

**GOVERNING BOARD**

**Craig Pedersen, Chair**  
Supervisor, Kings County

**Lloyd Pareira, Vice Chair**  
Supervisor, Merced County

**Drew M. Bessinger**  
Councilmember, City of Clovis

**Vito Chiesa**  
Supervisor, Stanislaus County

**David Couch**  
Supervisor, Kern County

**Christina Fugazi**  
Vice Mayor, City of Stockton

**Deborah Lewis**  
Mayor Pro Tem, City of Los Banos

**Buddy Mendes**  
Supervisor, Fresno County

**Tania Pacheco-Werner, PhD.**  
Appointed by Governor

**Alvaro Preciado**  
Mayor, City of Avenal

**Monte Reyes**  
Mayor, City of Porterville

**Robert Rickman**  
Supervisor, San Joaquin County

**Alexander C. Sherriffs, M.D.**  
Appointed by Governor

**Amy Shuklian**  
Supervisor, Tulare County

**Tom Wheeler**  
Supervisor, Madera County

---

**Samir Sheikh**  
Executive Director  
Air Pollution Control Officer

---

Northern Region Office  
4800 Enterprise Way  
Modesto, CA 95356-8718  
(209) 557-6400 • FAX (209) 557-6475

---

Central Region Office  
1990 East Gettysburg Avenue  
Fresno, CA 93726-0244  
(559) 230-6000 • FAX (559) 230-6061

---

Southern Region Office  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
(661) 392-5500 • FAX (661) 392-5585

---

DATE: December 16, 2021

TO: SJVUAPCD Governing Board



FROM: Samir Sheikh, Executive Director/APCO  
Project Coordinator: Morgan Lambert

RE: **ITEM NUMBER 19: RECEIVE AND FILE  
DISTRICT'S 2020-2021 ANNUAL OFFSET  
EQUIVALENCY REPORT TO THE FEDERAL  
ENVIRONMENTAL PROTECTION AGENCY**

**RECOMMENDATION:**

Receive and file the District's Final Annual Offset Equivalency Report submitted to the federal Environmental Protection Agency (EPA) for the 12-month period from August 20, 2020 through August 19, 2021.

**BACKGROUND:**

To achieve the District's mission of improving air quality and public health for all Valley residents, the District has developed and implemented numerous air quality plans to reduce emissions from stationary sources through the adoption of over 600 of the most stringent rules in the nation and strong voluntary incentive programs that have invested more than \$3 billion of combined funds in clean-air projects. Over the past several decades, these air quality improvement efforts have reduced NOx emissions (primary precursor for both ozone and PM2.5) from stationary and mobile sources by over 75%, including a greater than 90% reduction from stationary sources under the District's jurisdiction, resulting in significant air quality progress towards meeting the health-based federal ozone and PM2.5 standards.

In addition to the District rules aimed at directly reducing emissions from stationary sources, the District also has a set of rules establishing a permitting program designed under state law to ensure on a regional basis there is no net increase in emissions of nonattainment pollutants or their precursors for new or modified sources.

Under the District's New Source Review (NSR) Rule, new facilities and modifications to existing facilities that result in increases in permitted emissions above specified levels are required to provide offsets as a part of the requirements to obtain an "Authority to Construct" permit. Both federal and state law mandate NSR permitting programs that contain offsetting requirements. Emission reduction credits (ERCs) are the "currency" of offsets. Offsets are intended by both federal and state law to be one part of a comprehensive NSR permitting program that has been specifically designed by Congress and the state legislature to allow for industrial growth while regulating emissions increases. Additionally, any emission increases due to growth in the economy are accounted for in State Implementation Plans that demonstrate how the District's overall air quality control program will require sufficient emissions reductions to attain national ambient air quality standards.

It is important to clarify that ERCs cannot be used in lieu of meeting other air pollution control requirements, such as through market-based systems that other agencies may have in place. Instead, ERCs are required in addition to, and only after, establishing that the new emission units are controlled with the best available control technology (BACT), comply with all applicable prohibitory rules, and will not cause a health risk to surrounding communities. The District's NSR permitting program, including the accompanying ERC program, ensures that new emissions are controlled with the best technologies, prevents the permitting of any operation that will cause a significant health impact, demonstrates that attainment is not endangered, and has historically been found by the state and federal governments to comply with state and federal laws governing NSR/ERC programs.

The purpose of this item is to receive and file the District's 2020-21 Annual Offset Equivalency Report, which was filed with the federal EPA on November 19, 2021, as required by Rule 2201.

### **DISTRICT OFFSET EQUIVALENCY PROGRAM:**

As allowed by the federal Clean Air Act (CAA), the District's offsetting program differs from a direct implementation of the federal offsetting requirements. The federal Environmental Protection Agency (EPA) approved the District's approach in 2001 as the District's local NSR program was at least as stringent as the federal program. As included in the District's NSR Rule, to demonstrate equivalency with the federal NSR offsetting requirements the District is required to prepare and submit an annual offset equivalency report to EPA and the California Air Resources Board (CARB) by November 20th that evaluates whether both of the following conditions are met:

- Offset Quantity (Test 1) – the quantity of offsets required by the District from new and modified stationary sources equals or exceeds the quantity of offsets otherwise required under federal regulations; and

- Surplus Value (Test 2) – the amount of reductions, after discounting at the time of use, required by the District from new and modified stationary sources, plus any additional surplus creditable emission reductions, equals or exceeds the amount of offsets otherwise required under federal regulations.

Under the District's NSR rule, if the system cannot demonstrate equivalency with federal requirements, immediate and specified remedies are required to be enacted for each of the above tests.

### **PUBLIC PROCESS:**

On October 26, 2021, the District held a public workshop to present and receive feedback on the draft 2020-21 offset equivalency demonstration and provide an explanation of the equivalency process. No comments were received by the District following this workshop.

Additionally, since September 2020, the District has held ten meetings with the ERC Public Advisory Workgroup (PAW) in which topics such as the District's offset equivalency demonstration, implications associated with the offset equivalency demonstration, and the generation of new emission reductions have been discussed. The ERC PAW includes members of Valley community based organizations, regulated Valley businesses, CARB, and EPA.

### **2020-2021 ANNUAL OFFSET EQUIVALENCY REPORT:**

During this report's tracking period, there were sixteen (16) Authority to Construct (ATC) projects that triggered a Federal Major Modification (FMM). Of these sixteen (16) projects, four (4) projects were a FMM for NO<sub>x</sub> only, seven (7) projects were a FMM for VOC only, and five (5) were a FMM for both NO<sub>x</sub> and VOC. There were no projects finalized during this reporting period that triggered a FMM for SO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, or CO.

In addition to the new projects, each year, prior to conducting the annual equivalency demonstration, it may be necessary to adjust the prior year end carry-over balances to account for cancelled and unimplemented projects, partially implemented projects, and the addition of prior year projects, ERCs, or other creditable emission reductions that were not accounted for previously. Furthermore, the District must review new rules and regulations to determine if adjustments must be made to the surplus creditable reduction carry-over.

### ***Annual Equivalency Demonstration - Offset Quantity Equivalency (Test 1)***

#### VOC:

Effective November 20, 2020, VOC was no longer offset quantity (Test 1) equivalent and is no longer evaluated for equivalency as all new major sources or federal major modification projects triggering offsets for VOC under 40 CFR 51.165 and part D of Title I of the CAA are required to satisfy the full federal offset quantity and ERCs used to satisfy the offset requirements must be surplus-at-time of ATC issuance. Therefore, offset quantity (Test 1) equivalency was not evaluated for VOC in this report.

