

UNITED STATES
ENVIRONMENTAL PROTECTION AGENCY
REGION 9

In the Matter of:)	
)	
Bakersfield Crude Terminal LLC)	Docket No. R9-15-08
Plains Marketing, L.P.)	
Plains All American Inc.)	Finding and Notice of Violation
Taft, California)	
)	
Proceeding Under Section 113(a),)	
<u>Clean Air Act, As Amended</u>)	

This Finding and Notice of Violation (“NOV”) is issued to Bakersfield Crude Terminal LLC (“BCT”), Plains Marketing, L.P. (“PMLP”), and Plains All American Inc. (“PAAI”) for violations of the Clean Air Act (the “Act”) as amended, 42 U.S.C. §§ 7401-7671q, at their crude oil railcar-to-pipeline transfer and storage terminal located at or near South Lake Road and Santiago Road, Taft (Kern County), California (the “Facility”). The Facility is located within the jurisdiction of the San Joaquin Valley Air Pollution Control District (“SJVAPCD” or “District”). Section 113(a)(1) of the Act requires the Administrator of the Environmental Protection Agency (“EPA”) to notify a person in violation of a state implementation plan (“SIP”). The authority to issue NOV’s has been delegated to the Director of the Enforcement Division for EPA, Region IX.

I. STATUTORY AND REGULATORY BACKGROUND

A. General Provisions

1. Section 110(a) of the Act requires that all states adopt a SIP that provides for the implementation, maintenance and enforcement of primary and secondary air quality standards. 42 U.S.C. §7410(a).
2. A person’s failure to comply with any approved regulatory provision of a SIP renders the person subject to enforcement under section 113 of the Act. 42 U.S.C. §7413(a)(1); 40 C.F.R. §52.23.

B. SJVAPCD Rule 2010 Permits Required

3. In accordance with section 110 of the Act, EPA has approved Rule 2010 (“Permits Required”), as adopted on December 17, 1992, into SJVAPCD’s portion of the California SIP. 64 Fed. Reg. 39920 (July 23, 1999). 40 C.F.R. § 52.220(c)(199)(i)(D)(6).

4. Section 3.0 of Rule 2010 requires that any person who builds, alters, or replaces any equipment which may emit air pollution must first obtain a valid Authority to Construct (“ATC”).
5. Section 4.0 of Rule 2010 requires that a valid Permit to Operate (“PTO”) must be obtained prior to the operation of any source described in section 3.0 of Rule 2010.

C. SJVAPCD Rule 2201 New and Modified Stationary Source Review Rule

6. In accordance with section 110 of the Act, EPA has approved Rule 2201 (“New and Modified Stationary Source Review Rule”), as adopted on May 21, 2011, into SJVAPCD’s portion of the California SIP. 79 Fed. Reg. 55637 (September 17, 2014). 40 C.F.R. § 52.220(c)(400)(i)(A)(1).
7. Section 4.0 of Rule 2201 requires “Best Available Control Technology” (“BACT”), on a pollutant-by-pollutant and emissions unit-by-emissions unit basis, for a new emissions unit with a potential to emit (“PTE”) greater than 2.0 pounds per day.
8. Section 3.10 of Rule 2201 defines BACT as the most stringent emission limitation or control technique that has been achieved in practice or required by any SIP for the same class or category as the source.
9. Section 4.5.3 of Rule 2201 requires offsets for new a facility which has the PTE 20,000 pounds or more per year of volatile organic compounds (“VOC”).
10. Pursuant to section 3.24 of Rule 2201, if a new stationary source has a PTE of 20,000 pounds or more per year of VOC, it is considered a major stationary source of air pollution.
11. Section 4.14.1 of Rule 2201 requires that an air quality analysis be performed to assure that a new major stationary source of air pollution will not cause or make worse a violation of a state or national ambient air quality standard.
12. Section 4.15.1 of Rule 2201 requires that “For those sources for which an analysis of alternative sites, sizes, and production processes is required under Section 173 of the Federal Clean Air Act, the applicant shall prepare an analysis functionally equivalent to the requirements of Division 13, Section 21000 et. seq. of the [California] Public Resources Code.”
13. Section 5.4 of Rule 2201 requires that public notification and publication shall be provided for new major stationary sources of air pollution.

