



San Joaquin Valley Air Pollution Control District

2017 Annual Report

Indirect Source Review Program

Reporting Period: July 1, 2016 to June 30, 2017

SAN JOAQUIN VALLEY AIR POLLUTION CONTROL DISTRICT GOVERNING BOARD 2017

CHAIR: OLIVER L. BAINES III

Councilmember, City of Fresno

VICE CHAIR: BUDDY MENDES

Supervisor, Fresno County

MEMBERS:

DAVID AYERS CRAIG PEDERSEN
Mayor, City of Hanford Supervisor, Kings County

viagor, only or married

JOHN CAPITMAN, PH.D MONTE REYES
Appointed by Governor Councilmember, City of Porterville

DAVID COUCH ALEXANDER C. SHERRIFFS, M.D.

Supervisor, Kern County Appointed by Governor

BOB ELLIOTT CHRIS VIERRA
Supervisor, San Joaquin County Mayor, City of Ceres

CHRISTINA FUGAZI TOM WHEELER

Councilmember, City of Stockton Supervisor, Madera County

KRISTIN OLSEN J. STEVEN WORTHLEY

Supervisor, Stanislaus County Supervisor, Tulare County

LLOYD PAREIRA

Supervisor, Merced County

AIR POLLUTION CONTROL OFFICER:

SEYED SADREDIN

TABLE OF CONTENTS

I. EXECUTIVE SUMMARY	1
II. INTRODUCTION	2
III. IMPLEMENTATION	3
District Rule 9510 (Indirect Source Review)	3
Voluntary Emission Reduction Agreements	5
V. FISCAL SUMMARY	6
ISR-VERA Funds	6
V. EMISSION REDUCTION SUMMARY	7
Achieved Off-Site Emission Reductions	7
Projected Emission Reductions	8
Appendix A - Emission Reduction Projects	9

I. EXECUTIVE SUMMARY

This "2017 Annual Report on the District's Indirect Source Review Program" was prepared by the San Joaquin Valley Unified Air Pollution Control District (District). This annual report covers the reporting period from July 1, 2016 to June 30, 2017.

District Rule 9510 *Indirect Source Review* (ISR), was adopted by the District's Governing Board to reduce the impacts of growth in emissions resulting from new land development in the San Joaquin Valley. Rule 9510 is a commitment in Particulate Matter and Ozone Attainment Demonstration Plans. The objective of the rule is to reduce emissions of nitrogen oxides (NOx) and particulate matter smaller than ten microns in aerodynamic diameter (PM₁₀) associated with construction and operational activities of development projects occurring within the San Joaquin Valley.

District Rule 9510 applies to new development projects that would equal or exceed specific size limits called "applicability thresholds". The applicability thresholds were established at levels intended to capture projects that emit at least two tons of NOx or two tons of PM₁₀ per year. The rule contains provisions exempting stationary source projects that are subject to the District's stationary source permitting requirements.

Developers of projects subject to Rule 9510 must reduce a portion of the emissions occurring during construction and operational phases through on-site measures, or pay off-site mitigation fees. One hundred percent (100%) of all off-site mitigation fees are used by the District to fund emission reduction projects through its Incentives Programs, achieving emission reductions on behalf of the project. Additionally, developers pay an administrative fee equal to four percent (4%) of the required off-site fees. This fee is to cover the District's cost of administering the off-site emission reduction projects.

In addition to reducing a portion of the development project's impact on air quality through compliance with District Rule 9510, a developer can further reduce the project's impact on air quality by entering into a "Voluntary Emission Reduction Agreement" (VERA) with the District to address the mitigation requirements under California Environmental Quality Act (CEQA). Under a VERA, the developer may fully mitigate project emission impacts by providing funds to the District, which are then used by the District to administer emission reduction projects on behalf of the developer. The District has entered into thirty-two VERAs since 2005.

This annual report includes revenues, expenditures, and emission reductions achieved for both ISR and VERA (ISR-VERA program). To date, in addition to avoiding approximately 12,500 tons of NOx and PM₁₀ emissions from new development through the incorporation of on-site mitigation and clean-air design measures into projects subject to Rule 9510, the District has confirmed approximately 6,900 tons of reductions in NOx and PM₁₀ emissions have been achieved through the investment of ISR and VERA funds in its emission reduction incentive programs.