#### NO<sub>x</sub>:

As detailed in the report, there is a current year offset quantity shortfall of 37.1 tons for the current year. However, following the year-to-year adjustments to the prior year carry-over balances, NO<sub>x</sub> maintains a positive carry-over balance and thus remains offset quantity (Test 1) equivalent.

#### SO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and CO:

As detailed in the report, there is a current year offset quantity excess or shortfall of zero (0) tons for the current year. Following the year-to-year adjustments to the prior year carry-over balances, all pollutants maintain a positive carry-over balance and thus remain offset quantity (Test 1) equivalent.

### ***Annual Equivalency Demonstration – Surplus Value Equivalency (Test 2)***

#### NO<sub>x</sub> and VOC:

The equivalency system has not been able to demonstrate equivalency with the surplus value test for NO<sub>x</sub> and VOC since September of 2020. Pursuant to the District's NSR rule, since that time, the Rule 2201 remedy was enacted and all ATCs requiring NO<sub>x</sub> or VOC offsets under the NSR rule for a new major source or federal major modification are now required to supply ERCs with sufficient "surplus at time of use" credit at the time of ATC issuance. Therefore, surplus value (Test 2) equivalency was not evaluated for NO<sub>x</sub> and VOC in this report.

#### SO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>, and CO:

As detailed in the report, there were no new major source or federal major modification projects for PM<sub>10</sub>, PM<sub>2.5</sub>, SO<sub>x</sub>, or CO for the 2020-21 tracking year. Following the year-to-year adjustments to the prior year carry-over balances, these pollutants maintain a positive carry-over balance and thus remain surplus value (Test 2) equivalent.

## ***Implications of 2020-21 Offset Equivalency Demonstration***

### VOC

There is no change to the VOC offset requirements since the prior-year report. All new major sources or federal major modification projects triggering offsets for VOC under 40 CFR 51.165 and part D of Title I of the CAA are required to satisfy the full federal offset quantity and ERCs used to satisfy the offset requirements must be surplus at time of ATC issuance.

### NOx

There is no change to the NOx offset requirements since the prior-year report. Any ATC requiring NOx offsets under the District NSR rule for a new major source or federal major modification as defined by 40 CFR 51.165 and part D of Title I of the CAA are required to supply ERCs that are surplus at time of ATC issuance.

As discussed above, NOx remains Offset Quantity (Test 1) equivalent.

### PM10, PM2.5, SOx, and CO

As discussed above, PM10, PM2.5, SOx, and CO remain both Offset Quantity (Test 1) and Surplus Value (Test 2) equivalent. Therefore, there is no change to the offset quantity and ERC surplus value requirements at this time.

### **NEXT STEPS:**

With the enactment of the Rule 2201 remedies for VOC and NOx, the District is actively engaging with project proponents to help navigate the potentially significant impacts of federal offsetting requirements. Additionally, the District is working with stakeholders, EPA, and CARB through the Public Advisory Workgroup in pursuit of solutions to enhance the District ERC and offset equivalency programs to ensure an adequate supply of credits are available to meet offsetting obligations. District staff will continue to provide progress reports to the Governing Board.

San Joaquin Valley Unified Air Pollution Control District  
Meeting of the Governing Board  
December 16, 2021

**RECEIVE AND FILE DISTRICT'S ANNUAL OFFSET  
EQUIVALENCY REPORT TO THE FEDERAL ENVIRONMENTAL  
PROTECTION AGENCY**

**Attachment:**

**ANNUAL OFFSET EQUIVALENCY REPORT**  
**(46 PAGES)**

November 19, 2021

Matthew Lakin, Acting Director  
Air and Radiation Division  
U.S. EPA, Region IX  
75 Hawthorne St  
San Francisco, CA 94105-3901

**Re: Offset Equivalency Report, August 2020 – August 2021**

Dear Mr. Lakin:

Pursuant to Rule 2201 (*New and Modified Stationary Source Review NSR Rule*), the San Joaquin Valley Air Pollution Control District (District) has completed its annual offset equivalency report for the twelve-month period from August 20, 2020, to August 19, 2021. The individual elements that contributed to this year's offset equivalency determination are presented in this District's annual offset equivalency report, which is attached to this letter.

The attached report details the following:

- The quantity of offsets that would have been required from new major sources and major modifications to existing sources under a federal NSR program,
- The quantity of offsets actually required by the District,
- The surplus-at-time-of-use value of the emission reductions used to offset emissions increases from stationary sources,
- Adjustments to prior year end carry-over balances, and
- The quantity of shortfall or excess carry-over credits.

For your information, there were sixteen (16) Federal Major Modification projects during this reporting period, as detailed in the 2020-2021 Annual Offset Equivalency report, Appendix A, New Major Sources and Federal Major Modification Projects.

**Samir Sheikh**  
Executive Director/Air Pollution Control Officer

---

**Northern Region**  
4800 Enterprise Way  
Modesto, CA 95356-8718  
Tel: (209) 557-6400 FAX: (209) 557-6475

**Central Region (Main Office)**  
1990 E. Gettysburg Avenue  
Fresno, CA 93726-0244  
Tel: (559) 230-6000 FAX: (559) 230-6061

**Southern Region**  
34946 Flyover Court  
Bakersfield, CA 93308-9725  
Tel: (661) 392-5500 FAX: (661) 392-5585

As detailed in the report, the District demonstrated that the District's offset program has required the same or more offsets than would have been required under federal offset requirements (Test 1) for nitrogen oxides (NOx), particulate matter (PM10 and PM2.5) and sulfur oxides (SOx). Please note that on November 20, 2020, the District determined that the system was no longer able to demonstrate equivalency with the offset quantity test for volatile organic compounds (VOC); therefore, the remedy in District NSR Rule, Section 7.4.1 was enacted and all new major sources or federal major modification projects triggering offsets for VOC under 40 CFR 51.165 and part D of Title I of the CAA were required to satisfy the full federal offset quantity by providing emission reduction credits (ERCs) that are surplus at time of Authority to Construct (ATC) issuance. Due to the enactment of the remedy, offset quantity (Test 1) equivalency was not evaluated for VOC in this report, and the remedy enacted in November 2020 remains in place for VOC.

The report also demonstrates that the surplus value of the reductions used were equal to or exceeded those required under federal NSR for PM10, PM2.5, and SOx. Please note that on September 17, 2020, the District determined that the system was no longer able to demonstrate equivalency with the surplus value test for NOx and VOC; therefore, as discussed with CARB and EPA, the remedy in District NSR Rule, Section 7.4.2 was enacted and all projects requiring NOx or VOC offsets under the District NSR rule for a new major source or federal major modification were required to supply ERCs with sufficient "surplus at time of use" credit at the time of ATC issuance. Due to the enactment of the remedy, surplus value (Test 2) equivalency was not evaluated for NOx and VOC in this report, and the remedy enacted in September 2020 remains in place for NOx and VOC.

Please call me at (559) 230-5900 or email me at [brian.clements@valleyair.org](mailto:brian.clements@valleyair.org) if you have any questions regarding this matter, or if you need additional details.

