

SAN JOAQUIN VALLEY UNIFIED AIR POLLUTION CONTROL DISTRICT

DRAFT STAFF REPORT

Proposed Revision to State Implementation Plan (SIP) to Address Federal Clean Air Act Requirements for Reasonably Available Control Technology (RACT)

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I. SUMMARY

The San Joaquin Valley (Valley) is classified as extreme ozone nonattainment area for the 2008 8-hour standard¹. Sections 182(b)(2) and 182(f) of the federal Clean Air Act (CAA) require areas that are classified as moderate or above for ozone nonattainment to implement Reasonably Available Control Technology (RACT) for sources subject to U.S. Environmental Protection Agency (EPA) Control Technique Guidelines (CTG) or for “major sources” of NO_x and volatile organic compounds (VOC)².

In June 2014, the San Joaquin Valley Air Pollution Control District (District) adopted the *2014 Reasonably Available Control Technology Demonstration for the 8-Hour Ozone State Implementation Plan (2014 RACT SIP)* to fulfill the federal Clean Air Act requirements and demonstrate that all federal RACT requirements continue to be satisfied in the Valley. In response to EPA’s preliminary review of the 2014 RACT SIP, the District is submitting this supplemental demonstration to comply with the RACT requirements as they relate to the 2008 8-hour ozone standard. This demonstration includes a proposed action to incorporate permit conditions pertaining to emissions standards for NO_x into the SIP for JR Simplot’s nitric acid plant located in Helm, CA under permit # C-705-3-19 (see Appendix A). J.R. Simplot is already required to comply with these NO_x emission requirements by its current permit; therefore, no changes in equipment or operation will result from this proposed action. In addition, per EPA’s recommendation, the District is seeking to adopt negative declarations certifying

¹ EPA (May 12, 2012). Air Quality Designations for the 2008 NAAQS. 77 FR 30088. Retrieved from: <http://www.gpo.gov/fdsys/pkg/FR-2012-05-21/pdf/2012-11618.pdf>

² EPA Clean Air Act (CAA) Sections 182 (b)(2) and 182(f). Retrieved from: <https://www.gpo.gov/fdsys/pkg/USCODE-2013-title42/html/USCODE-2013-title42-chap85-subchapl-partD-subpart2-sec7511a.htm>

that there are no stationary sources in our region for five specified source categories that are subject to EPA CTG's (see Appendix B).

II. DISCUSSION

Federal Clean Air Act Section 182 requires the District to implement RACT for major stationary sources of NO_x into the SIP. This is satisfied either through the adoption of a source specific rule or the incorporation of relevant permit conditions into the SIP. The J.R. Simplot facility located in Helm, CA is a major source of NO_x. It is not subject to a source specific rule, and its permit conditions have not been incorporated into the SIP. As requested by EPA and to comply with the federal Clean Air Act requirements for RACT, the District is proposing to incorporate the relevant conditions of J.R. Simplot's permit C-705-3-19 into the SIP pertaining to emission standards for NO_x. The District selected this streamlined option in lieu of adopting a source specific rule, since there is only one nitric acid production facility in the San Joaquin Valley, and the District has concluded that the requirements in this permit meet RACT.

The Permit to Operate incorporates an expiration date that is for State of California purposes, only. For federal enforcement purposes the RACT provisions of this permit that are approved by EPA shall remain in effect as part of the State of California Implementation Plan until replaced pursuant to 40 CFR 51 and approved by EPA.

III. ANALYSIS

A. Emission Analysis

This RACT demonstration includes a proposed action to incorporate permit conditions pertaining to emissions standards for NO_x into the SIP for JR Simplot's nitric acid plant located in Helm, CA under permit C-705-3-19. J.R. Simplot is already required to comply with these requirements through its current permit; therefore, there will be no changes in emissions as a result of this action.

B. Economic Impact

The proposed action to incorporate permit conditions pertaining to emissions standards for NO_x into the SIP for JR Simplot's nitric acid plant located in Helm, CA under permit C-705-3-19 will not result in additional compliance costs. Therefore, there will be no economic impact.

C. Environmental Review

The proposed action is to incorporate permit conditions pertaining to emissions standards for NO_x into the SIP for JR Simplot's nitric acid plant located in Helm, CA under permit # C-705-3-19 (see Appendix A). J.R. Simplot is already required to comply with these NO_x emission requirements by its current permit; therefore, no changes in emissions will result from this proposed action. Based on the District's investigation and lack of evidence to the contrary, the District has concluded that the proposed action will not have any significant adverse effects on the environment.