During this reporting period under the ISR-VERA program the District received 264 Air Impact Assessment (AIA) applications, compared to 204 AIA applications received during the previous reporting period, representing a 29% increase in the number of AIA applications received. In addition, the District adopted three VERAs during this reporting period.

The total amount of funds received for this reporting period was \$14,221,649. This is an increase compared to the \$10,651,943 received in the previous reporting period. A large portion of the funds received was for the High Speed Rail VERA Construction Package 4 (\$2,740,190) and the Kern County Oil and Gas Emission Reduction Agreement (\$6,245,624).

This year the District achieved emission reductions totaling 501 tons NOx and 102 tons PM₁₀, for a combined total of 603 tons at a cost effectiveness of \$8,123 per ton of emissions reduced.

II. INTRODUCTION

The San Joaquin Valley is expected to be one of the fastest growing regions in the state through at least 2030. The Demographic Research Unit of the Department of Finance released interim revised population growth projections in February 2017 and expects approximately 19.3% growth in the Valley's population during the 2015 to 2030 period. In contrast, the total population for the State of California is projected to increase by only 12.7% over the same period of time.

Population growth results in increased area source emissions from activities such as consumer product use, fuel combustion for heating and cooking, and landscape maintenance. The total number of vehicle miles traveled (VMT) also increases with population growth, resulting in more emissions due to the combustion of vehicle fuels. The projected growth in these so called "indirect source" emissions erodes some of the progress generated by emission reductions achieved through the District's stationary source program and state and federal mobile source controls.

Although the District cannot directly regulate mobile source tailpipe emissions, it does have longstanding statutory authority to regulate indirect sources of air pollution. Pursuant to this authority, the District made a federally enforceable commitment to regulate indirect sources when it adopted its PM_{10} Attainment Plan in June 2003. Subsequently, the California State Legislature passed Senate Bill 709, Florez, in the fall of 2003, which Governor Gray Davis subsequently signed and codified into the Health and Safety Code in §40604. This additional legislation required the District to adopt, by regulation, a schedule of fees to be assessed on area wide or indirect sources of emissions that are regulated by the District.

District Rule 9510 was adopted by the District's Governing Board on December 15, 2005, and became effective March 1, 2006. The rule was adopted to reduce the impacts of growth in emissions resulting from new land development in the San Joaquin Valley. The rule applies to new residential and non-residential development projects, including transportation and transit projects, which equal or exceed established applicability thresholds. The applicability thresholds are established at levels intended to capture projects that emit at least two tons of NO_X or PM₁₀ per year.

Developers of projects subject to Rule 9510 must reduce emissions occurring during construction and operational phases through on-site emission reduction measures, or by paying off-site mitigation fees. One hundred percent of all off-site mitigation fees are used by the District to fund emission reduction projects through its Emission Reduction Incentive Programs, achieving emission reductions in behalf of the project. Additionally, developers pay an administrative fee equal to four percent (4%) of the required off-site fees. This fee is to cover the District's cost of administering the off-site emission reduction projects.

This report was prepared pursuant to provisions of Rule 9510 that require the District to prepare an annual report regarding expenditure of received funds and achieved emission reductions. Pursuant to Rule 9510, Section 10.4, the annual report includes the following:

- Total amount of off-site fees received;
- Total monies spent;
- Total monies remaining;
- Any refunds distributed;
- A list of all projects funded;
- Total emissions reductions realized; and
- The overall cost-effectiveness factor for the projects funded.

III. IMPLEMENTATION

District Rule 9510 (Indirect Source Review)

The number of AIA applications received during this reporting period represents the number of new and revised projects subject to Rule 9510 proposed by developers in the San Joaquin Valley. The number of AIA applications received each year since 2006, the first year of Rule 9510 implementation, is presented in Figure 1. During this reporting period, the District received 264 AIA applications compared to 204 AIA applications received during the previous reporting period, which represents a 29% increase in the number of ISR applications received. The 264 AIA applications received is the highest number received since the rule was adopted, and seem to provide some evidence of a continuing trend of a growing housing market (see Figure 1 below). The number of AIA applications received reflects the total of 196 new development projects and 68 modifications to previously approved development projects.