Sincerely,



Brian Clements  
Director of Permit Services

cc: Courtney Graham, CARB

Attachment: Annual Offset Equivalency Report

Attachment: 2020-2021 Annual Offset Equivalency Report

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

**2020-2021 Annual Offset Equivalency Report**

# San Joaquin Valley APCD

## DRAFT Annual Offset Equivalency Report

### DRAFT Offset Quantity Equivalency

Summary for 08/20/2020 through 08/19/2021

Pollutant	Number of New Major Sources	Number of Federal Major Mods	Offsets	Offsets	Current Year Excess or Shortfall	Previous	Year-to-	Year-End
			Required under Federal NSR	Required under District NSR		Total Carryover Excess or Shortfall	Year Adjustment to Carryover Balance	Total Carryover Excess or Shortfall
			(a)	(b)	(c) = (b) - (a)	(d)	(e)	(f)=(d)+(e)+(c)
NOx	0	9	60.9	23.8	-37.1	353.1	-7.9	308.1
PM10	0	0	0.0	10.6	10.6	326.1	0.0	336.7
PM2.5	0	0	0.0	0.0	0.0	192.3	0.0	192.3
CO	0	0	0.0	0.0	0.0	198.1	0.0	198.1
SOx	0	0	0.0	6.4	6.4	1,223.5	-0.3	1,229.6
VOC <sup>1</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

**Notes:**

- All values are in tons per year

<sup>1</sup> Effective November 20, 2020, VOC was no longer Offset Quantity equivalent and Rule 2201 remedy was enacted to require federal offset quantity ERCs for projects requiring VOC offsets under Rule 2201. Therefore, VOC are not included in Offset Quantity equivalency demonstration.

# San Joaquin Valley APCD

## DRAFT Annual Offset Equivalency Report

### DRAFT Surplus Value Equivalency

Summary for 08/20/2020 through 08/19/2021

Pollutant	Number of New Major Sources	Number of Federal Major Mods	Offsets Required under Federal NSR (a)	Surplus Reductions Used for Equivalency This Year (b)	Current Year Excess or Shortfall (c) = (b) - (a)	Previous Year-End Total Carry-over Creditable Reductions (d)	Year-to-Year Adjustment to Carryover Balance (e)	Current Year New Creditable Reductions (f)	Year-End Total Carry-over Creditable Reductions (g)=(d)+(e)+(c)+(f)
						Year-End Total Carry-over Creditable Reductions (d)	Year-to-Year Adjustment to Carryover Balance (e)	Current Year New Creditable Reductions (f)	Year-End Total Carry-over Creditable Reductions (g)=(d)+(e)+(c)+(f)
PM10	0	0	0.0	0.0	0.0	330.0	0.0	10.8	340.8
PM2.5	0	0	0.0	0.0	0.0	197.0	0.0	6.1	203.1
CO	0	0	0.0	0.0	0.0	763.0	0.0	0.0	763.0
SOx	0	0	0.0	0.0	0.0	338.2	-0.3	5.1	343.0
NOx <sup>1</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VOC <sup>1</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

**Notes:**

- All values are in tons per year

<sup>1</sup> Effective September 17, 2020, NOx and VOC were no longer Surplus Value equivalent and Rule 2201 remedy was enacted to require surplus at time-of-use ERCs for projects requiring NOx and VOC offsets under Rule 2201. Therefore, these pollutants are not included in Surplus Value demonstration.

# Table of Contents

I. Summary .....	1
II. Background .....	1
A. District Offset Equivalency Program.....	2
B. Public Advisory Workgroup .....	3
C. Public Workshop.....	3
III. Federal Offsets Required During 2020-2021 Tracking Period .....	4
A. New Major Source (NMS): .....	4
B. Federal Major Modification (FMM):.....	4
C. Total Federal Offset Quantity Required .....	5
IV. District Offsets Required During 2020-2021 Tracking Period .....	5
V. Creditable Emission Reductions Generated During 2020-2021 Tracking Period .....	6
A. Emission Reduction Credits Reserved/Withdrawn.....	6
B. Emission Reduction Credits Surrendered.....	7
C. Air Quality Improvement Deduction .....	7
D. Orphan Shutdowns.....	7
E. Actual Emission Reductions from Implementing BACT on Existing Equipment at Minor Source .....	7
VI. Adjustments to Prior Year End Carry-Over Balances .....	8
A. Offset Quantity (Test 1) Carry-Over Balance Adjustments .....	8
1. District and Federal Offset Quantity Adjustments.....	9
B. Surplus Creditable Reductions (Test 2) Carry-Over Balance Adjustments.....	9
1. Re-surplusing of Surplus Carry-Over Creditable Reductions .....	9
2. District and Federal Offset Quantity Adjustments.....	10
VII. Annual Equivalency Demonstration - Offset Quantity Equivalency (Test 1) .....	11
VIII. Annual Equivalency Demonstration - Surplus Value Equivalency (Test 2).....	12
IX. Implications of 2020-2021 Offset Equivalency Demonstration.....	13
A. VOC .....	13
B. NOx.....	13
C. PM10, PM2.5, and SOx.....	13

## List of Acronyms

AER:	Actual Emission Reductions
AG-ICE:	Agricultural Internal Combustion Engine Conversion Incentive Program
AQID:	Air Quality Improvement Deduction
ATC:	Authority to Construct
BACT:	Best Available Control Technology
CAA:	Clean Air Act
CARB:	California Air Resources Board
CFR:	Code of Federal Regulations
DOQ:	District Offsets Quantity
EPA:	Environmental Protection Agency
ERC:	Emission reduction credits
FMM:	Federal Major Modification
FOQ:	Federal Offsets Quantity
NMS:	New Major Source
NSR:	New Source Review
NOx:	Nitrogen Oxide
VOC:	Volatile Organic Compound
PM10:	Particulate Matter (10 micron or less)
PM2.5:	Particulate Matter (2.5 micron or less)
CO:	Carbon Monoxide
SOx:	Sulfur Oxide

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## I. Summary

Pursuant to Rule 2201 (*New and Modified Stationary Source Review NSR Rule*), the San Joaquin Valley Air Pollution Control District (District) has completed its annual offset equivalency report for the twelve-month period from August 20, 2019, to August 19, 2020. The individual elements that contributed to this year's offset equivalency determination are presented in this annual offset equivalency report.

A summary of the results from the 2020-2021 offset equivalency demonstration is shown in the following table:

**Table 1: 2020-2021 Offset Equivalency Demonstration Report Summary**

Equivalent?	NOx	VOC	PM10	PM2.5	CO	SOx
<b>Test 1: Offset Quantity</b>	Yes	No	Yes	Yes	Yes	Yes
<b>Test 2: Surplus Value</b>	No	No	Yes	Yes	Yes	Yes

## II. Background

To achieve the District's mission of improving air quality and public health for all Valley residents, the District has developed and implemented numerous air quality plans to reduce emissions from stationary sources through the adoption of nearly 650 of the most stringent rules in the nation and strong voluntary incentive programs that have invested more than \$3 billion of combined funds in clean-air projects. Over the past several decades, these air quality improvement efforts have reduced NOx emissions (primary precursor for both ozone and PM2.5) from stationary and mobile sources by over 75%, including a greater than 90% reduction from stationary sources under the District's jurisdiction, resulting in significant air quality progress towards meeting the health-based federal ozone and PM2.5 standards.

In addition to the District rules aimed at directly reducing emissions from stationary sources, the District also has a set of rules establishing a permitting program designed under state law to ensure on a regional basis there is no net increase in emissions of nonattainment pollutants or their precursors for new or modified sources.

Under the District's New Source Review (NSR) Rule, new facilities and modifications to existing facilities that result in increases in permitted emissions above specified levels are required to provide offsets as a part of the requirements to obtain an "Authority to Construct" permit. Both federal and state law mandate NSR permitting programs that contain offsetting requirements. Emission reduction credits (ERCs) are the currency of offsets. Offsets are intended by both federal and state law to be one part of a comprehensive NSR permitting program that has

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

been specifically designed by Congress and the state legislature to allow for industrial growth while regulating any emissions increases. Additionally, any emission increases due to growth in the economy are accounted for in State Implementation Plans that demonstrate how the District's overall air quality control program will require sufficient emissions reductions to attain national ambient air quality standards.

