

BEFORE THE ADMINISTRATOR
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

IN THE MATTER OF)	PETITION No. IX-2014-15
)	
ALON USA – BAKERSFIELD REFINERY)	ORDER RESPONDING TO THE
KERN COUNTY, CALIFORNIA)	PETITIONERS’ REQUEST FOR
)	OBJECTION TO THE ISSUANCE OF
PROJECT Nos. S-1134224 & S-1134223)	A PERMIT
)	
ISSUED BY THE SAN JOAQUIN VALLEY)	
UNIFIED AIR POLLUTION CONTROL DISTRICT)	

ORDER DENYING IN PART A PETITION FOR OBJECTION TO PERMIT

I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received a petition dated December 16, 2014, (Petition) from the Association of Irrigated Residents, Center for Biological Diversity, and the Sierra Club (the Petitioners). The Petition requests that the EPA object to the proposed issuance of an Authority to Construct / Certificate of Conformity (Permit) issued by the San Joaquin Valley Unified Air Pollution Control District (SJVUAPCD or District) to the Alon USA – Bakersfield Refinery (Alon or facility) in Bakersfield, Kern County, California.

This Order responds to Claims II and III of the Petition.¹ Based on a review of the Petition and other relevant materials, including the Permit, the permit record, and relevant statutory and regulatory authorities, and as explained further below, the EPA denies in part the Petition requesting that the EPA object to the Permit. Specifically, the EPA denies Claims II and III of the Petition.

II. STATUTORY AND REGULATORY FRAMEWORK

A. Title V Permits and Preconstruction Permits

Section 502(d)(1) of the Clean Air Act (CAA or Act), 42 U.S.C. § 7661a(d)(1), requires each state to develop and submit to the EPA an operating permit program to meet the requirements of title V of the CAA and the EPA’s implementing regulations at 40 C.F.R. part 70. The California Air

¹ Pursuant to the terms of a settlement agreement, noticed on October 21, 2016 (81 FR 72804), this Order responds only to the claims made in Sections II and III of the Petition. The EPA previously responded to Section V of the Petition, in accordance with the settlement agreement. *See In the Matter of Alon USA – Bakersfield Refinery*, Order on Petition No. IX-2014-15 (December 21, 2016). In addition, the settlement agreement provides that within 20 days of the EPA’s response to Sections II and III of the Petition, which is to be issued no later than July 31, 2017, the Petitioners will withdraw Sections I and IV of the Petition (the remaining two claims in the Petition) and the EPA will have no obligation to respond to those sections.

Resources Board submitted a title V program on behalf of SJVUAPCD governing the issuance of operating permits in the District on July 3, and August 17, 1995. The EPA granted interim approval of SJVUAPCD's title V operating permit program in 1996 (61 FR 18083) and final approval in 2001 (66 FR 63503). SJVUAPCD's title V program is codified in SJVUAPCD Rule 2520 and portions of Rule 2201.

All major stationary sources of air pollution and certain other sources are required to apply for title V operating permits that include emission limitations and other conditions as necessary to assure compliance with applicable requirements of the CAA, including the requirements of the applicable implementation plan. CAA §§ 502(a), 504(a), 42 U.S.C. §§ 7661a(a), 7661c(a). The title V operating permit program generally does not impose new substantive air quality control requirements, but does require permits to contain adequate monitoring, recordkeeping, reporting and other requirements to assure sources' compliance with applicable requirements. 57 Fed. Reg. 32250, 32251 (July 21, 1992); *see* CAA § 504(c), 42 U.S.C. § 7661c(c). One purpose of the title V program is to “enable the source, States, the EPA, and the public to understand better the requirements to which the source is subject, and whether the source is meeting those requirements.” 57 Fed. Reg. at 32251. Thus, the title V operating permit program is a vehicle for ensuring that air quality control requirements are appropriately applied to facility emission units and for assuring compliance with such requirements.