Figure 1: Number of ISR AIA Applications Received From 2006 to June 30, 2017

Through implementation of the ISR rule, District staff is seeing positive changes in development practices. Since adoption of the rule, developers have voluntarily begun to incorporate many air-friendly design changes into their projects. For instance, significant reductions in emissions have occurred through the use of a "construction clean fleet", which is defined as a construction fleet mix cleaner than the State fleet average. In 2006, the first year of implementation, only 14.3% of approved projects reduced construction exhaust impacts through use of a clean construction equipment fleet. The percentage has risen to approximately 33% for the entire history of the ISR program, and 46% for this reporting period.

Another noteworthy change is that developers of large distribution centers are continuing to reduce operational emissions and associated impacts through voluntarily committing to use newer heavy-duty on-road fleet vehicles and maintaining a fleet replacement schedule that ensures older vehicles are replaced in a timely manner. Many lesser but still cumulatively significant reductions in emissions have been garnered by a whole range of effective design principles. Examples include installation of solar power, integrated mixed-use development design, bike lanes, high-efficiency housing design, and many others.

Voluntary Emission Reduction Agreements

A Voluntary Emission Reduction Agreement is an air quality mitigation measure by which a developer can voluntarily enter into a contractual agreement with the District to mitigate a development project's impact on air quality, going beyond reductions achieved by compliance with District Rule 9510. Under the agreement, the developer provides funds to the District to administer the implementation of the VERA. The District then identifies emissions reductions projects, funds those projects, and verifies that the specified emission reductions have been successfully achieved.

Types of emission reduction projects that have been funded in the past include electrification of stationary internal combustion engines (such as agricultural irrigation pumps), replacing old heavy-duty trucks with new, cleaner, more efficient heavy-duty trucks, and replacement of old farm tractors with cleaner tractors. Since 2005, the District has entered into thirty-two VERAs. It is the District's experience that implementation of a VERA is often a feasible mitigation measure under CEQA, effectively achieving emission reductions necessary to reduce impacts to a less than significant level.

For development projects subject to Rule 9510, the developer must also comply with applicable rule provisions. Emission reductions achieved through implementation of a VERA are credited towards satisfying ISR requirements. This report therefore includes revenues and emission reductions achieved through both the ISR and the VERA process.

During this reporting period, the District adopted three VERAs. The adopted VERAs were for the Kern County Oil and Gas Emission Reduction Agreement (Kern County OGERA), the High Speed Rail (HSR) VERA Construction Package 4, and the MG3 Partners LLC development project in Bakersfield.

Of particular note is the Kern County OGERA, which is the result of an agreement between the District, Kern County, and the oil and gas industry, to fully mitigate all emissions associated future oil and gas exploration and production in the San Joaquin Valley. Kern County collects a mitigation fee from oil and gas companies when issuing permits for the drilling of new oil or gas production wells, and passes the funds to the District to use in its emission reduction incentive grant programs.

For this reporting period, \$6,245,624 has been transferred to the District under the OGERA and \$434,937 has been spent on clean air projects through the District's grant programs, achieving 88 tons of emissions reductions. It should be noted that nearly 70% of the \$6,245,624 in OGERA funding was received by the District in the last quarter of the reporting period, and is now in the process of being encumbered for emission reduction projects.

V. FISCAL SUMMARY

ISR-VERA Funds

As presented in Figure 2 below, the total amount of funds received in the ISR-VERA program during this reporting period increased from \$10,651,943 to \$14,221,649.