It is important to clarify that ERCs cannot be used in lieu of meeting other air pollution control requirements, such as through market-based systems that other agencies may have in place. Instead, ERCs are required in addition to, and only after, establishing that the new emission units are controlled with the best available control technology (BACT), comply with all applicable prohibitory rules, and will not cause a health risk to surrounding communities. The District's NSR permitting program, including the accompanying ERC program, ensures that new emissions are controlled with the best technologies, prevents the permitting of any operation that will cause a significant health impact, demonstrates that attainment is not endangered, and has historically been found by the state and federal governments to comply with state and federal laws governing NSR/ERC programs.

## A. District Offset Equivalency Program

As allowed by the federal Clean Air Act (CAA), the District's offsetting program differs from a direct implementation of the federal offsetting requirements. The federal Environmental Protection Agency (EPA) approved the District's approach in 2001 as the District's local NSR program was at least as stringent as the federal program. As included in the District's NSR Rule, to demonstrate equivalency with the federal NSR offsetting requirements the District is required to prepare and submit an annual offset equivalency report to EPA and the California Air Resources Board (CARB) by November 20<sup>th</sup> that evaluates where both of the following conditions are met:

- Offset Quantity (Test 1) – the quantity of offsets required by the District from new and modified stationary sources equals or exceeds the quantity of offsets otherwise required under federal regulations; and
- Surplus Value (Test 2) - the amount of reductions, after discounting at the time of use, required by the District from new and modified stationary sources, plus any additional surplus creditable emission reductions, equals or exceeds the amount of offsets otherwise required under federal regulations.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

Under the District's NSR rule, if the system cannot demonstrate equivalency with federal requirements, immediate and specified remedies are required to be enacted for each of the above tests. For example, if the system fails to demonstrate equivalency for the surplus value test any project requiring offsets under the District NSR rule for a new major source or federal major modification as defined by 40 CFR 51.165 and part D of Title I of the CAA are required to supply ERCs that are surplus-at-time of ATC issuance.

For additional information regarding the District offset equivalency program, please see Rule 2201, Section 7.0: <http://www.valleyair.org/rules/currnrules/r2201.pdf>.

## B. Public Advisory Workgroup

Following nearly a year and a half of a detailed review, CARB released its final report titled *Review of San Joaquin Valley Air Pollution Control District Emission Reduction Credit System* on June 5, 2020. In response to CARB's review, the District committed to taking specific steps to enhance the program as necessary to maintain an effective permitting system that allow for protection of public health and strong economic growth.

To ensure that any enhancements to the District's offset equivalency system benefit fully from the input and suggestions of Valley stakeholders and subject matter experts, the District Governing Board created a public advisory working group to assist in developing solutions related to the District's offset equivalency system. The public advisory working group concept and framework was developed with Valley community based organizations and regulated Valley businesses to support the development of the 2016 Ozone and the 2018 PM2.5 plans. This framework provided a successful mechanism to navigate complex topics and receive valuable stakeholder input that aided the development of the plans. The District believes that this public engagement tool will also be effective in navigating the complex subject matter of ERCs and federal offset equivalency, and enable effective stakeholder input that will be valuable in developing enhancements to the program. To date, the ERC Public Advisory Workgroup has met nine times since its formation in September 2020 and is scheduled to meet on an ongoing basis.

## C. Public Workshop

Consistent with a commitment by the District to enhance the public engagement and transparency in the offset equivalency process, on October 26, 2021, the District held of public workshop to present the draft 2020-21 offset equivalency demonstration and provide detailed explanations of the equivalency process and the significant adjustments that were being made as part of this year's demonstration.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

## III. Federal Offsets Required During 2020-2021 Tracking Period

Federal offsetting requirements are stated in 40 CFR 51.165, and part D of Title I of the CAA. Pursuant to these requirements, New Major Sources or Federal Major Modifications must provide a sufficient quantity of surplus-at-time-of-use ERCs to satisfy offsetting requirements. The amount of Federal Offsets Quantity (FOQ) required for ATC projects finalized during this report's tracking period is discussed in the following sections.

### A. New Major Source (NMS):

Pursuant to 40 CFR 51.165 (a)(1)(iv)(A)(3), a New Major Source is created if emission increases for a given pollutant at a new source or existing non-major source equals or exceeds the major source threshold for that pollutant, i.e. the project by itself would result in a net emission increase exceeding the major source threshold. The major source emission threshold for each criteria pollutant is specified in Rule 2201, Table 3-3 (8/15/19).

During this report's tracking period, there were no NMS projects finalized. Therefore, there will be no NMS projects mitigation in this year's equivalency demonstration.

### B. Federal Major Modification (FMM):

As defined in 40 CFR 51.165, Section (a)(1)(v) and part D of Title I of the CAA, a Federal Major Modification is any physical change in, or change in the method of operation of, a major stationary source that would result in a significant net emissions increase of any pollutant subject to regulation under the federal Clean Air Act. The significant net emission increase threshold for each criteria pollutant is specified in Rule 2201, Table 3-1 (8/15/19).

During this report's tracking period, there were sixteen (16) ATC projects that triggered a FMM. Of these sixteen (16) projects, four (4) projects were a FMM for NOx only, seven (7) projects were a FMM for VOC only, and five (5) were a FMM for both NOx and VOC. There were no projects finalized during this reporting period that triggered a FMM for SOx, PM10, or PM2.5.

**Table 2: Federal Major Modification Projects**

Tracking Period	NOx Only	VOC Only	NOx and VOC	SOx, PM10, or PM2.5	Total
<b>2020-2021</b>	4	7	5	0	<b>16</b>

All FMM projects are individually identified in Appendix A.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## C. Total Federal Offset Quantity Required

The total FOQ to be mitigated in this year's offset equivalency demonstration is shown in the table below:

**Table 3: Total Federal Offsets Required (tpy)**

<b>Project Type</b>	<b>NOx</b>	<b>SOx</b>	<b>PM10</b>	<b>PM2.5</b>	<b>VOC</b>
NMS	0.0	0.0	0.0	0.0	0.0
FMM	60.9	0.0	0.0	0.0	23.9
<b>Total</b>	<b>60.9</b>	<b>0.0</b>	<b>0.0</b>	<b>0.0</b>	<b>23.9</b>

The amount of federal offsets required for projects finalized during this report's tracking period is used to determine both Offset Quantity (Test 1) and Surplus Value (Test 2) equivalency.

## IV. **District Offsets Required During 2020-2021 Tracking Period**

During this report's tracking period, fifteen (15) ATC projects triggered offsets under the District's local NSR rule, and ERCs were required to satisfy the offsetting requirements for these projects.

**Table 4: Total District Offsets Required (tpy)**

<b>NOx</b>	<b>SOx</b>	<b>PM10</b>	<b>VOC</b>
23.8	6.4	10.6	53.6

The total amount of District offsets required for projects finalized during this report's tracking period and the surplus value of those ERCs used to satisfy the offset obligation are used to determine both Offset Quantity (Test 1) and Surplus Value (Test 2) equivalency.

All ERCs reserved for District offset projects are individually identified in Appendix B.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## V. Creditable Emission Reductions Generated During 2020-2021 Tracking Period

To satisfy surplus value (test 2) equivalency, the District may use the surplus at time-of-use value of various categories of creditable emission reductions, including ERCs reserved/withdrawn, surrendered ERCs, Air Quality Improvement Deduction (the district portion of newly issued ERCs), orphan shutdowns, and BACT on existing minor sources.

Surplus reductions generated during a tracking year excess of federal NSR requirements are allowed to be carried forward and used to demonstrate equivalency with federal offsetting requirements in future years provided the reductions remain surplus at time-of-use.

The new surplus reductions generated and added as part of this equivalency demonstration are summarized in the following table.