Applicable requirements for construction of a new “major stationary source” or for a “major modification” to an existing major stationary source include the requirement that the source obtain a preconstruction permit that complies with applicable new source review (NSR) requirements. For these sources, the NSR program is comprised of two core types of preconstruction permit requirements. Part C of Title I of the CAA establishes the Prevention of Significant Deterioration (PSD) program, which applies to the pollutants for which an area is designated as attainment or unclassifiable for the national ambient air quality standards (NAAQS) and other pollutants regulated under the CAA. CAA §§ 160–169, 42 U.S.C. §§ 7470–7479. Part D of Title I of the Act establishes the major nonattainment NSR (NNSR) program, which applies to those NAAQS pollutants for which an area is designated as nonattainment. CAA §§ 171–193, 42 U.S.C. §§ 7501–7515. The Alon facility is located in an area designated federally as nonattainment for ozone and particulate matter with an aerodynamic diameter less than or equal to 2.5 micrometers (PM_{2.5}), and, as such, is subject to the NNSR program.

B. SJVUAPCD Title V and Preconstruction Permit Programs

SJVUAPCD issues preconstruction NNSR permits—termed Authorities to Construct, or ATCs—under State Implementation Plan (SIP)-approved SJVUAPCD Rule 2201. Applicable requirements from a preconstruction permit (such as an ATC) must be included in a source's title V operating permit.² According to SJVUAPCD's EPA-approved title V program rules, this can

² Under 40 C.F.R. § 70.1(b), “All sources subject to [the title V regulations] shall have a permit to operate that assures compliance by the source with all applicable requirements.” “Applicable requirements” are defined in 40 C.F.R. § 70.2 to include: “(1) Any standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the [Clean Air] Act that implements the relevant requirements of the Act, including any revisions to that plan promulgated in [40 C.F.R.] part 52; [and] (2) Any term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act.”

be accomplished in one of two ways, as described below. *See* SJVUAPCD Rule 2520 § 5.3.3. Depending on the procedures used, proposed permits issued by SJVUAPCD are subject to EPA review in two different circumstances.

First, the source's title V permit could be revised to include the ATC terms through significant or minor title V permit modification procedures. *See* SJVUAPCD Rule 2520 §§ 3.20, 3.29, 11.3, 11.4; *see also* 40 C.F.R. § 70.7(e). Title V permit modifications that incorporate the terms of ATC permits through significant or minor title V permit modification procedures would be subject to review according to the requirements of title V of the CAA and the EPA's implementing regulations. Under CAA § 505(a), 42 U.S.C. § 7661d(a), and the relevant implementing regulations found at 40 C.F.R. § 70.8(a), permitting authorities are required to submit each proposed title V operating permit to the EPA for review. Upon receipt of a proposed permit, the EPA has 45 days to object to final issuance of the proposed permit if the EPA determines that the proposed permit is not in compliance with applicable requirements of the Act. CAA § 505(b)(1), 42 U.S.C. § 7661d(b)(1); *see also* 40 C.F.R. § 70.8(c) (providing that the EPA will object if the EPA determines that a proposed permit is not in compliance with applicable requirements or requirements under 40 C.F.R. part 70). If the EPA does not object to a permit on its own initiative, CAA § 505(b)(2) and 40 C.F.R. § 70.8(d) provide that any person may petition the Administrator, within 60 days of the expiration of the EPA's 45-day review period, to object to the permit.³ SJVUAPCD's EPA-approved title V regulations in Rule 2520 § 11.3 outline this process for initial title V permits, permit renewals, and significant permit modifications.

Alternatively, the ATC terms could be incorporated into the title V permit through administrative permit amendment procedures under certain circumstances. The EPA's regulations at 40 C.F.R. § 70.7(d)(1)(v) provide that requirements from preconstruction permits may be incorporated into a source's title V permit through administrative amendment procedures, provided that the permitting authority's EPA-approved preconstruction permit program "meets procedural requirements substantially equivalent to the requirements of" the EPA's title V regulations in 40 C.F.R. §§ 70.7 and 70.8 that would be applicable if the permit changes were subject to review as a title V permit modification. Under SJVUAPCD Rules 2201 and 2520, if an ATC is issued with a Certificate of Conformity (COC)—certifying that it was "issued in accordance with procedural requirements substantially equivalent to" those that would have been required under title V permit modification procedures—the ATC terms would be eligible to be incorporated into an existing title V permit as an administrative permit amendment. *See* SJVUAPCD Rule 2520 §§ 1.4, 3.2.6, 3.7; Rule 2201 § 6.0; *see also* 40 C.F.R. § 70.7(d)(1)(v). SJVUAPCD Rule 2201 §§ 5.9 and 6.0, which are also part of SJVUAPCD's EPA-approved title V program, detail the "enhanced" procedural requirements that must be followed to issue an ATC with a COC. Among others, these requirements include public notification, EPA 45-day review and objection procedures, and public petition procedures. *See* SJVUAPCD Rule 2201 § 5.9.1. Importantly, where an ATC permit is issued according to these "enhanced" procedural requirements in order