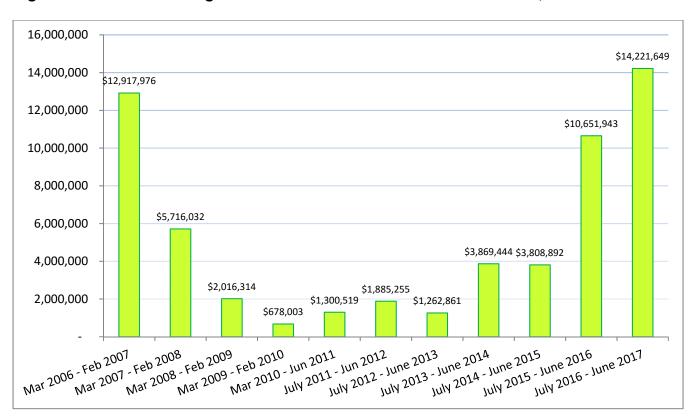


Figure 2: ISR-VERA Program Funds Received From 2006 to June 30, 2017

The District received \$5,223,156 in ISR funds and \$8,998,493 in VERA funds for a combined total of \$14,221,649. A large portion of the VERA funds received was for the High Speed Rail (HSR) VERA and the Kern County OGERA. The District received \$2,740,190 in mitigation funding for the HSR Construction Package 4, and \$6,245,624 under the Kern County OGERA.

As presented in Table 2 below, the District's ISR-VERA account held a beginning balance of \$11,890,152. During this reporting period, the District received funds totaling \$14,221,649. The District funded off-site emission reduction projects totaling \$4,898,054 during this reporting period, and has encumbered \$8,548,283 in contracts for emission reduction projects in the process of being implemented, leaving an unencumbered balance of \$12,665,464. The vast majority of the VERA funds from the HSR Construction Package

4 and the Kern County OGERA totaling \$8,985,814 (99%) and ISR funds totaling \$3,441,602 (66%), were received in the second half of this reporting period and are currently in the process of being encumbered for emission reduction projects.

Table 2: ISR-VERA Fiscal Summary (July 1, 2016 – June 30, 2017)

ISR-VERA Fiscal Summary	ISR	ISR VERA	
Beginning Fund Balance	\$3,332,560	\$8,557,592	\$11,890,152
Amount Received	\$5,223,156	\$8,998,493	\$14,221,649
Amount Refunded	\$0	\$0	\$0
Amount Spent	-\$1,131,052	-\$3,767,002	-\$4,898,054
Ending Fund Balance	\$7,424,664	\$13,789,083	\$21,213,747
Encumbered Amount	-\$1,201,510	-\$7,346,773	-\$8,548,283
Ending Unencumbered Balance	\$6,223,154	\$6,442,310	\$12,665,464

V. EMISSION REDUCTION SUMMARY

Achieved Off-Site Emission Reductions

During this reporting period, the District spent ISR and VERA monies to fund 256 emission reduction projects affecting 279 units. The monies were used to fund replacement of old heavy-duty off-road vehicles and on-road vehicles with newer, cleaner versions, replacement of wood burning stoves with natural gas fired inserts, replacement of old school buses with newer, cleaner versions, and fund the Bakersfield Municipal Airport Dust Control Project.

Typically, emission reduction projects go through a thorough application review before the contract for these projects between the District and the project applicant is executed. Once executed, funds are then encumbered for that project. The contract is valid for a limited amount of time to allow for the purchase of the new equipment and to submit a reimbursement request. Once the reimbursement request is approved, the funds encumbered for the emission reduction project are spent (reimbursed to the project applicant). This process typically takes several months for completion. Therefore, depending on the types of emission reduction projects available for funding, the funds received during this reporting period may result in the funds being spent in same reporting period or in the following reporting periods.

Emission reduction projects achieved total reductions of 501 tons NOx and 102 tons PM₁₀, for a combined total of 603 tons at a cost-effectiveness of \$8,123 per ton (Table 3 below). Additionally, funded projects reduced emissions of reactive organic gases (ROG) by 39 tons. A complete list of all projects funded is presented in Appendix A.

Achieved emission reductions presented in the table below represent only emission reductions from projects that have been completed and paid during this reporting period, and the cost effectiveness is based on those projects.