14. Section 5.6.1 of Rule 2201 states that: “An ATC shall not be issued unless the new or modified source complies with the provisions of this rule and all other applicable District Rules and Regulations.”
15. Section 5.7.2 of Rule 2201 states that: “A PTO shall include daily emissions limitations and other enforceable conditions which reflect applicable emission limits including the offset requirements.”

D. Requirements for a Valid Synthetic Minor Source Permit

16. Pursuant to the Act and Rule 2201, a proposed new stationary source which has a PTE over the major source threshold can request permit conditions which lower its PTE. A permit which contains these conditions and lowers the PTE of a proposed new source below the major source threshold is known as a “synthetic minor source permit.” The approach to creating a synthetic minor source permit is reflected in the definition of PTE set forth in section 3.27 of Rule 2201:

Potential to Emit: the maximum capacity of an emissions unit to emit a pollutant under its physical and operational design. Any physical or operational limitation on the capacity of the source to emit a pollutant, including pollution control equipment and restrictions in hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation or the effect it would have on emissions is incorporated into the applicable permit as an enforceable permit condition.

17. To be an “enforceable permit condition” and thus be used to limit the PTE of a source, the permit condition must be federally enforceable or legally and practicably enforceable by a state or local air pollution control agency. See, Chemical Manufacturers Ass'n v. EPA, 70 F.3d 637 (D.C. Cir. Sept. 15, 1995); National Mining Association v. EPA, 59 F.3d 1351 (D.C. Cir. July 21, 1995); and 40 C.F.R. § 51.165(a)(1)(iii). See also, *In the Matter of Hu Honua Bioenergy Facility*, Order on Petition No. IX-2011-1 (February 7, 2014).

II. FINDINGS OF FACT

18. BCT is registered with the California Secretary of State as a foreign limited liability company and is the original applicant for ATCs for the Facility.
19. PMLP is registered with the California Secretary of State as a foreign limited partnership. According to a communication from Glen Mears of PLMP to the SJVAPCD, PLMP acquired all assets of BCT, including BCT's name.
20. PAAI is registered with the California Secretary of State as a foreign corporation. PAAI is listed as a

partner in PMLP.

21. Some combination of BCT, PMLP, and PAAI own and/or operate the Facility (“Facility Owners/Operators”).
22. The Facility is located within the jurisdiction of the SJVAPCD.
23. The Facility is capable of operating 24 hours per day, 7 days per week, and every day of the calendar year. The Facility has been in operation since sometime in 2014.
24. The Facility consists of two rail spurs to receive and offload up to two unit trains per day (a unit train usually consists of between 104 and 120 railcars), two 150,000-barrel internal floating roof tanks to store the crude oil, a crude oil unloading rack that individually unloads each rail car, pump pits, transfer and booster pumps, connecting pipelines, and other ancillary equipment.
25. On May 16, 2012, BCT submitted an application for an ATC (“2012 Application”) for the Facility to the SJVAPCD. On July 25, 2012, the SJVAPCD issued a review of the 2012 Application (“2012 Application Review”). In the 2012 Application Review, the SJVAPCD calculated the PTE for the Facility to be 19,992 pounds per year. This PTE is based upon claims from BCT that the Reid vapor pressure (“RVP”) being unloaded from railcars at the Facility would not, on average, exceed 8.3 pounds per square inch absolute (“psia”).
26. The PTE calculations in the 2012 Application Review did not include emissions referred to as “roof landing losses” for internal floating roof tanks. Roof landing losses occur regularly in the petroleum industry when internal floating roof tanks are emptied to the point that the floating roof touches down on its support legs. Roof landings of internal floating roof tanks result in extra emissions of VOCs occurring compared to those emissions when the internal roof is floating on the liquid in the tank.
27. On July 31, 2012, the SJVAPCD issued ATCs (“2012 ATCs”) to BCT for the Facility’s internal floating roof storage tanks, unloading rack, and other associated equipment, permitting BCT to process any crude oil with an RVP of less than 11.0 psia at the Facility although SJVAPCD used an average RVP of 8.3 psia to calculate the PTE of the facility in its 2012 Application review.
28. The 2012 ATCs for the two internal floating roof storage tanks contain identical provisions purporting to

require an average RVP of 8.3 psia for crude oil processed at the Facility: “If any shipment of organic liquid with an RVP of greater than 8.3 psia is introduced, placed, or stored in this tank in any calendar year, compliance with the annual combined emission limit for tanks listed on S-8165-1 ‘-2 shall be demonstrated by calculating and maintaining an annual emissions summary using the EPA’s TANKS program.”