**Table 5: 2020-2021 New Surplus Reduction Summary (tpy)**

<b>Category</b>	<b>NOx</b>	<b>SOx</b>	<b>PM10</b>	<b>PM2.5</b>	<b>VOC</b>
ERC Reserved/Withdrawn	n/a	5.2	10.7	6.1	n/a
ERCs Surrendered	n/a	0.0	0.0	0.0	n/a
ERCs Newly Issued (AQID)	n/a	0.0	0.1	0.0	n/a
Orphan Shutdowns	n/a	0.0	0.0	0.0	n/a
BACT on Minor Sources	n/a	0.0	0.0	0.0	n/a
<b>Total</b>	<b>n/a</b>	<b>5.2</b>	<b>10.8</b>	<b>6.1</b>	<b>n/a</b>

### A. Emission Reduction Credits Reserved/Withdrawn

During this report's tracking period, there were fifteen (15) ATC projects for which ERC certificates were reserved/withdrawn to satisfy the offsetting requirements of District Rule 2201.

A detailed list of these ERC certificates is included in Appendix C-1.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## B. Emission Reduction Credits Surrendered

During this report's tracking period, there was one (1) ERC certificate surrendered to satisfy requirements not required by District Rule 2201.

A detailed list of the ERC certificate is included in Appendix C-2.

## C. Air Quality Improvement Deduction

During this report's tracking period, there was one (1) new ERC banking project finalized. Pursuant to District Rule 2201, Section 4.12, prior to banking Actual Emission Reductions (AER) for ERC certificates, the AER shall be discounted by 10 percent for Air Quality Improvement Deduction (AQID). The AQID is surplus of all federal rules and regulations at the time of banking and is included in the District's offset equivalency system as a surplus additional creditable reduction.

Individual ERC banking project is included in Appendix C-3.

## D. Orphan Shutdowns

On September 17, 2020, the District's Governing Board removed emission reductions from unbanked facility shutdowns ("orphan shutdowns") from the District's offset equivalency system. The District intends to work through a public process to develop EPA and CARB accepted mechanisms and methodologies to credit actual emission reductions from future orphan facility shutdowns and allow the use of these credits by facilities to satisfy federal offsetting requirements or to aid in demonstrating equivalency, as applicable.

No mechanisms and methodologies to credit these reductions have been approved as of the date of this report. Therefore, the surplus reductions from orphan shutdowns will not be considered in the equivalency demonstration for this tracking period.

## E. Actual Emission Reductions from Implementing BACT on Existing Equipment at Minor Sources

Pursuant to District Rule 2201, actual emission reductions in excess of any federal requirement, generated from control technologies required by the District's Best Available Control Technology (BACT) requirements for existing equipment at minor sources, are identified as surplus reductions. The District has never used these surplus reductions to demonstrate offset equivalency as no mechanisms or methodologies to quantify the surplus value of these reductions have been approved as of the date of this report. Therefore, the surplus reductions from the implementation of BACT on existing equipment at minor sources will not be considered in the equivalency demonstration for this tracking period.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

## VI. Adjustments to Prior Year End Carry-Over Balances

Prior to conducting the annual equivalency demonstration, it may be necessary to adjust the prior year end carry-over balances to account for cancelled and unimplemented projects, partially implemented projects, and the addition of prior year projects, ERCs, or other creditable emission reductions that were not accounted for previously. Additionally, the District must review new rules and regulations to determine if adjustments must be made to the surplus creditable reduction carry-over.

This year the District has conducted a review of the projects and entries in the system, and made adjustments to the carry-over balances as part of the 2020-2021 demonstration.

All adjustments made to the prior year end carry-over balances are presented below.

### A. Offset Quantity (Test 1) Carry-Over Balance Adjustments

**Table 6: Adjustments to Offset Quantity Carry-Over Balance (tpy)**

Category		NOx	SOx	PM10	PM2.5	VOC
(a)	Adjustments to District Offset Quantity	-10.3	-0.3	0.0	0.0	n/a
(b)	Adjustments to Federal Offset Quantity	-2.4	0.0	0.0	0.0	n/a
(c) = (a) – (b)	<b>Net Adjustment to Unused Carry-over</b>	<b>-7.9</b>	<b>-0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>n/a</b>

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

## 1. *District and Federal Offset Quantity Adjustments*

As VOC is no longer offset quantity (Test 1) equivalent, only adjustments are necessary for projects affecting the NOx, SOx, PM10, and PM2.5 offset quantity carry-over balances. For this year's offset equivalency demonstration, the District identified two (2) project entries in the equivalency system that needed to be re-evaluated due to cancelled/unimplemented ATCs. Once validated, the District Offset Quantity (DOQ) and FOQ for these project entries were adjusted, where necessary, and are reflected in the changes to the carry-over balances. Additional information on the two (2) adjusted projects is discussed below.

E & J Gallo Winery (Project N-1123806): The District issued an ATC and included the emissions in the tracking system for the installation of a digester gas operation during the 2012-2013 reporting period. However, the project was never implemented as proposed, the ATC expired and was cancelled.

E&B Natural Resources Mgmt (Project S-1193935): The District issued ATCs and included the emissions in the tracking system for the installation of diesel-fired IC engines during the 2019-2020 reporting period. However, the project was never implemented and all the ATCs were cancelled.

A list of adjustments to the DOQ and FOQ values for the Offset Quantity Carry-Over Balance is provided in Appendices D-1 and D-2.

## B. Surplus Creditable Reductions (Test 2) Carry-Over Balance Adjustments

**Table 7: Adjustments to Unused Surplus Carry-over Creditable Reductions (tpy)**

Category		NOx	SOx	PM10	PM2.5	VOC
(a)	Re-surplusing of Prior Year Carry-over	n/a	0.0	0.0	0.0	n/a
(b)	Adjustments to District Offset Quantity	n/a	-0.3	0.0	0.0	n/a
(c)	Adjustments to Federal Offset Quantity	n/a	0.0	0.0	0.0	n/a
(d) = (b) - (a) - (c)	<b>Net Adjustment to Unused Carry-over</b>	<b>n/a</b>	<b>-0.3</b>	<b>0.0</b>	<b>0.0</b>	<b>n/a</b>

### 1. *Re-surplusing of Surplus Carry-Over Creditable Reductions*

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

Each year the District must review changes to rules and regulations to determine if adjustments must be made to the surplus carry-over creditable reduction balance. During this report's tracking period, there was no surplus value discounting required.

## 2. *District and Federal Offset Quantity Adjustments*

As NO<sub>x</sub> and VOC are no longer surplus value (Test 2) equivalent, only adjustments were necessary for projects affecting the surplus SO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub> carry-over balances. For this year's offset equivalency demonstration, the District identified one (1) project entry in the equivalency system that needed to be re-evaluated for potential adjustments to DOQ and FOQ due to cancelled/unimplemented ATCs. Once validated, the DOQ and FOQ for these project entries were adjusted, where necessary, and are reflected in the changes to the carry-over balances. For purposes of surplus value (Test 2) equivalency, the adjustments to DOQ must be translated to the impact on the surplus value of those credits. Therefore, using the validated DOQ, the corresponding surplus value adjustments were determined for each impacted project and utilized in evaluating surplus value (Test 2) equivalency as reflected in Table 7 above. Additional information on the one (1) project requiring an adjustment to surplus value is discussed below.

E&B Natural Resources Mgmt (Project S-1193935): The District issued ATCs and included the emissions in the tracking system for the installation of diesel-fired IC engines during the 2019-2020 reporting period. However, the project was never implemented and all the ATCs were cancelled.

A list of adjustments to the DOQ values for the Surplus Carry-Over Creditable Reduction Balance is provided in Appendix D-3.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

## VII. Annual Equivalency Demonstration - Offset Quantity Equivalency (Test 1)

The table below outlines the District's 2020-21 equivalency demonstration for the Offset Quantity (Test 1) requirements specified in Section 7.2.1 of Rule 2201.