Table 3: ISR-VERA Off-Site Emission Reductions (July 1, 2016 – June 30, 2017)

Achieved Emission Reductions		Amount Spent	Cost		
Source	NOx	PM ₁₀	Total	(\$)	Effectiveness (\$/ton)
ISR	120 tons	6 tons	126 tons	\$1,131,052	\$8,977/ton
VERA	381 tons	96 tons	477 tons	\$3,767,002	\$7,897/ton
Grand Total	501 tons	102 tons	603 tons	\$4,898,054	\$8,123/ton

Projected Emission Reductions

Projected emission reductions are a combination of emission reductions to be achieved in the future through implementation of project design elements at full project build out and through funding off-site emission reductions projects using off-site mitigation fees. For this reporting period, implementation of ISR resulted in combined projected on-site and off-site emission reductions totaling 1,846 tons of NOx and 2,157 tons of PM₁₀ (Table 4 below).

Table 4: Emission Reductions from Approved ISR Projects (July 1, 2016 – June 30, 2017)

Projected Emission Reductions (tons)				
Source	NOx	PM ₁₀	Total	
On-site Emission Reductions	804 tons	1,492 tons	2,296 tons	
Off-site Emission Reductions	1,042 tons	665 tons	1,707 tons	
Total	1,846 tons	2,157 tons	4,003 tons	

APPENDIX A - EMISSION REDUCTION PROJECTS

List of all emission reduction projects funded by the ISR-VERA Program

ISR Annual Report / July 2016 - June 2017

Project #	Project Type	Number of Units	NOx (tons/project life)	PM (tons/project life)
C-21238	Agricultural Tractor	2	11.68	0.20
C-21241	Agricultural Tractor	2	11.81	0.21
C-24857	Agricultural Tractor	1	1.09	0.05
C-25012	Agricultural Tractor	1	2.19	0.14
C-25830	Agricultural Tractor	1	1.17	0.08
C-27636	Agricultural Tractor	1	1.12	0.07
C-27787	Agricultural Tractor	1	0.20	0.05
C-29371	Wheel Loader	1	2.17	0.14
C-29439	Wheel Loader	1	5.47	0.23
C-29771	Wheel Loader	1	0.66	0.03
C-30239	Agricultural Tractor	1	1.28	0.09
C-30339	Agricultural Tractor	1	0.55	0.05
C-30340	Agricultural Tractor	1	2.64	0.11
C-30341	Agricultural Tractor	1	2.48	0.13
C-30414	Agricultural Tractor	1	2.40	0.09
C-30416	Agricultural Tractor	1	3.55	0.23
C-30460	Bale Wagon	1	5.18	0.16
C-30480	Public School Bus-SBIRpl13	18	5.09	0.12
C-30725	Agricultural Tractor	1	7.42	0.46
C-30746	Agricultural Tractor	1	0.86	0.07
C-30775	Agricultural Tractor	1	0.82	0.07
C-30842	Agricultural Tractor	1	2.50	0.16
C-31267	Wheel Loader	1	9.19	0.45
C-31641	Agricultural Tractor	1	0.92	0.04
C-31651	Agricultural Tractor	1	1.69	0.11
C-31703	Agricultural Tractor	1	0.37	0.05
C-31704	Agricultural Tractor	1	0.31	0.04
C-31941	Wheel Loader	1	5.21	0.19
C-32596	Agricultural Tractor	1	3.46	0.21
C-34181	Almond Shaker	1	1.94	0.09