29. The 2012 ATCs do not require any testing of the RVP of the crude oil processed at the Facility to determine if the RVP of the crude oil processed by BCT is less than 11.0 psia or which could be used by BCT to show that the average annual RVP of crude oil processed at the Facility was no greater than 8.3 psia and therefore complied with the limits on VOC emissions contained in the 2012 ATCs.
30. The 2012 ATCs do not require any enforceable operational requirements or monitoring to ensure that the Facility will have an annual average RVP of no greater than 8.3 psia, which is the assumed average RVP for determining that the facility emits less than 20,000 pounds per year.
31. Geodesic domes have been installed in the United States which enclose tanks storing petroleum liquids. These domes lower emissions from the tanks. Since this control technology has been achieved in practice, it is BACT for these types of tanks. The tanks at the Facility are not enclosed by geodesic domes.
32. During the permitting process, both BCT and the SJVAPCD acknowledged that without limits on the Facility’s ability to emit VOC, the Facility would be a major source of VOC emissions pursuant to Rule 2201.
33. No offsets have been provided for the Facility as required by section 4.5 of Rule 2201.
34. No air quality analysis as required by section 4.14.1 of Rule 2201 has been performed for emissions from the Facility.
35. No analysis functionally equivalent to the requirements of Division 13, Section 21000 et. seq. of the California Public Resources Code has been performed with regard to the Facility.
36. No public notification or publication of the 2012 ATCs occurred as required by section 5.4 of Rule 2201.
37. On March 18, 2013, Glen Mears of PMLP (with the title of “Sr. Environmental RC Specialist”) resubmitted the 2012 Application for the Facility, claiming that while PMLP had acquired all assets of BCT, including BCT’s name, PLMP believed that the 2012 ATCs issued to BCT could not otherwise be transferred and

must be re-issued.

38. On September 8, 2014, Glen Mears, acting on behalf of BCT/PLMP but communicating on stationary bearing the letterhead of Plains LPG Services, L.P., submitted another application for an ATC to the SJVAPCD. This ATC application was for installation of four fixed roof tanks and an oil/water separator. These emission units were not included in the 2012 Application and not considered in the SJVAPCD 2012 Application review that determined that the PTE of the Facility was 19,992 pounds per year for VOC emissions. SJVAPCD issued the ATC for these additional units on September 23, 2014 ("2014 ATC"). The potential VOC emissions from these units were not added to the PTE VOC emissions for the Facility.
39. The RVP of a liquid such as crude oil determines its emissions rate. When stored in the same type of tank and under similar conditions (e.g., ambient air temps) crude oil with a higher RVP will emit more VOC emissions than crude oil with a lower RVP.
40. Pursuant to the 2012 and 2014 ATCs, the Facility is allowed to receive crude oil from the Bakken formation.
41. In August 2014, The North Dakota Petroleum Council issued a report that shows the average RVP for Bakken crude oil is 11.5 psia.
42. In May 2014, the American Fuel and Petrochemical Manufacturers ("AFPM") submitted a report to the U.S. Department of Transportation that showed that Bakken crude oil has a seasonal high average of 12.5 psia. Data from the AFPM report show that the RVP of Bakken crude oil can vary from below 5.0 psia to over 15.0 psia.
43. Reports such as the ones from the North Dakota Petroleum Council and the American Fuel and Petrochemical Manufacturers show that an RVP of 8.3 psia submitted in the BCT applications for ATC is 28 to 34 percent below the averages found in the reports from these trade associations.

III. FINDINGS OF LAW

44. The permit provisions in the 2012 ATC for the Facility are not enforceable as a practical matter and, therefore, cannot limit the Facility's PTE because an annual emission limit of 19,992 pounds of VOC, without a comprehensive and enforceable methodology (i.e., monitoring, reporting and recordkeeping) on a

more frequent than an annual basis, is not sufficient to ensure that the Facility emits less than 20,000 pounds of VOC emissions a year and remains a minor source.