This proposed action will be taken by a regulatory agency, the San Joaquin Valley Air District, as authorized by state law to assure the maintenance, restoration, enhancement, or protection of air quality in the San Joaquin Valley where the regulatory process involves procedures for protection of air quality.

The California Environmental Quality Act (CEQA) Guidelines §15308 (Actions by Regulatory Agencies for Protection of the Environment), provides a categorical exemption for "actions taken by regulatory agencies, as authorized by state or local ordinance, to assure the maintenance, restoration, enhancement, or protection of the environment where the regulatory process involves procedures for protection of the environment. Construction activities and relaxation of standards allowing environmental degradation are not included in this exemption." No construction activities or relaxation of standards are included in this project. Therefore, this proposed action is exempt from CEQA.

In addition, according to Section 15061(b)(3) of the CEQA Guidelines, a project is exempt from CEQA if, "(t)he activity is covered by the general rule that CEQA applies only to projects which have the potential for causing a significant effect on the environment. Where it can be seen with certainty that there is no possibility that the activity in question may have a significant effect on the environment, the activity is not subject to CEQA." As such, the District finds that the proposed action is exempt from CEQA.

IV. PUBLIC HEARING PROCESS

In accordance with California Health and Safety Code Section 40725, the proposed SIP submittal will be available on and after May 22, 2018. The proposed SIP submittal will be heard at the District Governing Board public hearing on June 21, 2018. Written comments received by 5:00 PM on June 5, 2018 will be ensured consideration ahead of the June 21, 2018 Governing Board public hearing.

Appendix A

J.R. Simplot Permit C-705-3-19

San Joaquin Valley Air Pollution Control District

PERMIT UNIT: C-705-3-19

EXPIRATION DATE:

EQUIPMENT DESCRIPTION:

NITRIC ACID PLANT CONSISTS OF: ONE AMMONIA VAPORIZER WITH SUPERHEATER, ONE NH₃ TO NO CONVERTER, ONE WASTE HEAT BOILER, ONE TAIL GAS PREHEATER, ONE TAIL GAS HEATER, ONE STEAM TURBINE, ONE AIR COMPRESSOR, ONE NO TO HNO₃ ABSORBER, ONE 6.87 MMBTU/HR NATURAL GAS FIRED CATALYST PREHEATER, ONE NO₂ TO N₂ BUTANE/NATURAL GAS-FIRED COMBUSTOR FOR EMISSIONS, 4 NITRIC ACID STORAGE TANKS, TRUCK LOADING STATION, DRIP PAD SUMPS AND SCRUBBER

PERMIT UNIT REQUIREMENTS

1. All equipment shall be maintained in good operating condition and shall be operated in a manner to minimize emissions of air contaminants into the atmosphere.
- 2.
- 3.
4. NO_x emissions (expressed as NO₂), excluding startup, shutdown and malfunction, shall not exceed 2.98 lbs/ton of 100% HNO₃ on a three-hour average as determined by continuous monitor and recording equipment certified to 40 CFR 60, Appendix B Performance Specification 2.
- 5.
6. NO_x emissions (expressed as NO₂) shall not exceed 0.78 lbs/ton of 100% HNO₃ on a 12 month rolling average as determined by continuous monitor and recording equipment certified to 40 CFR 60, Appendix B Performance Specification 2 and compliance testing conducted within 60 days of implementation of this Authority to Construct and at least once every twelve months thereafter utilizing USEPA Method 7.
- 7.
- 8.
- 9.
- 10.

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

Facility Name: J R SIMPLOT COMPANY

Location: 12688 S COLORADO AVE, HELM, CA 93627

- 11.
12. The owner or operator shall establish a conversion factor for the purpose of converting monitoring data into units of applicable standard (lb/ton of 100% HNO₃ produced). The conversion factor shall be obtained according to procedures and methods specified in 40 CFR 60.73 (b) and shall be reestablished during any performance test under 40 CFR 60.8 or any continuous emission monitoring system performance evaluation under 40 CFR 60.13 (c). |
13. Compliance demonstration (source testing) shall be witnessed or authorized by the District and the samples shall be collected by a California Air Resources Board certified testing laboratory. The District must be notified 30 days prior to any compliance source test, and a source test plan must be submitted for approval 15 days prior to testing. The results of each source test shall be submitted to the District within 60 days of source testing.
14. The owner or operator shall certify, maintain, operate, and quality-assure a Continuous Emissions Monitoring System (CEMS) which continuously measures and records the exhaust gas NO_x concentrations. The CEMS shall be capable of monitoring emissions during startups and shutdowns, as well as during normal operating conditions.
- 15.
16. When the plant is in operation, the monitoring system shall perform a daily calibration drift test in accordance with 40 CFR 60.13d.
17. When the plant is operating, the CEMS shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.
18. The NO_x CEMS shall meet the requirements in 40 CFR Part 60, Appendix B Performance Specification 2.
19. The owner/operator shall perform a relative accuracy test as specified by 40 CFR Part 60, Appendix F, at least once every four calendar quarters. The permittee shall comply with the applicable requirements for quality assurance testing and maintenance of the continuous emission monitor equipment in accordance with the procedures and guidance specified in 40 CFR Part 60, Appendix F.
- 20.
- 21.
- 22.
23. The owner or operator shall submit a written report of CEM operations for each calendar quarter to the APCO. The report is due on the 30th day following the end of the calendar quarter and shall include the following: Time intervals, data and magnitude of excess NO_x emissions, nature and the cause of excess (if known), corrective actions taken and preventative measures adopted; Averaging period used for data reporting corresponding to the averaging period specified in the emission test period and used to determine compliance with an emissions standard; Applicable time and date of each period during which the CEM was inoperative (monitor downtime), except for zero and span checks, and the nature of system repairs and adjustments; A negative declaration when no excess emissions occurred.