C-35624	Agricultural Tractor	1	1.57	0.10
C-36470	Almond Sweeper	1	0.90	0.10
C-37035	Agricultural Tractor	1	0.89	0.13
C-37189	Agricultural Tractor	1	7.40	0.47
C-37190	Agricultural Tractor	1	7.00	0.45
C-37677	Agricultural Tractor	1	13.51	0.57
C-37677	Agricultural Tractor	1	23.76	0.42
C-37797	Agricultural Tractor	1	1.30	0.09
C-38189	New Insert	1	0.00	0.61
C-38745	Agricultural Tractor	1	4.43	0.01
C-38955	Agricultural Tractor	1	8.36	0.52
C-38955 C-39151	Wheel Loader	1	9.48	0.48
C-39131 C-41419	New Insert	1	0.00	0.48
C-41419 C-41615		1	3.04	0.15
	Agricultural Tractor			
C-42753	New Insert	1	0.00	0.30
C-43497	New Insert	1	0.00	0.61
C-43618	New Insert	1	0.00	0.30
C-43801	New Insert	1	0.00	0.15
C-43975	Agricultural Tractor	1	12.79	0.54
C-44365	Agricultural Tractor	1	4.86	0.19
C-44366	Agricultural Tractor	1	4.86	0.19
C-44500	New Insert	1	0.00	0.31
C-44899	Agricultural Tractor	1	3.37	0.20
C-44923	New Insert	1	0.00	0.15
C-45057	Agricultural Tractor	1	2.16	0.21
C-45220	Agricultural Tractor	1	1.78	0.25
C-45227	Agricultural Tractor	1	1.12	0.16
C-45372	Loader	1	2.00	0.13
C-45435	Agricultural Tractor	1	3.34	0.19
C-45441	New Insert	1	0.00	0.30
C-45449	Wheel Loader	1	8.43	0.31
C-45499	New Insert	1	0.00	0.15
C-45743	Agricultural Tractor	1	1.80	0.07
C-45750	Agricultural Tractor	1	3.45	0.30
C-45751	Agricultural Tractor	1	2.51	0.22
C-45753	Agricultural Tractor	1	2.75	0.24
C-45865	Agricultural Tractor	1	3.22	0.44
C-45937	New Insert	1	0.00	0.15
-				

C-46762 Agricultural Tractor 1	7.07	0.00
		0.32
C-46773 Agricultural Tractor 1	23.71	0.75
C-46796 General On-Road Heavy Duty 2	6.00	0.00
C-46929 New Insert 1	0.00	0.15
C-47047 New Insert 1	0.00	0.31
C-47048 New Stove 1	0.00	1.52
C-47078 General On-Road Heavy Duty 1	3.34	0.00
C-47238 New Insert 2	0.00	0.26
C-47240 General On-Road Heavy Duty 1	6.41	0.00
C-47318 New Insert 1	0.00	0.15
C-47394 General On-Road Heavy Duty 1	4.46	0.00
C-47412 General On-Road Heavy Duty 1	3.82	0.00
C-47527 General On-Road Heavy Duty 1	5.48	0.00
C-47584 General On-Road Heavy Duty 1	4.42	0.00
C-47601 Agricultural Tractor 1	9.89	0.38
C-47696 General On-Road Heavy Duty 1	4.61	0.00
C-47732 Agricultural Tractor 1	5.73	0.22
C-47826 New Insert 1	0.00	0.15
C-47926 New Insert 1	0.00	0.15
C-47938 New Insert 1	0.00	0.15
C-48002 General On-Road Heavy Duty 1	2.70	0.06
C-48027 New Insert 1	0.00	0.15
C-48107 New Insert 1	0.00	0.15
C-48111 General On-Road Heavy Duty 1	4.40	0.00
C-48114 General On-Road Heavy Duty 1	4.43	0.00
C-48115 New Insert 1	0.00	0.15
C-48125 Agricultural Tractor 1	6.40	0.40
C-48130 Agricultural Tractor 1	7.13	0.36
C-48142 General On-Road Heavy Duty 1	2.37	0.00
C-48147 General On-Road Heavy Duty 1	6.32	0.00
C-48215 New Insert 1	0.00	0.92
C-48246 New Insert 1	0.00	0.30
C-48259 New Insert 1	0.00	0.15
C-48260 New Insert 1	0.00	0.15
C-48305 General On-Road Heavy Duty 1	7.43	0.00
C-48338 General On-Road Heavy Duty 1	5.92	0.00
C-48358 New Insert 1	0.00	0.25

