1	Agricultural Tractor	Diesel	2005	233	Tier 2	2021	280	Tier 4 Final	1000	0	0	10	Kings
G-99605-A1	Back Hoe	Diesel	1996	62	Tier 0	2021	69	Tier 4 Interim	500	0	0	10	Fresno
G-95451-A1	Wheel Loader	Diesel	2006	153	Tier 2	2021	166	Tier 4 Final	1500	0	0	10	Fresno
G-100669-A1	Wheel Loader	Diesel	1995	135	Tier 0	2021	166	Tier 4 Final	300	0	0	10	Merced
G-102871-A1	Back Hoe	Diesel	1993	75	Tier 0	2019	96	Tier 4 Final	210	0	0	10	Stanislaus
G-99579-A1	Wheel Loader	Diesel	2004	165	Tier 2	2021	192	Tier 4 Final	2700	0	0	10	Kern
G-107837-A1	Agricultural Tractor	Diesel	2005	89	Tier 2	2021	106	Tier 4 Final	1000	0	0	10	Stanislaus
G-109431-A1	Shaker	Diesel	2002	125	Tier 1	2020	148	Tier 4 Final	1000	0	0	10	Kern
G-109209-A1	Shaker	Diesel	2002	125	Tier 1	2020	148	Tier 4 Final	1000	0	0	10	Kern
G-107101-A1	Forklift	Diesel	1997	52	Tier 0	2020	74	Tier 4 Final	500	0	0	10	Tulare

Project Type Off-Road

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**Description Vehicle Replacement**

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-109264-A1	Shaker	Diesel	2002	125	Tier 1	2020	148	Tier 4 Final	400	0	0	10	Stanislaus
G-100942-A1	Agricultural Tractor	Diesel	1999	92	Tier 1	2021	123	Tier 4 Final	450	0	0	10	Kings
G-94466-A1	Agricultural Tractor	Diesel	1980	60	Tier 0	2021	65	Tier 4 Final	200	0	0	10	Fresno
G-100950-A1	Agricultural Tractor	Diesel	2006	95	Tier 2	2021	145	Tier 4 Final	450	0	0	10	Kings
G-94138-A1	Excavator	Diesel	1990	148	Tier 0	2020	173	Tier 4 Final	500	0	0	10	Stanislaus
G-125049-A1	Agricultural Tractor	Diesel	2002	115	Tier 1	2021	123	Tier 4 Final	700	0	0	10	Kern
G-107009-A1	Agricultural Tractor	Diesel	2005	86	Tier 2	2021	106	Tier 4 Phase In/Alt NOx	800	0	0	10	Tulare
C-54958-1-A1	Agricultural Tractor	Diesel	2002	71	Tier 1	2021	106	Tier 4 Phase In/Alt NOx	300	0	0	10	Tulare
C-63331-1-A1	Agricultural Tractor	Diesel	1987	256	Tier 0	2021	370	Tier 4 Final	1200	0	0	10	San Joaquin
G-94540-A1	Back Hoe	Diesel	1996	74	Tier 0	2021	92	Tier 4 Final	600	0	0	10	Madera
G-100521-A1	Agricultural Tractor	Diesel	2000	81	Tier 1	2020	106	Tier 4 Phase In/Alt NOx	300	0	0	10	Fresno
G-100519-A1	Agricultural Tractor	Diesel	2000	81	Tier 1	2020	106	Tier 4 Phase In/Alt NOx	300	0	0	10	Fresno
G-107832-A1	Agricultural Tractor	Diesel	2007	99	Tier 2	2021	101	Tier 4 Final	800	0	0	10	Kern
G-100922-A1	Wheel Loader	Diesel	2001	114	Tier 1	2021	163	Tier 4 Final	900	0	0	10	Merced
C-59284-1-A1	Agricultural Tractor	Diesel	1991	88	Tier 0	2022	99	Tier 4 Final	550	0	0	10	San Joaquin
G-110744-A1	Agricultural Tractor	Diesel	2005	131	Tier 2	2019	106	Tier 4 Phase In/Alt NOx	1200	0	0	10	Kern
G-107838-A1	Agricultural Tractor	Diesel	1978	38	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	1200	0	0	10	Kern
G-97050-A1	Agricultural Tractor	Diesel	1989	73	Tier 0	2021	115	Tier 4 Final	500	0	0	10	Merced
G-97048-A1	Agricultural Tractor	Diesel	1971	85	Tier 0	2021	115	Tier 4 Final	500	0	0	10	Merced
G-107322-A1	Agricultural Tractor	Diesel	1989	96	Tier 0	2021	114	Tier 4 Final	700	0	0	10	San Joaquin
G-101492-A1	Agricultural Tractor	Diesel	1999	135	Tier 1	2021	114	Tier 4 Final	500	0	0	10	Tulare
G-108766-A1	Forklift	Diesel	1998	67	Tier 1	2020	74	Tier 4 Final	1000	0	0	10	Tulare
G-106971-A1	Agricultural Tractor	Diesel	1979	126	Tier 0	2021	93	Tier 4 Final	250	0	0	10	Fresno
G-107948-A1	Wheel Loader	Diesel	1998	178	Tier 1	2021	173	Tier 4 Final	800	0	0	10	Kern
G-94762-A1	Agricultural Tractor	Diesel	1998	114	Tier 1	2022	123	Tier 4 Final	900	0	0	10	Madera
G-94765-A1	Agricultural Tractor	Diesel	2000	114	Tier 1	2022	123	Tier 4 Final	900	0	0	10	Madera
G-94763-A1	Agricultural Tractor	Diesel	1998	99	Tier 1	2022	123	Tier 4 Final	1000	0	0	10	Madera
G-94766-A1	Agricultural Tractor	Diesel	1994	102	Tier 0	2022	123	Tier 4 Final	1000	0	0	10	Madera
G-108617-A1	Agricultural Tractor	Diesel	1991	60	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	800	0	0	10	Tulare
G-96284-A1	Agricultural Tractor	Diesel	1972	115	Tier 0	2021	114	Tier 4 Final	560	0	0	10	Fresno
G-80920-A1	Agricultural Tractor	Diesel	2004	89	Tier 2	2021	95	Tier 4 Final	1000	0	0	10	Fresno

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-107404-A1	Back Hoe	Diesel	1985	69	Tier 0	2021	96	Tier 4 Final	250	0	0	10	Merced
G-108004-A1	Agricultural Tractor	Diesel	1980	216	Tier 0	2021	248	Tier 4 Final	800	0	0	10	Merced
G-107831-A1	Agricultural Tractor	Diesel	1970	57	Tier 0	2019	74	Tier 4 Final	500	0	0	10	Fresno
G-110185-A1	Agricultural Tractor	Diesel	1984	90	Tier 0	2022	99	Tier 4 Final	350	0	0	10	Fresno
G-94142-A1	Agricultural Tractor	Diesel	1968	127	Tier 0	2021	123	Tier 4 Final	300	0	0	10	Merced
G-109394-A1	Agricultural Tractor	Diesel	1987	95	Tier 0	2021	123	Tier 4 Final	900	0	0	10	Tulare
G-107235-A1	Agricultural Tractor	Diesel	2004	98	Tier 2	2021	123	Tier 4 Final	900	0	0	10	Tulare
G-94052-A1	Agricultural Tractor	Diesel	1988	51	Tier 0	2020	53	Tier 4 Final	1500	0	0	10	Madera
G-75955-A1	Wheel Loader	Diesel	1978	151	Tier 0	2021	152	Tier 4 Final	350	0	0	10	Fresno
G-89298-A1	Wheel Loader	Diesel	1990	120	Tier 0	2021	152	Tier 4 Final	350	0	0	10	Fresno
G-72674-A1	Wheel Loader	Diesel	1993	97	Tier 0	2019	139	Tier 4 Final	800	0	0	10	Stanislaus
G-76227-A1	Agricultural Tractor	Diesel	1994	95	Tier 0	2021	101	Tier 4 Final	500	0	0	10	Stanislaus
G-91838-A1	Agricultural Tractor	Diesel	2004	150	Tier 2	2021	175	Tier 4 Final	500	0	0	10	Merced
G-111251-A1	Agricultural Tractor	Diesel	1992	100	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	500	0	0	10	Madera
G-94120-A1	Agricultural Tractor	Diesel	1996	192	Tier 1	2021	123	Tier 4 Final	2000	0	0	10	Stanislaus
G-95935-A1	Skid Loader	Diesel	2007	49	Tier 2	2021	61	Tier 4 Final	360	0	0	10	Merced
G-111451-A1	Agricultural Tractor	Diesel	1983	102	Tier 0	2021	101	Tier 4 Final	500	0	0	10	Kern
C-54377-1-A1	Agricultural Tractor	Diesel	1993	100	Tier 0	2021	114	Tier 4 Final	400	0	0	10	Fresno
G-107124-A1	Agricultural Tractor	Diesel	1990	71	Tier 0	2021	106	Tier 4 Final	450	0	0	10	Merced
G-110863-A1	Nut Sweeper	Diesel	2001	80	Tier 1	2021	74	Tier 4 Final	385	0	0	10	Fresno
G-70791-A1	Agricultural Tractor	Diesel	2005	99	Tier 2	2021	100	Tier 4 Final	400	0	0	10	Fresno
G-97051-A1	Agricultural Tractor	Diesel	1972	66	Tier 0	2021	106	Tier 4 Final	500	0	0	10	Merced
G-101538-A1	Agricultural Tractor	Diesel	2005	92	Tier 2	2021	73	Tier 4 Final	800	0	0	10	Fresno
G-107097-A1	Tractor	Diesel	2005	98	Tier 2	2021	114	Tier 4 Final	300	0	0	10	Stanislaus
G-110827-A1	Bale Wagon	Diesel	2000	166	Tier 1	2021	190	Tier 4 Final	350	0	0	10	Merced
G-95804-A1	Agricultural Tractor	Diesel	1980	108	Tier 0	2021	175	Tier 4 Final	800	0	0	10	Merced
G-107660-A1	Tractor	Diesel	2003	113	Tier 2	2021	155	Tier 4 Final	600	0	0	10	Merced
G-103239-A1	Agricultural Tractor	Diesel	1984	168	Tier 0	2021	175	Tier 4 Final	500	0	0	10	Madera
G-95474-A1	Agricultural Tractor	Diesel	1983	90	Tier 0	2021	114	Tier 4 Final	600	0	0	10	Kern
G-116296-A1	Swathers	Diesel	2004	185	Tier 2	2021	249	Tier 4 Final	485	0	0	10	Stanislaus
G-111622-A1	Agricultural Tractor	Diesel	2004	41	Tier 2	2021	53	Tier 4 Final	700	0	0	10	Tulare

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-98904-A1	Agricultural Tractor	Diesel	1997	192	Tier 1	2021	236	Tier 4 Final	600	0	0	10	Merced
G-95150-A1	Forklift	Diesel	1979	70	Tier 0	2021	74	Tier 4 Final	150	0	0	10	Fresno
G-107022-A1	Agricultural Tractor	Diesel	2005	113	Tier 2	2021	155	Tier 4 Final	1000	0	0	10	Merced
G-106214-A1	Agricultural Tractor	Diesel	1988	30	Tier 0	2021	38	Tier 4 Final	90	0	0	10	Kern
C-42201-1-A1	Agricultural Tractor	Diesel	1990	88	Tier 0	2021	123	Tier 4 Final	200	0	0	10	Fresno
G-107445-A1	Agricultural Tractor	Diesel	1990	114	Tier 0	2021	165	Tier 4 Final	1000	0	0	10	Merced
G-107809-A1	Agricultural Tractor	Diesel	1990	34	Tier 0	2021	42	Tier 4 Final	300	0	0	10	Tulare
G-110910-A1	Agricultural Tractor	Diesel	1988	63	Tier 0	2021	73	Tier 4 Final	600	0	0	10	Kern
G-111686-A1	Agricultural Tractor	Diesel	1984	72	Tier 0	2020	106	Tier 4 Phase In/Alt NOx	750	0	0	10	Fresno
G-111684-A1	Agricultural Tractor	Diesel	1997	95	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	750	0	0	10	Fresno
C-51133-1-A1	Wheel Loader	Diesel	2007	129	Tier 2	2019	173	Tier 4 Final	575	0	0	10	Madera
G-100511-A1	Agricultural Tractor	Diesel	2000	81	Tier 1	2019	125	Tier 4 Final	500	0	0	10	Fresno
G-119621-A1	Agricultural Tractor	Diesel	1994	170	Tier 0	2019	270	Tier 4 Final	350	0	0	10	Fresno
G-106211-A1	Agricultural Tractor	Diesel	2004	92	Tier 2	2021	114	Tier 4 Final	900	0	0	10	Merced
G-110959-A1	Nut Shuttle Vehicle	Diesel	1998	110	Tier 1	2021	148	Tier 4 Final	1500	0	0	10	Kern
G-110735-A1	Agricultural Tractor	Diesel	2007	86	Tier 2	2020	106	Tier 4 Final	600	0	0	10	Stanislaus
G-107834-A1	Agricultural Tractor	Diesel	2007	99	Tier 2	2021	101	Tier 4 Final	800	0	0	10	Kern
G-94548-A1	Agricultural Tractor	Diesel	1998	114	Tier 1	2022	123	Tier 4 Final	900	0	0	10	Madera
G-92852-A1	Wheel Loader	Diesel	1996	125	Tier 0	2021	249	Tier 4 Final	1750	0	0	10	Stanislaus
G-97411-A1	Wheel Loader	Diesel	1996	125	Tier 0	2021	152	Tier 4 Final	1400	0	0	10	Fresno
G-108820-A1	Agricultural Tractor	Diesel	1961	38	Tier 0	2021	55	Tier 4 Final	400	0	0	10	Tulare
G-103106-A1	Wheel Loader	Diesel	1984	155	Tier 0	2019	173	Tier 4 Final	1000	0	0	10	Stanislaus
G-101474-A1	Forklift	Diesel	1979	52	Tier 0	2020	74	Tier 4 Final	250	0	0	10	Tulare
G-110695-A1	Agricultural Tractor	Diesel	1971	58	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	1500	0	0	10	Kern
G-75857-A1	Agricultural Tractor	Diesel	1988	97	Tier 0	2021	155	Tier 4 Final	600	0	0	10	Merced
G-75856-A1	Agricultural Tractor	Diesel	1996	110	Tier 0	2021	155	Tier 4 Final	600	0	0	10	Merced
G-75858-A1	Agricultural Tractor	Diesel	1993	134	Tier 0	2021	210	Tier 4 Final	600	0	0	10	Merced
G-107897-A1	Agricultural Tractor	Diesel	2005	48	Tier 2	2021	59	Tier 4 Final	1000	0	0	10	Kern
G-107847-A1	Wheel Loader	Diesel	2004	177	Tier 2	2021	183	Tier 4 Final	1600	0	0	10	Madera
G-107846-A1	Wheel Loader	Diesel	2004	177	Tier 2	2021	183	Tier 4 Final	1600	0	0	10	Madera
G-110889-A1	Agricultural Tractor	Diesel	1978	52	Tier 0	2021	74	Tier 4 Final	412	0	0	10	Tulare

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-101215-A1	Wheel Loader	Diesel	2005	153	Tier 2	2022	192	Tier 4 Final	1010	0	0	10	Fresno
G-101684-A1	Back Hoe	Diesel	1978	52	Tier 0	2022	97	Tier 4 Final	500	0	0	10	San Joaquin
G-98711-A1	Wheel Loader	Diesel	1989	135	Tier 0	2021	166	Tier 4 Final	1200	0	0	10	Tulare
G-108878-A1	Tractor	Diesel	1998	99	Tier 1	2021	123	Tier 4 Final	500	0	0	10	Madera
G-114717-A1	Skid Loader	Diesel	2003	52	Tier 1	2021	73	Tier 4 Final	200	0	0	10	Stanislaus
G-99206-A1	Agricultural Tractor	Diesel	2003	98	Tier 1	2021	121	Tier 4 Final	800	0	0	10	Kings
C-62469-1-A1	Agricultural Tractor	Diesel	1968	114	Tier 0	2021	172	Tier 4 Final	2920	0	0	10	Merced
G-110713-A1	Agricultural Tractor	Diesel	1979	97	Tier 0	2021	125	Tier 4 Final	2000	0	0	10	Kern
G-103477-A1	Agricultural Tractor	Diesel	1981	64	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	600	0	0	10	Tulare
G-109752-A1	Wheel Loader	Diesel	2006	154	Tier 2	2021	184	Tier 4 Final	1500	0	0	10	Kings
G-98705-A1	Back Hoe	Diesel	1985	59	Tier 0	2021	73	Tier 4 Final	250	0	0	10	Stanislaus
G-115328-A1	Agricultural Tractor	Diesel	1994	350	Tier 0	2021	545	Tier 4 Final	1500	0	0	10	Tulare
G-94045-A1	Agricultural Tractor	Diesel	2005	98	Tier 2	2021	101	Tier 4 Final	1800	0	0	10	Fresno
G-68779-A1	Back Hoe	Diesel	2000	89	Tier 1	2021	103	Tier 4 Final	800	0	0	10	San Joaquin
G-108011-A1	Agricultural Tractor	Diesel	1999	162	Tier 1	2021	230	Tier 4 Final	900	0	0	10	Tulare
G-109414-A1	Agricultural Tractor	Diesel	2001	181	Tier 1	2021	195	Tier 4 Final	500	0	0	10	Kern
G-109412-A1	Agricultural Tractor	Diesel	1999	175	Tier 1	2021	195	Tier 4 Final	500	0	0	10	Kern
G-103972-A1	Back Hoe	Diesel	1981	87	Tier 0	2021	113	Tier 4 Final	500	0	0	10	San Joaquin
G-96730-A1	Agricultural Tractor	Diesel	2002	196	Tier 1	2021	233	Tier 4 Final	2000	0	0	10	Kern
G-96729-A1	Agricultural Tractor	Diesel	2002	196	Tier 1	2021	233	Tier 4 Final	2000	0	0	10	Kern
G-110530-A1	Wheel Loader	Diesel	2004	208	Tier 2	2018	249	Tier 4 Final	4000	0	0	10	Tulare
G-97369-A1	Agricultural Tractor	Diesel	2002	300	Tier 1	2021	626	Tier 4 Final	850	0	0	10	Merced
C-63489-1-A1	Wheel Loader	Diesel	2002	125	Tier 1	2021	163	Tier 4 Final	750	0	0	10	Kern
G-108530-A1	Back Hoe	Diesel	1985	63	Tier 0	2022	97	Tier 4 Final	500	0	0	10	Stanislaus
G-75366-A1	Ag Forage Harvester	Diesel	2003	601	Tier 2	2021	779	Tier 4 Final	740	0	0	10	Madera
G-96164-A1	Agricultural Tractor	Diesel	1999	53	Tier 1	2021	114	Tier 4 Final	218	0	0	10	Madera
G-111289-A1	Agricultural Tractor	Diesel	1981	98	Tier 0	2021	120	Tier 4 Final	500	0	0	10	Kern
G-111301-A1	Agricultural Tractor	Diesel	1967	76	Tier 0	2022	123	Tier 4 Final	500	0	0	10	Tulare
G-109346-A1	Agricultural Tractor	Diesel	1990	90	Tier 0	2021	71	Tier 4 Final	200	0	0	10	Fresno
G-66944-A1	Shaker	Diesel	1985	58	Tier 0	2021	74	Tier 4 Final	500	0	0	10	Kings
G-107559-A1	Agricultural Tractor	Diesel	1980	108	Tier 0	2020	115	Tier 4 Final	500	0	0	10	Merced



Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-101182-A1	Agricultural Tractor	Diesel	1981	97	Tier 0	2021	65	Tier 4 Final	150	0	0	10	Tulare
G-109723-A1	Agricultural Tractor	Diesel	1999	36	Tier 1	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109731-A1	Agricultural Tractor	Diesel	1989	25	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109734-A1	Agricultural Tractor	Diesel	1992	25	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109732-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109730-A1	Agricultural Tractor	Diesel	1995	33	Tier 0	2019	34	Tier 4 Final	200	0	0	10	Kern
G-109729-A1	Agricultural Tractor	Diesel	1990	33	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109728-A1	Agricultural Tractor	Diesel	1990	25	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109727-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109725-A1	Agricultural Tractor	Diesel	1998	39	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109724-A1	Agricultural Tractor	Diesel	1990	25	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109720-A1	Agricultural Tractor	Diesel	1990	25	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109719-A1	Agricultural Tractor	Diesel	1992	25	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-109718-A1	Agricultural Tractor	Diesel	1993	25	Tier 0	2019	34	Tier 4 Final	200	0	0	10	Kern
G-109716-A1	Agricultural Tractor	Diesel	1991	25	Tier 0	2021	34	Tier 4 Final	200	0	0	10	Kern
G-104126-A1	Agricultural Tractor	Diesel	1977	84	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	300	0	0	10	Fresno
G-99853-A1	Agricultural Tractor	Diesel	1998	85	Tier 1	2020	106	Tier 4 Phase In/Alt NOx	400	0	0	10	Fresno
G-87130-A1	Agricultural Tractor	Diesel	2002	425	Tier 2	2021	123	Tier 4 Final	400	0	0	10	San Joaquin
G-92463-A1	Chopper	Diesel	2007	757	Tier 2	2021	818	Tier 4 Final	900	0	0	10	Fresno
G-92462-A1	Harvester	Diesel	2007	757	Tier 2	2021	818	Tier 4 Final	900	0	0	10	Fresno
G-124400-A1	Swathers	Diesel	1999	172	Tier 1	2020	235	Tier 4 Final	500	0	0	10	Kern
G-108108-A1	Windrower	Diesel	2002	166	Tier 1	2020	235	Tier 4 Final	1100	0	0	10	Merced
G-104864-A1	Agricultural Tractor	Diesel	1983	300	Tier 0	2021	282	Tier 4 Final	900	0	0	10	Merced
G-100450-A1	Agricultural Tractor	Diesel	1987	77	Tier 0	2021	114	Tier 4 Final	700	0	0	10	Stanislaus
G-98642-A1	Skid Loader	Diesel	1996	36	Tier 0	2021	61	Tier 4 Final	200	0	0	10	Kern
C-61332-1-A1	Agricultural Tractor	Diesel	1985	85	Tier 0	2022	223	Tier 4 Final	1000	0	0	10	Tulare
G-112907-A1	Agricultural Tractor	Diesel	2004	142	Tier 2	2021	175	Tier 4 Final	2300	0	0	10	Merced
G-99287-A1	Agricultural Tractor	Diesel	1984	63	Tier 0	2021	43	Tier 4 Final	1000	0	0	10	Madera
G-107399-A1	Skid Loader	Diesel	1996	73	Tier 0	2021	73	Tier 4 Final	250	0	0	10	Stanislaus
G-95844-A1	Swathers	Diesel	2004	108	Tier 2	2021	260	Tier 4 Final	900	0	0	10	Stanislaus
G-111443-A1	Chopper	Diesel	2000	450	Tier 1	2021	779	Tier 4 Final	800	0	0	10	Tulare

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-109110-A1	Agricultural Tractor	Diesel	1996	62	Tier 0	2021	121	Tier 4 Final	500	0	0	10	Madera
G-99041-A1	Wheel Loader	Diesel	2004	129	Tier 2	2020	183	Tier 4 Final	2190	0	0	10	Merced
G-103994-A1	Agricultural Tractor	Diesel	1978	72	Tier 0	2021	73	Tier 4 Final	350	0	0	10	Stanislaus
G-94794-A1	Agricultural Tractor	Diesel	2005	86	Tier 2	2021	121	Tier 4 Final	650	0	0	10	San Joaquin
G-101181-A1	Wheel Loader	Diesel	1995	125	Tier 0	2022	166	Tier 4 Final	1800	0	0	10	Tulare
G-103350-A1	Agricultural Tractor	Diesel	1983	97	Tier 0	2021	121	Tier 4 Final	600	0	0	10	Kern
G-103349-A1	Agricultural Tractor	Diesel	1992	81	Tier 0	2020	121	Tier 4 Final	600	0	0	10	Kern
G-103348-A1	Agricultural Tractor	Diesel	2006	105	Tier 2	2021	121	Tier 4 Final	600	0	0	10	Kern
G-103346-A1	Agricultural Tractor	Diesel	2006	105	Tier 2	2020	121	Tier 4 Final	600	0	0	10	Kern
G-103251-A1	Agricultural Tractor	Diesel	2006	155	Tier 2	2021	114	Tier 4 Final	800	0	0	10	Stanislaus
G-110321-A1	Motor Grader	Diesel	1979	155	Tier 0	2021	190	Tier 4 Final	1200	0	0	10	Kings
G-97843-A1	Agricultural Tractor	Diesel	1985	84	Tier 0	2021	123	Tier 4 Final	500	0	0	10	San Joaquin
G-95277-A1	Agricultural Tractor	Diesel	1979	38	Tier 0	2021	42	Tier 4 Final	500	0	0	10	Fresno
G-108528-A1	Wheel Loader	Diesel	1998	142	Tier 1	2021	184	Tier 4 Final	900	0	0	10	Kings
G-108527-A1	Wheel Loader	Diesel	1992	125	Tier 0	2021	184	Tier 4 Final	1100	0	0	10	Kings
G-103434-A1	Wheel Loader	Diesel	2000	114	Tier 1	2022	163	Tier 4 Final	750	0	0	10	Stanislaus
G-113696-A1	Tractor	Diesel	1998	89	Tier 1	2021	123	Tier 4 Final	1000	0	0	10	Tulare
G-110006-A1	Agricultural Tractor	Diesel	2004	110	Tier 2	2021	123	Tier 4 Final	1900	0	0	10	Madera
G-110001-A1	Agricultural Tractor	Diesel	2005	113	Tier 2	2022	123	Tier 4 Final	1900	0	0	10	Madera
G-111623-A1	Agricultural Tractor	Diesel	1982	81	Tier 0	2020	118	Tier 4 Final	500	0	0	10	Tulare
G-97010-A1	Agricultural Tractor	Diesel	2005	98	Tier 2	2021	123	Tier 4 Final	300	0	0	10	Kings
G-107106-A1	Agricultural Tractor	Diesel	1996	120	Tier 0	2021	175	Tier 4 Final	500	0	0	10	Kern
G-103973-A1	Agricultural Tractor	Diesel	1978	127	Tier 0	2020	202	Tier 4 Final	500	0	0	10	Stanislaus
G-76150-A1	Agricultural Tractor	Diesel	1994	81	Tier 0	2021	98	Tier 4 Final	1000	0	0	10	Tulare
G-95853-A1	Agricultural Tractor	Diesel	2002	425	Tier 2	2020	545	Tier 4 Final	1500	0	0	10	Stanislaus
G-108016-A1	Agricultural Tractor	Diesel	2004	51	Tier 2	2021	73	Tier 4 Final	750	0	0	10	Tulare
G-110549-A1	Agricultural Tractor	Diesel	1969	58	Tier 0	2022	114	Tier 4 Final	350	0	0	10	Stanislaus
G-106979-A1	Agricultural Tractor	Diesel	1980	210	Tier 0	2021	342	Tier 4 Final	400	0	0	10	Tulare
G-102195-A1	Sweeper	Diesel	1994	70	Tier 0	2021	74	Tier 4 Final	350	0	0	10	San Joaquin
G-108254-A1	Back Hoe	Diesel	1999	98	Tier 1	2021	92	Tier 4 Final	500	0	0	10	Tulare
G-94125-A1	Motor Grader	Diesel	1995	240	Tier 0	2021	306	Tier 4 Final	2000	0	0	10	Kings