³ SJVUAPCD Rule 2520 § 11.3.7 mirrors these provisions for the submittal of petitions to the EPA on title V permit actions.

to qualify for a COC, an opportunity for the public to petition the EPA exists on the ATC issued with a COC, under Rule 2201. *See* SJVUAPCD Rule 2201 § 5.9.1.7.⁴

C. Framework for EPA Review of Issues in the Petition

The Petition requests an EPA objection to the ATC permit issued with a COC. The Petition cites CAA § 505(b)(2) and 40 C.F.R. § 70.8(d) as well as SJVUAPCD Rule 2201 as the bases for its Petition. The framework for the EPA’s evaluation of the issues raised in a petition on a proposed ATC issued with a COC according to SJVUAPCD Rule 2201 should be the same as the framework for the EPA’s review of a proposed title V permit issued under SJVUAPCD Rule 2520 (under the authority of CAA § 505(b)(2) and 40 C.F.R. § 70.8(d)). The premise of the “enhanced administrative requirements” contained in SJVUAPCD Rule 2201 (and authorized by 40 C.F.R. § 70.7(d)(1)(v)) is to create a process that is “substantially equivalent to” the process delineated in 40 C.F.R. §§ 70.7 and 70.8. As this includes the opportunity to petition the EPA and for EPA objection (SJVUAPCD Rule 2201 § 5.9.1.7), the framework underlying the EPA’s review of a SJVUAPCD Rule 2201 petition should be “substantially equivalent to” the standard of review contemplated by title V of the CAA and the EPA’s implementing regulations. Moreover, SJVUAPCD Rule 2201 § 5.9.1.9.4 states that EPA objection “shall be limited to compliance with applicable requirements and the requirements of 40 CFR Part 70.”⁵ This language mirrors the objection criteria articulated in CAA § 505(b)(1) and (2) and 40 C.F.R. § 70.8(c). Thus, it is appropriate for the EPA to apply the traditional title V standards and framework based on CAA § 505(b)(2) (described in the following subsection) when reviewing the Petition under Rule 2201.

D. Review of Issues in a Petition Pursuant to 505(b)(2)

A petition to the EPA under CAA § 505(b)(2) shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting agency (unless the petitioner demonstrates in the petition to the Administrator that it was impracticable to raise such objections within such period or unless the grounds for such objection arose after such period). CAA § 505(b)(2), 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); *see also* SJVUAPCD Rule 2201 § 5.9.1.7. In response to such a petition, the Act requires the Administrator to issue an objection if a petitioner demonstrates that a permit is not in compliance with the requirements of the Act. CAA § 505(b)(2), 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1).⁶ Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to the EPA.⁷

⁴ As noted above, these rules are part of the District’s EPA-approved title V program. *See* 66 FR 63503 (November 30, 2001); 66 FR 53151 (October 19, 2001) (proposing to approve portions of District Rule 2201 “that contain part 70 requirements allowing a source to obtain a modification under Rule 2201 that also satisfies part 70 requirements”).

⁵ Similarly, SJVUAPCD Rule 2201 § 5.9.1.7 indicates, “Petitions shall be based on the compliance of the permit provisions with applicable requirements.”

⁶ *See also New York Public Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (*NYPIRG*).