45. The provisions in the 2012 ATCs and the 2014 ATC that allow the Facility to receive crude oil shipments with an RVP of anything less than 11.0 psia is not enforceable as a practical matter based on the operations of the Facility because this limit cannot ensure that the annual VOC emissions are less than 20,000 pounds per year. This “shipment” based limit of 11 psia is 33 percent greater than the 8.3 psia used as the basis for the Facility’s PTE in the 2012 Application and 2012 Applicability analyses. Using the 10.9 psia (which is less than 11.0 psia) on an annual basis results in VOC emissions of greater than 25,900 pounds per year from the units permitted in the 2012 ATC alone (i.e., these emissions do not include the emissions from the additional 5 emission units permitted in the 2014 ATC). Given the wide variations in RVP for the crude oil that can be received at the Facility, and the annual emissions estimate of 19,992 pounds per year (or 99.96 percent of the major source threshold) for the emission units permitted in the 2012 ATCs, testing and/or monitoring provisions for the RVP from the crude oil shipments are required to ensure that the facility emits less than 20,000 pounds of VOC emissions in a year and remain a minor source. Without enforceable limits, the Facility’s annual PTE for VOC emissions is equal to or greater than 20,000 pounds per year.
46. The PTE calculations used in the 2012 Application Review to determine the Facility’s minor source status incorrectly underestimated the emissions from the floating roof tanks installed at the Facility. As set forth in the 2012 ATCs for the storage tanks at the Facility and as experienced in the petroleum industry, internal floating roof tanks are regularly emptied to the point that the floating roof touches down on its support legs. In a roof landing event, substantial amounts of VOC emissions occur, and these emissions are referred to as “roof landing losses.” A proper engineering analysis includes roof landing losses in the PTE for a petroleum storage tank. The PTE calculations used to determine the Facility’s minor source status omitted roof landing losses for the internal floating roof tanks.
47. Inclusion of the additional VOC emissions from the internal floating roof landing would result in an annual PTE for the Facility of 20,000 pounds or more per year of VOC.
48. The emission calculations for the additional units in the 2014 ATC (i.e., the four sump tanks and the

oil/water separator) were improperly excluded from the Facility's PTE. The VOC emissions from these units (after being controlled by a carbon canister system) was calculated to be 509 pounds per year collectively or 1.4 pounds per day for all five units. However, these VOC emissions were "rounded down" to zero and not included in the Facility's PTE in view of SJVAPCD policy APR 1130 that excludes new units with emissions of 0.54 pounds per day or less from a facility's PTE calculations. The exclusion of these VOC emissions from PTE calculations is neither approved under the SIP nor legitimate under the Act. Rounding down daily emissions might be acceptable under some limited circumstances, e.g., a rule establishes the emissions threshold for new units requiring BACT at one pound per day and a new emission unit will have emissions of less than 0.50 pounds per day. However, rounding down per day emissions to eliminate these emissions from annual PTE calculations is not an acceptable practice.

49. Inclusion of the additional VOC emissions from the five additional units in the 2014 ATC would result in an annual PTE for the Facility of 20,000 pounds or more per year of VOC.
50. If the Facility has a PTE of 20,000 pounds or more of VOC per year, it is considered a major source under section 3.24 of Rule 2201.
51. As a major source, the Facility is, pursuant to Rule 2201, required to have a valid ATC and a subsequent valid PTO which contain the requirements for a major source.
52. BACT has not been installed on all emissions units at the Facility that are subject to the requirement in Rule 2201 to install BACT.

IV. FINDINGS OF VIOLATION

Findings of Failure to Comply with Rules 2010 and 2201

53. The Facility Owners/Operators are in violation of Section 3.0 of Rule 2010 because they failed to obtain a valid ATC for a major source of VOC emissions prior to building the Facility.
54. The Facility Owners/Operators are in violation of Section 4.0 of Rule 2010 because they failed to obtain a valid PTO for a major source of VOC emissions prior to operating the Facility.