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-83839-A1	Wheel Loader	Diesel	2005	161	Tier 2	2022	164	Tier 4 Final	2400	0	0	10	Tulare
G-108412-A1	Agricultural Tractor	Diesel	2005	98	Tier 2	2021	123	Tier 4 Final	500	0	0	10	Fresno
G-114054-A1	Tractor	Diesel	1980	72	Tier 0	2021	114	Tier 4 Final	700	0	0	10	Merced
G-111753-A1	Agricultural Tractor	Diesel	1998	132	Tier 1	2021	125	Tier 4 Final	300	0	0	10	Kern
G-90313-A1	Agricultural Tractor	Diesel	1976	72	Tier 0	2021	73	Tier 4 Final	700	0	0	10	Merced
G-109556-A1	Wheel Loader	Diesel	1970	104	Tier 0	2021	162	Tier 4 Final	800	0	0	10	Merced
G-110832-A1	Sweeper	Diesel	1996	165	Tier 0	2020	142	Tier 4 Final	350	0	0	10	Merced
G-107023-A1	Agricultural Tractor	Diesel	2007	92	Tier 2	2021	114	Tier 4 Final	800	0	0	10	San Joaquin
C-61333-1-A1	Agricultural Tractor	Diesel	1978	90	Tier 0	2022	221	Tier 4 Final	1000	0	0	10	Tulare
G-80971-A1	Agricultural Tractor	Diesel	1998	115	Tier 1	2021	71	Tier 4 Final	200	0	0	10	Tulare
G-107026-A1	Agricultural Tractor	Diesel	1996	115	Tier 0	2021	121	Tier 4 Final	500	0	0	10	Tulare
G-94823-A1	Agricultural Tractor	Diesel	2007	99	Tier 2	2021	100	Tier 4 Final	400	0	0	10	Kern
G-103392-A1	Agricultural Tractor	Diesel	1979	38	Tier 0	2021	35	Tier 4 Final	500	0	0	10	Tulare
G-99126-A1	Agricultural Tractor	Diesel	1985	72	Tier 0	2021	71	Tier 4 Final	900	0	0	10	Kern
G-111902-A1	Forklift	Diesel	1998	69	Tier 1	2020	74	Tier 4 Final	400	0	0	10	San Joaquin
G-104718-A1	Wheel Loader	Diesel	1982	140	Tier 0	2019	173	Tier 4 Final	1000	0	0	10	Merced
G-97395-A1	Agricultural Tractor	Diesel	1973	105	Tier 0	2021	130	Tier 4 Final	1000	0	0	10	San Joaquin
G-97393-A1	Agricultural Tractor	Diesel	1975	105	Tier 0	2021	130	Tier 4 Final	1000	0	0	10	San Joaquin
G-110533-A1	Forklift	Diesel	1975	70	Tier 0	2021	74	Tier 4 Final	100	0	0	10	Stanislaus
G-107126-A1	Agricultural Tractor	Diesel	2005	92	Tier 2	2022	123	Tier 4 Final	500	0	0	10	Stanislaus
G-107127-A1	Agricultural Tractor	Diesel	2003	92	Tier 1	2022	123	Tier 4 Final	500	0	0	10	Stanislaus
G-104852-A1	Agricultural Tractor	Diesel	1975	48	Tier 0	2021	50	Tier 4 Final	900	0	0	10	Fresno
G-101140-A1	Chopper	Diesel	2010	1063	Tier 2	2021	912	Tier 4 Final	700	0	0	10	Kern
G-101476-A1	Agricultural Tractor	Diesel	1981	275	Tier 0	2021	250	Tier 4 Final	500	0	0	10	Tulare
G-109474-A1	Agricultural Backhoe	Diesel	1974	57	Tier 0	2021	53	Tier 4 Final	300	0	0	10	San Joaquin
G-109475-A1	Agricultural Tractor	Diesel	1980	215	Tier 0	2021	370	Tier 4 Final	500	0	0	10	San Joaquin
G-108531-A1	Back Hoe	Diesel	2005	80	Tier 2	2021	96	Tier 4 Final	500	0	0	10	Stanislaus
G-89925-A1	Agricultural Tractor	Diesel	1987	81	Tier 0	2021	108	Tier 4 Final	250	0	0	10	Fresno
C-46308-1-A1	Wheel Loader	Diesel	1998	135	Tier 1	2021	272	Tier 4 Final	500	0	0	10	Merced
G-98708-A1	Agricultural Tractor	Diesel	1981	310	Tier 0	2022	590	Tier 4 Final	800	0	0	10	Stanislaus
G-104853-A1	Agricultural Tractor	Diesel	1975	48	Tier 0	2021	50	Tier 4 Final	900	0	0	10	Fresno

**Description Vehicle Replacement**

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-104850-A1	Agricultural Tractor	Diesel	1975	48	Tier 0	2021	42	Tier 4 Final	900	0	0	10	Fresno
G-116348-A1	Sweeper	Diesel	2003	80	Tier 1	2021	74	Tier 4 Final	320	0	0	10	Kern
G-109417-A1	Agricultural Tractor	Diesel	1998	155	Tier 1	2021	195	Tier 4 Final	500	0	0	10	Kern
G-96890-A1	Agricultural Tractor	Diesel	1993	240	Tier 0	2022	310	Tier 4 Final	500	0	0	10	Fresno
G-100526-A1	Agricultural Tractor	Diesel	1998	110	Tier 1	2021	114	Tier 4 Final	720	0	0	10	Kern
G-103081-A1	Agricultural Tractor	Diesel	2004	51	Tier 2	2021	73	Tier 4 Final	300	0	0	10	Merced
G-111009-A1	Forklift	Diesel	1999	80	Tier 1	2022	74	Tier 4 Final	600	0	0	10	Kern
G-109281-A1	Agricultural Tractor	Diesel	1989	335	Tier 0	2021	545	Tier 4 Final	600	0	0	10	Kern
G-108637-A1	Agricultural Tractor	Diesel	2000	59	Tier 1	2020	74	Tier 4 Final	500	0	0	10	Tulare
G-110855-A1	Agricultural Tractor	Diesel	1991	104	Tier 0	2021	114	Tier 4 Final	308	0	0	10	Fresno
G-97336-A1	Skid Loader	Diesel	1981	36	Tier 0	2021	63	Tier 4 Final	500	0	0	10	Fresno
G-110493-A1	Agricultural Tractor	Diesel	1985	100	Tier 0	2021	114	Tier 4 Final	500	0	0	10	Kern
G-103441-A1	Agricultural Tractor	Diesel	1999	109	Tier 1	2021	114	Tier 4 Final	200	0	0	10	Merced
G-107900-A1	Agricultural Tractor	Diesel	1982	193	Tier 0	2022	236	Tier 4 Final	1080	0	0	10	Fresno
G-98710-A1	Agricultural Tractor	Diesel	1978	60	Tier 0	2021	59	Tier 4 Final	200	0	0	10	Fresno
G-84851-A1	Agricultural Tractor	Diesel	1983	26	Tier 0	2021	53	Tier 4 Final	200	0	0	10	Merced
G-84847-A1	Agricultural Tractor	Diesel	1997	27	Tier 0	2020	53	Tier 4 Final	200	0	0	10	Merced
G-95948-A1	Back Hoe	Diesel	1975	62	Tier 0	2020	90	Tier 4 Final	500	0	0	10	Stanislaus
G-74389-A1	Crawler Dozer	Diesel	2002	87	Tier 1	2022	92	Tier 4 Final	500	0	0	10	Merced
G-110739-A1	Agricultural Tractor	Diesel	1998	84	Tier 1	2021	40	Tier 4 Final	400	0	0	10	Kern
G-111916-A1	Almond Shaker	Diesel	1985	104	Tier 0	2020	148	Tier 4 Final	423	0	0	10	Fresno
G-108086-A1	Agricultural Tractor	Diesel	1997	216	Tier 1	2021	342	Tier 4 Final	1500	0	0	10	Fresno
G-103355-A1	Agricultural Tractor	Diesel	1990	95	Tier 0	2020	121	Tier 4 Final	600	0	0	10	Kern
G-103354-A1	Agricultural Tractor	Diesel	2003	110	Tier 2	2021	121	Tier 4 Final	600	0	0	10	Kern
G-103353-A1	Agricultural Tractor	Diesel	1981	48	Tier 0	2020	121	Tier 4 Final	600	0	0	10	Kern
G-103351-A1	Agricultural Tractor	Diesel	1996	108	Tier 0	2020	121	Tier 4 Final	600	0	0	10	Kern
G-96873-A1	Agricultural Tractor	Diesel	1988	81	Tier 0	2021	114	Tier 4 Final	500	0	0	10	Tulare
G-101138-A1	Chopper	Diesel	2010	872	Tier 2	2021	912	Tier 4 Final	700	0	0	10	Kern
G-108003-A1	Agricultural Tractor	Diesel	1999	109	Tier 1	2021	123	Tier 4 Final	450	0	0	10	Kern
G-103075-A1	Agricultural Tractor	Diesel	2000	89	Tier 1	2022	114	Tier 4 Final	300	0	0	10	Fresno
G-108157-A1	Wheel Loader	Diesel	1998	172	Tier 1	2021	183	Tier 4 Final	600	0	0	10	Kern

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-110476-A1	Agricultural Tractor	Diesel	2002	48	Tier 1	2021	45	Tier 4 Final	450	0	0	10	Stanislaus
G-113242-A1	Agricultural Tractor	Diesel	1974	76	Tier 0	2021	74	Tier 4 Final	350	0	0	10	Stanislaus
G-90211-A1	Agricultural Tractor	Diesel	1987	34	Tier 0	2021	63	Tier 4 Final	1000	0	0	10	Tulare
G-112035-A1	Shaker	Diesel	1972	104	Tier 0	2020	148	Tier 4 Final	350	0	0	10	Stanislaus
G-112036-A1	Shaker	Diesel	1994	120	Tier 0	2020	148	Tier 4 Final	350	0	0	10	Stanislaus
G-112041-A1	Shredder	Diesel	2004	300	Tier 2	2021	456	Tier 4 Final	975	0	0	10	Kings
C-53942-1-A1	Wheel Loader	Diesel	2005	153	Tier 2	2020	184	Tier 4 Final	2900	0	0	10	Fresno
G-114798-A1	Agricultural Tractor	Diesel	1973	67	Tier 0	2021	74	Tier 4 Final	150	0	0	10	San Joaquin
G-110816-A1	Agricultural Tractor	Diesel	1978	228	Tier 0	2021	115	Tier 4 Final	100	0	0	10	San Joaquin
G-96854-A1	Agricultural Tractor	Diesel	1994	33	Tier 0	2021	39	Tier 4 Final	2000	0	0	10	Fresno
G-97339-A1	Agricultural Tractor	Diesel	1992	72	Tier 0	2021	73	Tier 4 Final	500	0	0	10	Fresno
G-102348-A1	Back Hoe	Diesel	2005	75	Tier 2	2022	113	Tier 4 Final	500	0	0	10	San Joaquin
G-112223-A1	Agricultural Tractor	Diesel	1993	168	Tier 0	2020	212	Tier 4 Final	800	0	0	10	Merced
G-108013-A1	Agricultural Tractor	Diesel	1992	186	Tier 0	2021	175	Tier 4 Final	950	0	0	10	Tulare
G-124476-A1	Agricultural Tractor	Diesel	2005	225	Tier 2	2021	248	Tier 4 Final	600	0	0	10	Kings
G-108471-A1	Agricultural Tractor	Diesel	2003	94	Tier 1	2021	172	Tier 4 Final	800	0	0	10	Stanislaus
G-122458-A1	Sweeper	Diesel	1993	73	Tier 0	2022	74	Tier 4 Final	270	0	0	10	Stanislaus
G-93193-A1	Agricultural Tractor	Diesel	2005	225	Tier 2	2021	123	Tier 4 Final	1000	0	0	10	Fresno
G-95397-A1	Wheel Loader	Diesel	1975	210	Tier 0	2022	249	Tier 4 Final	1000	0	0	10	San Joaquin
G-94432-A1	Wheel Loader	Diesel	2005	160	Tier 2	2021	183	Tier 4 Final	2000	0	0	10	Kern
G-96299-A1	Wheel Loader	Diesel	1995	138	Tier 0	2019	139	Tier 4 Final	600	0	0	10	Merced
G-113698-A1	Wheel Loader	Diesel	1978	115	Tier 0	2022	166	Tier 4 Final	1000	0	0	10	Tulare
G-112610-A1	Skid Loader	Diesel	1997	74	Tier 0	2022	73	Tier 4 Final	250	0	0	10	Stanislaus
G-102474-A1	Wheel Loader	Diesel	1990	165	Tier 0	2022	152	Tier 4 Final	1460	0	0	10	Stanislaus
G-111049-A1	Agricultural Tractor	Diesel	1981	300	Tier 0	2021	570	Tier 4 Final	800	0	0	10	Kern
G-111249-A1	Agricultural Tractor	Diesel	1998	39	Tier 0	2020	59	Tier 4 Final	750	0	0	10	Tulare
G-97959-A1	Agricultural Tractor	Diesel	1998	202	Tier 1	2022	281	Tier 4 Final	2336	0	0	10	Tulare
C-53353-1-A1	Wheel Loader	Diesel	1985	123	Tier 0	2021	282	Tier 4 Final	400	0	0	10	Stanislaus
G-114887-A1	Agricultural Tractor	Diesel	1979	140	Tier 0	2021	114	Tier 4 Final	175	0	0	10	Fresno
G-106137-A1	Agricultural Tractor	Diesel	2000	360	Tier 1	2021	515	Tier 4 Final	700	0	0	10	Merced
G-94415-A1	Agricultural Tractor	Diesel	1993	88	Tier 0	2021	114	Tier 4 Final	225	0	0	10	Stanislaus

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-96276-A1	Agricultural Tractor	Diesel	1974	121	Tier 0	2021	123	Tier 4 Final	200	0	0	10	Merced
G-103993-A1	Agricultural Tractor	Diesel	1975	210	Tier 0	2021	123	Tier 4 Final	450	0	0	10	Fresno
G-108340-A1	Agricultural Tractor	Diesel	1999	99	Tier 1	2019	202	Tier 4 Final	200	0	0	10	Merced
G-66207-A1	Agricultural Tractor	Diesel	1983	144	Tier 0	2021	175	Tier 4 Final	750	0	0	10	Fresno
G-116700-A1	Sweeper	Diesel	1997	80	Tier 0	2021	74	Tier 4 Final	1000	0	0	10	Tulare
G-116699-A1	Sweeper	Diesel	2002	80	Tier 1	2021	74	Tier 4 Final	1000	0	0	10	Tulare
G-107444-A1	Agricultural Tractor	Diesel	1975	210	Tier 0	2021	123	Tier 4 Final	350	0	0	10	Fresno
G-109263-A1	Shaker	Diesel	1995	120	Tier 0	2020	148	Tier 4 Final	450	0	0	10	Stanislaus
G-103901-A1	Shaker	Diesel	1999	125	Tier 1	2020	148	Tier 4 Final	450	0	0	10	Stanislaus
G-103900-A1	Shaker	Diesel	2001	125	Tier 1	2020	148	Tier 4 Final	300	0	0	10	Stanislaus
C-64525-1-A1	Agricultural Tractor	Diesel	1990	81	Tier 0	2022	114	Tier 4 Final	500	0	0	10	Fresno
G-106895-A1	Agricultural Tractor	Diesel	2005	155	Tier 2	2022	155	Tier 4 Final	600	0	0	10	Tulare
G-99925-A1	Agricultural Tractor	Diesel	1987	97	Tier 0	2021	106	Tier 4 Final	600	0	0	10	San Joaquin
G-99602-A1	Agricultural Tractor	Diesel	1998	89	Tier 1	2021	106	Tier 4 Final	600	0	0	10	San Joaquin
G-103338-A1	Agricultural Tractor	Diesel	1972	162	Tier 0	2022	233	Tier 4 Final	2200	0	0	10	Kings
G-108472-A1	Agricultural Tractor	Diesel	2005	92	Tier 2	2022	213	Tier 4 Final	750	0	0	10	Stanislaus
G-104527-A1	Agricultural Tractor	Diesel	1989	72	Tier 0	2021	100	Tier 4 Final	300	0	0	10	Madera
G-104712-A1	Back Hoe	Diesel	2001	108	Tier 1	2022	113	Tier 4 Final	445	0	0	10	San Joaquin
C-54628-1-A1	Agricultural Tractor	Diesel	1976	180	Tier 0	2021	115	Tier 4 Final	750	0	0	10	Kings
G-114042-A1	Agricultural Tractor	Diesel	1975	70	Tier 0	2021	98	Tier 4 Final	150	0	0	10	Tulare
G-112540-A1	Agricultural Tractor	Diesel	1997	175	Tier 1	2022	195	Tier 4 Final	800	0	0	10	Kern
G-115679-A1	Agricultural Tractor	Diesel	2006	105	Tier 2	2021	106	Tier 4 Final	300	0	0	10	San Joaquin
G-95487-A1	Agricultural Tractor	Diesel	1995	120	Tier 0	2021	100	Tier 4 Final	600	0	0	10	Fresno
G-95485-A1	Agricultural Tractor	Diesel	1995	97	Tier 0	2021	100	Tier 4 Final	600	0	0	10	Fresno
G-102413-A1	Agricultural Tractor	Diesel	1993	91	Tier 0	2021	123	Tier 4 Final	900	0	0	10	Madera
G-111302-A1	Agricultural Tractor	Diesel	1988	90	Tier 0	2021	123	Tier 4 Final	500	0	0	10	Kern
G-114545-A1	Tractor	Diesel	1985	62	Tier 0	2022	74	Tier 4 Final	150	0	0	10	Tulare
G-96290-A1	Agricultural Tractor	Diesel	1973	120	Tier 0	2021	123	Tier 4 Final	525	0	0	10	Madera
G-95153-A1	Agricultural Tractor	Diesel	1981	60	Tier 0	2021	123	Tier 4 Final	450	0	0	10	Madera
G-111949-A1	Agricultural Tractor	Diesel	1992	105	Tier 0	2021	121	Tier 4 Final	400	0	0	10	Kings
G-88914-A1	Agricultural Tractor	Diesel	1987	70	Tier 0	2021	73	Tier 4 Final	500	0	0	10	Fresno

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-110545-A1	Agricultural Tractor	Diesel	2000	175	Tier 1	2021	221	Tier 4 Final	420	0	0	10	Merced
G-111682-A1	Agricultural Tractor	Diesel	1998	115	Tier 0	2022	123	Tier 4 Final	400	0	0	10	Fresno
G-111679-A1	Agricultural Tractor	Diesel	1976	76	Tier 0	2022	123	Tier 4 Final	400	0	0	10	Fresno
G-98524-A1	Agricultural Tractor	Diesel	2004	86	Tier 2	2021	106	Tier 4 Final	300	0	0	10	Merced
G-111680-A1	Agricultural Tractor	Diesel	1980	97	Tier 0	2022	123	Tier 4 Final	400	0	0	10	Fresno
G-128656-A1	Agricultural Tractor	Diesel	1968	76	Tier 0	2021	73	Tier 4 Final	150	0	0	10	Stanislaus
G-112613-A1	Agricultural Tractor	Diesel	1981	72	Tier 0	2022	114	Tier 4 Final	250	0	0	10	Stanislaus
G-112612-A1	Agricultural Tractor	Diesel	2004	71	Tier 2	2022	123	Tier 4 Final	250	0	0	10	Stanislaus
G-103903-A1	Shaker	Diesel	2002	125	Tier 1	2020	148	Tier 4 Final	325	0	0	10	Stanislaus
G-113144-A1	Agricultural Tractor	Diesel	2006	117	Tier 2	2022	155	Tier 4 Final	1250	0	0	10	Kern
G-109559-A1	Agricultural Tractor	Diesel	1977	60	Tier 0	2021	72	Tier 4 Final	500	0	0	10	Fresno
G-103902-A1	Shaker	Diesel	2001	125	Tier 1	2020	148	Tier 4 Final	300	0	0	10	Stanislaus
G-107808-A1	Agricultural Tractor	Diesel	1984	50	Tier 0	2021	65	Tier 4 Final	300	0	0	10	Fresno
G-110835-A1	Agricultural Tractor	Diesel	2007	89	Tier 2	2022	120	Tier 4 Final	350	0	0	10	Merced
G-94429-A1	Agricultural Tractor	Diesel	1965	55	Tier 0	2021	74	Tier 4 Final	200	0	0	10	Fresno
G-113326-A1	Excavator	Diesel	2005	138	Tier 2	2022	146	Tier 4 Final	1800	0	0	10	Fresno
G-116504-A1	Tractor	Diesel	2006	153	Tier 2	2021	197	Tier 4 Final	500	0	0	10	Stanislaus
G-113410-A1	Bale Wagon	Diesel	1997	152	Tier 1	2020	190	Tier 4 Final	260	0	0	10	San Joaquin
G-110225-A1	Wheel Loader	Diesel	1995	125	Tier 0	2021	163	Tier 4 Final	2000	0	0	10	Tulare
G-111898-A1	Back Hoe	Diesel	1987	69	Tier 0	2021	74	Tier 4 Final	500	0	0	10	San Joaquin
G-94701-A1	Wheel Loader	Diesel	2002	129	Tier 1	2022	163	Tier 4 Final	1000	0	0	10	San Joaquin
G-99198-A1	Agricultural Tractor	Diesel	2002	39	Tier 1	2021	59	Tier 4 Final	500	0	0	10	Kern
G-100939-A1	Agricultural Tractor	Diesel	1997	81	Tier 0	2021	74	Tier 4 Final	300	0	0	10	Stanislaus
G-90581-A1	Agricultural Tractor	Diesel	1969	65	Tier 0	2022	99	Tier 4 Final	500	0	0	10	Fresno
G-102363-A1	Skid Loader	Diesel	1994	40	Tier 0	2019	58	Tier 4 Final	500	0	0	10	Stanislaus
G-91914-A1	Agricultural Tractor	Diesel	2005	67	Tier 2	2020	99	Tier 4 Final	500	0	0	10	Fresno
G-113204-A1	Agricultural Tractor	Diesel	1989	33	Tier 0	2021	37	Tier 4 Final	250	0	0	10	Kings
G-112042-A1	Agricultural Tractor	Diesel	1984	158	Tier 0	2022	123	Tier 4 Final	500	0	0	10	Fresno
G-110478-A1	Agricultural Tractor	Diesel	2000	99	Tier 1	2020	121	Tier 4 Final	500	0	0	10	Kern
G-114115-A1	Agricultural Tractor	Diesel	2005	92	Tier 2	2021	114	Tier 4 Final	1000	0	0	10	Stanislaus