⁷ *WildEarth Guardians v. EPA*, 728 F.3d 1075, 1081–82 (10th Cir. 2013); *MacClarence v. EPA*, 596 F.3d 1123, 1130–33 (9th Cir. 2010); *Sierra Club v. EPA*, 557 F.3d 401, 405–07 (6th Cir. 2009); *Sierra Club v. Johnson*, 541

The petitioner’s demonstration burden is a critical component of CAA § 505(b)(2). As courts have recognized, CAA § 505(b)(2) contains both a “discretionary component,” to determine whether a petition demonstrates to the Administrator that a permit is not in compliance with the requirements of the Act, and a nondiscretionary duty to object where such a demonstration is made. *Sierra Club v. Johnson*, 541 F.3d at 1265–66 (“[I]t is undeniable [that CAA § 505(b)(2)] also contains a discretionary component: it requires the Administrator to make a judgment of whether a petition demonstrates a permit does not comply with clean air requirements.”); *NYPIRG*, 321 F.3d at 333. Courts have also made clear that the Administrator is only obligated to grant a petition to object under CAA § 505(b)(2) if the Administrator determines that the petitioner has demonstrated that the permit is not in compliance with requirements of the Act. *Citizens Against Ruining the Environment*, 535 F.3d at 677 (stating that § 505(b)(2) “clearly obligates the Administrator to (1) determine whether the petition demonstrates noncompliance and (2) object *if* such a demonstration is made” (emphasis added)).⁸ When courts have reviewed the EPA’s interpretation of the ambiguous term “demonstrates” and its determination as to whether the demonstration has been made, they have applied a deferential standard of review. *See, e.g., MacClarence*, 596 F.3d at 1130–31.⁹ Certain aspects of the petitioner’s demonstration burden are discussed below; however, a more detailed discussion can be found in *In the Matter of Consolidated Environmental Management, Inc. – Nucor Steel Louisiana*, Order on Petition Nos. VI-2011-06 and VI-2012-07 at 4–7 (June 19, 2013) (*Nucor II Order*).

The EPA has looked at a number of criteria in determining whether a petitioner has demonstrated noncompliance with the Act. *See generally Nucor II Order* at 7. For example, one such criterion is whether the petitioner has addressed the state or local permitting authority’s decision and reasoning. The EPA expects the petitioner to address the permitting authority’s final decision, and the permitting authority’s final reasoning (including the response to comments, or RTC), where these documents were available during the timeframe for filing the petition. *See MacClarence*, 596 F.3d at 1132–33.¹⁰ Another factor the EPA has examined is whether a petitioner has provided the relevant analyses and citations to support its claims. If a petitioner does not, the EPA is left to work out the basis for petitioner’s objection, contrary to Congress’s express allocation of the burden of demonstration to the petitioner in CAA § 505(b)(2). *See MacClarence*, 596 F.3d at 1131 (“[T]he Administrator’s requirement that [a title V petitioner] support his allegations with legal reasoning, evidence, and references is reasonable and

F.3d 1257, 1266–67 (11th Cir. 2008); *Citizens Against Ruining the Environment v. EPA*, 535 F.3d 670, 677–78 (7th Cir. 2008); *c.f. NYPIRG*, 321 F.3d at 333 n.11.

⁸ *See also Sierra Club v. Johnson*, 541 F.3d at 1265 (“Congress’s use of the word ‘shall’ . . . plainly mandates an objection *whenever* a petitioner demonstrates noncompliance.” (emphasis added)).

⁹ *See also Sierra Club v. Johnson*, 541 F.3d at 1265–66; *Citizens Against Ruining the Environment*, 535 F.3d at 678.

¹⁰ *See also, e.g., In the Matter of Noranda Alumina, LLC*, Order on Petition No. VI-2011-04 at 20–21 (Dec. 14, 2012) (denying a title V petition issue where petitioners did not respond to the state’s explanation in response to comments or explain why the state erred or the permit was deficient); *In the Matter of Kentucky Syngas, LLC*, Order on Petition No. IV-2010-9 at 41 (June 22, 2012) (denying a title V petition issue where petitioners did not acknowledge or reply to the state’s response to comments or provide a particularized rationale for why the state erred or the permit was deficient); *In the Matter of Georgia Power Company*, Order on Petitions, at 9–13 (Jan. 8, 2007) (*Georgia Power Plants Order*) (denying a title V petition issue where petitioners did not address a potential defense that the state had pointed out in the response to comments).