55. The Facility Owners/Operators are in violation of Section 4.1 of Rule 2201 because they failed to obtain a valid ATC and subsequent PTO which comply with Rule 2201's BACT requirements prior to building the Facility.
56. The Facility Owners/Operators are in violation of Section 4.5.3 of Rule 2201 because they failed to obtain VOC offsets for the Facility prior to commencing operation of the Facility.
57. The Facility Owners/Operators are in violation of Section 4.14.1 of Rule 2201 because they failed to obtain an ATC and subsequent PTO based upon an ambient air quality analysis showing that the Facility would not cause or make worse an exceedance of a state or national ambient air quality standard.
58. The Facility Owners/Operators are in violation of Section 4.15.1 of Rule 2201 because they failed to obtain an ATC and subsequent PTO based upon an analysis functionally equivalent to the requirements of Division 13, Section 21000 et. seq., of the Public Resources Code.
59. The Facility Owners/Operators are in violation of Section 5.4 of Rule 2201 because they failed to obtain an ATC and subsequent PTO which were issued after compliance with the public notification and publication requirements in that section.
60. The Facility Owners/Operators are in violation of Section 5.6.1 of Rule 2201 because they failed to obtain an ATC which complied with all requirements of Rule 2201.
61. The Facility Owners/Operators are in violation of Section 5.7.2 of Rule 2201 because they failed to obtain a PTO that contains enforceable conditions which reflect emissions limits applicable to the Facility.
62. The Facility Owners/Operators remain and will continue to be in violation of Rules 2010 and 2201 until they obtains a valid ATC and valid PTO for the Facility and fully complies with the conditions set forth in the valid ATC and valid PTO.

V. NOTICE OF VIOLATION

Notice is given to the Facility Owners/Operators that the Administrator of the EPA, by authority duly delegated to the undersigned, finds the Facility Owners/Operators are in violation of section 110 of the Act, the California SIP, and SJVAPCD Rules 2010 and 2201, as set forth in the Findings of Violation.

VI. ENFORCEMENT

Section 113(a)(1) of the Act provides that when any person has violated any requirement or prohibition of an applicable implementation plan or permit, EPA may:

- issue an order requiring compliance with the requirements or prohibition of such implementation plan or permit, or
- issue an administrative penalty order pursuant to section 113(d) for civil administrative penalties of up to \$37,500 per day of violation, or
- bring a civil action pursuant to section 113(b) for injunctive relief and/or civil penalties of not more than \$37,500 per day for each violation.

Furthermore, if a person knowingly violates any requirements of an applicable implementation plan more than 30 days after notification of violation, section 113(c) provides for criminal penalties or imprisonment, or both.

Under section 306(a) of the Act, the regulations promulgated thereunder (40 C.F.R. Part 15), and Executive Order 11738, facilities to be used in federal contracts, grants, and loans must be in full compliance with the Act and all regulations promulgated pursuant to it. Violations of the Act may result in the facility being declared ineligible for participation in any federal contract, grant, or loan.

VII. PENALTY ASSESSMENT CRITERIA

Section 113(e)(1) of the Act states that the Administrator or the court, as appropriate, shall, in determining the amount of any penalty to be assessed, take into consideration (in addition to such other factors as justice may require) the size of the business, the economic impact of the penalty on the business, the violator's full compliance history and good faith efforts to comply, the duration of the violation as established by any credible evidence (including evidence other than the applicable test method), payment by the violator of penalties previously assessed for the same violation, the economic benefit of noncompliance, and the seriousness of the violation.

Section 113(e)(2) of the Act allows the Administrator or the court to assess a penalty for each day of violation. For the purposes of determining the number of days of violation, where the EPA makes a prima facie

showing that the conduct or events giving rise to this violation are likely to have continued or recurred past the date of this NOV, the days of violation shall be presumed to include the date of this NOV and each and every day thereafter until the violator establishes that continuous compliance has been achieved, except to the extent that the violator can prove by the preponderance of the evidence that there were intervening days during which no violation occurred or that the violation was not continuing in nature.

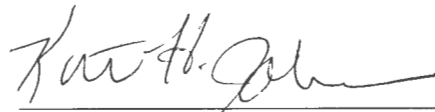
VIII. OPPORTUNITY FOR CONFERENCE

The Facility Owners/Operators may, upon request, confer with EPA. The conference will enable the Facility Owners/Operators to present evidence bearing on the finding of violation, the nature of the violation, and any efforts they may have taken or proposes to take to achieve compliance. The Facility Owners/Operators have the right to be represented by counsel. A request for a conference with EPA must be made within ten (10) working days of receipt of this NOV. The request for a conference or other inquiries concerning the NOV should be made in writing or via email to:

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APR 30 2015

Date



Kathleen H. Johnson
Director, Enforcement Division