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-114113-A1	Tractor	Diesel	2000	92	Tier 1	2022	114	Tier 4 Final	600	0	0	10	Stanislaus
G-113930-A1	Wheel Loader	Diesel	1995	208	Tier 0	2021	272	Tier 4 Final	1250	0	0	10	Tulare
G-68776-A1	Back Hoe	Diesel	2005	93	Tier 2	2022	103	Tier 4 Final	800	0	0	10	San Joaquin
G-115069-A1	Shaker	Diesel	2000	125	Tier 1	2021	139	Tier 4 Final	300	0	0	10	Kings
G-108146-A1	Agricultural Tractor	Diesel	1965	58	Tier 0	2021	45	Tier 4 Final	150	0	0	10	Tulare
G-109418-A1	Wheel Loader	Diesel	2002	208	Tier 1	2022	184	Tier 4 Final	1800	0	0	10	Kern
G-118891-A1	Agricultural Tractor	Diesel	1965	59	Tier 0	2022	65	Tier 4 Final	1000	0	0	10	Kings
G-108022-A1	Agricultural Tractor	Diesel	2005	189	Tier 2	2022	123	Tier 4 Final	500	0	0	10	Madera
G-98161-A1	Back Hoe	Diesel	2003	86	Tier 1	2022	109	Tier 4 Final	650	0	0	10	Kern
G-97656-A1	Agricultural Tractor	Diesel	1995	134	Tier 0	2022	155	Tier 4 Final	500	0	0	10	Fresno
G-116824-A1	Agricultural Tractor	Diesel	1967	270	Tier 0	2021	340	Tier 4 Final	1000	0	0	10	Merced
G-110467-A1	Tomato Harvester	Diesel	2005	225	Tier 2	2022	225	Tier 4 Final	900	0	0	10	Fresno
G-113412-A1	Agricultural Tractor	Diesel	2000	120	Tier 1	2021	155	Tier 4 Final	179	0	0	10	San Joaquin
G-113411-A1	Agricultural Tractor	Diesel	2000	110	Tier 1	2021	155	Tier 4 Final	180	0	0	10	San Joaquin
G-113406-A1	Agricultural Tractor	Diesel	2005	86	Tier 2	2021	114	Tier 4 Final	299	0	0	10	San Joaquin
G-113404-A1	Agricultural Tractor	Diesel	2005	86	Tier 2	2021	114	Tier 4 Final	302	0	0	10	San Joaquin
G-113402-A1	Agricultural Tractor	Diesel	2003	89	Tier 1	2021	114	Tier 4 Final	290	0	0	10	San Joaquin
G-103978-A1	Sweeper	Diesel	1984	80	Tier 0	2022	74	Tier 4 Final	400	0	0	10	San Joaquin
G-103977-A1	Sweeper	Diesel	2003	80	Tier 1	2022	74	Tier 4 Final	400	0	0	10	San Joaquin
G-116061-A1	Agricultural Tractor	Diesel	2004	89	Tier 2	2021	108	Tier 4 Final	450	0	0	10	San Joaquin
G-119400-A1	Agricultural Tractor	Diesel	2000	95	Tier 1	2021	101	Tier 4 Final	1000	0	0	10	Kings
G-115440-A1	Tractor	Diesel	1978	97	Tier 0	2022	106	Tier 4 Phase In/Alt NOx	750	0	0	10	Fresno
G-113332-A1	Wheel Loader	Diesel	2004	153	Tier 2	2022	192	Tier 4 Final	1800	0	0	10	Stanislaus
G-113700-A1	Agricultural Tractor	Diesel	1990	89	Tier 0	2021	114	Tier 4 Final	400	0	0	10	Stanislaus
C-57058-1-A1	Agricultural Tractor	Diesel	1978	156	Tier 0	2022	196	Tier 4 Final	500	0	0	10	Madera
G-102395-A1	Back Hoe	Diesel	1990	69	Tier 0	2022	100	Tier 4 Final	1460	0	0	10	Stanislaus
G-90683-A1	Agricultural Tractor	Diesel	2004	32	Tier 2	2022	40	Tier 4 Final	200	0	0	10	Madera
G-115423-A1	Agricultural Tractor	Diesel	2003	120	Tier 2	2021	123	Tier 4 Final	455	0	0	10	Kern
G-107012-A1	Agricultural Tractor	Diesel	1995	25	Tier 0	2021	34	Tier 4 Final	600	0	0	10	San Joaquin



## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-107011-A1	Agricultural Tractor	Diesel	1995	25	Tier 0	2021	34	Tier 4 Final	600	0	0	10	San Joaquin
G-113833-A1	Wheel Loader	Diesel	1978	151	Tier 0	2021	272	Tier 4 Final	1200	0	0	10	Stanislaus
G-113329-A1	Excavator	Diesel	2004	247	Tier 2	2022	273	Tier 4 Final	1800	0	0	10	Fresno
G-108474-A1	Skid Loader	Diesel	2004	90	Tier 2	2022	73	Tier 4 Final	1200	0	0	10	Stanislaus
G-109433-A1	Agricultural Tractor	Diesel	2006	109	Tier 2	2021	114	Tier 4 Final	500	0	0	10	Stanislaus
C-63170-1-A1	Wheel Loader	Diesel	2006	180	Tier 2	2022	192	Tier 4 Final	1800	0	0	10	Tulare
G-114060-A1	Tractor	Diesel	1992	95	Tier 0	2018	115	Tier 4 Final	250	0	0	10	Fresno
G-111907-A1	Agricultural Tractor	Diesel	1974	76	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	100	0	0	10	Fresno
C-51760-1-A1	Agricultural Tractor	Diesel	2001	82	Tier 1	2021	114	Tier 4 Final	2000	0	0	10	Stanislaus
G-101290-A1	Back Hoe	Diesel	2005	92	Tier 2	2020	90	Tier 4 Final	1000	0	0	10	Kern
G-102188-A1	Agricultural Tractor	Diesel	1997	114	Tier 1	2021	90	Tier 4 Final	700	0	0	10	Kern
G-112039-A1	Wheel Loader	Diesel	1973	80	Tier 0	2021	173	Tier 4 Final	1000	0	0	10	Tulare
G-112038-A1	Wheel Loader	Diesel	1975	80	Tier 0	2021	173	Tier 4 Final	1000	0	0	10	Tulare
G-111010-A1	Forklift	Diesel	1985	76	Tier 0	2020	74	Tier 4 Final	600	0	0	10	Kern
G-108162-A1	Skid Loader	Diesel	1999	60	Tier 1	2022	74	Tier 4 Final	600	0	0	10	Kern
G-113571-A1	Agricultural Tractor	Diesel	2006	113	Tier 2	2021	108	Tier 4 Final	300	0	0	10	Tulare
G-112857-A1	Agricultural Tractor	Diesel	2001	75	Tier 1	2021	106	Tier 4 Final	500	0	0	10	Tulare
G-113303-A1	Shaker	Diesel	2000	125	Tier 1	2020	148	Tier 4 Final	500	0	0	10	Tulare
G-108411-A1	Agricultural Tractor	Diesel	2007	52	Tier 2	2022	123	Tier 4 Final	500	0	0	10	Fresno
G-90192-A1	Shaker	Diesel	2003	130	Tier 2	2022	148	Tier 4 Final	500	0	0	10	Fresno
G-100220-A1	Agricultural Tractor	Diesel	1983	30	Tier 0	2020	38	Tier 4 Final	350	0	0	10	Fresno
G-108253-A1	Agricultural Tractor	Diesel	1997	78	Tier 0	2022	69	Tier 4 Final	500	0	0	10	Tulare
G-114045-A1	Tractor	Diesel	1992	104	Tier 0	2021	113	Tier 4 Final	150	0	0	10	Tulare
G-91450-A1	Agricultural Tractor	Diesel	2007	99	Tier 2	2022	123	Tier 4 Final	3700	0	0	10	Tulare
G-97732-A1	Agricultural Tractor	Diesel	2002	300	Tier 1	2022	340	Tier 4 Final	700	0	0	10	Tulare
G-114808-A1	Wheel Loader	Diesel	2002	140	Tier 1	2021	139	Tier 4 Final	1400	0	0	10	Stanislaus
G-112867-A1	Agricultural Tractor	Diesel	2004	113	Tier 2	2021	123	Tier 4 Final	600	0	0	10	Fresno
G-111455-A1	Agricultural Tractor	Diesel	1997	360	Tier 1	2021	666	Tier 4 Final	450	0	0	10	Stanislaus
G-104146-A1	Agricultural Tractor	Diesel	1976	50	Tier 0	2021	58	Tier 4 Final	150	0	0	10	Stanislaus

Project Type Off-Road

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## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-117217-A1	Agricultural Tractor	Diesel	1969	57	Tier 0	2022	30	Tier 4 Final	200	0	0	10	Merced
G-113933-A1	Back Hoe	Diesel	1990	69	Tier 0	2022	92	Tier 4 Final	1500	0	0	10	Fresno
G-114767-A1	Agricultural Tractor	Diesel	2002	98	Tier 1	2022	123	Tier 4 Final	450	0	0	10	Tulare
G-97368-A1	Agricultural Tractor	Diesel	2004	99	Tier 2	2021	114	Tier 4 Final	500	0	0	10	Fresno
G-113684-A1	Almond Sweeper	Diesel	1993	80	Tier 0	2021	74	Tier 4 Final	1000	0	0	10	Fresno
G-115705-A1	Back Hoe	Diesel	1978	62	Tier 0	2021	74	Tier 4 Final	500	0	0	10	Tulare
G-108466-A1	Agricultural Tractor	Diesel	1993	33	Tier 0	2022	38	Tier 4 Final	250	0	0	10	Fresno
G-112446-A1	Shaker	Diesel	2004	156	Tier 2	2022	173	Tier 4 Final	500	0	0	10	San Joaquin
G-115700-A1	Agricultural Tractor	Diesel	1991	109	Tier 0	2022	123	Tier 4 Final	800	0	0	10	Merced
G-110590-A1	Agricultural Tractor	Diesel	1992	88	Tier 0	2021	114	Tier 4 Final	175	0	0	10	Kern
G-113680-A1	Tractor	Diesel	1980	52	Tier 0	2021	73	Tier 4 Final	400	0	0	10	Stanislaus
G-66790-A1	Agricultural Tractor	Diesel	1973	151	Tier 0	2022	123	Tier 4 Final	400	0	0	10	Fresno
G-110864-A1	Back Hoe	Diesel	1977	59	Tier 0	2022	74	Tier 4 Final	1100	0	0	10	Tulare
G-108619-A1	Agricultural Tractor	Diesel	1997	269	Tier 1	2021	123	Tier 4 Final	400	0	0	10	Fresno
G-101706-A1	Agricultural Tractor	Diesel	2004	41	Tier 2	2022	90	Tier 4 Final	900	0	0	10	Madera
G-109212-A1	Agricultural Tractor	Diesel	1976	50	Tier 0	2022	63	Tier 4 Final	400	0	0	10	Stanislaus
G-103085-A1	Agricultural Tractor	Diesel	1968	114	Tier 0	2020	123	Tier 4 Final	500	0	0	10	Kings
G-105726-A1	Shaker	Diesel	1993	80	Tier 0	2021	115	Tier 4 Final	500	0	0	10	Fresno
G-105729-A1	Pistachio Catcher	Diesel	1993	80	Tier 0	2021	115	Tier 4 Final	500	0	0	10	Fresno
G-112236-A1	Forklift	Diesel	2001	75	Tier 1	2021	74	Tier 4 Final	1000	0	0	10	Kern
G-109342-A1	Back Hoe	Diesel	1988	62	Tier 0	2022	92	Tier 4 Final	300	0	0	10	San Joaquin
G-66715-A1	Agricultural Tractor	Diesel	1976	103	Tier 0	2021	123	Tier 4 Final	300	0	0	10	Fresno
G-105728-A1	Pistachio Catcher	Diesel	1993	80	Tier 0	2020	115	Tier 4 Final	500	0	0	10	Fresno
G-105727-A1	Shaker	Diesel	1993	80	Tier 0	2021	115	Tier 4 Final	500	0	0	10	Fresno
G-110489-A1	Agricultural Tractor	Diesel	2003	116	Tier 2	2022	145	Tier 4 Final	500	0	0	10	Kern
G-104745-A1	Skid Loader	Diesel	1999	91	Tier 1	2021	74	Tier 4 Final	250	0	0	10	San Joaquin
G-102648-A1	Shaker	Diesel	2000	125	Tier 1	2022	173	Tier 4 Final	311	0	0	10	Kern
G-113487-A1	Agricultural Tractor	Diesel	1998	90	Tier 1	2022	123	Tier 4 Final	300	0	0	10	Madera
G-108773-A1	Shaker	Diesel	2004	156	Tier 2	2021	148	Tier 4 Final	800	0	0	10	San Joaquin

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-108771-A1	Shaker	Diesel	2005	156	Tier 2	2021	148	Tier 4 Final	800	0	0	10	San Joaquin
G-115177-A1	Agricultural Tractor	Diesel	2006	105	Tier 2	2022	123	Tier 4 Final	500	0	0	10	Stanislaus
G-115212-A1	Agricultural Tractor	Diesel	2004	98	Tier 2	2022	123	Tier 4 Final	500	0	0	10	Stanislaus
G-115211-A1	Agricultural Tractor	Diesel	2006	109	Tier 2	2022	123	Tier 4 Final	500	0	0	10	Stanislaus
G-96749-A1	Agricultural Tractor	Diesel	2001	181	Tier 1	2022	196	Tier 4 Final	1000	0	0	10	Tulare
G-116201-A1	Shaker	Diesel	2000	125	Tier 1	2020	148	Tier 4 Final	500	0	0	10	Fresno
G-109744-A1	Agricultural Tractor	Diesel	1992	88	Tier 0	2021	73	Tier 4 Final	300	0	0	10	Stanislaus
G-107032-A1	Skid Loader	Diesel	2004	79	Tier 2	2021	73	Tier 4 Final	500	0	0	10	Stanislaus
G-113575-A1	Agricultural Tractor	Diesel	1975	168	Tier 0	2019	125	Tier 4 Final	300	0	0	10	San Joaquin
G-104717-A1	Back Hoe	Diesel	1991	71	Tier 0	2021	96	Tier 4 Final	450	0	0	10	Stanislaus
G-104408-A1	Agricultural Tractor	Diesel	2000	90	Tier 1	2022	101	Tier 4 Final	200	0	0	10	San Joaquin
G-116114-A1	Agricultural Tractor	Diesel	1966	69	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	600	0	0	10	Tulare
G-120150-A1	Agricultural Tractor	Diesel	2003	40	Tier 1	2020	52	Tier 4 Final	500	0	0	10	Kern
G-113927-A1	Agricultural Tractor	Diesel	2006	40	Tier 2	2019	33	Tier 4 Final	300	0	0	10	Kern
G-111919-A1	Agricultural Tractor	Diesel	2007	33	Tier 2	2019	33	Tier 4 Final	200	0	0	10	Kern
G-111917-A1	Agricultural Tractor	Diesel	2007	33	Tier 2	2019	33	Tier 4 Final	200	0	0	10	Kern
G-110373-A1	Sweeper	Diesel	1984	32	Tier 0	2022	74	Tier 4 Final	400	0	0	10	Merced
G-112037-A1	Forklift	Diesel	2002	85	Tier 1	2021	74	Tier 4 Final	1000	0	0	10	Kern
G-111288-A1	Agricultural Tractor	Diesel	1982	98	Tier 0	2022	120	Tier 4 Final	500	0	0	10	Kern
G-111815-A1	Tractor	Diesel	1973	46	Tier 0	2022	73	Tier 4 Final	250	0	0	10	Stanislaus
G-116293-A1	Back Hoe	Diesel	1970	59	Tier 0	2022	92	Tier 4 Final	200	0	0	10	Fresno
G-110736-A1	Agricultural Tractor	Diesel	1981	158	Tier 0	2022	123	Tier 4 Final	300	0	0	10	Merced
G-94310-A1	Agricultural Tractor	Diesel	1982	97	Tier 0	2021	110	Tier 4 Final	300	0	0	10	Merced
G-112694-A1	Shaker	Diesel	1999	125	Tier 1	2020	148	Tier 4 Final	550	0	0	10	Merced
G-102184-A1	Agricultural Tractor	Diesel	1999	360	Tier 1	2021	514	Tier 4 Final	800	0	0	10	Kern
G-111062-A1	Agricultural Tractor	Diesel	1967	54	Tier 0	2021	114	Tier 4 Final	500	0	0	10	Merced
G-108475-A1	Tractor	Diesel	1951	52	Tier 0	2022	59	Tier 4 Final	400	0	0	10	Merced
G-107028-A1	Wheel Loader	Diesel	1999	183	Tier 1	2021	307	Tier 4 Final	4500	0	0	10	Fresno
G-108703-A1	Agricultural Tractor	Diesel	2004	425	Tier 2	2021	666	Tier 4 Final	1200	0	0	10	Merced

Project Type Off-Road

**SJVAPCD Project Data 2023**

**Description Vehicle Replacement**

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-113427-A1	Agricultural Tractor	Diesel	2006	129	Tier 2	2022	145	Tier 4 Final	535	0	0	10	Stanislaus
G-67058-A1	Agricultural Tractor	Diesel	1979	60	Tier 0	2021	99	Tier 4 Final	250	0	0	10	Fresno
G-100948-A1	Agricultural Tractor	Diesel	1997	260	Tier 1	2021	310	Tier 4 Final	800	0	0	10	Kings
G-100952-A1	er Agricultural Equipm	Diesel	1991	27	Tier 0	2021	37	Tier 4 Final	159	0	0	10	San Joaquin
G-111362-A1	Agricultural Tractor	Diesel	1986	67	Tier 0	2021	125	Tier 4 Final	4000	0	0	10	Kings
G-111321-A1	Agricultural Tractor	Diesel	1998	91	Tier 1	2022	123	Tier 4 Final	1000	0	0	10	Madera
G-111050-A1	Agricultural Tractor	Diesel	1978	54	Tier 0	2022	73	Tier 4 Final	200	0	0	10	Tulare
G-126098-A1	Sweeper	Diesel	1997	80	Tier 0	2022	74	Tier 4 Final	400	0	0	10	Kings
G-106122-A1	Agricultural Tractor	Diesel	1990	81	Tier 0	2021	114	Tier 4 Final	400	0	0	10	Tulare
G-115821-A1	Tractor	Diesel	2005	113	Tier 2	2022	114	Tier 4 Final	500	0	0	10	Madera
G-114058-A1	Agricultural Tractor	Diesel	2007	95	Tier 2	2022	114	Tier 4 Final	500	0	0	10	Madera
G-114057-A1	Tractor	Diesel	2006	109	Tier 2	2022	114	Tier 4 Final	500	0	0	10	Madera
G-114055-A1	Tractor	Diesel	2006	109	Tier 2	2022	114	Tier 4 Final	500	0	0	10	Madera
G-112538-A1	Forklift	Diesel	1986	55	Tier 0	2020	74	Tier 4 Final	500	0	0	10	Tulare
G-124314-A1	Sweeper	Diesel	2007	80	Tier 2	2022	74	Tier 4 Final	500	0	0	10	Kern
G-111814-A1	Agricultural Tractor	Diesel	1989	97	Tier 0	2021	106	Tier 4 Final	200	0	0	10	Fresno
G-125338-A1	Wheel Loader	Diesel	2006	143	Tier 2	2022	183	Tier 4 Final	2000	0	0	10	Kings
G-117216-A1	Shaker	Diesel	1998	125	Tier 1	2020	148	Tier 4 Final	500	0	0	10	Fresno
G-101831-A1	Shaker	Diesel	2006	130	Tier 2	2020	173	Tier 4 Final	500	0	0	10	Stanislaus
G-116062-A1	Agricultural Tractor	Diesel	2005	209	Tier 2	2022	233	Tier 4 Final	1800	0	0	10	Tulare
G-126551-A1	Self-Propelled Harveste	Diesel	1980	104	Tier 0	2022	174	Tier 4 Final	950	0	0	10	Merced
G-116134-A1	Tractor	Diesel	2007	92	Tier 2	2021	106	Tier 4 Phase In/Alt NOx	400	0	0	10	Kern
G-116365-A1	Skid Loader	Diesel	2001	75	Tier 1	2021	73	Tier 4 Final	300	0	0	10	Stanislaus
G-125045-A1	Shaker	Diesel	1988	104	Tier 0	2021	174	Tier 4 Final	500	0	0	10	Kings
G-113153-A1	Almond Sweeper	Diesel	1994	38	Tier 0	2021	48	Tier 4 Final	300	0	0	10	Stanislaus
G-111216-A1	Agricultural Tractor	Diesel	1981	185	Tier 0	2022	123	Tier 4 Final	400	0	0	10	Kings
G-112438-A1	Agricultural Tractor	Diesel	1989	142	Tier 0	2022	123	Tier 4 Final	500	0	0	10	Kings
G-111458-A1	Forklift	Diesel	1986	52	Tier 0	2022	74	Tier 4 Final	500	0	0	10	Kern
G-113441-A1	Wheel Loader	Diesel	2006	80	Tier 2	2021	162	Tier 4 Final	500	0	0	10	Madera

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-121237-A1	Agricultural Tractor	Diesel	1986	66	Tier 0	2021	113	Tier 4 Final	115	0	0	10	San Joaquin
G-99855-A1	Agricultural Tractor	Diesel	2005	92	Tier 2	2021	106	Tier 4 Phase In/Alt NOx	400	0	0	10	Fresno
G-103890-A1	Shaker	Diesel	2004	156	Tier 2	2020	148	Tier 4 Final	505	0	0	10	Merced
G-118939-A1	Agricultural Tractor	Diesel	1999	175	Tier 1	2021	370	Tier 4 Final	500	0	0	10	Kern
G-93691-A1	Agricultural Tractor	Diesel	2005	258	Tier 2	2022	250	Tier 4 Final	2000	0	0	10	Fresno
G-126397-A1	Agricultural Tractor	Diesel	1972	47	Tier 0	2022	114	Tier 4 Final	500	0	0	10	Kern
G-117810-A1	Agricultural Tractor	Diesel	2005	98	Tier 2	2021	106	Tier 4 Final	1500	0	0	10	Madera
G-96960-A1	Almond Elevator	Diesel	1995	80	Tier 0	2021	74	Tier 4 Final	1500	0	0	10	Madera
G-102874-A1	Agricultural Tractor	Diesel	2005	225	Tier 2	2022	230	Tier 4 Final	1200	0	0	10	Merced
G-96344-A1	Shaker	Diesel	1985	166	Tier 0	2022	148	Tier 4 Final	305	0	0	10	Fresno
G-96340-A1	Pistachio Catcher	Diesel	1984	158	Tier 0	2022	121	Tier 4 Final	305	0	0	10	Fresno
G-96328-A1	Pistachio Catcher	Diesel	1982	130	Tier 0	2021	121	Tier 4 Final	205	0	0	10	Fresno
G-96326-A1	Pistachio Harvester	Diesel	1984	158	Tier 0	2021	148	Tier 4 Final	205	0	0	10	Fresno
G-96318-A1	Pistachio Harvester	Diesel	1982	121	Tier 0	2021	148	Tier 4 Final	205	0	0	10	Fresno
G-96317-A1	Pistachio Harvester	Diesel	1982	121	Tier 0	2021	121	Tier 4 Final	205	0	0	10	Fresno
G-113731-A1	Agricultural Tractor	Diesel	2006	96	Tier 2	2019	114	Tier 4 Final	300	0	0	10	Stanislaus
G-114542-A1	Tractor	Diesel	2004	86	Tier 2	2021	106	Tier 4 Phase In/Alt NOx	210	0	0	10	Tulare
G-114543-A1	Agricultural Tractor	Diesel	2007	97	Tier 2	2021	106	Tier 4 Phase In/Alt NOx	374	0	0	10	Tulare
G-114531-A1	Tractor	Diesel	2003	90	Tier 1	2021	106	Tier 4 Phase In/Alt NOx	281	0	0	10	Tulare
G-110719-A1	Agricultural Tractor	Diesel	1981	25	Tier 0	2022	35	Tier 4 Final	1456	0	0	10	Tulare
G-110717-A1	Agricultural Tractor	Diesel	1981	25	Tier 0	2022	35	Tier 4 Final	1456	0	0	10	Tulare
G-110718-A1	Agricultural Tractor	Diesel	1981	25	Tier 0	2022	35	Tier 4 Final	1456	0	0	10	Tulare
G-110721-A1	Agricultural Tractor	Diesel	1981	25	Tier 0	2022	35	Tier 4 Final	1456	0	0	10	Tulare
G-110716-A1	Agricultural Tractor	Diesel	1981	25	Tier 0	2022	35	Tier 4 Final	1456	0	0	10	Tulare
G-110715-A1	Agricultural Tractor	Diesel	1981	25	Tier 0	2022	35	Tier 4 Final	1456	0	0	10	Tulare
C-52852-1-A1	Agricultural Tractor	Diesel	1998	101	Tier 1	2021	165	Tier 4 Final	1250	0	0	10	Madera
G-105869-A1	Agricultural Tractor	Diesel	1995	81	Tier 0	2021	114	Tier 4 Final	250	0	0	10	Fresno
G-105868-A1	Agricultural Tractor	Diesel	2001	85	Tier 1	2021	114	Tier 4 Final	250	0	0	10	Fresno
G-113727-A1	Tractor	Diesel	1971	70	Tier 0	2022	73	Tier 4 Final	100	0	0	10	Fresno

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-66802-A1	Agricultural Tractor	Diesel	2002	260	Tier 1	2021	123	Tier 4 Final	600	0	0	10	Kings
G-107005-A1	Windrower	Diesel	2002	165	Tier 1	2021	266	Tier 4 Final	450	0	0	10	Fresno
G-121747-A1	Almond Sweeper	Diesel	2007	80	Tier 2	2020	142	Tier 4 Final	475	0	0	10	Madera
G-121749-A1	Almond Shaker	Diesel	2005	135	Tier 2	2022	139	Tier 4 Final	510	0	0	10	Madera
G-101965-A1	Agricultural Tractor	Diesel	1974	76	Tier 0	2019	98	Tier 4 Phase In/Alt NOx	500	0	0	10	San Joaquin
G-114048-A1	Agricultural Tractor	Diesel	1978	50	Tier 0	2021	74	Tier 4 Final	150	0	0	10	Tulare
G-112033-A1	Shaker	Diesel	1988	121	Tier 0	2020	148	Tier 4 Final	375	0	0	10	Merced
G-115547-A1	Agricultural Tractor	Diesel	2001	85	Tier 1	2021	106	Tier 4 Final	400	0	0	10	San Joaquin
G-114046-A1	Agricultural Tractor	Diesel	1997	120	Tier 1	2021	145	Tier 4 Final	250	0	0	10	Merced
G-118976-A1	Agricultural Tractor	Diesel	1998	360	Tier 1	2020	380	Tier 4 Final	350	0	0	10	Merced
G-111920-A1	Agricultural Tractor	Diesel	2006	90	Tier 2	2022	114	Tier 4 Final	500	0	0	10	Fresno
G-99285-A1	Forklift	Diesel	1978	52	Tier 0	2022	74	Tier 4 Final	500	0	0	10	Tulare
G-109808-A1	Agricultural Tractor	Diesel	1978	127	Tier 0	2021	114	Tier 4 Final	450	0	0	10	Stanislaus
G-115313-A1	Agricultural Tractor	Diesel	1982	84	Tier 0	2021	113	Tier 4 Final	250	0	0	10	Stanislaus
G-111925-A1	Forklift	Diesel	1988	52	Tier 0	2021	74	Tier 4 Final	212	0	0	10	Stanislaus
G-122682-A1	Agricultural Tractor	Diesel	1991	180	Tier 0	2022	250	Tier 4 Final	500	0	0	10	San Joaquin
G-123212-A1	Agricultural Tractor	Diesel	2006	125	Tier 2	2022	123	Tier 4 Final	400	0	0	10	Stanislaus
G-93692-A1	Almond Shaker	Diesel	1981	104	Tier 0	2022	173	Tier 4 Final	400	0	0	10	Fresno
G-103076-A1	Agricultural Tractor	Diesel	2005	189	Tier 2	2022	196	Tier 4 Final	500	0	0	10	Fresno
G-103078-A1	Agricultural Tractor	Diesel	2002	300	Tier 1	2022	196	Tier 4 Final	500	0	0	10	Fresno
G-103077-A1	Agricultural Tractor	Diesel	2003	199	Tier 2	2022	196	Tier 4 Final	400	0	0	10	Fresno
G-113686-A1	Agricultural Tractor	Diesel	1994	120	Tier 0	2021	165	Tier 4 Final	800	0	0	10	Merced
G-103280-A1	Agricultural Tractor	Diesel	1981	186	Tier 0	2022	230	Tier 4 Final	1800	0	0	10	Kings
G-103279-A1	Agricultural Tractor	Diesel	1981	186	Tier 0	2022	230	Tier 4 Final	1800	0	0	10	Kings
G-112691-A1	Agricultural Tractor	Diesel	2004	504	Tier 2	2021	671	Tier 4 Final	750	0	0	10	Madera
G-124568-A1	Agricultural Tractor	Diesel	2003	263	Tier 2	2021	250	Tier 4 Final	1000	0	0	10	Kern
G-124548-A1	Agricultural Tractor	Diesel	2004	259	Tier 2	2021	250	Tier 4 Final	1000	0	0	10	Kern
G-124546-A1	Agricultural Tractor	Diesel	1996	170	Tier 0	2021	250	Tier 4 Final	1000	0	0	10	Kern
G-95473-A1	Agricultural Tractor	Diesel	1981	97	Tier 0	2021	105	Tier 4 Final	169	0	0	10	San Joaquin