persuasive.”).¹¹ Relatedly, the EPA has pointed out in numerous orders that, in particular cases, general assertions or allegations did not meet the demonstration standard. *See, e.g., In the Matter of Luminant Generation Co. – Sandow 5 Generating Plant (Luminant Sandow Order)*, Order on Petition Number VI-2011-05 (January 15, 2013), at 9.¹² Also, if a petitioner did not address a key element of a particular issue, the petition should be denied. *See, e.g., In the Matter of Georgia Pacific Consumer Products LP Plant*, Order on Petition No. V-2011-1 at 6–7, 10–11, 13–14 (July 23, 2012).¹³

The information that the EPA considers in making a determination whether to grant or deny a petition generally includes, but is not limited to, the administrative record for the proposed permit and the petition, including attachments to the petition. The administrative record for a particular proposed permit includes the draft and proposed permits; any permit applications that relate to the draft or proposed permits; the statement of basis for the draft and proposed permits; the permitting authority’s written responses to comments, including responses to all significant comments raised during the public participation process on the draft permit; relevant supporting materials made available to the public according to 40 C.F.R. § 70.7(h)(2); and all other materials available to the permitting authority that are relevant to the permitting decision and that the permitting authority made available to the public according to § 70.7(h)(2). If a final permit and a statement of basis for the final permit are available during the agency’s review of a petition on a proposed permit, those documents may also be considered as part of making a determination whether to grant or deny the petition.

III. BACKGROUND

A. The Alon Facility

Alon USA owns a petroleum products refinery and gasoline terminal, located in Bakersfield, Kern County, California. Alon has proposed multiple modifications to its facility, including the addition of new equipment and the modification of several process and combustion units (termed the “Crude Flexibility Project”). These modifications will result in nitrogen oxide (NO_x), carbon monoxide (CO), volatile organic compounds (VOC), PM₁₀, PM_{2.5} and sulfur oxide (SO_x) emissions from new or modified combustion units, as well as VOC emissions from tank, loading, and fugitive sources. Because the facility is located in a nonattainment area for ozone and PM_{2.5}, Alon was required to obtain ATCs for the Crude Flexibility Project pursuant to SJVUAPCD’s NNSR rules. The Crude Flexibility Project will exceed SJVUAPCD NNSR offset thresholds for

¹¹ *See also In the Matter of Murphy Oil USA, Inc.*, Order on Petition No. VI-2011-02 at 12 (Sept. 21, 2011) (denying a title V petition claim where petitioners did not cite any specific applicable requirement that lacked required monitoring); *In the Matter of Portland Generating Station*, Order on Petition, at 7 (June 20, 2007) (*Portland Generating Station Order*).

¹² *See also Portland Generating Station Order* at 7 (“[C]onclusory statements alone are insufficient to establish the applicability of [an applicable requirement].”); *In the Matter of BP Exploration (Alaska) Inc., Gathering Center #1*, Order on Petition Number VII-2004-02 at 8 (Apr. 20, 2007); *Georgia Power Plants Order* at 9–13; *In the Matter of Chevron Products Co., Richmond, Calif. Facility*, Order on Petition No. IX-2004–10 at 12, 24 (Mar. 15, 2005).

¹³ *See also In the Matter of Public Service Company of Colorado, dba Xcel Energy, Pawnee Station*, Order on Petition No. VIII-2010-XX at 7–10 (June 30, 2011); *Portland Generating Station Order* at 5–6; *Georgia Power Plants Order* at 10.

NO_x, SO_x, CO, PM₁₀ and VOC emissions, and, therefore, Alon was required to obtain offsets for the emissions associated with the Crude Flexibility Project.¹⁴

B. Permitting History

On October 25, 2013, Alon submitted an application for multiple ATCs to authorize the proposed Crude Flexibility Project. Alon also applied for the ATCs to be processed with a COC, as these modifications would have also necessitated a significant permit modification to Alon's title V permit. Accordingly, the ATCs were processed according to the enhanced administrative requirements of Rule 2201 § 5.9. SJVUAPCD published notice¹⁵ of its preliminary decision and proposed ATCs and COC (Proposed Permit) for the Crude Flexibility Project on October 14, 2014, triggering a public comment period that ended on November 19, 2014. SJVUAPCD also emailed the preliminary decision to the EPA on October 14, 2014, triggering the EPA's 45-day review period, which ended on November 27, 2014. The EPA did not object to the issuance of the Permit or otherwise submit comments. SJVUAPCD issued the final ATCs and COC (Final Permit) on March 19, 2015.¹⁶ SJVUAPCD's RTC document accompanied the Final Permit, as Appendix L of the Final Decision Application Review. As noted above in section I, the EPA previously granted Claim V of the Petition in its December 21, 2016, Order. In response to the EPA's Order, SJVUAPCD issued a Supplemental RTC, dated March 9, 2017, which was included as Appendix M of the Final Decision Application Review.