**Table 8: Offset Quantity Equivalency Demonstration (tpy)**

Pollutant	Number of New Major Sources	Number of Federal Major Mods	Offsets	Offsets	Current Year Excess or Shortfall	Previous	Year-to-	Year-End
			Required under Federal NSR	Required under District NSR		Year-End Total Carryover Excess or Shortfall	Year Adjustment to Carryover Balance	Year-End Total Carryover Excess or Shortfall
			(a)	(b)	(c) = (b) - (a)	(d)	(e)	(f)=(d)+(e)+(c)
NOx	0	9	60.9	23.8	-37.1	353.1	-7.9	308.1
PM10	0	0	0.0	10.6	10.6	326.1	0.0	336.7
PM2.5	0	0	0.0	0.0	0.0	192.3	0.0	192.3
CO	0	0	0.0	0.0	0.0	198.1	0.0	198.1
SOx	0	0	0.0	6.4	6.4	1,223.5	-0.3	1,229.6
VOC <sup>1</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

**Notes:**

- All values are in tons per year

<sup>1</sup> Effective November 20, 2020, VOC was no longer Offset Quantity equivalent and Rule 2201 remedy was enacted to require federal offset quantity ERCs for projects requiring VOC offsets under Rule 2201. Therefore, VOC are not included in Offset Quantity equivalency demonstration.

**NOx:**

As shown in the table, there is a current year offset quantity shortfall for the current year. Following the year-to-year adjustments to the prior year carry-over balances, NO<sub>x</sub> maintains a positive carry-over balance and thus remains offset quantity (Test 1) equivalent.

**SOx, PM<sub>10</sub>, PM<sub>2.5</sub>, and CO:**

As shown in the table, there is a current year offset quantity excess, or zero (0) shortfall, for the current year. Following the year-to-year adjustments to the prior year carry-over balances, all pollutants maintain a positive carry-over balance and thus remain offset quantity (Test 1) equivalent.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

## VOC:

Effective November 20, 2020, VOC was no longer offset quantity (Test 1) equivalent and is no longer evaluated for equivalency as all new major sources or federal major modification projects triggering offsets for VOC under 40 CFR 51.165 and part D of Title I of the CAA are required to satisfy the full federal offset quantity and ERCs used to satisfy the offset requirements must be surplus-at-time of ATC issuance.

An explanation of the categories in the table is provided in Appendix E.

## VIII. Annual Equivalency Demonstration - Surplus Value Equivalency (Test 2)

The table below outlines the District's 2020-21 equivalency demonstration for the Surplus Value (Test 2) requirements specified in Section 7.2.2 of Rule 2201.

**Table 9: Surplus Value Equivalency Demonstration (tpy)**

Pollutant	Number of New Major Sources	Number of Federal Major Mods	Offsets	Surplus	Current Year Excess or Shortfall	Previous	Year-to-	Current Year New Creditable Reductions	Year-End Total Carry-over Creditable Reductions
			Required under Federal NSR	Reductions Used for Equivalency This Year		Year-End Total Carry-over Creditable Reductions	Year Adjustment to Carryover Balance		
			(a)	(b)	(c) = (b) - (a)	(d)	(e)	(f)	(g)=(d)+(e)+(c)+(f)
PM10	0	0	0.0	0.0	0.0	330.0	0.0	10.8	340.8
PM2.5	0	0	0.0	0.0	0.0	197.0	0.0	6.1	203.1
CO	0	0	0.0	0.0	0.0	763.0	0.0	0.0	763.0
SOx	0	0	0.0	0.0	0.0	338.2	-0.3	5.1	343.0
NOx <sup>1</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
VOC <sup>1</sup>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a

*Notes:*

- All values are in tons per year

<sup>1</sup> Effective September 17, 2020, NOx and VOC were no longer Surplus Value equivalent and Rule 2201 remedy was enacted to require surplus at time-of-use ERCs for projects requiring NOx and VOC offsets under Rule 2201. Therefore, these pollutants are not included in Surplus Value demonstration.

As discussed in the previous year's report, the system was no longer able to demonstrate equivalency with the surplus value test for NOx and VOC. Pursuant to the District's NSR rule, effective September 17, 2020, the Rule 2201 remedy was enacted and all ATCs requiring NOx or VOC offsets under the NSR rule for a new major source or federal major modification are now required to supply ERCs with sufficient "surplus at time of use" credit at the time of ATC issuance. Therefore, surplus value (Test 2) equivalency was not evaluated for NOx and VOC in this report.

For the remainder of the pollutants, there were no NMS or FMM projects this tracking year. Following the year-to-year adjustments to the prior year carry-over

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

balances, all remaining pollutants maintain a positive carry-over balance and thus remain surplus value (Test 2) equivalent.

An explanation of the categories in the table is provided in Appendix E.

## IX. Implications of 2020-2021 Offset Equivalency Demonstration

### A. VOC

All new major sources or federal major modification projects triggering offsets for VOC under 40 CFR 51.165 and part D of Title I of the CAA are required to satisfy the full federal offset quantity and ERCs used to satisfy the offset requirements must be surplus-at-time of ATC issuance. There is no change to the VOC offset requirements since the prior-year report.

### B. NO<sub>x</sub>

Any ATC requiring NO<sub>x</sub> offsets under the District NSR rule for a new major source or federal major modification as defined by 40 CFR 51.165 and part D of Title I of the CAA are required to supply ERCs that are surplus-at-time of ATC issuance.

As demonstrated above, NO<sub>x</sub> remains Offset Quantity (Test 1) equivalent. Therefore, there is no change to the offset quantity requirement at this time.

### C. PM<sub>10</sub>, PM<sub>2.5</sub>, and SO<sub>x</sub>

As demonstrated above, PM<sub>10</sub>, PM<sub>2.5</sub>, and SO<sub>x</sub> remain both Offset Quantity (Test 1) and Surplus Value (Test 2) equivalent. Therefore, there is no change to the offset quantity and ERC surplus value requirements at this time.

## Appendices

- A. NMS and FMM Projects Entered for the 2020-2021 Tracking Period
- B. ERCs Reserved/Withdrawn During the 2020-2021 Tracking Period
- C. Surplus Reductions Generated by the District NSR Rule
  - C-1: ERCs Reserved or Withdrawn
  - C-2: ERCs Surrendered
  - C-3: AQID

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## D. Adjustments to Offset Equivalency Carry-Over Balances