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-95934-A1	Agricultural Tractor	Diesel	1989	97	Tier 0	2021	105	Tier 4 Final	165	0	0	10	San Joaquin
G-115548-A1	Agricultural Tractor	Diesel	2006	105	Tier 2	2019	114	Tier 4 Final	400	0	0	10	San Joaquin
G-102164-A1	Back Hoe	Diesel	2005	89	Tier 2	2022	134	Tier 4 Final	500	0	0	10	Merced
G-108417-A1	Agricultural Tractor	Diesel	1997	68	Tier 0	2021	73	Tier 4 Final	100	0	0	10	Stanislaus
G-120265-A1	Agricultural Tractor	Diesel	2001	89	Tier 1	2021	106	Tier 4 Final	400	0	0	10	San Joaquin
G-991111-A1	Shaker	Diesel	2003	130	Tier 2	2022	139	Tier 4 Final	390	0	0	10	Madera
G-91309-A1	Agricultural Tractor	Diesel	1996	156	Tier 0	2022	210	Tier 4 Final	450	0	0	10	San Joaquin
G-103330-A1	Agricultural Tractor	Diesel	2004	316	Tier 2	2022	400	Tier 4 Final	1800	0	0	10	Kings
G-108468-A1	Agricultural Tractor	Diesel	1981	80	Tier 0	2021	114	Tier 4 Final	200	0	0	10	Merced
G-110747-A1	Back Hoe	Diesel	1989	83	Tier 0	2021	62	Tier 4 Final	260	0	0	10	Merced
G-103397-A1	Wheel Loader	Diesel	1999	125	Tier 1	2021	68	Tier 4 Final	2000	0	0	10	Tulare
G-119370-A1	Agricultural Tractor	Diesel	1978	60	Tier 0	2022	73	Tier 4 Final	90	0	0	10	Stanislaus
G-103237-A1	Back Hoe	Diesel	1987	69	Tier 0	2020	74	Tier 4 Final	500	0	0	10	Tulare
G-113591-A1	Agricultural Tractor	Diesel	2000	29	Tier 1	2021	35	Tier 4 Final	350	0	0	10	Merced
G-97098-A1	Agricultural Tractor	Diesel	2005	54	Tier 2	2021	72	Tier 4 Final	2200	0	0	10	Madera
G-113408-A1	Agricultural Tractor	Diesel	1998	130	Tier 1	2022	104	Tier 4 Final	152	0	0	10	San Joaquin
G-113409-A1	Agricultural Tractor	Diesel	1999	130	Tier 1	2022	104	Tier 4 Final	155	0	0	10	San Joaquin
G-112534-A1	Agricultural Tractor	Diesel	1986	188	Tier 0	2022	230	Tier 4 Final	800	0	0	10	Kings
G-134489-A1	Agricultural Tractor	Diesel	1997	360	Tier 1	2020	410	Tier 4 Final	380	0	0	10	Fresno
G-119543-A1	Skid Loader	Diesel	2005	52	Tier 2	2021	67	Tier 4 Final	2500	0	0	10	Tulare
G-114796-A1	Wheel Loader	Diesel	1984	158	Tier 0	2021	173	Tier 4 Final	1000	0	0	10	Merced
G-118265-A1	Back Hoe	Diesel	1978	62	Tier 0	2021	96	Tier 4 Final	500	0	0	10	Stanislaus
G-100582-A1	Agricultural Tractor	Diesel	2006	105	Tier 2	2022	106	Tier 4 Final	500	0	0	10	Fresno
G-100578-A1	Agricultural Tractor	Diesel	2003	92	Tier 1	2022	106	Tier 4 Final	500	0	0	10	Fresno
G-100577-A1	Agricultural Tractor	Diesel	2005	105	Tier 2	2022	106	Tier 4 Final	500	0	0	10	Fresno
G-109842-A1	Agricultural Tractor	Diesel	2002	115	Tier 1	2022	123	Tier 4 Final	300	0	0	10	Stanislaus
G-114430-A1	Wheel Loader	Diesel	1993	251	Tier 0	2018	245	Tier 4 Final	300	0	0	10	Stanislaus
G-117356-A1	Agricultural Tractor	Diesel	2007	99	Tier 2	2022	114	Tier 4 Final	600	0	0	10	Stanislaus
G-113733-A1	Agricultural Tractor	Diesel	1999	75	Tier 1	2022	74	Tier 4 Final	300	0	0	10	Stanislaus

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-112295-A1	Wheel Loader	Diesel	1985	120	Tier 0	2021	103	Tier 4 Final	190	0	0	10	Kern
G-81799-A1	Shaker	Diesel	2001	125	Tier 1	2021	173	Tier 4 Final	250	0	0	10	Merced
G-107123-A1	Agricultural Tractor	Diesel	1995	270	Tier 0	2022	155	Tier 4 Final	250	0	0	10	Merced
G-112164-A1	Agricultural Tractor	Diesel	1979	38	Tier 0	2021	73	Tier 4 Final	250	0	0	10	Merced
G-116060-A1	Sweeper	Diesel	1991	80	Tier 0	2022	74	Tier 4 Final	230	0	0	10	San Joaquin
G-116224-A1	Agricultural Tractor	Diesel	2005	207	Tier 2	2022	196	Tier 4 Final	500	0	0	10	Fresno
G-122627-A1	Shaker	Diesel	1998	125	Tier 1	2021	148	Tier 4 Final	400	0	0	10	Fresno
G-108723-A1	Agricultural Tractor	Diesel	1963	61	Tier 0	2021	73	Tier 4 Final	251	0	0	10	San Joaquin
G-118499-A1	Agricultural Tractor	Diesel	1986	94	Tier 0	2022	114	Tier 4 Final	200	0	0	10	Fresno
G-108768-A1	Agricultural Tractor	Diesel	1987	60	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	200	0	0	10	Tulare
G-109347-A1	Agricultural Tractor	Diesel	2004	244	Tier 2	2021	243	Tier 4 Final	500	0	0	10	Fresno
G-107842-A1	Agricultural Tractor	Diesel	1989	204	Tier 0	2020	291	Tier 4 Final	400	0	0	10	Merced
G-113230-A1	Agricultural Tractor	Diesel	1986	77	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	750	0	0	10	Fresno
G-107394-A1	Agricultural Tractor	Diesel	2006	80	Tier 2	2021	73	Tier 4 Final	500	0	0	10	Stanislaus
G-104051-A1	Wheel Loader	Diesel	1998	111	Tier 1	2021	164	Tier 4 Final	500	0	0	10	Merced
G-115004-A1	Agricultural Tractor	Diesel	1979	40	Tier 0	2021	65	Tier 4 Final	1095	0	0	10	Kings
G-113246-A1	Shaker	Diesel	2002	125	Tier 1	2020	139	Tier 4 Final	400	0	0	10	Tulare
G-87674-A1	Agricultural Tractor	Diesel	1980	132	Tier 0	2022	155	Tier 4 Final	2000	0	0	10	Fresno
G-87673-A1	Agricultural Tractor	Diesel	1980	156	Tier 0	2022	155	Tier 4 Final	2000	0	0	10	Fresno
G-116055-A1	Back Hoe	Diesel	2006	95	Tier 2	2019	96	Tier 4 Final	400	0	0	10	Kern
G-103887-A1	Shaker	Diesel	1998	130	Tier 1	2022	173	Tier 4 Final	325	0	0	10	Merced
G-120389-A1	Agricultural Tractor	Diesel	2005	92	Tier 2	2022	114	Tier 4 Final	400	0	0	10	San Joaquin
G-134446-A1	Agricultural Tractor	Diesel	1998	101	Tier 1	2021	115	Tier 4 Final	200	0	0	10	Merced
G-111627-A1	Agricultural Tractor	Diesel	1977	45	Tier 0	2022	51	Tier 4 Final	1000	0	0	10	Kings
G-112455-A1	Agricultural Tractor	Diesel	1968	103	Tier 0	2022	138	Tier 4 Final	550	0	0	10	Merced
G-97573-A1	Skid Loader	Diesel	2003	99	Tier 1	2020	74	Tier 4 Final	400	0	0	10	Kern
G-130622-A1	Agricultural Tractor	Diesel	2006	115	Tier 2	2021	125	Tier 4 Final	500	0	0	10	Tulare
G-99058-A1	Skid Loader	Diesel	1992	42	Tier 0	2020	74	Tier 4 Final	600	0	0	10	Kern
G-97582-A1	Skid Loader	Diesel	2007	61	Tier 2	2020	74	Tier 4 Final	430	0	0	10	Kern



Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-99055-A1	Skid Loader	Diesel	1992	44	Tier 0	2020	74	Tier 4 Final	300	0	0	10	Kern
G-115064-A1	Tractor	Diesel	2003	90	Tier 1	2021	114	Tier 4 Final	500	0	0	10	Stanislaus
G-115068-A1	Agricultural Tractor	Diesel	2004	99	Tier 2	2022	114	Tier 4 Final	500	0	0	10	Stanislaus
G-115067-A1	Agricultural Tractor	Diesel	2005	99	Tier 2	2022	114	Tier 4 Final	500	0	0	10	Stanislaus
G-115066-A1	Agricultural Tractor	Diesel	2005	99	Tier 2	2021	114	Tier 4 Final	500	0	0	10	Stanislaus
G-123788-A1	Shaker	Diesel	1984	104	Tier 0	2021	148	Tier 4 Final	300	0	0	10	Fresno
G-115063-A1	Tractor	Diesel	2003	90	Tier 1	2022	114	Tier 4 Final	500	0	0	10	Stanislaus
G-115061-A1	Agricultural Tractor	Diesel	2003	90	Tier 1	2021	114	Tier 4 Final	500	0	0	10	Stanislaus
G-115059-A1	Agricultural Tractor	Diesel	2007	99	Tier 2	2022	114	Tier 4 Final	500	0	0	10	Stanislaus
G-135028-A1	Agricultural Tractor	Diesel	1949	63	Tier 0	2016	101	Tier 4 Final	500	0	0	10	Stanislaus
G-114540-A1	Agricultural Tractor	Diesel	2000	45	Tier 1	2021	73	Tier 4 Final	125	0	0	10	Tulare
G-114534-A1	Tractor	Diesel	2000	45	Tier 1	2021	73	Tier 4 Final	125	0	0	10	Tulare
G-114537-A1	Agricultural Tractor	Diesel	2000	45	Tier 1	2021	73	Tier 4 Final	127	0	0	10	Tulare
G-114532-A1	Tractor	Diesel	2000	45	Tier 1	2021	73	Tier 4 Final	127	0	0	10	Tulare
G-121765-A1	Agricultural Tractor	Diesel	2005	98	Tier 2	2022	123	Tier 4 Final	500	0	0	10	Fresno
G-118778-A1	Agricultural Tractor	Diesel	1977	72	Tier 0	2021	39	Tier 4 Final	200	0	0	10	Fresno
G-108788-A1	Shaker	Diesel	2006	130	Tier 2	2022	173	Tier 4 Final	700	0	0	10	Kern
G-108789-A1	Shaker	Diesel	2006	130	Tier 2	2022	173	Tier 4 Final	700	0	0	10	Kern
C-52385-1-A1	Wheel Loader	Diesel	1995	178	Tier 0	2022	173	Tier 4 Final	900	0	0	10	Stanislaus
G-123298-A1	Agricultural Tractor	Diesel	1973	150	Tier 0	2021	142	Tier 4 Final	150	0	0	10	Madera
G-103230-A1	Wheel Loader	Diesel	1987	80	Tier 0	2022	166	Tier 4 Final	1200	0	0	10	Fresno
C-58496-1-A1	Agricultural Tractor	Diesel	2005	300	Tier 2	2021	370	Tier 4 Final	1000	0	0	10	Kings
G-114888-A1	Tractor	Diesel	1976	140	Tier 0	2022	114	Tier 4 Final	150	0	0	10	Fresno
G-117648-A1	Agricultural Tractor	Diesel	1965	65	Tier 0	2021	80	Tier 4 Final	250	0	0	10	Stanislaus
G-125670-A1	Agricultural Tractor	Diesel	1992	88	Tier 0	2022	99	Tier 4 Final	600	0	0	10	Merced
G-117845-A1	Tractor	Diesel	2005	97	Tier 2	2021	115	Tier 4 Final	1500	0	0	10	Madera
G-129365-A1	Agricultural Tractor	Diesel	1993	375	Tier 0	2022	590	Tier 4 Final	850	0	0	10	Stanislaus
G-126167-A1	Agricultural Tractor	Diesel	1976	26	Tier 0	2022	31	Tier 4 Final	200	0	0	10	San Joaquin
G-120189-A1	Agricultural Tractor	Diesel	1976	84	Tier 0	2021	115	Tier 4 Final	500	0	0	10	Kings

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-130689-A1	Agricultural Tractor	Diesel	1973	68	Tier 0	2021	108	Tier 4 Final	102	0	0	10	Fresno
C-55541-1-A1	Agricultural Tractor	Diesel	2007	99	Tier 2	2022	114	Tier 4 Final	300	0	0	10	Fresno
G-101598-A1	Agricultural Tractor	Diesel	1995	81	Tier 0	2021	100	Tier 4 Final	175	0	0	10	Kern
G-116386-A1	Pistachio Catcher	Diesel	1987	84	Tier 0	2022	74	Tier 4 Final	1000	0	0	10	Fresno
G-108007-A1	Agricultural Tractor	Diesel	1994	210	Tier 0	2022	230	Tier 4 Final	1000	0	0	10	Kings
G-125071-A1	Agricultural Tractor	Diesel	1961	58	Tier 0	2022	73	Tier 4 Final	600	0	0	10	Tulare
G-124524-A1	Back Hoe	Diesel	1976	42	Tier 0	2022	92	Tier 4 Final	500	0	0	10	Kern
C-46128-1-A1	Wheel Loader	Diesel	1976	80	Tier 0	2022	183	Tier 4 Final	1200	0	0	10	Merced
G-94342-A1	Agricultural Tractor	Diesel	2000	425	Tier 1	2022	666	Tier 4 Final	700	0	0	10	Merced
G-125184-A1	Agricultural Tractor	Diesel	1982	74	Tier 0	2022	55	Tier 4 Final	600	0	0	10	Tulare
G-124250-A1	Agricultural Tractor	Diesel	1992	142	Tier 0	2022	123	Tier 4 Final	550	0	0	10	Stanislaus
G-120264-A1	Wheel Loader	Diesel	1997	215	Tier 1	2021	225	Tier 4 Final	500	0	0	10	San Joaquin
G-101186-A1	Back Hoe	Diesel	1987	69	Tier 0	2022	103	Tier 4 Final	400	0	0	10	Merced
G-119909-A1	Wheel Loader	Diesel	1984	167	Tier 0	2022	249	Tier 4 Final	500	0	0	10	Stanislaus
G-122106-A1	Wheel Loader	Diesel	2002	225	Tier 1	2022	103	Tier 4 Final	350	0	0	10	Kern
G-106040-A1	Agricultural Tractor	Diesel	1978	84	Tier 0	2021	106	Tier 4 Phase In/Alt NOx	300	0	0	10	Tulare
G-113789-A1	Agricultural Tractor	Diesel	1998	190	Tier 1	2022	233	Tier 4 Final	550	0	0	10	Stanislaus
G-112880-A1	Pistachio Harvester	Diesel	1990	120	Tier 0	2022	139	Tier 4 Final	500	0	0	10	Tulare
G-112881-A1	Pistachio Harvester	Diesel	1993	120	Tier 0	2022	139	Tier 4 Final	500	0	0	10	Tulare
G-112882-A1	Pistachio Harvester	Diesel	1990	120	Tier 0	2022	139	Tier 4 Final	500	0	0	10	Tulare
G-112883-A1	Pistachio Harvester	Diesel	1989	121	Tier 0	2022	139	Tier 4 Final	400	0	0	10	Tulare
G-112897-A1	Pistachio Catcher	Diesel	1990	120	Tier 0	2022	139	Tier 4 Final	400	0	0	10	Tulare
G-116507-A1	Wheel Loader	Diesel	2005	129	Tier 2	2021	170	Tier 4 Final	2000	0	0	10	Stanislaus
G-120309-A1	Wheel Loader	Diesel	2002	128	Tier 1	2022	184	Tier 4 Final	1200	0	0	10	Tulare
G-111364-A1	Back Hoe	Diesel	1972	108	Tier 0	2021	62	Tier 4 Final	300	0	0	10	Fresno
G-124497-A1	Wheel Loader	Diesel	2005	177	Tier 2	2022	192	Tier 4 Final	3650	0	0	10	Kern
G-112899-A1	Pistachio Catcher	Diesel	1984	121	Tier 0	2022	139	Tier 4 Final	400	0	0	10	Tulare
G-112898-A1	Pistachio Catcher	Diesel	1990	121	Tier 0	2022	139	Tier 4 Final	400	0	0	10	Tulare
G-112896-A1	Pistachio Catcher	Diesel	1990	120	Tier 0	2022	139	Tier 4 Final	400	0	0	10	Tulare

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New			New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP						
G-112891-A1	Pistachio Catcher	Diesel	1988	80	Tier 0	2022	139	Tier 4 Final	400	0	0	10	Tulare
G-112890-A1	Pistachio Catcher	Diesel	1992	120	Tier 0	2022	139	Tier 4 Final	400	0	0	10	Tulare
G-112889-A1	Pistachio Catcher	Diesel	1999	80	Tier 1	2022	139	Tier 4 Final	400	0	0	10	Tulare
G-112886-A1	Pistachio Catcher	Diesel	2001	95	Tier 1	2022	139	Tier 4 Final	400	0	0	10	Tulare
G-112879-A1	Shaker	Diesel	1990	82	Tier 0	2022	139	Tier 4 Final	500	0	0	10	Tulare
G-112877-A1	Shaker	Diesel	1990	105	Tier 0	2022	139	Tier 4 Final	500	0	0	10	Tulare
G-112874-A1	Shaker	Diesel	2006	80	Tier 2	2022	139	Tier 4 Final	500	0	0	10	Tulare
G-112873-A1	Shaker	Diesel	2002	115	Tier 1	2022	139	Tier 4 Final	500	0	0	10	Tulare
G-112872-A1	Pistachio Catcher	Diesel	1988	80	Tier 0	2022	139	Tier 4 Final	400	0	0	10	Tulare
G-112871-A1	Shaker	Diesel	1990	120	Tier 0	2022	139	Tier 4 Final	500	0	0	10	Tulare
G-112870-A1	Shaker	Diesel	2003	75	Tier 1	2022	139	Tier 4 Final	500	0	0	10	Tulare
G-112892-A1	Pistachio Catcher	Diesel	2007	99	Tier 2	2022	139	Tier 4 Final	500	0	0	10	Tulare
G-132779-A1	Agricultural Tractor	Diesel	1979	158	Tier 0	2020	202	Tier 4 Final	400	0	0	10	Fresno
G-103250-A1	Wheel Loader	Diesel	1979	114	Tier 0	2022	166	Tier 4 Final	1200	0	0	10	Tulare
G-110893-A1	Tractor	Diesel	1969	115	Tier 0	2022	123	Tier 4 Final	486	0	0	10	Fresno
G-110892-A1	Tractor	Diesel	1976	145	Tier 0	2022	123	Tier 4 Final	457	0	0	10	Fresno
G-110890-A1	Tractor	Diesel	1980	132	Tier 0	2022	123	Tier 4 Final	596	0	0	10	Fresno
G-113413-A1	Wheel Loader	Diesel	1980	114	Tier 0	2021	106	Tier 4 Final	500	0	0	10	Kings
G-121187-A1	Cotton Picker	Diesel	1991	250	Tier 0	2022	555	Tier 4 Final	496	0	0	10	Kern
G-114809-A1	Tractor	Diesel	1996	325	Tier 1	2022	350	Tier 4 Final	1000	0	0	10	Fresno
G-113782-A1	Sweeper	Diesel	1983	49	Tier 0	2021	74	Tier 4 Final	300	0	0	10	Fresno
G-133339-A1	Agricultural Tractor	Diesel	2005	98	Tier 2	2022	114	Tier 4 Final	400	0	0	10	Fresno
G-133338-A1	Agricultural Tractor	Diesel	1988	84	Tier 0	2021	114	Tier 4 Final	400	0	0	10	Fresno
G-118775-A1	Sweeper	Diesel	2003	46	Tier 1	2019	74	Tier 4 Final	400	0	0	10	Stanislaus
G-113730-A1	Tractor	Diesel	2006	96	Tier 2	2021	114	Tier 4 Final	300	0	0	10	Stanislaus
G-116974-A1	Wheel Loader	Diesel	1972	80	Tier 0	2020	141	Tier 4 Final	1200	0	0	10	Kings
G-111696-A1	Agricultural Tractor	Diesel	2004	283	Tier 2	2021	370	Tier 4 Final	600	0	0	10	Merced
G-127389-A1	Almond Shaker	Diesel	1984	104	Tier 0	2020	148	Tier 4 Final	450	0	0	10	Fresno
G-107034-A1	Agricultural Tractor	Diesel	2001	100	Tier 1	2022	123	Tier 4 Final	300	0	0	10	Fresno

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-108875-A1	Agricultural Tractor	Diesel	1996	120	Tier 0	2022	152	Tier 4 Final	500	0	0	10	Merced
G-106567-A1	Forklift	Diesel	1992	60	Tier 0	2022	74	Tier 4 Final	300	0	0	10	Tulare
G-107025-A1	Forklift	Diesel	2006	80	Tier 2	2022	74	Tier 4 Final	515	0	0	10	Tulare
G-119170-A1	Agricultural Tractor	Diesel	1977	145	Tier 0	2021	101	Tier 4 Final	300	0	0	10	Stanislaus
G-99697-A1	Agricultural Tractor	Diesel	1998	202	Tier 1	2022	281	Tier 4 Final	735	0	0	10	Tulare
G-109832-A1	Agricultural Backhoe	Diesel	1991	63	Tier 0	2022	90	Tier 4 Final	1000	0	0	10	Fresno
G-120543-A1	Wheel Loader	Diesel	2005	129	Tier 2	2022	163	Tier 4 Final	1500	0	0	10	Tulare
G-103410-A1	Agricultural Tractor	Diesel	1957	59	Tier 0	2022	95	Tier 4 Final	150	0	0	10	Tulare
G-100666-A1	Windrower	Diesel	2004	185	Tier 2	2022	235	Tier 4 Final	800	0	0	10	Fresno
G-113453-A1	Harvester	Diesel	2003	601	Tier 2	2021	779	Tier 4 Final	835	0	0	10	Madera
G-121085-A1	Track-Type Loader	Diesel	1964	150	Tier 0	2022	106	Tier 4 Final	100	0	0	10	Merced
G-113932-A1	Wheel Loader	Diesel	1998	300	Tier 1	2021	307	Tier 4 Final	1000	0	0	10	Fresno
G-108770-A1	Agricultural Tractor	Diesel	1977	28	Tier 0	2020	33	Tier 4 Final	200	0	0	10	Kern
G-129792-A1	Agricultural Tractor	Diesel	1967	110	Tier 0	2022	120	Tier 4 Final	400	0	0	10	Tulare
G-107121-A1	Wheel Loader	Diesel	1990	110	Tier 0	2022	124	Tier 4 Final	1200	0	0	10	Tulare
C-45005-1-A1	Chopper	Diesel	2003	601	Tier 2	2022	912	Tier 4 Final	1050	0	0	10	Kern
G-121339-A1	Back Hoe	Diesel	1991	93	Tier 0	2022	97	Tier 4 Final	500	0	0	10	San Joaquin
G-125478-A1	Agricultural Tractor	Diesel	2005	37	Tier 2	2021	40	Tier 4 Final	500	0	0	10	Merced
G-112535-A1	Agricultural Tractor	Diesel	1982	113	Tier 0	2022	114	Tier 4 Final	800	0	0	10	Fresno
G-105443-A1	Agricultural Tractor	Diesel	2000	223	Tier 1	2021	210	Tier 4 Final	600	0	0	10	Tulare
G-124543-A1	Agricultural Tractor	Diesel	1999	240	Tier 1	2022	250	Tier 4 Final	1000	0	0	10	Kern
G-125109-A1	Skid Loader	Diesel	1965	57	Tier 0	2022	97	Tier 4 Final	300	0	0	10	Tulare
G-115900-A1	Agricultural Tractor	Diesel	1983	102	Tier 0	2022	123	Tier 4 Final	540	0	0	10	Merced
G-122105-A1	Agricultural Tractor	Diesel	1982	84	Tier 0	2022	114	Tier 4 Final	300	0	0	10	Stanislaus
G-124495-A1	Wheel Loader	Diesel	2004	180	Tier 2	2022	192	Tier 4 Final	3650	0	0	10	Kern
G-125113-A1	Wheel Loader	Diesel	1998	172	Tier 1	2022	192	Tier 4 Final	3650	0	0	10	Kern
G-109447-A1	Agricultural Tractor	Diesel	1978	186	Tier 0	2021	114	Tier 4 Final	400	0	0	10	Stanislaus
C-55544-1-A1	Agricultural Tractor	Diesel	2005	99	Tier 2	2022	114	Tier 4 Final	300	0	0	10	Fresno
G-125214-A1	Agricultural Tractor	Diesel	2004	113	Tier 2	2021	114	Tier 4 Final	800	0	0	10	Stanislaus