C-48363	New Insert	1	0.00	0.15
C-48389	General On-Road Heavy Duty	1	4.40	0.00
C-48421	New Insert	2	0.00	0.46
C-48497	New Stove	1	0.00	0.25
C-48517	New Insert	1	0.00	0.15
C-48571	General On-Road Heavy Duty	1	3.39	0.00
C-48573	General On-Road Heavy Duty	1	3.97	0.00
C-48646	General On-Road Heavy Duty	1	4.99	0.00
C-48651	General On-Road Heavy Duty	1	4.51	0.00
C-48674	General On-Road Heavy Duty	1	4.14	0.00
C-48720	New Insert	1	0.00	0.30
C-48724	New Insert	1	0.00	0.15
C-48725	New Insert	1	0.00	0.15
C-48726	New Insert	1	0.00	0.15
C-48749	New Insert	1	0.00	0.15
C-48782	New Insert	1	0.00	0.15
C-48799	New Insert	1	0.00	1.51
C-48866	New Insert	1	0.00	0.15
C-48871	New Insert	1	0.00	0.15
C-48901	New Insert	1	0.00	0.15
C-48982	New Insert	1	0.00	0.15
C-48983	New Insert	1	0.00	0.15
C-49019	New Insert	1	0.00	0.15
C-49138	General On-Road Heavy Duty	1	3.17	0.00
C-49139	New Insert	1	0.00	0.30
C-49144	New Insert	1	0.00	0.15
C-49252	New Insert	1	0.00	0.30
C-49258	New Insert	1	0.00	0.15
C-49261	New Insert	1	0.00	0.15
C-49279	New Insert	1	0.00	0.15
C-49288	New Insert	1	0.00	0.51
C-49291	New Insert	1	0.00	0.30
C-49293	New Insert	1	0.00	0.15
C-49311	New Insert	1	0.00	0.15
C-49312	New Insert	1	0.00	0.30
C-49360	New Insert	1	0.00	0.30
C-49371	General On-Road Heavy Duty	1	6.65	0.00
C-49428	General On-Road Heavy Duty	1	3.67	0.00

C-49441	New Insert	1	0.00	0.15
C-49447	New Insert	1	0.00	0.15
C-49467	New Insert	1	0.00	0.15
C-49486	General On-Road Heavy Duty	1	3.69	0.00
C-49547	General On-Road Heavy Duty	1	1.55	0.04
C-49603	New Insert	1	0.00	0.15
C-49614	New Insert	1	0.00	0.29
C-49616	New Insert	1	0.00	0.30
C-49618	New Insert	1	0.00	0.15
C-49626	New Insert	2	0.00	1.19
C-49629	General On-Road Heavy Duty	1	5.85	0.00
C-49647	New Insert	1	0.00	0.15
C-49687	New Insert	1	0.00	0.15
C-49716	New Insert	1	0.00	0.03
C-49730	New Insert	1	0.00	0.15
C-49735	New Insert	1	0.00	0.08
C-49736	New Insert	1	0.00	0.15
C-49737	New Insert	1	0.00	0.30
C-49739	New Insert	1	0.00	0.08
C-49740	New Insert	1	0.00	0.04
C-49741	New Insert	1	0.00	0.04
C-49742	New Insert	1	0.00	0.08
C-49745	New Insert	1	0.00	0.05
C-49755	New Insert	1	0.00	0.61
C-49792	General On-Road Heavy Duty	1	1.44	0.00
C-49805	Agricultural Tractor	1	2.14	0.12
C-49829	New Insert	1	0.00	0.23
C-49867	General On-Road Heavy Duty	1	3.19	0.00
C-49885	New Insert	1	0.00	0.02
C-49886	New Insert	1	0.00	0.15
C-49911	New Insert	1	0.00	0.08
C-49912	New Insert	1	0.00	0.03
C-49915	New Insert	1	0.00	1.01
C-49917	New Insert	1	0.00	0.04
C-49918	New Insert	1	0.00	0.11
C-49922	New Insert	1	0.00	0.15
C-49968	New Insert	1	0.00	0.15
C-50017	New Insert	1	0.00	0.04