C. Timeliness of Petition

If the EPA does not object to a proposed permit during its 45-day review period, any person may petition the Administrator within 60 days after the expiration of the 45-day review period to object. SJVUAPCD Rule 2201 § 5.9.1.7. The 60-day public petition period ran until January 26,

¹⁴ SJVUAPCD's EPA-approved NNSR rules include requirements derived from federal law as well as California state law. As such, Rule 2201 requires that a source obtain offsets for pollutants beyond those for which the area is currently designated nonattainment under federal law (i.e., beyond ozone precursor emissions and PM_{2.5} direct and precursor emissions), provided certain thresholds and criteria are met. *See* SJVUAPCD Rule 2201 § 4.5. Alon and SJVUAPCD stipulated that emissions from the Crude Flexibility Project would exceed all offset thresholds for the pollutants listed in the text above. *See* San Joaquin Valley Air Pollution Control District, Authority to Construct Application Review, Crude Flexibility Project at 28, 38 (October 14, 2014) (Proposed Application Review); Final Decision, San Joaquin Valley Air Pollution Control District, Authority to Construct Application Review, Crude Flexibility Project at 28, 38 (March 19, 2015) (Final Decision Application Review).

¹⁵ As described above, SJVUAPCD rules provide for two distinct procedures to incorporate terms from a preconstruction permit into a title V permit. *See* SJVUAPCD Rule 2520 § 5.3.3. The EPA notes that although the ATC was issued according to the Rule 2201 § 5.9 enhanced administrative procedures, the public notice package also indicated that the "modification can be classified as a significant Title V modification pursuant to Rule 2520, and can be processed with a [COC]." Proposed Application Review at 2. The EPA understands this to mean that revising Alon's title V permit to incorporate the terms of the ATCs at issue *would have* required title V significant modification procedures, if these changes had been processed through Rule 2520 rather than Rule 2201. The EPA does not interpret the ATC issued with a COC to constitute an actual title V significant permit modification under Rule 2520 §§ 3.29 and 11.3. Rather, the Permit clearly explains that, by virtue of obtaining a COC with the ATC, the revision to Alon's title V permit may subsequently be conducted via administrative amendment procedures (not significant permit modification procedures).

¹⁶ Per SJVUAPCD Rule 2050 Section 4.4, the ATCs were renewed without modification, effective March 13, 2017.

2015.¹⁷ The Petition was dated December 16, 2014, and, therefore, the EPA finds that the Petitioners timely filed the Petition.

IV. DETERMINATIONS ON CLAIMS RAISED BY THE PETITIONERS

Claim II: The Petitioners' Claim that "The Air District's Calculation of Baseline Emissions Violates District Rule 2201 and Does Not Represent Normal Source Operation."

Petitioners' Claim: The Petitioners assert that the District's use of calendar year 2008 as the baseline year for calculating increases in stationary source emissions associated with the Crude Flexibility Project for emissions offset purposes violates SJVUAPCD Rule 2201, and that the baseline period chosen does not represent normal operation. Petition at 10–11. Citing SJVUAPCD Rule 2201 §§ 3.9.1 and 3.9.2, the Petitioners claim that to determine baseline emissions, the District could choose either: "two consecutive years of operation immediately prior to the submission date of the Complete Application; or . . . [] at least two consecutive years within the five years immediately prior to the submission date of the Complete Application if determined by the APCO as more representative of normal source operation" Petition at 11.¹⁸

First, the Petitioners assert that the use of calendar year 2008 violates SJVUAPCD Rule 2201 § 3.9. The Petitioners, noting that the ATC application was submitted on October 25, 2013, claim that under SJVUAPCD Rule 2201, the District could have chosen as baseline years either "(1) October 25, 2011–October 25, 2013; or (2) any two or more consecutive years between October 25, 2008, and October 25, 2013 if the Air District determined these years were more representative [of] normal source operation." *Id.* The Petitioners allege that the District's use of January 1, 2008 to December 31, 2008 was outside of the timeframe allowed by the rule, and shorter than the required period of two consecutive years. *Id.*