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-125213-A1	Agricultural Tractor	Diesel	2004	75	Tier 2	2021	114	Tier 4 Final	900	0	0	10	Stanislaus
G-128938-A1	Agricultural Tractor	Diesel	1998	270	Tier 1	2022	340	Tier 4 Final	500	0	0	10	Kern
G-133832-A1	Agricultural Tractor	Diesel	1975	97	Tier 0	2021	121	Tier 4 Final	900	0	0	10	Tulare
G-128375-A1	Agricultural Tractor	Diesel	1993	400	Tier 0	2022	640	Tier 4 Final	500	0	0	10	Merced
G-111900-A1	Back Hoe	Diesel	2004	95	Tier 2	2022	74	Tier 4 Final	425	0	0	10	San Joaquin
G-119466-A1	Agricultural Tractor	Diesel	2001	91	Tier 1	2022	73	Tier 4 Final	300	0	0	10	San Joaquin
C-56213-1-A1	Agricultural Tractor	Diesel	1989	97	Tier 0	2021	114	Tier 4 Final	350	0	0	10	Fresno
G-102531-A1	Agricultural Tractor	Diesel	1967	88	Tier 0	2022	113	Tier 4 Final	150	0	0	10	Tulare
G-120124-A1	Forklift	Diesel	1983	52	Tier 0	2022	74	Tier 4 Final	210	0	0	10	Kern
G-103281-A1	Agricultural Tractor	Diesel	1997	240	Tier 1	2022	230	Tier 4 Final	1800	0	0	10	Kings
G-123914-A1	Agricultural Tractor	Diesel	2002	120	Tier 1	2020	115	Tier 4 Final	500	0	0	10	Merced
G-108346-A1	Agricultural Tractor	Diesel	2003	98	Tier 1	2022	100	Tier 4 Final	800	0	0	10	Kings
G-130359-A1	Agricultural Tractor	Diesel	2003	93	Tier 1	2022	114	Tier 4 Final	250	0	0	10	Tulare
G-119380-A1	Agricultural Tractor	Diesel	2002	98	Tier 1	2022	114	Tier 4 Final	600	0	0	10	Tulare
G-115666-A1	Tractor	Diesel	1981	80	Tier 0	2022	114	Tier 4 Final	320	0	0	10	Madera
G-94267-A1	Agricultural Tractor	Diesel	1999	78	Tier 1	2022	100	Tier 4 Final	250	0	0	10	Tulare
G-121725-A1	Agricultural Tractor	Diesel	2007	92	Tier 2	2021	115	Tier 4 Final	635	0	0	10	Tulare
G-124493-A1	Wheel Loader	Diesel	2004	180	Tier 2	2022	192	Tier 4 Final	3650	0	0	10	Kern
G-92859-A1	Agricultural Tractor	Diesel	1972	68	Tier 0	2021	114	Tier 4 Final	1000	0	0	10	Fresno
G-127710-A1	Agricultural Tractor	Diesel	1979	60	Tier 0	2022	73	Tier 4 Final	500	0	0	10	Merced
G-127706-A1	Agricultural Tractor	Diesel	1973	54	Tier 0	2022	114	Tier 4 Final	500	0	0	10	Merced
G-119471-A1	Tractor	Diesel	1981	162	Tier 0	2022	123	Tier 4 Final	250	0	0	10	Kings
G-113734-A1	Back Hoe	Diesel	1983	69	Tier 0	2022	74	Tier 4 Final	300	0	0	10	Stanislaus
G-95450-A1	Agricultural Tractor	Diesel	1988	72	Tier 0	2021	90	Tier 4 Final	250	0	0	10	Fresno
G-125935-A1	Agricultural Tractor	Diesel	1998	425	Tier 1	2021	545	Tier 4 Final	1500	0	0	10	San Joaquin
G-111318-A1	Agricultural Tractor	Diesel	2005	92	Tier 2	2022	105	Tier 4 Final	1000	0	0	10	Madera
G-99530-A1	Agricultural Tractor	Diesel	2006	125	Tier 2	2021	142	Tier 4 Final	2000	0	0	10	Fresno
C-29749-1-A1	Agricultural Tractor	Diesel	1969	77	Tier 0	2022	123	Tier 4 Final	300	0	0	10	Merced
G-110030-A1	Agricultural Tractor	Diesel	1986	335	Tier 0	2022	250	Tier 4 Final	1000	0	0	10	Kings

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-109135-A1	Agricultural Tractor	Diesel	1998	89	Tier 1	2022	63	Tier 4 Final	64	0	0	10	Fresno
G-125112-A1	Wheel Loader	Diesel	1998	170	Tier 1	2022	192	Tier 4 Final	3650	0	0	10	Kern
G-78973-A1	Wheel Loader	Diesel	1978	115	Tier 0	2022	100	Tier 4 Final	250	0	0	10	Stanislaus
G-132604-A1	Agricultural Tractor	Diesel	1995	45	Tier 0	2021	53	Tier 4 Final	200	0	0	10	San Joaquin
G-111317-A1	Agricultural Tractor	Diesel	1998	98	Tier 1	2022	135	Tier 4 Final	1000	0	0	10	Madera
G-128351-A1	Agricultural Tractor	Diesel	1974	76	Tier 0	2019	106	Tier 4 Final	600	0	0	10	Fresno
G-128350-A1	Agricultural Tractor	Diesel	1982	84	Tier 0	2021	106	Tier 4 Final	700	0	0	10	Fresno
G-136563-A1	Agricultural Tractor	Diesel	2001	89	Tier 1	2017	115	Tier 4 Final	250	0	0	10	Merced
G-114432-A1	Agricultural Tractor	Diesel	1978	60	Tier 0	2021	73	Tier 4 Final	150	0	0	10	Merced
G-122939-A1	Agricultural Tractor	Diesel	1977	60	Tier 0	2022	89	Tier 4 Final	1000	0	0	10	Fresno
G-122793-A1	Agricultural Tractor	Diesel	1991	104	Tier 0	2021	123	Tier 4 Final	1200	0	0	10	Fresno
G-120841-A1	Agricultural Tractor	Diesel	2001	92	Tier 1	2022	152	Tier 4 Final	500	0	0	10	Stanislaus
G-107827-A1	Agricultural Tractor	Diesel	1997	370	Tier 1	2022	370	Tier 4 Final	1000	0	0	10	Fresno
G-113692-A1	Tractor	Diesel	1981	194	Tier 0	2022	210	Tier 4 Final	1000	0	0	10	Kings
G-113690-A1	Agricultural Tractor	Diesel	2005	207	Tier 2	2022	210	Tier 4 Final	1000	0	0	10	Kings
G-108153-A1	Agricultural Tractor	Diesel	1992	96	Tier 0	2021	120	Tier 4 Final	400	0	0	10	Tulare
G-89933-A1	Agricultural Tractor	Diesel	1987	81	Tier 0	2021	114	Tier 4 Final	250	0	0	10	Fresno
G-105435-A1	Swathers	Diesel	2004	185	Tier 2	2022	266	Tier 4 Final	510	0	0	10	Tulare
G-119906-A1	Back Hoe	Diesel	2004	85	Tier 2	2022	74	Tier 4 Final	500	0	0	10	Merced
C-60784-1-A2	Wheel Loader	Diesel	2001	160	Tier 1	2022	192	Tier 4 Final	1800	0	0	10	Tulare
G-114179-A1	Windrower	Diesel	1999	152	Tier 1	2021	235	Tier 4 Final	1000	0	0	10	Fresno
G-125075-A1	Agricultural Tractor	Diesel	1991	103	Tier 0	2022	123	Tier 4 Final	225	0	0	10	Kern
G-129136-A1	Forklift	Diesel	1993	52	Tier 0	2022	74	Tier 4 Final	1000	0	0	10	Kern
G-74978-A1	Skid Loader	Diesel	2003	63	Tier 1	2022	73	Tier 4 Final	500	0	0	10	Merced
G-75568-A1	Agricultural Tractor	Diesel	1994	103	Tier 0	2022	106	Tier 4 Phase In/Alt NOx	750	0	0	10	Fresno
G-126394-A1	Agricultural Tractor	Diesel	1992	74	Tier 0	2022	93	Tier 4 Final	500	0	0	10	Kern
G-115960-A1	Agricultural Tractor	Diesel	1988	28	Tier 0	2022	56	Tier 4 Final	175	0	0	10	Merced
G-109111-A1	Agricultural Tractor	Diesel	1998	270	Tier 1	2022	375	Tier 4 Final	500	0	0	10	Fresno
G-77126-A1	Agricultural Tractor	Diesel	1978	76	Tier 0	2022	75	Tier 4 Final	150	0	0	10	Fresno

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-107384-A1	Agricultural Tractor	Diesel	1978	108	Tier 0	2022	155	Tier 4 Final	250	0	0	10	Madera
G-132784-A1	Agricultural Tractor	Diesel	1969	39	Tier 0	2019	74	Tier 4 Final	650	0	0	10	Fresno
G-103235-A1	Wheel Loader	Diesel	1995	138	Tier 0	2022	194	Tier 4 Final	3000	0	0	10	Tulare
G-103234-A1	Wheel Loader	Diesel	1995	138	Tier 0	2021	194	Tier 4 Final	3000	0	0	10	Tulare
G-121850-A1	Back Hoe	Diesel	1979	62	Tier 0	2019	96	Tier 4 Final	250	0	0	10	Merced
G-101209-A1	Agricultural Tractor	Diesel	1976	38	Tier 0	2021	58	Tier 4 Final	320	0	0	10	Fresno
G-141940-A1	Tree Hedger/Topper	Diesel	1995	103	Tier 0	2021	173	Tier 4 Final	2000	0	0	10	Tulare
G-88837-A1	Agricultural Tractor	Diesel	1994	240	Tier 0	2022	155	Tier 4 Final	2000	0	0	10	Fresno
G-96654-A1	Wheel Loader	Diesel	2003	199	Tier 2	2022	230	Tier 4 Final	1000	0	0	10	Tulare
G-125546-A1	Agricultural Tractor	Diesel	2000	110	Tier 1	2021	100	Tier 4 Final	150	0	0	10	Kern
G-112251-A1	Agricultural Tractor	Diesel	2007	90	Tier 2	2022	114	Tier 4 Final	800	0	0	10	Kings
G-112252-A1	Agricultural Tractor	Diesel	2007	90	Tier 2	2022	114	Tier 4 Final	800	0	0	10	Kings
G-112253-A1	Agricultural Tractor	Diesel	2007	90	Tier 2	2022	114	Tier 4 Final	800	0	0	10	Kings
G-112255-A1	Agricultural Tractor	Diesel	2007	90	Tier 2	2022	114	Tier 4 Final	800	0	0	10	Kings
G-132592-A1	Agricultural Tractor	Diesel	1999	30	Tier 1	2022	37	Tier 4 Final	190	0	0	10	San Joaquin
G-65506-A1	Shredder	Diesel	2004	300	Tier 2	2021	456	Tier 4 Final	1300	0	0	10	Merced
G-86376-A1	Agricultural Tractor	Diesel	1979	60	Tier 0	2022	74	Tier 4 Final	200	0	0	10	Madera
G-127695-A1	Agricultural Tractor	Diesel	2002	54	Tier 1	2021	71	Tier 4 Final	1000	0	0	10	Kern
G-109476-A1	Agricultural Tractor	Diesel	1985	64	Tier 0	2021	115	Tier 4 Final	1560	0	0	10	Madera
G-118972-A1	Shaker	Diesel	1983	104	Tier 0	2022	139	Tier 4 Final	290	0	0	10	Fresno
G-75579-A1	Agricultural Tractor	Diesel	2001	148	Tier 1	2022	178	Tier 4 Final	1500	0	0	10	Kern
G-109144-A1	Wheel Loader	Diesel	1984	76	Tier 0	2022	71	Tier 4 Final	1000	0	0	10	Fresno
G-130047-A1	Agricultural Tractor	Diesel	1990	95	Tier 0	2022	114	Tier 4 Final	250	0	0	10	Fresno
G-125585-A1	Wheel Loader	Diesel	1988	128	Tier 0	2022	163	Tier 4 Final	1500	0	0	10	Tulare
G-115664-A1	Agricultural Tractor	Diesel	1985	84	Tier 0	2022	53	Tier 4 Final	250	0	0	10	Madera
G-90428-A1	Wheel Loader	Diesel	2005	129	Tier 2	2019	173	Tier 4 Final	1000	0	0	10	Stanislaus
G-125879-A1	Skid Loader	Diesel	2006	61	Tier 2	2022	63	Tier 4 Final	833	0	0	10	Stanislaus
G-128949-A1	Back Hoe	Diesel	2002	120	Tier 1	2022	74	Tier 4 Final	400	0	0	10	Tulare
G-128860-A1	Shaker	Diesel	1979	104	Tier 0	2022	173	Tier 4 Final	225	0	0	10	Stanislaus

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline			New			Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-102012-A1	Agricultural Tractor	Diesel	1978	156	Tier 0	2022	370	Tier 4 Final	500	0	0	10	Tulare
G-135942-A1	Spreader	Diesel	1997	365	Tier 1	2022	365	Tier 4 Final	500	0	0	10	Stanislaus
G-107141-A1	Agricultural Tractor	Diesel	1976	109	Tier 0	2022	114	Tier 4 Final	1000	0	0	10	Tulare
G-128377-A1	Agricultural Tractor	Diesel	1990	225	Tier 0	2022	310	Tier 4 Final	500	0	0	10	Merced
G-117155-A1	Tractor	Diesel	2006	91	Tier 2	2022	99	Tier 4 Final	500	0	0	10	Tulare
G-117148-A1	Tractor	Diesel	2004	99	Tier 2	2022	114	Tier 4 Final	500	0	0	10	Tulare
G-117978-A1	Agricultural Tractor	Diesel	1998	114	Tier 1	2022	114	Tier 4 Final	600	0	0	10	Madera
G-128365-A2	Agricultural Tractor	Diesel	1981	25	Tier 0	2022	32	Tier 4 Final	300	0	0	10	Fresno
G-121741-A1	Wheel Loader	Diesel	2000	147	Tier 1	2022	183	Tier 4 Final	1500	0	0	10	Fresno
G-142151-A1	Agricultural Tractor	Diesel	1999	101	Tier 1	2021	172	Tier 4 Final	1000	0	0	10	Merced
G-125704-A1	Agricultural Tractor	Diesel	1980	84	Tier 0	2022	123	Tier 4 Final	300	0	0	10	Fresno
G-97410-A1	Back Hoe	Diesel	1983	69	Tier 0	2022	116	Tier 4 Final	300	0	0	10	San Joaquin
G-95471-A1	Agricultural Tractor	Diesel	1975	47	Tier 0	2021	73	Tier 4 Final	116	0	0	10	San Joaquin
G-95931-A1	Agricultural Tractor	Diesel	1995	74	Tier 0	2021	73	Tier 4 Final	100	0	0	10	San Joaquin
G-93769-A1	Tractor	Diesel	1995	100	Tier 0	2022	123	Tier 4 Final	180	0	0	10	Madera
G-110958-A1	Agricultural Tractor	Diesel	1992	160	Tier 0	2022	172	Tier 4 Final	500	0	0	10	Stanislaus
G-120041-A1	Agricultural Tractor	Diesel	1974	151	Tier 0	2022	248	Tier 4 Final	800	0	0	10	Merced
G-127493-A1	Agricultural Tractor	Diesel	1967	120	Tier 0	2022	114	Tier 4 Final	300	0	0	10	Kern
G-107461-A1	Agricultural Tractor	Diesel	1975	48	Tier 0	2022	53	Tier 4 Final	250	0	0	10	Tulare
G-130052-A1	Excavator	Diesel	1994	222	Tier 0	2022	273	Tier 4 Final	500	0	0	10	Fresno
G-130135-A1	Tree Hedger/Topper	Diesel	2007	98	Tier 2	2021	155	Tier 4 Final	500	0	0	10	Kern
G-97836-A1	Agricultural Tractor	Diesel	1998	89	Tier 1	2022	100	Tier 4 Final	800	0	0	10	Fresno
G-142040-A1	Agricultural Tractor	Diesel	1963	45	Tier 0	2018	98	Tier 4 Final	100	0	0	10	Stanislaus
G-126434-A1	Agricultural Tractor	Diesel	1983	90	Tier 0	2022	106	Tier 4 Final	500	0	0	10	Stanislaus
G-140335-A1	Shaker	Diesel	1980	104	Tier 0	2022	173	Tier 4 Final	230	0	0	10	Stanislaus
G-142176-A1	Almond Harvester	Diesel	1983	104	Tier 0	2013	125	Tier 3	220	0	0	10	Merced
G-92181-A1	Back Hoe	Diesel	2003	94	Tier 1	2022	107	Tier 4 Final	1500	0	0	10	Kings
G-116506-A1	Agricultural Tractor	Diesel	1996	204	Tier 1	2022	282	Tier 4 Final	3000	0	0	10	San Joaquin
G-128372-A1	Tractor	Diesel	1993	102	Tier 0	2022	123	Tier 4 Final	500	0	0	10	Fresno



## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline		New				Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-129069-A1	Agricultural Tractor	Diesel	1998	129	Tier 1	2022	155	Tier 4 Final	500	0	0	10	Stanislaus
G-129068-A1	Agricultural Tractor	Diesel	1984	90	Tier 0	2022	155	Tier 4 Final	500	0	0	10	Stanislaus
G-129209-A1	Agricultural Tractor	Diesel	1989	28	Tier 0	2022	34	Tier 4 Final	170	0	0	10	Merced
G-129212-A1	Agricultural Tractor	Diesel	2000	277	Tier 1	2022	310	Tier 4 Final	450	0	0	10	Merced
G-135044-A1	Agricultural Tractor	Diesel	2005	504	Tier 2	2022	440	Tier 4 Final	750	0	0	10	San Joaquin
G-127358-A1	Agricultural Tractor	Diesel	1974	57	Tier 0	2022	65	Tier 4 Final	300	0	0	10	Tulare
G-105441-A1	Agricultural Tractor	Diesel	2000	223	Tier 1	2022	230	Tier 4 Final	600	0	0	10	Tulare
G-138621-A1	Agricultural Tractor	Diesel	1994	285	Tier 0	2020	342	Tier 4 Final	520	0	0	10	Madera
G-135597-A1	Excavator	Diesel	2000	249	Tier 1	2021	264	Tier 4 Final	800	0	0	10	San Joaquin
G-133342-A1	Agricultural Tractor	Diesel	1978	38	Tier 0	2022	37	Tier 4 Final	200	0	0	10	Stanislaus
G-135812-A1	Agricultural Tractor	Diesel	1990	300	Tier 0	2022	370	Tier 4 Final	210	0	0	10	Fresno
G-135810-A1	Tractor	Diesel	1989	300	Tier 0	2022	370	Tier 4 Final	210	0	0	10	Fresno
G-127708-A1	Agricultural Tractor	Diesel	1991	84	Tier 0	2022	123	Tier 4 Final	500	0	0	10	Merced
G-121187-A1	Cotton Picker	Diesel	1991	250	Tier 0	2022	555	Tier 4 Final	-	0	0	-	Kern

Project Type Off-Road

**SJVAPCD Project Data 2023**

**Description Engine Repower**

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
G-95842-A1	Agricultural Ripper	Diesel	1986	770	Tier 0	2010	875	Tier 2	1800	0	63000	10	Kern
G-97037-A1	Grape Harvester	Diesel	2004	177	Tier 2	2010	185	Tier 3	1000	0	2000	10	San Joaquin
G-95841-A1	Agricultural	Diesel	1993	770	Tier 0	2010	875	Tier 2	1800	0	63000	10	Kern
G-103100-A1	Agricultural	Diesel	1988	520	Tier 0	2010	579	Tier 3	1500	0	44500	10	Tulare
G-108356-A1	Crane	Diesel	1994	215	Tier 0	2019	174	Tier 4 Final	1100	0	-	5	Fresno
C-40344-3-A1	Crawler Dozer	Diesel	1982	700	Tier 0	2010	693	Tier 3	1500	0	121600	10	Madera

Project Type Ag Engine

### SJVAPCD Project Data 2023

Description Diesel to Diesel

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage	Annual Usage	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
C-61900-1A	Irrigation Pump	Diesel	2005	325	Tier 3	2022	335	Tier 4 Final	5000	0	0	7	Madera
G-125867-A1	Irrigation Pump	Diesel	2006	225	Tier 3	2020	174	Tier 4 Final	500	0	0	7	Fresno
G-125866-A1	Irrigation Pump	Diesel	2006	225	Tier 3	2020	174	Tier 4 Final	500	0	0	7	Fresno
G-125865-A1	Irrigation Pump	Diesel	2006	225	Tier 3	2020	174	Tier 4 Final	500	0	0	7	Fresno
G-125869-A1	Irrigation Pump	Diesel	2006	225	Tier 3	2020	174	Tier 4 Final	500	0	0	7	Fresno
C-61899-1-A1	Irrigation Pump	Diesel	2006	275	Tier 3	2020	275	Tier 4 Final	4000	0	0	7	Madera

Project Type Yard Truck  
**Description Replacement**

**SJVAPCD Project Data 2023**

Project #	Primary Function	Fuel Type	Baseline			New			Annual Usage	Annual Usage	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
G-111716-A1	Agricultural	Diesel	2008	200		2021	-	-	357	0	-	5	Kern
G-111712-A1	Agricultural	Diesel	2008	200		2021	-	-	1637	0	-	5	Kern
G-111713-A1	Agricultural	Diesel	2009	200		2021	-	-	820	0	-	5	Kern
G-113744-A1	al On-Road Heav	Diesel	1996	174	Tier 0	2022	-	-	883	0	-	5	Merced
G-118569-A1	Agricultural	Diesel	2004	155	Tier 2	2021	-	-	971	0	-	5	Fresno
G-118568-A1	Agricultural	Diesel	2006	155	Tier 2	2021	-	-	662	0	-	5	Tulare
G-118565-A1	Agricultural	Diesel	2001	173	Tier 1	2021	-	-	1669	0	-	5	Tulare
G-118571-A1	Agricultural	Diesel	2011	173	Tier 3	2021	-	-	1295	-	43422	5	Tulare
G-118572-A1	Agricultural	Diesel	2011	173	Tier 3	2022	-	-	1242	0	-	5	Tulare
G-118805-A1	Agricultural	Diesel	2011	173	Tier 3	2021	-	-	1321	0	-	5	Tulare
G-112240-A1	Agricultural	Diesel	2004	155	Tier 2	2020	-	-	271	0	-	5	Kern
G-112242-A1	Agricultural	Diesel	2004	155	Tier 2	2020	-	-	1620	0	-	5	Kern
G-111054-A1	al On-Road Heav	Diesel	1979	210	olled Tec	2021	-	-	222	0	-	5	Merced

Project Type Locomotive  
**Description Replacement**

**SJVAPCD Project Data 2023**

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
G-73414-A3	Switcher (Locomotive)	Diesel	1969	2000	Tier 0	2022	2414	Tier 4 Final	0	0	17000	15	Fresno
G-73416-A2	Switcher (Locomotive)	Diesel	1969	2000	Tier 0	2019	2414	Tier 4 Final	0	0	17000	15	Fresno

Description Locomotive Replacement

Project #	Primary Function	Fuel Type	Baseline			New			Annual Usage	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Eng Yr	New HP	New Tier					
C-56776-1-A1	Line Haul	Diesel	2005	4400	Tier 2	2020	4400	Tier 4 Final	0	0	173785	15	Fresno
C-56773-1-A1	Line Haul	Diesel	2005	4400	Tier 2	2020	4400	Tier 4 Final	0	0	145725	15	Fresno
C-56764-1-A1	Line Haul	Diesel	2005	4400	Tier 2	2020	4400	Tier 4 Final	0	0	173785	15	Fresno

Project Type On-Road

**SJVAPCD Project Data 2023**

**Description Emergency Vehicle Replacement**

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
G-117933-A1	Fire Truck	Diesel	2008	425	-	2021	360	-	0	2581	5777	14	San Joaquin

Project Type School Bus

**SJVAPCD Project Data 2023**

**Description Vehicle Replacement**

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
G-77374-A1	-	Diesel	1990	350	-	2021	295	-	0	2581	5777	10	Madera
G-77418-A1	-	Diesel	1989	250	-	2021	295	-	0	7950	-	10	Madera