PERMIT UNIT REQUIREMENTS CONTINUE ON NEXT PAGE

These terms and conditions are part of the Facility-wide Permit to Operate.

24. A violation of emission standards of this permit, as shown by the stack-monitoring system, shall be reported to the district within 96 hours.
25. The operator shall notify the district at least 24 hours prior to the shutting down of monitoring equipment. In the event of breakdown of monitoring equipment, the owner or the operator shall notify the district within 1 hour after the breakdown is detected. Such a notice is not required for any maintenance or QA/QC activity on the system if the operator expects the down time to be less than four hours, but the operator must still report these periods in their quarterly report.
26. APCO or an authorized representative shall be allowed to inspect, as determined to be necessary, the required monitoring devices to ensure that such devices are functioning properly.
27. The owner or operator shall maintain CEMS records that contain the following: the occurrence and duration of any start-up, shutdown or malfunction, performance testing, evaluations, calibrations, checks, adjustments, maintenance, duration of any periods during which a continuous monitoring system or monitoring device is inoperative, and emissions measurements.
- 28.
29. Permittee shall record daily production rate and emission data. Records shall be retained and provided to the District upon request.
30. Permittee shall maintain records to demonstrate compliance with the rolling average NOx emission rate. 12 month

These terms and conditions are part of the Facility-wide Permit to Operate.

Appendix B

Negative Declarations

The federal Clean Air Act (CAA) requires areas designated non-attainment for ozone and classified moderate and above to implement Reasonably Available Control Technology (RACT). More specifically, CAA section 182(b)(2) and 182(f) requires the adoption of RACT level requirements for source categories covered by EPA Control Techniques Guideline (CTG), or if a source category does not exist in the affected area, the District may submit a Negative Declaration.

The District previously adopted Negative Declarations for CTGs without applicable facilities in the Valley for *Shipbuilding and Ship Repair Operations*, *Control of Volatile Organic Emissions from Manufacture of Synthesized Pharmaceutical Products*, and *Control of Volatile Organic Emissions from Manufacture of Pneumatic Rubber Tires* as referenced in the 2009 RACT SIP.³ The District has reviewed its permits files, SIC codes, and internet searches for sources of emissions from the aforementioned CTG source categories and is confirming that the Negative Declarations adopted previously are still valid.

Based on the District's review of its permits files, SIC codes, and internet searches, the District has determined that there are no source categories in the Valley that are subject to the following CTG's and therefore proposes the following Negative Declarations:

- *Volatile Organic Emissions from Existing Stationary Sources-Volume IV: Surface Coating of Insulation of Magnet Wire* (EPA-450/2-77-033, 12/1977)
- *Volatile Organic Compound Emissions from Manufacture of High-Density Polyethylene, Polypropylene, and Polystyrene Resins* (EPA 450/3-83-008, 11/1983)
- *Volatile Organic Compound Leaks from Synthetic Organic Chemical Polymer and Resin Manufacturing Equipment* (EPA-450/3-83-006, 03/1984)
- *Volatile Organic Compound from Air Oxidation Processes in Synthetic Organic Chemical Manufacturing Industry* (EPA-450/3-84-015, 12/1984)
- *Volatile Organic Compound from Reactor Processes and Distillation Operations in Synthetic Organic Chemical Manufacturing Industry* (EPA-450/4-91-031, 08/1993)

³ SJVAPCD (April 16, 2009). Chapter 2: CTG Source Categories and Applicable District Rules from the 2009 RACT SIP. Retrieved from: http://www.valleyair.org/Air_Quality_Plans/docs/RACTSIP-2009.pdf