Second, the Petitioners claim that 2008 is an inappropriate year for baseline calculations because it does not represent normal operations. The Petitioners argue that because no crude refining operations have occurred at the facility since December 2008, the ATC should have reflected a baseline of zero emissions as the most representative of normal source operation. *Id.* The Petitioners, noting a series of claimed changes to the facility between 2008 and 2012, allege that the 2008 calendar year operating conditions do not represent the current conditions at the facility, and that the years the refinery was completely shut down are "more representative of normal source operation." *Id.* at 11–12 (citing SJVUAPCD Rule 2201 § 3.9.2).¹⁹

Accordingly, the Petitioners conclude that the Administrator must object to the Permit for failure to include a proper baseline, resulting in an underestimate of the Project's required emissions offsets. *Id.* at 12.

¹⁷ The EPA notes that the District issued its RTC after the end of the 60-day public petition period. Thus, the Petitioners did not have the opportunity to address the District's RTC in the Petition.

¹⁸ The Petitioners state that Rule 2201 §§ 3.9.3 and 3.9.4 are not applicable. Petition at 11, n. 26.

¹⁹ The Petitioners further claim that the District has previously recognized that 2008 is an inappropriate year for baseline calculations, and cite prior communications from the District in support of this claim. Petition at 12.

EPA's Response: For the following reasons, the EPA denies the Petitioners' request for an objection on this claim.

As described above, the Petitioners claim that the District's use of calendar year 2008 for calculating baseline emissions does not comply with the definition of "Baseline Period" found in SJVUAPCD Rule 2201 § 3.9. However, as the District explained in the permit record, and as described below, the District's methodology for calculating baseline emissions does not rely on the Baseline Period as defined in § 3.9. Accordingly, the Petitioners' arguments regarding the appropriate Baseline Period are not relevant to the facility's emission offsetting obligations with respect to the Crude Flexibility Project. For this reason, the Petitioners have not met their burden to demonstrate that the permit is not in compliance with the requirements of the Act.

The Petitioners claim that the District's failure to utilize a proper baseline period resulted in an underestimate of the Project's required emissions offsets. The required quantity of emissions offsets is established in SJVUAPCD Rule 2201 § 4.7.1. Section 4.7.1 provides that "[f]or pollutants with a pre-project Stationary Source Potential to Emit (SSPE1) greater than the emission offset threshold levels, emission offsets shall be provided for . . . All increases in Stationary Source emissions, calculated as the sum of differences between the post-project Potential to Emit (PE2) and the Baseline Emissions (BE) of all new and modified emissions units"

In the application review for this project, the District explained that the applicant stipulated that the offset thresholds had been exceeded for NO_x, SO_x, PM₁₀, CO and VOC.²⁰ Accordingly, pursuant to Rule 2201 § 4.7.1, emission offsets must be provided for the difference between PE2 and BE for all new and modified emissions units.

SJVUAPCD Rule 2201 § 3.8 defines BE for these purposes as follows:

Baseline Emissions (BE): for a given pollutant, shall be equal to the sum of:

3.8.1 The pre-project Potential to Emit for:

...

3.8.1.4 Any Clean Emissions Unit, located at a Major Source, provided that if the unit has a SLC, all units under the SLC also qualify as Clean Emissions Units.

3.8.2 The Historic Actual Emissions (HAE) for emissions units not specified in Section 3.8.1.

Thus, BE can be based on either pre-project Potential to Emit (PE1) in certain circumstances, or on HAE if the circumstances specified in § 3.8.1 are not met. Further, SJVUAPCD Rule 2201 defines Potential to Emit in § 3.27 and HAE in § 3.23. Importantly, while HAE is defined as "Actual Emissions occurring during the Baseline Period," the definition of Potential to Emit does not depend on or otherwise refer to the Baseline Period. Accordingly, the Baseline Period, which the Petitioners' claim relies upon being calculated incorrectly, is only relevant when BE is based

²⁰ See Proposed Application Review at 28, 39; see also Final Decision Application Review at 28, 38.

on HAE under § 3.8.2, and not when BE is based on the pre-project Potential to Emit (PE1) under § 3.8.1.