Project Type On-Road

**SJVAPCD Project Data 2023**

**Description Ag Truck Replacement**

Project #	Primary Function	Fuel Type	Baseline			New Eng			Annual Usage	Annual Usage	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			e Yr	Old HP	Old Tier	Yr	New HP	New Tier					
G-72909-A1	Agricultural	Diesel	1995	435	-	2021	450	-	0	1023	0	3	Kings
G-72357-A1	Agricultural	Diesel	1992	430	-	2022	450	-	0	1212	0	3	Kings
G-72381-A1	Agricultural	Diesel	1992	430	-	2022	450	-	0	993	0	3	Kings
G-72391-A1	Agricultural	Diesel	1990	444	-	2022	450	-	0	46	0	3	Kings
G-72392-A1	Agricultural	Diesel	1989	400	-	2022	450	-	0	4773	0	3	Kings
G-72385-A1	Agricultural	Diesel	1992	400	-	2022	450	-	0	1025	0	3	Kings
G-72389-A1	Agricultural	Diesel	1992	430	-	2022	450	-	0	7526	0	3	Kings
G-72398-A1	Agricultural	Diesel	1990	370	-	2022	450	-	0	3324	0	3	Kings
G-72396-A1	Agricultural	Diesel	1994	435	-	2022	450	-	0	2696	0	3	Kings
G-72397-A1	Agricultural	Diesel	1990	370	-	2022	450	-	0	2154	0	3	Kings
G-72373-A1	Agricultural	Diesel	1992	430	-	2022	450	-	0	7163	0	3	Kings
G-72394-A1	Agricultural	Diesel	1994	435	-	2022	450	-	0	7696	0	3	Kings
G-72353-A1	Agricultural	Diesel	1992	430	-	2022	450	-	0	5470	0	3	Kings

## Description Ag UTV Replacement

Project #	Primary Function	Fuel Type	Baseline		Old Tier	New Eng			Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP		Yr	New HP	New Tier					
G-81087-A1	Ag UTV	Gasoline	2007	28	Control Technology	-	36	-	800	0	0	5	Tulare
G-81086-A1	Ag UTV	Gasoline	2010	15	Control Technology	-	36	-	800	0	0	5	Tulare
G-98331-A1	Ag UTV	Gasoline	2013	16	Control Technology	-	40	-	500	0	0	5	Kern
G-83508-A1	Ag UTV	Gasoline	2006	16	Control Technology	-	35	-	250	0	0	5	Merced
G-83191-A1	Ag UTV	Gasoline	1986	13	Uncontrolled Technology	-	30	-	495	0	0	5	Tulare
G-98068-A1	Ag UTV	Gasoline	2002	19	Uncontrolled Technology	-	35	-	1200	0	0	5	Madera
G-82844-A1	Ag UTV	Gasoline	1979	13	Uncontrolled Technology	-	30	-	250	0	0	5	San Joaquin
G-98195-A1	Ag UTV	Gasoline	2009	14	Control Technology	-	35	-	1800	0	0	5	Fresno
G-98194-A1	Ag UTV	Diesel	2007	22	Tier 2	-	35	-	1800	0	0	5	Fresno
G-98347-A1	Ag UTV	Gasoline	2014	8	Control Technology	-	6	-	200	0	0	5	Tulare
G-80477-A1	Ag UTV	Gasoline	2002	17	Uncontrolled Technology	-	30	-	800	0	0	5	Tulare
G-98455-A1	Ag UTV	Gasoline	2004	27	Control Technology	-	35	-	500	0	0	5	Fresno
G-81452-A1	Ag UTV	Gasoline	1996	16	Uncontrolled Technology	-	6	-	300	0	0	5	Fresno
G-98467-A1	Ag UTV	Gasoline	1985	15	Uncontrolled Technology	-	36	-	300	0	0	5	Merced
G-82650-A1	Ag UTV	Gasoline	2007	21	Control Technology	-	24	-	800	0	0	5	Kern
G-98497-A1	Ag UTV	Gasoline	2012	20	Control Technology	-	35	-	1800	0	0	5	Tulare
G-98499-A1	Ag UTV	Gasoline	2012	20	Control Technology	-	35	-	1600	0	0	5	Tulare
G-98495-A1	Ag UTV	Gasoline	1981	8	Uncontrolled Technology	-	40	-	100	0	0	5	Stanislaus
G-98475-A1	Ag UTV	Gasoline	2001	16	Uncontrolled Technology	-	35	-	250	0	0	5	San Joaquin
G-83242-A1	Ag UTV	Gasoline	2004	29	Control Technology	-	30	-	400	0	0	5	Merced
G-97948-A1	Ag UTV	Gasoline	2015	28	Control Technology	-	19	-	8230	0	0	5	Stanislaus
G-104505-A1	Ag UTV	Gasoline	2000	22	Uncontrolled Technology	-	38	-	500	0	0	5	Merced
G-98823-A1	Ag UTV	Gasoline	2009	19	Control Technology	-	35	-	700	0	0	5	Merced
G-98821-A1	Ag UTV	Gasoline	2005	46	Control Technology	-	35	-	600	0	0	5	Merced
G-99554-A1	Ag UTV	Gasoline	1985	25	Uncontrolled Technology	-	35	-	175	0	0	5	Stanislaus
G-98155-A1	Ag UTV	Diesel	2012	22	Tier 4 Final	-	35	-	1000	0	0	5	Fresno
G-98259-A1	Ag UTV	Gasoline	1998	20	Uncontrolled Technology	-	22	-	300	0	0	5	Stanislaus
G-98257-A1	Ag UTV	Gasoline	1998	20	Uncontrolled Technology	-	22	-	300	0	0	5	Stanislaus
G-77472-A1	Ag UTV	Gasoline	1996	25	Uncontrolled Technology	-	35	-	100	0	0	5	Madera
G-77392-A1	Ag UTV	Gasoline	1993	23	Uncontrolled Technology	-	35	-	100	0	0	5	Madera

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Ag UTV Replacement

Project #	Primary Function	Fuel Type	Baseline		Old Tier	New Eng			Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP		Yr	New HP	New Tier					
G-98262-A1	Ag UTV	Gasoline	2012	15	Control Technology	-	6	-	200	0	0	5	Fresno
G-82181-A1	Ag UTV	Gasoline	2001	10	Uncontrolled Technology	-	6	-	100	0	0	5	Tulare
G-98699-A1	Ag UTV	Gasoline	1994	20	Uncontrolled Technology	-	35	-	100	0	0	5	Tulare
G-82235-A1	Ag UTV	Gasoline	2006	21	Control Technology	-	35	-	1000	0	0	5	San Joaquin
G-98531-A1	Ag UTV	Diesel	2009	22	Tier 4 Final	-	30	-	1000	0	0	5	Fresno
G-81122-A1	Ag UTV	Gasoline	1987	5	Uncontrolled Technology	-	40	-	650	0	0	5	Kern
G-81084-A1	Ag UTV	Gasoline	2013	15	Control Technology	-	36	-	900	0	0	5	Tulare
G-83675-A1	Ag UTV	Gasoline	2008	33	Control Technology	-	12	-	800	0	0	5	Stanislaus
G-83084-A1	Ag UTV	Gasoline	1988	13	Uncontrolled Technology	-	6	-	250	0	0	5	Fresno
G-98802-A1	Ag UTV	Gasoline	1992	19	Uncontrolled Technology	-	35	-	150	0	0	5	Stanislaus
G-81849-A1	Ag UTV	Gasoline	1988	23	Uncontrolled Technology	-	22	-	110	0	0	5	Stanislaus
G-99113-A1	Ag UTV	Gasoline	2007	7	Control Technology	-	4	-	800	0	0	5	Tulare
G-98788-A1	Ag UTV	Gasoline	1986	14	Uncontrolled Technology	-	35	-	400	0	0	5	Tulare
G-98503-A1	Ag UTV	Gasoline	2012	16	Control Technology	-	22	-	300	0	0	5	Stanislaus
G-98501-A1	Ag UTV	Gasoline	2008	21	Control Technology	-	22	-	300	0	0	5	Stanislaus
G-83428-A1	Ag UTV	Gasoline	1985	13	Uncontrolled Technology	-	35	-	500	0	0	5	San Joaquin
G-98789-A1	Ag UTV	Gasoline	2002	11	Uncontrolled Technology	-	6	-	1200	0	0	5	Tulare
G-98786-A1	Ag UTV	Gasoline	2002	11	Uncontrolled Technology	-	6	-	1200	0	0	5	Tulare
G-98695-A1	Ag UTV	Gasoline	1995	19	Uncontrolled Technology	-	7	-	318	0	0	5	Fresno
G-98324-A1	Ag UTV	Gasoline	1999	19	Uncontrolled Technology	-	35	-	1200	0	0	5	Fresno
G-80363-A1	Ag UTV	Gasoline	1995	20	Uncontrolled Technology	-	6	-	200	0	0	5	Fresno
G-99362-A1	Ag UTV	Gasoline	2007	15	Control Technology	-	35	-	650	0	0	5	Merced
G-98930-A1	Ag UTV	Gasoline	1984	13	Uncontrolled Technology	-	4	-	800	0	0	5	Tulare
G-98852-A1	Ag UTV	Gasoline	2000	25	Uncontrolled Technology	-	22	-	200	0	0	5	San Joaquin
G-98233-A1	Ag UTV	Gasoline	2002	33	Uncontrolled Technology	-	22	-	560	0	0	5	San Joaquin
G-98827-A1	Ag UTV	Gasoline	1999	19	Uncontrolled Technology	-	6	-	265	0	0	5	San Joaquin
G-81995-A1	Ag UTV	Gasoline	2012	19	Control Technology	-	30	-	200	0	0	5	Merced
G-98094-A1	Ag UTV	Gasoline	1993	17	Uncontrolled Technology	-	22	-	400	0	0	5	Stanislaus
G-98549-A1	Ag UTV	Gasoline	2001	16	Uncontrolled Technology	-	6	-	750	0	0	5	San Joaquin

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Ag UTV Replacement

Project #	Primary Function	Fuel Type	Baseline		Old Tier	New Eng			Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP		Yr	New HP	New Tier					
G-98309-A1	Ag UTV	Gasoline	1993	19	Uncontrolled Technology	-	22	-	832	0	0	5	San Joaquin
G-98646-A1	Ag UTV	Gasoline	1996	19	Uncontrolled Technology	-	22	-	700	0	0	5	Stanislaus
G-98645-A1	Ag UTV	Gasoline	1996	19	Uncontrolled Technology	-	22	-	700	0	0	5	Stanislaus
G-84051-A1	Ag UTV	Gasoline	2015	31	Control Technology	-	22	-	500	0	0	5	Stanislaus
G-99024-A1	Ag UTV	Gasoline	1999	40	Uncontrolled Technology	-	22	-	500	0	0	5	Stanislaus
G-82298-A1	Ag UTV	Gasoline	1982	7	Uncontrolled Technology	-	22	-	120	0	0	5	Merced
G-98933-A1	Ag UTV	Diesel	2014	24	Tier 4 Final	-	35	-	300	0	0	5	Tulare
G-99283-A1	Ag UTV	Gasoline	1999	19	Uncontrolled Technology	-	22	-	500	0	0	5	San Joaquin
G-99515-A1	Ag UTV	Diesel	2011	24	Tier 4 Final	-	35	-	500	0	0	5	Fresno
G-98539-A1	Ag UTV	Gasoline	2014	27	Control Technology	-	6	-	460	0	0	5	Fresno
G-98124-A1	Ag UTV	Gasoline	1986	15	Uncontrolled Technology	-	35	-	200	0	0	5	Stanislaus
G-81538-A1	Ag UTV	Gasoline	2003	44	Uncontrolled Technology	-	40	-	700	0	0	5	Tulare
G-98564-A1	Ag UTV	Gasoline	2014	17	Control Technology	-	35	-	2000	0	0	5	Fresno
G-98563-A1	Ag UTV	Gasoline	2012	17	Control Technology	-	35	-	2000	0	0	5	Fresno
G-98558-A1	Ag UTV	Gasoline	2012	17	Control Technology	-	35	-	2000	0	0	5	Fresno
G-98231-A1	Ag UTV	Gasoline	2008	16	Control Technology	-	35	-	700	0	0	5	Fresno
G-98576-A1	Ag UTV	Gasoline	2011	13	Control Technology	-	35	-	75	0	0	5	Fresno
G-98574-A1	Ag UTV	Diesel	2009	22	Tier 4 Final	-	35	-	100	0	0	5	Fresno
G-82007-A1	Ag UTV	Gasoline	1983	9	Uncontrolled Technology	-	35	-	100	0	0	5	Fresno
G-98552-A1	Ag UTV	Gasoline	1984	13	Uncontrolled Technology	-	35	-	375	0	0	5	Fresno
G-98790-A1	Ag UTV	Gasoline	2003	42	Uncontrolled Technology	-	35	-	200	0	0	5	Madera
G-99371-A1	Ag UTV	Gasoline	2013	10	Control Technology	-	6	-	1070	0	0	5	Fresno
G-99370-A1	Ag UTV	Gasoline	2002	15	Uncontrolled Technology	-	6	-	1225	0	0	5	Fresno
G-99399-A1	Ag UTV	Gasoline	1991	22	Uncontrolled Technology	-	35	-	50	0	0	5	Tulare
G-83919-A1	Ag UTV	Gasoline	2004	15	Control Technology	-	35	-	500	0	0	5	Fresno
G-98339-A1	Ag UTV	Gasoline	2005	15	Control Technology	-	35	-	200	0	0	5	Fresno
G-99645-A1	Ag UTV	Gasoline	1981	7	Uncontrolled Technology	-	35	-	520	0	0	5	Tulare
G-98692-A1	Ag UTV	Gasoline	2006	20	Control Technology	-	35	-	388	0	0	5	San Joaquin
G-98473-A1	Ag UTV	Gasoline	1983	13	Uncontrolled Technology	-	22	-	300	0	0	5	Stanislaus

## Description Ag UTV Replacement

Project #	Primary Function	Fuel Type	Baseline		Old Tier	New Eng			Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP		Yr	New HP	New Tier					
G-99471-A1	Ag UTV	Gasoline	1995	19	Uncontrolled Technology	-	35	-	100	0	0	5	Madera
G-98275-A1	Ag UTV	Gasoline	1984	13	Uncontrolled Technology	-	35	-	155	0	0	5	Fresno
G-99020-A1	Ag UTV	Gasoline	1983	11	Uncontrolled Technology	-	35	-	200	0	0	5	San Joaquin
G-98934-A1	Ag UTV	Gasoline	1986	15	Uncontrolled Technology	-	35	-	100	0	0	5	San Joaquin
G-100284-A1	Ag UTV	Gasoline	2007	10	Control Technology	-	35	-	1000	0	0	5	Fresno
G-98240-A1	Ag UTV	Gasoline	2008	21	Control Technology	-	22	-	300	0	0	5	Stanislaus
G-99250-A1	Ag UTV	Gasoline	2008	33	Control Technology	-	35	-	393	0	0	5	San Joaquin
G-82916-A1	Ag UTV	Gasoline	1988	19	Uncontrolled Technology	-	35	-	300	0	0	5	Fresno
G-99276-A1	Ag UTV	Gasoline	1988	30	Uncontrolled Technology	-	35	-	250	0	0	5	Tulare
G-73069-A1	Ag UTV	Gasoline	1997	10	Uncontrolled Technology	-	6	-	1500	0	0	5	Madera
G-98632-A1	Ag UTV	Gasoline	2008	27	Control Technology	-	35	-	275	0	0	5	Fresno
G-98655-A1	Ag UTV	Gasoline	2005	5	Control Technology	-	35	-	500	0	0	5	San Joaquin
G-98791-A1	Ag UTV	Gasoline	2000	23	Uncontrolled Technology	-	35	-	125	0	0	5	Fresno
G-98540-A1	Ag UTV	Gasoline	2000	23	Uncontrolled Technology	-	35	-	230	0	0	5	Kings
G-98784-A1	Ag UTV	Gasoline	2010	20	Control Technology	-	6	-	2000	0	0	5	Kings
G-98548-A1	Ag UTV	Gasoline	2001	5	Uncontrolled Technology	-	35	-	250	0	0	5	San Joaquin
G-99911-A1	Ag UTV	Gasoline	2004	36	Control Technology	-	7	-	750	0	0	5	Kern
G-98369-A1	Ag UTV	Gasoline	2007	16	Control Technology	-	35	-	1250	0	0	5	Madera
G-98007-A1	Ag UTV	Gasoline	1995	20	Uncontrolled Technology	-	22	-	200	0	0	5	Stanislaus
G-98151-A1	Ag UTV	Diesel	2011	22	Tier 4 Final	-	35	-	1000	0	0	5	Fresno
G-98346-A1	Ag UTV	Gasoline	1995	18	Uncontrolled Technology	-	6	-	200	0	0	5	Tulare
G-100118-A1	Ag UTV	Gasoline	2004	6	Control Technology	-	35	-	125	0	0	5	Fresno
G-100294-A1	Ag UTV	Gasoline	2008	10	Control Technology	-	35	-	200	0	0	5	San Joaquin
G-99751-A1	Ag UTV	Gasoline	1982	9	Uncontrolled Technology	-	7	-	50	0	0	5	San Joaquin
G-99598-A1	Ag UTV	Gasoline	2004	10	Control Technology	-	35	-	150	0	0	5	Merced
G-99413-A1	Ag UTV	Gasoline	2011	20	Control Technology	-	35	-	300	0	0	5	San Joaquin
G-81525-A1	Ag UTV	Gasoline	2011	27	Control Technology	-	6	-	500	0	0	5	Merced
G-99600-A1	Ag UTV	Gasoline	2000	19	Uncontrolled Technology	-	36	-	400	0	0	5	Kern
G-98546-A1	Ag UTV	Diesel	1999	18	Tier 1	-	6	-	100	0	0	5	Tulare

## Description Ag UTV Replacement

Project #	Primary Function	Fuel Type	Baseline			New Eng			Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Yr	New HP	New Tier					
G-98052-A1	Ag UTV	Gasoline	2015	27	Control Technology	-	7	-	1200	0	0	5	Kern
G-80026-A1	Ag UTV	Gasoline	2006	10	Control Technology	-	40	-	350	0	0	5	San Joaquin
G-98929-A1	Ag UTV	Gasoline	1982	13	Uncontrolled Technology	-	4	-	600	0	0	5	Tulare
G-101464-A1	Ag UTV	Gasoline	2016	7	Control Technology	-	35	-	500	0	0	5	Stanislaus
G-100185-A1	Ag UTV	Gasoline	2001	23	Uncontrolled Technology	-	38	-	500	0	0	5	Merced
G-99209-A1	Ag UTV	Gasoline	1999	17	Uncontrolled Technology	-	6	-	550	0	0	5	Madera
G-82648-A1	Ag UTV	Gasoline	2000	30	Uncontrolled Technology	-	7	-	700	0	0	5	Kern
G-81578-A1	Ag UTV	Gasoline	2002	28	Uncontrolled Technology	-	7	-	450	0	0	5	Kern
G-98844-A1	Ag UTV	Gasoline	2003	10	Uncontrolled Technology	-	6	-	390	0	0	5	Fresno
G-98842-A1	Ag UTV	Diesel	2005	18	Tier 2	-	6	-	175	0	0	5	Fresno
G-112302-A1	Ag UTV	Gasoline	1999	22	Uncontrolled Technology	-	19	-	100	0	0	5	Stanislaus
G-111643-A1	Ag UTV	Gasoline	1999	19	Uncontrolled Technology	-	13	-	50	0	0	5	Fresno
G-98267-A1	Ag UTV	Diesel	2008	21	Tier 4 Final	-	22	-	300	0	0	5	Tulare
G-99272-A1	Ag UTV	Gasoline	2005	17	Control Technology	-	22	-	500	0	0	5	Stanislaus
G-99257-A1	Ag UTV	Gasoline	2005	17	Control Technology	-	22	-	500	0	0	5	Stanislaus
G-98263-A1	Ag UTV	Gasoline	1979	6	Uncontrolled Technology	-	12	-	200	0	0	5	Merced
G-101382-A1	Ag UTV	Gasoline	1996	23	Uncontrolled Technology	-	35	-	1200	0	0	5	Merced
G-83760-A1	Ag UTV	Gasoline	2013	27	Control Technology	-	7	-	800	0	0	5	Stanislaus
G-81048-A1	Ag UTV	Gasoline	2002	27	Uncontrolled Technology	-	36	-	2000	0	0	5	Stanislaus
G-81047-A1	Ag UTV	Gasoline	2004	22	Uncontrolled Technology	-	36	-	2000	0	0	5	Stanislaus
G-99842-A1	Ag UTV	Gasoline	2014	16	Control Technology	-	35	-	500	0	0	5	Fresno
G-101298-A1	Ag UTV	Gasoline	2004	22	Control Technology	-	6	-	300	0	0	5	Fresno
G-101155-A1	Ag UTV	Gasoline	2009	30	Control Technology	-	6	-	300	0	0	5	Fresno
G-81059-A1	Ag UTV	Gasoline	2004	44	Control Technology	-	36	-	1000	0	0	5	San Joaquin
G-99182-A1	Ag UTV	Diesel	2011	24	Tier 4 Final	-	6	-	200	0	0	5	Fresno
G-100165-A1	Ag UTV	Gasoline	2000	8	Uncontrolled Technology	-	6	-	1300	0	0	5	Tulare
G-98937-A1	Ag UTV	Gasoline	1997	5	Uncontrolled Technology	-	35	-	400	0	0	5	Tulare
G-98792-A1	Ag UTV	Gasoline	1997	19	Uncontrolled Technology	-	35	-	200	0	0	5	Tulare
G-101862-A1	Ag UTV	Gasoline	1986	10	Uncontrolled Technology	-	35	-	400	0	0	5	Merced

## Description Ag UTV Replacement

Project #	Primary Function	Fuel Type	Baseline		Old Tier	New Eng			Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP		Yr	New HP	New Tier					
G-82384-A1	Ag UTV	Gasoline	1999	28	Uncontrolled Technology	-	36	-	600	0	0	5	Tulare
G-136342-A:	Ag UTV	Gasoline	2003	10	Uncontrolled Technology	-	17	-	100	0	0	5	Tulare
G-98819-A1	Ag UTV	Gasoline	2018	11	Control Technology	-	35	-	800	0	0	5	Tulare
G-98796-A1	Ag UTV	Gasoline	2010	22	Control Technology	-	35	-	800	0	0	5	Tulare
G-101743-A:	Ag UTV	Gasoline	2006	20	Control Technology	-	35	-	600	0	0	5	Fresno
G-101704-A:	Ag UTV	Gasoline	2005	32	Control Technology	-	35	-	600	0	0	5	Fresno
G-99353-A1	Ag UTV	Diesel	1993	20	Tier 0	-	30	-	400	0	0	5	Fresno
G-100117-A:	Ag UTV	Gasoline	2015	23	Control Technology	-	30	-	1000	0	0	5	Fresno
G-98828-A1	Ag UTV	Gasoline	2013	15	Control Technology	-	35	-	1000	0	0	5	Stanislaus
G-136545-A:	Ag UTV	Gasoline	2006	46	Control Technology	-	30	-	300	0	0	5	Fresno
G-99306-A1	Ag UTV	Gasoline	2005	18	Control Technology	-	35	-	260	0	0	5	Fresno
G-98950-A1	Ag UTV	Gasoline	1996	12	Uncontrolled Technology	-	30	-	60	0	0	5	San Joaquin
G-98977-A1	Ag UTV	Gasoline	1986	22	Uncontrolled Technology	-	35	-	350	0	0	5	Fresno
G-98976-A1	Ag UTV	Gasoline	1999	21	Uncontrolled Technology	-	35	-	350	0	0	5	Fresno
G-98948-A1	Ag UTV	Gasoline	1995	10	Uncontrolled Technology	-	30	-	75	0	0	5	San Joaquin
G-98947-A1	Ag UTV	Gasoline	1995	10	Uncontrolled Technology	-	30	-	105	0	0	5	San Joaquin
G-98907-A1	Ag UTV	Gasoline	1988	9	Uncontrolled Technology	-	30	-	150	0	0	5	Stanislaus
G-98905-A1	Ag UTV	Gasoline	2012	13	Control Technology	-	30	-	150	0	0	5	Stanislaus
G-98903-A1	Ag UTV	Gasoline	2017	13	Control Technology	-	30	-	150	0	0	5	Stanislaus
G-98902-A1	Ag UTV	Gasoline	2016	13	Control Technology	-	30	-	150	0	0	5	Stanislaus
G-98900-A1	Ag UTV	Gasoline	2014	13	Control Technology	-	30	-	150	0	0	5	Stanislaus
G-98898-A1	Ag UTV	Gasoline	2013	13	Control Technology	-	30	-	150	0	0	5	Stanislaus
G-99395-A1	Ag UTV	Gasoline	2007	32	Control Technology	-	35	-	1000	0	0	5	Tulare
G-99377-A1	Ag UTV	Diesel	2004	22	Tier 1	-	35	-	1500	0	0	5	Tulare
G-100464-A:	Ag UTV	Gasoline	1996	15	Uncontrolled Technology	-	6	-	250	0	0	5	Fresno
G-98936-A1	Ag UTV	Gasoline	2004	23	Control Technology	-	35	-	355	0	0	5	Stanislaus
G-99892-A1	Ag UTV	Gasoline	1985	18	Uncontrolled Technology	-	35	-	200	0	0	5	San Joaquin
G-136363-A:	Ag UTV	Gasoline	1989	20	Uncontrolled Technology	-	30	-	400	0	0	5	Tulare
G-136650-A:	Ag UTV	Gasoline	2005	15	Control Technology	-	30	-	300	0	0	5	Tulare