C-50028	New Insert	1	0.00	0.46
C-50073	New Insert	1	0.00	0.15
C-50095	New Insert	1	0.00	0.15
C-50107	New Insert	1	0.00	0.30
C-50115	New Insert	1	0.00	0.08
C-50196	New Insert	1	0.00	0.15
C-50208	New Insert	1	0.00	0.15
C-50209	New Insert	1	0.00	0.15
C-50214	New Stove	1	0.00	0.74
C-50215	New Insert	1	0.00	0.04
C-50237	General On-Road Heavy Duty	1	4.47	0.00
C-50242	New Insert	1	0.00	0.02
C-50246	New Insert	1	0.00	0.15
C-50313	New Insert	1	0.00	0.43
C-50337	New Insert	1	0.00	0.15
C-50350	General On-Road Heavy Duty	1	4.77	0.00
C-50380	General On-Road Heavy Duty	1	2.92	0.00
C-50384	General On-Road Heavy Duty	1	2.76	0.00
C-50394	General On-Road Heavy Duty	1	3.42	0.00
C-50443	New Insert	1	0.00	0.15
C-50457	New Insert	1	0.00	0.08
C-50460	New Insert	1	0.00	0.08
C-50482	New Insert	1	0.00	0.03
C-50484	New Insert	1	0.00	0.15
C-50520	New Insert	1	0.00	0.15
C-50521	New Insert	1	0.00	1.06
C-50522	New Insert	1	0.00	0.08
C-50553	General On-Road Heavy Duty	1	6.25	0.00
C-50554	General On-Road Heavy Duty	1	5.59	0.00
C-50555	New Insert	1	0.00	0.02
C-50594	New Insert	1	0.00	0.15
C-50607	New Insert	1	0.00	0.15
C-50608	New Insert	1	0.00	0.01
C-50632	General On-Road Heavy Duty	1	2.62	0.00
C-50666	New Insert	1	0.00	0.15
C-50672	New Insert	1	0.00	0.23
C-50679	New Insert	1	0.00	0.08
C-50683	General On-Road Heavy Duty	1	2.29	0.00

C-50685	General On-Road Heavy Duty	1	2.93	0.00
C-50687	General On-Road Heavy Duty	1	2.93	0.00
C-50712	General On-Road Heavy Duty	1	2.28	0.00
C-50726	New Insert	1	0.00	0.01
C-50793	New Insert	1	0.00	0.12
C-50794	New Stove	1	0.00	0.16
C-50844	New Insert	1	0.00	0.46
C-50845	New Insert	1	0.00	0.64
C-50867	New Insert	1	0.00	0.46
C-51007	General On-Road Heavy Duty	1	2.79	0.00
C-51117	Dust Control	1	0.00	52.31
C-51196	New Insert	1	0.00	0.12
C-51275	New Insert	1	0.00	0.92
C-51280	New Insert	1	0.00	0.92
C-51327	New Insert	1	0.00	0.23
C-51356	General On-Road Heavy Duty	1	2.64	0.00
C-51404	General On-Road Heavy Duty	1	5.07	0.00
C-51448	New Stove	1	0.00	0.64
C-51508	New Insert	1	0.00	0.23
C-51523	New Insert	1	0.00	0.95
C-51561	New Insert	1	0.00	0.12
C-51579	General On-Road Heavy Duty	1	1.23	0.00
C-51806	General On-Road Heavy Duty	1	2.40	0.06
C-51910	General On-Road Heavy Duty	1	3.24	0.07
C-51914	New Insert	1	0.00	0.12
C-51918	New Insert	1	0.00	0.12
C-51968	New Stove	1	0.00	1.48
C-52297	General On-Road Heavy Duty	1	2.79	0.00
C-52415	General On-Road Heavy Duty	1	0.46	0.00
C-52416	General On-Road Heavy Duty	1	0.70	0.00
C-52752	General On-Road Heavy Duty	1	2.10	0.00
C-53008	General On-Road Heavy Duty	1	4.10	0.00
C-53272	General On-Road Heavy Duty	1	1.03	0.00
C-53591	General On-Road Heavy Duty	1	2.40	0.00
C-53593	General On-Road Heavy Duty	1	2.63	0.00
C-53898	New Insert	1	0.00	0.16