D-1: District Offset Quantity Adjustments

D-2: Federal Offset Quantity Adjustments

D-3: Surplus Adjustments Due to District Offset Quantity Adjustments

## E. Offset Equivalency Report Summary Table Glossary

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## Appendix A

NMS and FMM Projects Entered for the 2020-2021 Tracking Period

## SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

### 2020-21 Federal Major Modification Projects

Region	Facility ID	Facility Name	Project	Track Number	Final Date	NOx FOQ	VOC FOQ	PM10 FOQ	PM25 FOQ	SOx FOQ
S	1328	BERRY PETROLEUM COMPANY LLC	1193430	7375	12/16/2019	3.5	3.2	0	0	0
C	629	O'NEILL BEVERAGES CO LLC	1191691	7383	09/24/2020	0	2.8	0	0	0
C	7748	OLAM SPICES	1203750	7384	05/24/2021	13.4	0	0	0	0
N	829	NUSTAR TERMINALS OPS PARTNERSHIP LP	1181193	7385	01/05/2021	0	4.9	0	0	0
N	1399	LIBERTY PACKING CO - THE MORNING STAR CO	1200345	7386	12/15/2020	4.1*	0	0	0	0
N	1665	BRONCO WINE COMPANY	1201116	7387	04/13/2021	0	0	0	0	0
N	1399	LIBERTY PACKING CO - THE MORNING STAR CO	1201405	7388	02/17/2021	13.5*	0	0	0	0
N	1399	LIBERTY PACKING CO - THE MORNING STAR CO	1203800	7389	04/21/2021	0.8*	0	0	0	0
N	2321	CBUS OPS INC (DBA WOODBRIDGE WINERY)	1204622	7390	05/26/2021	0	0.4	0	0	0
S	1372	SENTINEL PEAK RESOURCES CA LLC	1200016	7391	11/02/2020	0	0	0	0	0
S	37	KERN OIL & REFINING CO.	1200501	7392	08/04/2021	0	1.2	0	0	0
S	1372	SENTINEL PEAK RESOURCES CA LLC	1200729	7393	03/01/2021	3.4	1.7	0	0	0
S	1372	SENTINEL PEAK RESOURCES CA LLC	1201688	7394	09/22/2020	2.6	0.4	0	0	0
S	8452	CALIFORNIA RESOURCES PRODUCTION CORP	1202811	7395	07/06/2021	0	2.8	0	0	0
S	2234	CALIFORNIA RESOURCES ELK HILLS LLC	1203245	7396	07/12/2021	7.6	3.7	0	0	0
S	1372	SENTINEL PEAK RESOURCES CA LLC	1203797	7397	07/12/2021	5.1	1	0	0	0
S	1372	SENTINEL PEAK RESOURCES CA LLC	1204327	7398	06/09/2021	10.4	5	0	0	0

\* The amount of federal offsets required to be tracked for equivalency purposes for each of these projects has been revised. The federal offsets required to be tracked for equivalency purposes for these projects were originally inaccurately calculated based off of a Specific Limiting Condition that limited the combined potential emissions of several units not included in the projects, which was greater than the full potential of the new units. The revised quantity of federal offsets required are based on the full potential emissions of the new units in each project, times the federal offset ratio (1.5). This calculation methodology is consistent with the requirements of 40 CFR 51.165(a)(3)(ii)(J) and 40 CFR 51.165(a)(9)(ii)(E). This revision only affects the amount of federal offsets required to be tracked for equivalency purposes and does not impact any conditions of approval for the projects.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## Appendix B

ERCs Reserved/Withdrawn During the 2020-2021 Tracking  
Period

## SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

### 2020-2021 Projects with ERCs Reserved/Withdrawn

Region	Facility ID	Project	Facility Name	ERC Certificate	Track Number	NOx	VOC	PM10	SOx
C	230	1202619	CAMPOS BROTHERS	C-1177-4	7399	0	0	0.2	0
S	1372	1200729	SENTINEL PEAK RESOURCES CA LLC	N-1484-4	7400	0	0	1.7	0
S	1372	1200729	SENTINEL PEAK RESOURCES CA LLC	N-1484-2	7401	1.5	0	0	0
S	1372	1200729	SENTINEL PEAK RESOURCES CA LLC	N-1484-5	7402	0	0	0	0.3
N	2321	1204622	CBUS OPS INC (DBA WOODBRIDGE WINERY)	C-1516-1	7403	0	0.4	0	0
N	1662	1200219	GALLO GLASS COMPANY	N-1516-4	7404	0	0	3.7	0
N	829	1181193	NUSTAR TERMINALS OPS PARTNERSHIP LP	C-1519-1	7405	0	4.9	0	0
N	8234	1191493	DIAMOND PET FOOD PROCESSORS OF RIPON	N-1525-2	7406	10	0	0	0
S	1372	1204327	SENTINEL PEAK RESOURCES CA LLC	N-1551-4	7407	0	0	4.7	0
S	1372	1200729	SENTINEL PEAK RESOURCES CA LLC	N-1553-1	7408	0	1.7	0	0
S	1372	1203797	SENTINEL PEAK RESOURCES CA LLC	N-1553-1	7409	0	1	0	0
S	1372	1204327	SENTINEL PEAK RESOURCES CA LLC	N-1553-1	7410	0	5	0	0
S	8452	1202811	CALIFORNIA RESOURCES PRODUCTION CORP	S-1722-1	7411	0	4.2	0	0
S	9168	1200348	ELK HILLS POWER LLC	S-3951-1	7412	0	24.2	0	0
S	2234	1202756	CALIFORNIA RESOURCES ELK HILLS LLC	S-4196-1	7413	0	0.1	0	0
S	8452	1202811	CALIFORNIA RESOURCES PRODUCTION CORP	S-4470-1	7414	0	5.8	0	0
S	2234	1203245	CALIFORNIA RESOURCES ELK HILLS LLC	S-4747-1	7415	0	4.2	0	0
S	2234	1203245	CALIFORNIA RESOURCES ELK HILLS LLC	S-5003-1	7416	0	1.9	0	0
S	1547	1200351	AERA ENERGY LLC	S-5082-1	7417	0	6.2	0	0
S	1372	1204327	SENTINEL PEAK RESOURCES CA LLC	S-5166-5	7418	0	0	0	4.8
N	9371	1204384	MCMANIS FAMILY VINEYARDS	S-5170-1	7419	0	1.2	0	0
S	1372	1200729	SENTINEL PEAK RESOURCES CA LLC	S-5203-2	7420	1.9	0	0	0

## SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

Region	Facility ID	Project	Facility Name	ERC Certificate	Track Number	NOx	VOC	PM10	SOx
S	1372	1204327	SENTINEL PEAK RESOURCES CA LLC	S-5203-2	7421	10.4	0	0	0
S	1372	1200729	SENTINEL PEAK RESOURCES CA LLC	S-5205-5	7422	0	0	0	1.3
S	1372	1204327	SENTINEL PEAK RESOURCES CA LLC	S-5207-4	7423	0	0	0.3	0
S	2234	1202756	CALIFORNIA RESOURCES ELK HILLS LLC	S-5210-1	7424	0	0.7	0	0
S	37	1200501	KERN OIL & REFINING CO.	S-5213-1	7425	0	2.2	0	0

Field Key:

- [pollutant] – quantity of ERC provided to satisfy offset obligations (valued at time of banking)

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## Appendix C

Surplus Reductions Generated by the District NSR Rule

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## Appendix C-1

ERCs Reserved or Withdrawn



## SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

Region	Project	ERC Certificate	Track Number	NOx	VOC	PM10	PM2.5	SOx	Surplus NOx	Surplus VOC	Surplus PM10	Surplus PM2.5	Surplus SOx
S	1204327	S-5203-2	7421	10.4	0	0	0	0	0	0	0	0	0
S	1200729	S-5205-5	7422	0	0	0	0	1.3	0	0	0	0	0
S	1204327	S-5207-4	7423	0	0	0.3	0.3	0	0	0	0.3	0.3	0
S	1202756	S-5210-1	7424	0	0.7	0	0	0	0	0	0	0	0
S	1200501	S-5213-1	7425	0	2.2	0	0	0	0	0	0	0	0

**Field Key:**

- [pollutant] – quantity of ERC provided to satisfy offset obligations (valued at time of banking)
- Surplus [pollutant] – surplus value of ERC at time of ATC issuance (time of use)

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

Appendix C-2

ERCs Surrendered

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## 2020-2021 ERCs Surrendered Surplus Value

Region	Project	ERC Certificate	Track Number	NOx	VOC	PM10	PM2.5	SOx	Surplus NOx	Surplus VOC	Surplus PM10	Surplus PM2.5	Surplus SOx
S	1210466	S-5218-5	7426	0	0	0	0	0.5	0	0	0	0	0.0

Field Key:

- [pollutant] – quantity of ERC surrendered (valued at time of banking)
- Surplus [pollutant] – surplus value of ERC at time of surrender (time of use)

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

Appendix C-3

AQID

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## AQID from ERCs issued in 2020-2021

Region	Facility ID	Project	Facility Name	Track Number	Surplus PM10	Surplus PM25	Surplus SOx
S	1392	1202740	BASF CORPORATION	7427	0.1	0.0	0.0

Field Key:

- Surplus [pollutant] – surplus value of ERC

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

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## Appendix D

### Adjustments to Offset Equivalency Carry-Over Balances

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

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

Appendix D-1

District Offset Quantity Adjustments

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## District Offset Quantity Adjustments

Region	Facility ID	Project	DOQ NOx	DOQ SOx	DOQ PM10	DOQ PM25	DOQ VOC	adj DOQ NOx	adj DOQ SOx	adj DOQ PM10	adj DOQ PM25	adj DOQ VOC	Reason For Evaluation
N	1237	1123806	2.4	0.0	0.0	0.0	0.1	-2.4	0.0	0.0	0.0	-0.1	Cancelled/Expired ATCs
S	1624	1193935	7.9	0.3	0.0	0.0	0.0	-7.9	-0.3	0.0	0.0	0.0	Cancelled/Expired ATCs

### Field Key:

- DOQ [pollutant] – initial District Offset Quantity used in equivalency system
- adj DOQ [pollutant] – adjustment necessary to initial District Offset Quantity; reflected in adjustment to the carry-over balance

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

Appendix D-2

Federal Offset Quantity Adjustments

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## Federal Offset Quantity Adjustments

Region	Facility ID	Project	FOQ NOx	FOQ SOx	FOQ PM10	FOQ PM25	FOQ VOC	adj FOQ NOx	adj FOQ SOx	adj FOQ PM10	adj FOQ PM25	adj FOQ VOC	Reason For Evaluation
N	1237	1123806	2.4	0.0	0.0	0.0	0.0	-2.4	0.0	0.0	0.0	0.0	Cancelled/Expired ATCs
S	1624	1193935	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	Cancelled/Expired ATCs

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

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

Appendix D-3

Surplus Adjustments Due to District Offset Quantity Adjustments

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## Surplus Adjustments Due to District Offset Quantity Adjustments

Adjustments to PM10 Surplus Carry-over:

None

Adjustments to PM2.5 Surplus Carry-over:

None

Adjustments to SOx Surplus Carry-over:

Region	Facility Id	Project	DOQ SOx	adj DOQ SOx	adj Percent	SOx Balance	SOx Used	adj Surplus SOx
S	1624	1193935	0.3	-0.3	-100.0%	0.0	0.0	0.0

Field Key:

- DOQ SOx – initial District Offset Quantity used in equivalency system
- adj DOQ SOx – adjustment necessary to initial District Offset Quantity; reflected in adjustment to the carry-over balance
- SOx Balance – value in surplus carry-over balance
- SOx Used – value previously used a surplus value mitigation in past equivalency demonstrations
- Adj Surplus SOx – adjustment necessary to surplus carry-over balance to reflect DOQ adjustments

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## Appendix E

Offset Equivalency Report Summary Tables Glossary

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

## Offset Quantity Equivalency (Test 1) Summary Table Glossary

- **Number of New Major Sources**  
This is the number of NMS projects that were finalized by the District during the current tracking period. Note that if a project was a NMS for multiple pollutants (i.e. NOx and VOC), the project will be counted in all pollutant rows for which the source was a NMS and federal offsets were required.
- **Number of Federal Major Modifications**  
This is the number of FMM projects that were finalized by the District during the current tracking period. Note that if a project triggered a FMM for multiple pollutants (i.e. NOx and VOC), the project will be counted in all pollutant rows that triggered a FMM and federal offsets were required.
- **Offsets Required Under Federal NSR**  
This is the amount of offsets required under the federal NSR offsetting program for the FMM and NMS projects finalized by the District during the tracking period.
- **Offsets Required Under District NSR**  
This is the amount of offsets the District's NSR offsetting program required for the FMM and NMS projects finalized by the District during the tracking period.
- **Current Year Excess or Shortfall**  
This value is the difference between the amount of offsets required under District NSR and the amount of offsets required under federal NSR. This value is only a comparison of the offsetting requirements for the FMM and NMS finalized by the District during the tracking period. If this value is positive, the District's NSR offsetting program required more offsets than what would have been required under Federal NSR for FMM and NMS projects finalized during the tracking period.
- **Previous Year-End Total Carry-over Excess or Shortfall**  
This value represents the Year-End Total Carry-over Excess or Shortfall from the previous year's offset equivalency report.
- **Year-to-Year Adjustment to Carry-Over Balance**  
This value is the total amount of adjustments made by the District following the previous year's offset equivalency report.
- **Year-End Total Carry-Over Excess or Shortfall**  
This value is the difference between the total offsets required by the District's NSR offsetting program and the federal NSR offsetting program since the start of the offset equivalency demonstration. This value includes the current

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

tracking year's excess or shortfall and any adjustments that were made in the current equivalency report. If this value is positive, the District's NSR offsetting program has required more offsets than what would have been required under Federal NSR since the start of the offset equivalency demonstration, and the District has successfully demonstrated equivalency with Test 1.

## **Surplus Value Equivalency (Test 2) Summary Table Glossary**

- **Number of New Major Sources**  
This is the number of NMS projects that were finalized by the District during the current tracking period. Note that if a project was a NMS for multiple pollutants (i.e. NO<sub>x</sub> and VOC), the project will be counted in all pollutant rows for which the source was a NMS and federal offsets were required.
- **Number of Federal Major Modifications**  
This is the number of FMM projects that were finalized by the District during the current tracking period. Note that if a project triggered a FMM for multiple pollutants (i.e. NO<sub>x</sub> and VOC), the project will be counted in all pollutant rows that triggered a FMM and federal offsets were required.
- **Offsets Required Under Federal NSR**  
This is the amount of offsets required under the federal NSR offsetting program for the FMM and NMS projects finalized by the District during the tracking period.
- **Surplus Reductions Used for Equivalency This Year**  
This is the amount of surplus reductions that were used in this year's equivalency demonstration to mitigate the surplus offsets quantity required under federal NSR for FMM and NMS projects finalized by the District during the current tracking period. Surplus reductions consist of reductions in the creditable reductions carry-over bank.
- **Current Year Excess or Shortfall**  
This value is the difference between the amount of offsets required under federal NSR and the surplus reductions used for equivalency this year. A zero (0.0) value means the District's creditable reduction carry-over bank had more surplus reductions than the amount of offsets required under federal NSR for FMM and NMS projects finalized by the District during the current tracking period.

# SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

2020-2021 SJVAPCD Annual Offset Equivalency Report to the Federal EPA

---

- **Previous Year-End Total Carry-over Creditable Reductions**  
This value represents the Year-End Total Carry-over Creditable Reductions from the previous year's offset equivalency report.
- **Year-to-Year Adjustment to Carry-Over Balance**  
This value is the total amount of adjustments made by the District following the previous year's offset equivalency report.
- **Current Year New Creditable Reductions**  
This value is the total amount of surplus reductions collected by the District for the current equivalency tracking period.
- **Year-End Total Carry-Over Creditable Reductions**  
This value is the difference between the total surplus reductions generated by the District and the amount of surplus offsets required by FMM and NMS since the start of the offset equivalency demonstration. This value includes the current tracking year's excess or shortfall and any adjustments that were made in the current equivalency report. If this value is positive, the District's has generated more surplus reductions than what would have been required under Federal NSR since the start of the offset equivalency demonstration, and the District has successfully demonstrated equivalency with Test 2.