Project Type Off-Road

## SJVAPCD Project Data 2023

## Description Ag UTV Replacement

Project #	Primary Function	Fuel Type	Baseline		Old Tier	New Eng			Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP		Yr	New HP	New Tier					
G-100324-A:	Ag UTV	Gasoline	2007	15	Control Technology	-	35	-	300	0	0	5	Stanislaus
G-100323-A:	Ag UTV	Gasoline	2007	15	Control Technology	-	35	-	300	0	0	5	Stanislaus
G-98794-A1	Ag UTV	Gasoline	2004	17	Control Technology	-	35	-	500	0	0	5	San Joaquin
G-98583-A1	Ag UTV	Diesel	2010	22	Tier 4 Interim	-	6	-	500	0	0	5	San Joaquin
G-136423-A:	Ag UTV	Gasoline	2003	33	Uncontrolled Technology	-	30	-	400	0	0	5	Fresno
G-101127-A:	Ag UTV	Gasoline	2003	32	Uncontrolled Technology	-	35	-	200	0	0	5	Kings
G-99116-A1	Ag UTV	Gasoline	2002	13	Uncontrolled Technology	-	35	-	800	0	0	5	Tulare
G-99178-A1	Ag UTV	Gasoline	2006	21	Control Technology	-	35	-	1200	0	0	5	Tulare
G-99175-A1	Ag UTV	Gasoline	2000	20	Uncontrolled Technology	-	35	-	1200	0	0	5	Tulare
G-101628-A:	Ag UTV	Gasoline	2005	24	Control Technology	-	6	-	250	0	0	5	Fresno
G-137874-A:	Ag UTV	Gasoline	2013	28	Control Technology	-	30	-	1300	0	0	5	Fresno
G-99999-A1	Ag UTV	Gasoline	2006	14	Control Technology	-	30	-	187	0	0	5	Fresno
G-99966-A1	Ag UTV	Gasoline	1991	15	Uncontrolled Technology	-	30	-	600	0	0	5	Kings
G-99006-A1	Ag UTV	Gasoline	1991	19	Uncontrolled Technology	-	35	-	250	0	0	5	Fresno
G-100137-A:	Ag UTV	Gasoline	2007	33	Control Technology	-	30	-	100	0	0	5	San Joaquin
G-99404-A1	Ag UTV	Gasoline	1983	16	Uncontrolled Technology	-	30	-	150	0	0	5	San Joaquin
G-98854-A1	Ag UTV	Gasoline	2005	46	Control Technology	-	35	-	300	0	0	5	Stanislaus
G-98951-A1	Ag UTV	Gasoline	1986	16	Uncontrolled Technology	-	35	-	350	0	0	5	Kings
G-99248-A1	Ag UTV	Gasoline	2001	24	Uncontrolled Technology	-	30	-	572	0	0	5	Stanislaus
G-99255-A1	Ag UTV	Gasoline	2016	14	Control Technology	-	35	-	700	0	0	5	Fresno
G-98850-A1	Ag UTV	Gasoline	2006	5	Control Technology	-	35	-	100	0	0	5	San Joaquin
G-98848-A1	Ag UTV	Gasoline	2014	30	Control Technology	-	30	-	700	0	0	5	Merced
G-98846-A1	Ag UTV	Gasoline	1993	30	Uncontrolled Technology	-	30	-	250	0	0	5	Merced
G-99375-A1	Ag UTV	Gasoline	1998	9	Uncontrolled Technology	-	35	-	700	0	0	5	Fresno
G-98482-A1	Ag UTV	Gasoline	2000	19	Uncontrolled Technology	-	30	-	750	0	0	5	Fresno
G-82260-A1	Ag UTV	Gasoline	2007	24	Control Technology	-	7	-	200	0	0	5	Stanislaus
G-98847-A1	Ag UTV	Gasoline	2007	28	Control Technology	-	35	-	360	0	0	5	Tulare
G-98964-A1	Ag UTV	Diesel	1980	16	Tier 0	-	30	-	100	0	0	5	Stanislaus
G-136408-A:	Ag UTV	Gasoline	2013	16	Control Technology	-	30	-	1300	0	0	5	Kings



## Description Ag UTV Replacement

Project #	Primary Function	Fuel Type	Baseline			New Eng			Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP	Old Tier	Yr	New HP	New Tier					
G-136693-A:	Ag UTV	Gasoline	1995	28	Uncontrolled Technology	-	6	-	100	0	0	5	Fresno
G-136426-A:	Ag UTV	Gasoline	2012	16	Control Technology	-	12	-	900	0	0	5	Kern
G-98993-A1	Ag UTV	Gasoline	2005	12	Control Technology	-	35	-	400	0	0	5	Tulare
G-137089-A:	Ag UTV	Diesel	2015	19	Tier 4 Final	-	6	-	500	0	0	5	Kern
G-136460-A:	Ag UTV	Gasoline	1982	17	Uncontrolled Technology	-	30	-	200	0	0	5	Stanislaus
G-101698-A:	Ag UTV	Gasoline	2008	30	Control Technology	-	30	-	280	0	0	5	Merced
G-98927-A1	Ag UTV	Diesel	2015	25	Tier 4 Final	-	7	-	600	0	0	5	Tulare
G-98838-A1	Ag UTV	Gasoline	2013	16	Control Technology	-	12	-	300	0	0	5	Merced
G-136383-A:	Ag UTV	Gasoline	2004	29	Control Technology	-	30	-	150	0	0	5	Merced
G-99208-A1	Ag UTV	Gasoline	2001	16	Uncontrolled Technology	-	30	-	300	0	0	5	San Joaquin
G-98992-A1	Ag UTV	Gasoline	2001	16	Uncontrolled Technology	-	30	-	600	0	0	5	Stanislaus
G-100470-A:	Ag UTV	Gasoline	2008	19	Control Technology	-	30	-	73	0	0	5	Stanislaus
G-138176-A:	Ag UTV	Gasoline	2011	13	Control Technology	-	12	-	250	0	0	5	Stanislaus
G-98849-A1	Ag UTV	Gasoline	2004	10	Control Technology	-	6	-	700	0	0	5	Tulare
G-136312-A:	Ag UTV	Diesel	2015	22	Tier 4 Final	-	30	-	200	0	0	5	Tulare
G-136303-A:	Ag UTV	Gasoline	2013	22	Control Technology	-	30	-	500	0	0	5	Tulare
G-99500-A1	Ag UTV	Gasoline	1986	13	Uncontrolled Technology	-	4	-	800	0	0	5	Tulare
G-136533-A:	Ag UTV	Gasoline	1994	9	Uncontrolled Technology	-	20	-	200	0	0	5	Tulare
G-99559-A1	Ag UTV	Gasoline	2004	27	Control Technology	-	12	-	1500	0	0	5	Stanislaus
G-98991-A1	Ag UTV	Gasoline	1996	19	Uncontrolled Technology	-	12	-	1500	0	0	5	Stanislaus
G-99005-A1	Ag UTV	Diesel	2015	21	Tier 4 Final	-	6	-	1800	0	0	5	Fresno
G-101554-A:	Ag UTV	Gasoline	2003	5	Uncontrolled Technology	-	12	-	200	0	0	5	San Joaquin
G-99516-A1	Ag UTV	Gasoline	1986	25	Uncontrolled Technology	-	6	-	400	0	0	5	Madera
G-82128-A1	Ag UTV	Gasoline	2006	44	Control Technology	-	30	-	200	0	0	5	Madera
G-98952-A1	Ag UTV	Gasoline	1996	12	Uncontrolled Technology	-	30	-	55	0	0	5	San Joaquin
G-98974-A1	Ag UTV	Gasoline	2007	26	Control Technology	-	30	-	400	0	0	5	Merced
G-98826-A1	Ag UTV	Gasoline	1987	21	Uncontrolled Technology	-	30	-	400	0	0	5	Kings
G-136879-A:	Ag UTV	Gasoline	2016	8	Control Technology	-	6	-	350	0	0	5	Fresno
G-136648-A:	Ag UTV	Gasoline	1997	10	Uncontrolled Technology	-	5	-	500	0	0	5	Fresno

## Description Ag UTV Replacement

Project #	Primary Function	Fuel Type	Baseline		Old Tier	New Eng			Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
			Yr	Old HP		Yr	New HP	New Tier					
G-98649-A1	Ag UTV	Gasoline	2005	28	Control Technology	-	4	-	300	0	0	5	Tulare
G-136461-A	Ag UTV	Gasoline	1989	8	Uncontrolled Technology	-	12	-	40	0	0	5	Fresno
G-98787-A1	Ag UTV	Gasoline	1982	7	Uncontrolled Technology	-	30	-	700	0	0	5	Madera
G-98785-A1	Ag UTV	Gasoline	1990	14	Uncontrolled Technology	-	30	-	300	0	0	5	Madera
G-101037-A	Ag UTV	Gasoline	1988	8	Uncontrolled Technology	-	30	-	1000	0	0	5	Tulare
G-136403-A	Ag UTV	Gasoline	2013	32	Control Technology	-	30	-	2000	0	0	5	San Joaquin
G-136654-A	Ag UTV	Gasoline	2012	51	Control Technology	-	30	-	160	0	0	5	Tulare
G-137637-A	Ag UTV	Gasoline	1997	27	Uncontrolled Technology	-	30	-	150	0	0	5	Fresno
G-98965-A1	Ag UTV	Gasoline	1992	16	Uncontrolled Technology	-	30	-	400	0	0	5	Stanislaus
G-98853-A1	Ag UTV	Gasoline	2004	19	Control Technology	-	6	-	300	0	0	5	San Joaquin

**Appendix B**  
**NRCS Combustion System Improvement Program Project Information**

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
3978	Skid Steer Loader	Diesel	2005	92	Tier 2	2018	106	Tier 4 Final	350	-	-	10	San Joaquin
3979	Skid Steer Loader	Diesel	1998	40	Tier 0	2020	49	Tier 4 Final	300	-	-	10	San Joaquin
3980	Tractor	Diesel	1998	92	Tier 1	2021	114	Tier 4 Final	400	-	-	10	San Joaquin
3981	Tractor	Diesel	1975	100	Tier 0	2018	100	Tier 4 Final	300	-	-	10	San Joaquin
3982	Tractor	Diesel	1967	110	Tier 0	2021	114	Tier 4 Final	665	-	-	10	San Joaquin
3983	Tractor	Diesel	1981	67	Tier 0	2020	105	Tier 4 Final	400	-	-	10	San Joaquin
3984	Tractor	Diesel	1986	67	Tier 0	2020	70	Tier 4 Final	400	-	-	10	San Joaquin
3985	Tractor	Diesel	2002	110	Tier 1	2021	135	Tier 4 Final	200	-	-	10	San Joaquin
3986	Tractor	Diesel	1965	55	Tier 0	2021	57	Tier 4 Final	200	-	-	10	San Joaquin
3987	Tractor	Diesel	1978	97	Tier 0	2019	47	Tier 4 Final	780	-	-	10	San Joaquin
3988	Crawler Tractor/Dozer	Diesel	2000	270	Tier 1	2020	300	Tier 4 Final	300	-	-	10	San Joaquin
3989	Tractor	Diesel	1980	98	Tier 0	2019	100	Tier 4 Final	300	-	-	10	San Joaquin
3990	Tractor	Diesel	2006	125	Tier 2	2020	131	Tier 4 Final	1870	-	-	10	San Joaquin
3991	Tractor	Diesel	2004	71	Tier 2	2020	74	Tier 4 Final	1000	-	-	10	San Joaquin
3992	Tractor	Diesel	1999	35	Tier 1	2021	42	Tier 4 Final	1000	-	-	10	San Joaquin
3993	Tractor	Diesel	1981	60	Tier 0	2020	75	Tier 4 Final	450	-	-	10	San Joaquin
3994	Tractor	Diesel	2006	140	Tier 2	2020	125	Tier 4 Final	900	-	-	10	San Joaquin
3995	Tractor	Diesel	2007	85	Tier 2	2019	100	Tier 4 Final	950	-	-	10	San Joaquin
3996	Tractor	Diesel	2004	85	Tier 2	2018	100	Tier 4 Final	450	-	-	10	San Joaquin
3997	Tractor	Diesel	2007	85	Tier 2	2018	100	Tier 4 Final	900	-	-	10	San Joaquin
3998	Tractor	Diesel	2007	85	Tier 2	2020	100	Tier 4 Final	900	-	-	10	San Joaquin
3999	Tractor	Diesel	1985	45	Tier 0	2021	55	Tier 4 Final	260	-	-	10	San Joaquin
4000	Tractor	Diesel	1975	174	Tier 0	2020	165	Tier 4 Final	600	-	-	10	San Joaquin
4001	Tractor	Diesel	1978	90	Tier 0	2021	89	Tier 4 Final	600	-	-	10	San Joaquin
4002	Tractor	Diesel	1988	88	Tier 0	2021	89	Tier 4 Final	600	-	-	10	San Joaquin
4003	Tractor	Diesel	1972	112	Tier 0	2021	89	Tier 4 Final	600	-	-	10	San Joaquin
4004	Tractor	Diesel	1981	87	Tier 0	2019	100	Tier 4 Final	200	-	-	10	San Joaquin
4005	Tractor	Diesel	1977	76	Tier 0	2018	95	Tier 4 Final	450	-	-	10	San Joaquin
4006	Tractor	Diesel	2001	95	Tier 1	2021	115	Tier 4 Final	200	-	-	10	San Joaquin
4007	Tractor	Diesel	1995	81	Tier 0	2021	100	Tier 4 Final	300	-	-	10	San Joaquin
4008	Tractor	Diesel	2000	90	Tier 1	2018	106	Tier 4 Final	500	-	-	10	San Joaquin

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4009	Tractor	Diesel	1996	95	Tier 0	2021	114	Tier 4 Final	800	-	-	10	San Joaquin
4010	Tractor	Diesel	2007	90	Tier 2	2020	99	Tier 4 Final	440	-	-	10	San Joaquin
4011	Skid Steer Loader	Diesel	1997	80	Tier 0	2020	74	Tier 4 Final	900	-	-	10	San Joaquin
4012	Tractor	Diesel	1990	126	Tier 0	2021	123	Tier 4 Final	485	-	-	10	San Joaquin
4013	Tractor	Diesel	1995	83	Tier 0	2021	99	Tier 4 Final	600	-	-	10	San Joaquin
4014	Tractor	Diesel	1987	68	Tier 0	2018	74	Tier 4 Final	200	-	-	10	San Joaquin
4015	Tractor	Diesel	2006	112	Tier 2	2019	123	Tier 4 Final	200	-	-	10	Stanislaus
4016	Tractor	Diesel	2006	112	Tier 2	2020	123	Tier 4 Final	200	-	-	10	Stanislaus
4017	Tractor	Diesel	1987	104	Tier 0	2021	106	Tier 4 Final	500	-	-	10	Stanislaus
4018	Tractor	Diesel	2008	99	Tier 3	2021	115	Tier 4 Final	2000	-	-	10	Tulare
4019	Tractor	Diesel	2000	110	Tier 1	2021	115	Tier 4 Final	2000	-	-	10	Tulare
4020	Tractor	Diesel	1988	97	Tier 0	2021	115	Tier 4 Final	2000	-	-	10	Tulare
4021	Tractor	Diesel	1987	102	Tier 0	2021	115	Tier 4 Final	2000	-	-	10	Tulare
4022	Tractor	Diesel	1979	27	Tier 0	2021	32	Tier 4 Final	600	-	-	10	Tulare
4022	Tractor	Diesel	1979	27	Tier 0	2021	32	Tier 4 Final	600	-	-	10	Tulare
4023	Tractor	Diesel	1999	115	Tier 1	2021	125	Tier 4 Final	300	-	-	10	San Joaquin
4024	Tractor	Diesel	1996	161	Tier 0	2021	123	Tier 4 Final	700	-	-	10	Tulare
4025	Tractor	Diesel	2004	52	Tier 2	2018	50	Tier 4 Final	600	-	-	10	Tulare
4026	Tractor	Diesel	1965	58	Tier 0	2021	37	Tier 4 Final	624	-	-	10	Tulare
4027	Tractor	Diesel	1978	48	Tier 0	2020	57	Tier 4 Final	1000	-	-	10	San Joaquin
4028	Tractor	Diesel	1982	133	Tier 0	2021	165	Tier 4 Final	750	-	-	10	San Joaquin
4029	Tractor	Diesel	1987	82	Tier 0	2018	99	Tier 4 Final	500	-	-	10	San Joaquin
4030	Loader	Diesel	1999	67	Tier 1	2021	80	Tier 4 Final	750	-	-	10	San Joaquin
4031	Tractor	Diesel	1979	97	Tier 0	2021	114	Tier 4 Final	560	-	-	10	San Joaquin
4032	Tractor	Diesel	1984	69	Tier 0	2019	67	Tier 4 Final	600	-	-	10	San Joaquin
4033	Tractor	Diesel	1967	114	Tier 0	2019	104	Tier 4 Final	575	-	-	10	San Joaquin
4034	Tractor	Diesel	1976	164	Tier 0	2020	185	Tier 4 Final	250	-	-	10	San Joaquin
4035	Tractor	Diesel	2005	110	Tier 2	2019	114	Tier 4 Final	610	-	-	10	San Joaquin
4036	Tractor	Diesel	1993	289	Tier 0	2020	210	Tier 4 Final	1200	-	-	10	San Joaquin
4037	Tractor	Diesel	1985	30	Tier 0	2020	35	Tier 4 Final	400	-	-	10	San Joaquin
4038	Tractor	Diesel	1977	60	Tier 0	2021	70	Tier 4 Final	2000	-	-	10	San Joaquin

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4039	Tractor	Diesel	2007	768	Tier 2	2021	830	Tier 4 Final	720	-	-	10	San Joaquin
4040	Tractor	Diesel	1976	97	Tier 0	2021	114	Tier 4 Final	180	-	-	10	San Joaquin
4041	Tractor	Diesel	2002	95	Tier 1	2020	114	Tier 4 Final	500	-	-	10	San Joaquin
4042	Tractor	Diesel	1966	47	Tier 0	2020	37	Tier 4 Final	350	-	-	10	San Joaquin
4043	Shaker	Diesel	2006	130	Tier 2	2020	148	Tier 4 Final	215	-	-	10	San Joaquin
4044	Tractor	Diesel	1965	47	Tier 0	2021	60	Tier 4 Final	600	-	-	10	San Joaquin
4045	Tractor	Diesel	1989	162	Tier 0	2022	123	Tier 4 Final	1500	-	-	10	Tulare
4046	Tractor	Diesel	2005	72	Tier 2	2021	74	Tier 4 Final	850	-	-	10	San Joaquin
4047	Tractor	Diesel	2006	98	Tier 2	2020	120	Tier 4 Final	900	-	-	10	Kings
4048	Tractor	Diesel	2006	98	Tier 2	2020	120	Tier 4 Final	900	-	-	10	Kings
4049	Tractor	Diesel	1968	101	Tier 0	2020	125	Tier 4 Final	500	-	-	10	Kings
4050	Tractor	Diesel	1984	49	Tier 0	2020	57	Tier 4 Final	3000	-	-	10	Kings
4051	Tractor	Diesel	1978	90	Tier 0	2020	106	Tier 4 Final	850	-	-	10	Kings
4052	Tractor	Diesel	1999	100	Tier 1	2020	115	Tier 4 Final	1200	-	-	10	Kings
4053	Tractor	Diesel	1972	217	Tier 0	2020	115	Tier 4 Final	1200	-	-	10	Kings
4054	Tractor	Diesel	1974	100	Tier 0	2020	115	Tier 4 Final	1200	-	-	10	Kings
4055	Tractor	Diesel	2006	98	Tier 2	2020	120	Tier 4 Final	900	-	-	10	Kings
4056	Tractor	Diesel	2006	98	Tier 2	2020	120	Tier 4 Final	900	-	-	10	Kings
4057	Tractor	Diesel	1980	76	Tier 0	2021	97	Tier 4 Final	100	-	-	10	Fresno
4058	Tractor	Diesel	1987	47	Tier 0	2022	55	Tier 4 Final	100	-	-	10	Fresno
4059	Tractor	Diesel	1976	60	Tier 0	2022	74	Tier 4 Final	600	-	-	10	Fresno
4060	Tractor	Diesel	2001	110	Tier 1	2020	120	Tier 4 Final	125	-	-	10	Fresno
4061	Shaker	Diesel	1988	149	Tier 0	2022	173	Tier 4 Final	500	-	-	10	Fresno
4062	Tractor	Diesel	1985	46	Tier 0	2021	55	Tier 4 Final	250	-	-	10	Madera
4063	Tractor	Diesel	1994	325	Tier 0	2021	370	Tier 4 Final	850	-	-	10	Fresno
4064	Tractor	Diesel	1984	80	Tier 0	2021	90	Tier 4 Final	275	-	-	10	San Joaquin
4065	Loader	Diesel	2002	217	Tier 1	2022	200	Tier 4 Final	725	-	-	10	San Joaquin
4066	Tractor	Diesel	1980	57	Tier 0	2021	63	Tier 4 Final	175	-	-	10	San Joaquin
4067	Tractor	Diesel	1992	88	Tier 0	2021	105	Tier 4 Final	420	-	-	10	San Joaquin
4068	Tractor	Diesel	1974	58	Tier 0	2021	65	Tier 4 Final	250	-	-	10	Fresno
4069	Tractor	Diesel	1995	114	Tier 0	2022	114	Tier 4 Final	500	-	-	10	Merced

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4070	Tractor	Diesel	2006	90	Tier 2	2020	106	Tier 4 Final	900	-	-	10	San Joaquin
4071	Tractor	Diesel	2003	115	Tier 1	2021	106	Tier 4 Final	450	-	-	10	San Joaquin
4072	Tractor	Diesel	1996	85	Tier 0	2021	106	Tier 4 Final	200	-	-	10	Merced
4073	Tractor	Diesel		102	Tier 0	2022	115	Tier 4 Final	200	-	-	10	Madera
4074	Tractor	Diesel	1984	79	Tier 0	2022	90	Tier 4 Final	800	-	-	10	Madera
4075	Tractor	Diesel	2004	80	Tier 2	2022	100	Tier 4 Final	700	-	-	10	Madera
4076	Tractor	Diesel		97	Tier 0	2022	115	Tier 4 Final	400	-	-	10	Madera
4077	Tractor	Diesel	1984	90	Tier 0	2021	106	4 Phase In/Alt	400	-	-	10	Fresno
4078	Tractor	Diesel	1995	102	Tier 0	2022	123	Tier 4 Final	500	-	-	10	Madera
4079	Tractor	Diesel	1989	36	Tier 0	2022	42	Tier 4 Final	100	-	-	10	Tulare
4080	Tractor	Diesel	1972	79	Tier 0	2022	92	Tier 4 Final	250	-	-	10	San Joaquin
4081	Tractor	Diesel	1971	83	Tier 0	2021	70	Tier 4 Final	300	-	-	10	Fresno
4082	Tractor	Diesel	1978	80	Tier 0	2021	70	Tier 4 Final	250	-	-	10	Fresno
4083	Tractor	Diesel	1986	128	Tier 0	2022	123	Tier 4 Final	6400	-	-	10	Tulare
4085	Tractor	Diesel	1986	91	Tier 0	2021	106	Tier 4 Final	300	-	-	10	Tulare
4086	Tractor	Diesel	1980	74	Tier 0	2022	92	Tier 4 Final	300	-	-	10	Fresno
4087	Tractor	Diesel	1991	95	Tier 0	2021	106	Tier 4 Final	150	-	-	10	Merced
4088	Tractor	Diesel	2001	103	Tier 1	2022	115	Tier 4 Final	250	-	-	10	Madera
4089	Tractor	Diesel	1998	26	Tier 1	2021	33	Tier 4 Final	400	-	-	10	Stanislaus
4090	Tractor	Diesel	1997	68	Tier 0	2022	74	Tier 4 Final	400	-	-	10	San Joaquin
4091	Tractor	Diesel	1979	63	Tier 0	2021	74	Tier 4 Final	200	-	-	10	Stanislaus
4092	Tractor	Diesel	1982	82	Tier 0	2021	97	Tier 4 Final	150	-	-	10	Stanislaus
4093	Tractor	Diesel	2006	105	Tier 2	2021	114	Tier 4 Final	800	-	-	10	Tulare
4094	Tractor	Diesel	1977	80	Tier 0	2021	99	Tier 4 Final	1100	-	-	10	Merced
4095	Tractor	Diesel	1995	100	Tier 0	2021	145	Tier 4 Final	1300	-	-	10	Merced
4096	Tractor	Diesel	1995	102	Tier 0	2022	125	Tier 4 Final	300	-	-	10	Merced
4097	Tractor	Diesel	1998	114	Tier 0	2021	130	Tier 4 Final	500	-	-	10	Kern
4098	Tractor	Diesel	1992	88	Tier 0	2022	74	Tier 4 Final	650	-	-	10	San Joaquin
4099	Tractor	Diesel	1997	83	Tier 0	2021	100	Tier 4 Final	375	-	-	10	San Joaquin
4100	Tractor	Diesel	1981	45	Tier 0	2019	55	Tier 4 Final	60	-	-	10	Fresno
4101	Tractor	Diesel	1990	97	Tier 0	2020	120	Tier 4 Final	150	-	-	10	Fresno

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4102	Tractor	Diesel	1966	115	Tier 0	2022	91	Tier 4 Final	200	-	-	10	Fresno
4103	Tractor	Diesel	1977	82	Tier 0	2022	75	Tier 4 Final	300	-	-	10	Fresno
4104	Tractor	Diesel	1960	61	Tier 0	2021	70	Tier 4 Final	500	-	-	10	Tulare
4105	Tractor	Diesel	1987	89	Tier 0	2021	100	Tier 4 Final	350	-	-	10	Madera
4106	Tractor	Diesel	1993	92	Tier 0	2021	100	Tier 4 Final	300	-	-	10	Madera
4107	Tractor	Diesel	1996	97	Tier 0	2020	106	Tier 4 Final	1200	-	-	10	Fresno
4108	Tractor	Diesel	2003	40	Tier 2	2021	50	Tier 4 Final	700	-	-	10	Fresno
4109	Tractor	Diesel	1969	62	Tier 0	2021	74	Tier 4 Final	250	-	-	10	Fresno
4110	Tractor	Diesel	1979	79	Tier 0	2018	74	Tier 4 Final	380	-	-	10	San Joaquin
4111	Tractor	Diesel	1963	71	Tier 0	2022	75	Tier 4 Final	100	-	-	10	Fresno
4112	Tractor	Diesel	2001	99	Tier 1	2021	112	Tier 4 Final	700	-	-	10	Tulare
4113	Tractor	Diesel	1985	310	Tier 0	2019	375	Tier 4 Final	1000	-	-	10	Tulare
4114	Tractor	Diesel	2005	114	Tier 2	2021	115	Tier 4 Final	200	-	-	10	Madera
4115	Chipper	Diesel	1994	380	Tier 0	2021	456	Tier 4 Final	400	-	-	10	Madera
4116	Tractor	Diesel	1999	99	Tier 1	2021	117	Tier 4 Final	400	-	-	10	Fresno
4117	Tractor	Diesel	1991	102	Tier 1	2021	120	Tier 4 Final	500	-	-	10	Madera
4118	Tractor	Diesel	1979	120	Tier 0	2021	125	Tier 4 Final	48	-	-	10	Madera
4119	Tractor	Diesel	1998	38	Tier 0	2022	36	Tier 4 Final	300	-	-	10	Madera
4120	Tractor	Diesel	1974	80	Tier 0	2022	98	Tier 4 Final	700	-	-	10	Fresno
4121	Tractor	Diesel	1993	46	Tier 0	2021	53	Tier 4 Final	2000	-	-	10	Kern
4122	Tractor	Diesel	2006	120	Tier 2	2021	114	Tier 4 Final	2500	-	-	10	Kern
4123	Tractor	Diesel	1998	120	Tier 1	2019	115	Tier 4 Final	500	-	-	10	Fresno
4124	Tractor	Diesel	1981	96	Tier 0	2022	100	Tier 4 Final	100	-	-	10	Fresno
4125	Tractor	Diesel	1978	190	Tier 0	2022	148	Tier 4 Final	900	-	-	10	Tulare
4126	Tractor	Diesel	1984	210	Tier 0	2022	250	Tier 4 Final	700	-	-	10	San Joaquin
4127	Tractor	Diesel	1997	68	Tier 0	2022	74	Tier 4 Final	250	-	-	10	San Joaquin
4128	Tractor	Diesel	1979	25	Tier 0	2021	124	Tier 4 Final	550	-	-	10	Madera
4128	Tractor	Diesel	1980	146	Tier 0				150	-	-	10	Madera
4129	Tractor	Diesel	1977	73	Tier 0	2022	74	Tier 4 Final	300	-	-	10	San Joaquin
4130	Tractor	Diesel	1987	73	Tier 0	2021	74	Tier 4 Final	750	-	-	10	San Joaquin
4131	Tractor	Diesel	1993	104	Tier 0	2020	110	Tier 4 Final	250	-	-	10	Madera



## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4132	Tractor	Diesel	2005	125	Tier 2	2021	106	Tier 4 Final	320	-	-	10	Tulare
4133	Tractor	Diesel	1985	46	Tier 0	2021	55	Tier 4 Final	250	-	-	10	Madera
4134	Tractor	Diesel	1995	92	Tier 0	2021	100	Tier 4 Final	350	-	-	10	Madera
4135	Tractor	Diesel	1990	89	Tier 0	2021	100	Tier 4 Final	350	-	-	10	Madera
4136	Tractor	Diesel	1990	92	Tier 0	2021	100	Tier 4 Final	350	-	-	10	Madera
4137	Tractor	Diesel	1994	92	Tier 0	2021	100	Tier 4 Final	350	-	-	10	Madera
4138	Tractor	Diesel	2003	92	Tier 1	2021	114	Tier 4 Final	550	-	-	10	San Joaquin
4139	Tractor	Diesel	2003	92	Tier 1	2022	114	Tier 4 Final	850	-	-	10	San Joaquin
4140	Tractor	Diesel	1984	210	Tier 0	2022	121	Tier 4 Final	900	-	-	10	Tulare
4141	Tractor	Diesel	1972	151	Tier 0	2022	106	Tier 4 Final	130	-	-	10	Tulare
4142	Tractor	Diesel	1979	84	Tier 0	2022	101	Tier 4 Final	350	-	-	10	San Joaquin
4143	Tractor	Diesel	1977	96	Tier 0	2020	106	Tier 4 Final	1200	-	-	10	Fresno
4144	Tractor	Diesel	1995	63	Tier 0	2022	74	Tier 4 Final	300	-	-	10	Fresno
4145	Tractor	Diesel	1995	84	Tier 0	2022	105	Tier 4 Final	500	-	-	10	San Joaquin
4146	Tractor	Diesel	1978	84	Tier 0	2020	90	Tier 4 Final	200	-	-	10	San Joaquin
4147	Tractor	Diesel	1996	100	Tier 0	2021	105	Tier 4 Final	300	-	-	10	Madera
4148	Loader	Diesel	1969	275	Tier 0	2022	184	Tier 4 Final	1050	-	-	10	Tulare
4149	Tractor	Diesel	1979	45	Tier 0	2021	56	Tier 4 Final	300	-	-	10	Stanislaus
4150	Tractor	Diesel	1962	60	Tier 0	2021	70	Tier 4 Final	120	-	-	10	Fresno
4151	Tractor	Diesel	1978	63	Tier 0	2020	74	Tier 4 Final	45	-	-	10	Fresno
4152	Tractor	Diesel	2000	43	Tier 1	2020	53	Tier 4 Final	800	-	-	10	Tulare
4153	Tractor	Diesel	1990	60	Tier 0	2022	65	Tier 4 Final	325	-	-	10	Madera
4154	Tractor	Diesel	1994	103	Tier 0	2021	106	Tier 4 Final	450	-	-	10	Madera
4155	Tractor	Diesel	1987	97	Tier 0	2022	115	Tier 4 Final	650	-	-	10	Madera
4156	Tractor	Diesel	1965	76	Tier 0	2021	80	Tier 4 Final	350	-	-	10	Tulare
4157	Tractor	Diesel	1989	97	Tier 0	2022	114	Tier 4 Final	420	-	-	10	Tulare
4158	Tractor	Diesel	1997	102	Tier 0	2022	101	Tier 4 Final	300	-	-	10	Fresno
4159	Forklift	Diesel	1981	100	Tier 0	2020	74	Tier 4 Final	420	-	-	10	Fresno
4160	Tractor	Diesel	1989	97	Tier 0	2021	117	Tier 4 Final	800	-	-	10	Merced
4161	Tractor	Diesel	1984	94	Tier 0	2021	106	Tier 4 Final	580	-	-	10	Merced
4162	Tractor	Diesel	1998	110	Tier 1	2021	141	Tier 4 Final	1000	-	-	10	Merced

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4163	Tractor	Diesel	1998	135	Tier 1	2022	141	Tier 4 Final	1000	-	-	10	Merced
4164	Tractor	Diesel	1995	120	Tier 0	2021	145	Tier 4 Final	600	-	-	10	Merced
4165	Tractor	Diesel	1975	55	Tier 0	2022	63	Tier 4 Final	140	-	-	10	Merced
4166	Tractor	Diesel	1984	94	Tier 0	2023	106	Tier 4 Final	205	-	-	10	Merced
4167	Tractor	Diesel	1983	87	Tier 0	2021	92	Tier 4 Final	100	-	-	10	Merced
4168	Tractor	Diesel	1998	92	Tier 1	2021	114	Tier 4 Final	300	-	-	10	Merced
4169	Tractor	Diesel	1965	62	Tier 0	2022	67	Tier 4 Final	480	-	-	10	Merced
4170	Tractor	Diesel	1989	81	Tier 0	2021	100	Tier 4 Final	1500	-	-	10	Merced
4171	Tractor	Diesel	1988	84	Tier 0	2021	93	Tier 4 Final	330	-	-	10	Merced
4172	Forklift	Diesel	1989	63	Tier 0	2021	74	Tier 4 Final	500	-	-	10	Merced
4173	Tractor	Diesel	1967	83	Tier 0	2021	93	Tier 4 Final	60	-	-	10	Merced
4174	Tractor	Diesel	1985	73	Tier 0	2022	89	Tier 4 Final	400	-	-	10	Merced
4175	Tractor	Diesel	1979	156	Tier 0	2022	114	Tier 4 Final	144	-	-	10	Merced
4176	Tractor	Diesel	2003	96	Tier 1	2021	114	Tier 4 Final	1000	-	-	10	Merced
4177	Tractor	Diesel	1971	47	Tier 0	2022	59	Tier 4 Final	150	-	-	10	Merced
4178	Tractor	Diesel	1995	66	Tier 0	2021	55	Tier 4 Final	180	-	-	10	San Joaquin
4180	Tractor	Diesel	1981	60	Tier 0	2021	65	Tier 4 Final	600	-	-	10	Tulare
4181	Tractor	Diesel	1985	25	Tier 0	2021	33	Tier 4 Final	100	-	-	10	San Joaquin
4182	Tractor	Diesel	1976	45	Tier 0	2021	55	Tier 4 Final	500	-	-	10	Fresno
4183	Shaker	Diesel	2002	124	Tier 1	2021	139	Tier 4 Final	600	-	-	10	Madera
4184	Tractor	Diesel	1997	330	Tier 1	2021	370	Tier 4 Final	850	-	-	10	Tulare
4185	Tractor	Diesel	1975	65	Tier 0	2022	100	Tier 4 Final	950	-	-	10	Fresno
4186	Tractor	Diesel	1979	87	Tier 0	2020	105	Tier 4 Final	350	-	-	10	San Joaquin
4187	Tractor	Diesel	1998	95	Tier 1	2021	106	Tier 4 Final	600	-	-	10	San Joaquin
4188	Tractor	Diesel	1999	75	Tier 1	2022	74	Tier 4 Final	75	-	-	10	San Joaquin
4189	Tractor	Diesel	2001	605	Tier 1	2018	687	Tier 4 Final	500	-	-	10	Tulare
4190	Tractor	Diesel	1990	74	Tier 0	2022	90	Tier 4 Final	450	-	-	10	San Joaquin
4191	Tractor	Diesel	1976	60	Tier 0	2021	65	Tier 4 Final	120	-	-	10	Fresno
4192	Tractor	Diesel	2007	73	Tier 2	2021	70	Tier 4 Final	260	-	-	10	San Joaquin
4193	Swather	Diesel	2000	95	Tier 1	2018	100	Tier 4 Final	500	-	-	10	San Joaquin
4194	Tractor	Diesel	1982	100	Tier 0	2021	115	Tier 4 Final	1500	-	-	10	Tulare

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4195	Tractor	Diesel	1989	98	Tier 0	2021	100	Tier 4 Final	105	-	-	10	Stanislaus
4196	Tractor	Diesel	1990	96	Tier 0	2021	114	Tier 4 Final	400	-	-	10	Stanislaus
4197	Tractor	Diesel	1973	58	Tier 0	2021	70	Tier 4 Final	100	-	-	10	Madera
4198	Tractor	Diesel	1969	120	Tier 0	2021	115	Tier 4 Final	150	-	-	10	Madera
4199	Tractor	Diesel	1999	101	Tier 1	2021	114	Tier 4 Final	400	-	-	10	Stanislaus
4200	Tractor	Diesel	2005	85	Tier 2	2021	106	Tier 4 Final	500	-	-	10	Madera
4201	Crawler Tractor/Dozer	Diesel	1954	59	Tier 0	2020	74	Tier 4 Final	200	-	-	10	San Joaquin
4202	Tractor	Diesel	1976	40	Tier 0	2022	37	Tier 4 Final	100	-	-	10	Fresno
4203	Crawler Tractor/Dozer	Diesel	1977	152	Tier 0	2021	106	Tier 4 Final	500	-	-	10	San Joaquin
4204	Crawler Tractor/Dozer	Diesel	1977	152	Tier 0	2021	106	Tier 4 Final	500	-	-	10	San Joaquin
4205	Tractor	Diesel	1981	73	Tier 0	2021	74	Tier 4 Final	250	-	-	10	Stanislaus
4206	Tractor	Diesel	1999	104	Tier 1	2022	120	Tier 4 Final	500	-	-	10	Fresno
4207	Tractor	Diesel	1965	37	Tier 0	2021	43	Tier 4 Final	350	-	-	10	Fresno
4208	Tractor	Diesel	1983	72	Tier 0	2021	84	Tier 4 Final	250	-	-	10	Fresno
4209	Tractor	Diesel	1985	34	Tier 0	2022	38	Tier 4 Final	100	-	-	10	San Joaquin
4213	Tractor	Diesel		60	Tier 0	2021	65	Tier 4 Final	500	-	-	10	Madera
4214	Tractor	Diesel	1997	30	Tier 0	2021	34	Tier 4 Final	300	-	-	10	Madera
4215	Tractor	Diesel	1995	74	Tier 0	2021	65	Tier 4 Final	250	-	-	10	Madera
4216	Tractor	Diesel	1999	91	Tier 1	2021	91	Tier 4 Final	503	-	-	10	San Joaquin
4217	Tractor	Diesel	1975	78	Tier 0	2021	90	Tier 4 Final	250	-	-	10	Fresno
4218	Tractor	Diesel	1984	72	Tier 0	2020	75	Tier 4 Final	500	-	-	10	Fresno
4219	Tractor	Diesel	1994	95	Tier 0	2021	114	Tier 4 Final	500	-	-	10	Stanislaus
4220	Tractor	Diesel	1975	76	Tier 0	2022	90	Tier 4 Final	525	-	-	10	Madera
4221	Tractor	Diesel	2002	114	Tier 1	2022	123	Tier 4 Final	600	-	-	10	Fresno
4222	Tractor	Diesel	1964	58	Tier 0	2018	70	Tier 4 Final	500	-	-	10	Tulare
4223	Shaker	Diesel	2000	140	Tier 1	2020	139	Tier 4 Final	500	-	-	10	Madera
4224	Tractor	Diesel	2004	91	Tier 2	2021	99	Tier 4 Final	350	-	-	10	Kern
4225	Tractor	Diesel	2004	91	Tier 2	2021	99	Tier 4 Final	600	-	-	10	Kern
4226	Tractor	Diesel	1964	84	Tier 0	2021	100	Tier 4 Final	900	-	-	10	Fresno
4227	Tractor	Diesel	1984	370	Tier 0	2021	195	Tier 4 Final	1000	-	-	10	Fresno
4228	Forklift	Diesel	1992	80	Tier 0	2021	75	Tier 4 Final	600	-	-	10	Fresno

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4229	Tractor	Diesel	2005	105	Tier 2	2021	114	Tier 4 Final	600	-	-	10	Fresno
4230	Tractor	Diesel	1965	45	Tier 0	2021	55	Tier 4 Final	350	-	-	10	Fresno
4231	Tractor	Diesel	1982	84	Tier 1	2021	100	Tier 4 Final	250	-	-	10	Fresno
4232	Tractor	Diesel	1966	52	Tier 0	2021	52	Tier 4 Final	200	-	-	10	Fresno
4233	Tractor	Diesel	1976	140	Tier 0	2022	155	Tier 4 Final	300	-	-	10	Kern
4234	Tractor	Diesel	1960	96	Tier 0	2020	115	Tier 4 Final	1066	-	-	10	Fresno
4235	Tractor	Diesel	1992	38	Tier 0	2021	42	Tier 4 Final	400	-	-	10	Fresno
4236	Tractor	Diesel	1995	72	Tier 0	2022	90	Tier 4 Final	375	-	-	10	Merced
4237	Tractor	Diesel	1986	103	Tier 0	2020	100	Tier 4 Final	450	-	-	10	Fresno
4238	Tractor	Diesel	1979	157	Tier 0	2020	100	Tier 4 Final	200	-	-	10	Stanislaus
4239	Tractor	Diesel	1975	74	Tier 0	2022	90	Tier 4 Final	300	-	-	10	Madera
4240	Tractor	Diesel	1973	75	Tier 0	2021	89	Tier 4 Final	250	-	-	10	Fresno
4241	Tractor	Diesel	1975	68	Tier 0	2022	75	Tier 4 Final	250	-	-	10	Fresno
4242	Tractor	Diesel	2007	98	Tier 2	2020	115	Tier 4 Final	245	-	-	10	Fresno
4243	Tractor	Diesel	2008	100	Tier 3	2019	115	Tier 4 Final	570	-	-	10	Fresno
4244	Tractor	Diesel	2004	99	Tier 2	2021	123	Tier 4 Final	150	-	-	10	Madera
4245	Tractor	Diesel	1978	84	Tier 0	2021	100	Tier 4 Final	300	-	-	10	Fresno
4246	Sweeper	Diesel	1980	80	Tier 0	2022	74	Tier 4 Final	250	-	-	10	Fresno
4247	Tractor	Diesel	1983	66	Tier 0	2021	60	Tier 4 Final	120	-	-	10	Fresno
4248	Tractor	Diesel	2004	110	Tier 2	2020	135	Tier 4 Final	300	-	-	10	Tulare
4249	Tractor	Diesel	2007	99	Tier 2	2022	123	Tier 4 Final	400	-	-	10	Madera
4250	Tractor	Diesel	1980	81	Tier 0	2022	100	Tier 4 Final	800	-	-	10	Fresno
4251	Tractor	Diesel	1998	99	Tier 1	2021	115	Tier 4 Final	425	-	-	10	Madera
4252	Tractor	Diesel	2007	52	Tier 2	2021	65	Tier 4 Final	270	-	-	10	Fresno
4253	Tractor	Diesel	1998	75	Tier 1	2020	75	Tier 4 Final	720	-	-	10	Fresno
4254	Tractor	Diesel	1996	97	Tier 0	2021	115	Tier 4 Final	1200	-	-	10	Fresno
4256	Tractor	Diesel	2005	105	Tier 2	2021	123	Tier 4 Final	1600	-	-	10	Tulare
4257	Tractor	Diesel	1982	82	Tier 0	2021	100	Tier 4 Final	2000	-	-	10	Tulare
4258	Tractor	Diesel	1983	80	Tier 0	2021	90	Tier 4 Final	300	-	-	10	Fresno
4259	Tractor	Diesel	2004	80	Tier 2	2022	100	Tier 4 Final	600	-	-	10	Fresno
4260	Tractor	Diesel	2005	105	Tier 2	2021	123	Tier 4 Final	1600	-	-	10	Tulare

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4261	Tractor	Diesel	2005	105	Tier 2	2021	123	Tier 4 Final	1600	-	-	10	Tulare
4262	Tractor	Diesel	2005	105	Tier 2	2021	123	Tier 4 Final	1600	-	-	10	Tulare
4263	Tractor	Diesel	1979	84	Tier 0	2022	99	Tier 4 Final	400	-	-	10	Merced
4264	Tractor	Diesel	2005	105	Tier 2	2020	125	Tier 4 Final	800	-	-	10	Stanislaus
4265	Tractor	Diesel	2005	190	Tier 2	2021	220	Tier 4 Final	1100	-	-	10	Stanislaus
4266	Tractor	Diesel	2005	110	Tier 2	2021	135	Tier 4 Final	2400	-	-	10	Tulare
4267	Crawler Tractor/Dozer	Diesel	1950	93	Tier 0	2021	114	Tier 4 Final	220	-	-	10	San Joaquin
4268	Shuttle	Diesel	1994	115	Tier 0	2021	142	Tier 4 Final	550	-	-	10	San Joaquin
4269	Tractor	Diesel	1967	46	Tier 0	2021	55	Tier 4 Final	450	-	-	10	Madera
4270	Tractor	Diesel	1964	46	Tier 0	2021	55	Tier 4 Final	450	-	-	10	Madera
4271	Tractor	Diesel	1998	100	Tier 1	2022	125	Tier 4 Final	450	-	-	10	Madera
4273	Tractor	Diesel	1967	168	Tier 0	2022	210	Tier 4 Final	200	-	-	10	Tulare
4274	Tractor	Diesel	1968	65	Tier 0	2021	74	Tier 4 Final	400	-	-	10	Stanislaus
4275	Shaker	Diesel	1986	158	Tier 0	2022	173	Tier 4 Final	325	-	-	10	Fresno
4276	Shaker	Diesel	1987	175	Tier 0	2021	174	Tier 4 Final	325	-	-	10	Fresno
4277	Shaker	Diesel	1984	158	Tier 0	2021	174	Tier 4 Final	325	-	-	10	Fresno
4278	Tractor	Diesel	1990	62	Tier 0	2021	70	Tier 4 Final	700	-	-	10	Fresno
4279	Tractor	Diesel	1991	93	Tier 0	2022	115	Tier 4 Final	800	-	-	10	Fresno
4280	Tractor	Diesel	1983	80	Tier 0	2022	92	Tier 4 Final	150	-	-	10	Fresno
4281	Tractor	Diesel	1981	162	Tier 0	2020	125	Tier 4 Final	400	-	-	10	Fresno
4282	Tractor	Diesel	1979	90	Tier 0	2021	74	Tier 4 Final	300	-	-	10	Fresno
4283	Tractor	Diesel	2006	110	Tier 2	2021	115	Tier 4 Final	800	-	-	10	Fresno
4284	Tractor	Diesel	1978	250	Tier 0	2022	310	Tier 4 Final	700	-	-	10	Tulare
4285	Tractor	Diesel	1964	58	Tier 0	2021	50	Tier 4 Final	80	-	-	10	Fresno
4286	Tractor	Diesel	1987	112	Tier 2	2020	130	Tier 4 Final	800	-	-	10	San Joaquin
4287	Tractor	Diesel	2004	89	Tier 2	2020	100	Tier 4 Final	1000	-	-	10	Fresno
4288	Tractor	Diesel	2005	192	Tier 2	2021	195	Tier 4 Final	500	-	-	10	Kern
4289	Tractor	Diesel	1992	97	Tier 0	2021	100	Tier 4 Final	250	-	-	10	Fresno
4290	Tractor	Diesel	1965	76	Tier 0	2021	90	Tier 4 Final	500	-	-	10	Fresno
4291	Tractor	Diesel	1973	125	Tier 0	2021	125	Tier 4 Final	300	-	-	10	Fresno
4292	Tractor	Diesel	1997	83	Tier 0	2022	95	Tier 4 Final	200	-	-	10	San Joaquin

## Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4293	Tractor	Diesel	1989	195	Tier 0	2021	230	Tier 4 Final	500	-	-	10	Fresno
4294	Tractor	Diesel	1998	108	Tier 1	2021	115	Tier 4 Final	1000	-	-	10	Fresno
4295	Tractor	Diesel	1998	95	Tier 1	2021	115	Tier 4 Final	1000	-	-	10	Fresno
4296	Tractor	Diesel	1980	210	Tier 0	2022	165	Tier 4 Final	1500	-	-	10	San Joaquin
4297	Tractor	Diesel	2005	275	Tier 2	2021	410	Tier 4 Final	1000	-	-	10	Tulare
4298	Tractor	Diesel	2006	110	Tier 2	2021	125	Tier 4 Final	200	-	-	10	Fresno
4299	Tractor	Diesel	1987	63	Tier 0	2021	73	Tier 4 Final	400	-	-	10	Stanislaus
4300	Tractor	Diesel	1970	102	Tier 0	2021	115	Tier 4 Final	150	-	-	10	Fresno
4301	Tractor	Diesel	1975	84	Tier 0	2021	100	Tier 4 Final	350	-	-	10	Merced
4302	Tractor	Diesel	2006	92	Tier 2	2021	74	Tier 4 Final	700	-	-	10	Fresno
4303	Tractor	Diesel	2002	110	Tier 1	2020	135	Tier 4 Final	750	-	-	10	Merced
4304	Tractor	Diesel	2005	105	Tier 2	2018	123	Tier 4 Final	1600	-	-	10	Tulare
4305	Tractor	Diesel	2002	72	Tier 0	2021	90	Tier 4 Final	600	-	-	10	Madera
4306	Tractor	Diesel	1977	180	Tier 0	2022	165	Tier 4 Final	1000	-	-	10	San Joaquin
4307	Tractor	Diesel	1977	182	Tier 0	2021	180	Tier 4 Final	800	-	-	10	Merced
4308	Tractor	Diesel	1985	29	Tier 0	2022	34	Tier 4 Final	975	-	-	10	Tulare
4309	Tractor	Diesel	1964	45	Tier 0	2022	34	Tier 4 Final	1050	-	-	10	Tulare
4310	Tractor	Diesel	1976	48	Tier 0	2018	120	Tier 4 Final	1000	-	-	10	Fresno
4311	Tractor	Diesel	1980	127	Tier 0	2022	114	Tier 4 Final	275	-	-	10	Merced
4312	Tractor	Diesel	1993	35	Tier 0	2021	43	Tier 4 Final	400	-	-	10	Madera
4313	Tractor	Diesel	1977	165	Tier 0	2021	125	Tier 4 Final	600	-	-	10	Stanislaus
4314	Tractor	Diesel	1976	66	Tier 0	2021	74	Tier 4 Final	150	-	-	10	Stanislaus
4315	Tractor	Diesel	1980	51	Tier 0	2022	63	Tier 4 Final	125	-	-	10	Stanislaus
4316	Tractor	Diesel	1978	41	Tier 0	2021	33	Tier 4 Final	110	-	-	10	Stanislaus
4318	Tractor	Diesel	1978	80	Tier 0	2021	90	Tier 4 Final	200	-	-	10	Fresno
4319	Tractor	Diesel	1972	145	Tier 0	2021	115	Tier 4 Final	500	-	-	10	Madera
4320	Tractor	Diesel	1979	350	Tier 0	2020	420	Tier 4 Final	750	-	-	10	Stanislaus
4321	Tractor	Diesel	1979	45	Tier 0	2021	56	Tier 4 Final	300	-	-	10	Stanislaus
4322	Tractor	Diesel	1977	47	Tier 0	2020	56	Tier 4 Final	200	-	-	10	Stanislaus
4323	Tractor	Diesel	1964	46	Tier 0	2021	55	Tier 4 Final	350	-	-	10	San Joaquin
4324	Tractor	Diesel	1972	80	Tier 0	2021	90	Tier 4 Final	350	-	-	10	Madera

Project Type NRCS EQIP

### NRCS Project Data 2023

#### Description Vehicle Replacement

Project #	Primary Function	Fuel Type	Baseline Yr	Old HP	Old Tier	New Eng Yr	New HP	New Tier	Annual Usage (Hours)	Annual Usage (Miles)	Annual Usage (Fuel)	Project Life (Yrs)	Location (County)
4325	Tractor	Diesel	1978	73	Tier 0	2020	74	Tier 4 Final	600	-	-	10	Stanislaus
4179	Tractor	Diesel	1979	83	Tier 0	2022	100	Tier 4 Final	100	-	-	10	Tulare
4317	Tractor	Diesel	1991	60	Tier 0	2022	73	Tier 4 Final	100	-	-	10	Stanislaus