None of the District's BE calculations for the Crude Flexibility Project are based on HAE. In the application review accompanying both the Proposed and Final Permits, the District explains its BE calculations, describing three different classes of units. Proposed Application Review at 30; Final Decision Application Review at 30.²¹ First, the District states that existing fugitive components and the sales terminal truck loading rack are Clean Emissions Units under § 3.8. Proposed Application Review at 30, 41. Therefore, the District explains, BE equals PE1 for these units. *Id.* Second, the District states that existing heaters 21-H21, 27-H2, and 26-H13/15 are being retrofitted with low NO_x burners solely for compliance with SJVUAPCD Rule 4306. *Id.* Accordingly, the District states, they are exempt from offset requirements pursuant to Rule 2201 § 4.6.8. *Id.* For units exempt from offsets, the District writes, determination of BE is not required. *Id.* Third, the District writes that “[a]ll other emission units associated with this project are new . . . as such, BE = PE1 = 0 for all criteria pollutants.” *Id.* at 30; *see id.* at 41. The District further notes that for “Existing Units, other, where BE = HAE . . . No equipment falls within this category.” *Id.* at 41. Accordingly, none of the District's emission offset calculations depend on HAE, and, thus, none use the regulatory definition of Baseline Period.

As discussed in section II.D above, the burden is on the Petitioners to demonstrate that the Permit is not in compliance with applicable requirements. The Petitioners' claim centers on the allegation that the District used the incorrect Baseline Period. However, as discussed above, because the District did not rely on a Baseline Period in calculating the amount of offsets required for the Crude Flexibility Project, the EPA finds that the Petitioners' arguments are simply not relevant to demonstrating a flaw in the current permit action.²² Moreover, the Petitioners have not addressed how the regulatory definition of Baseline Period relates to SIP requirements applicable to the present permit, and the Petitioners have failed to acknowledge pertinent portions of the regulatory framework relevant to offset calculations. *See, e.g.*, SJVUAPCD Rule 2201 §§ 3.8 and 4.7.1. The Petitioners also failed to address relevant portions of the permit record that explained how the District applied this framework to the Crude Flexibility Project (including the Proposed Application Review), despite the fact that this information was available during the public comment and petition periods.²³ Overall, because the Petitioners have failed to address key elements of the particular issue at hand (both the regulatory framework and the permit record), the Petitioners have not demonstrated that the Permit is not in

²¹ Although the remainder of this paragraph cites relevant provisions from the Proposed Application Review, the Final Decision Application Review contains substantially similar provisions.

²² Because it is not relevant to the District's offsetting requirements for the Crude Flexibility Project, the EPA does not herein address the question of the proper Baseline Period.

²³ As discussed above, both the Proposed Application Review and Final Decision Application Review contain substantially similar explanations of how the offset requirements for the Crude Flexibility Project were calculated. *See* Proposed Application Review at 30, 39–45; Final Decision Application Review at 30, 38–43. However, as the District noted in its RTC, Appendix F of the Proposed Application Review mistakenly included a footnote stating, “Baseline period taken to be calendar year 2008, in accordance with Rule 2201 section 3.9, as described in the ATC application.” The District removed this footnote in its Final Decision Application Review and explained that the footnote was incorrect *See* RTC at 4. Because the Proposed Application Review clearly explained the District's calculation methodology and expressly stated that “no equipment falls within [the] category” for which BE = HAE, the EPA concludes that it was clear that this footnote was included in error, and potential commenters were not prejudiced in their ability to comment on the District's actual methodology.

compliance with applicable requirements of the Act. *See, e.g., In the Matter of Georgia Pacific Consumer Products LP Plant*, Order on Petition No. V-2011-1 at 6–7, 10–11, 13–14 (July 23, 2012); *In the Matter of Chevron USA Inc. – 7z Steam Plant*, Order on Petition No. IX-2016-8 at 10 (April 24, 2017).

For the foregoing reasons, the EPA denies the Petitioners’ request for an objection on this claim.

Claim III: The Petitioners’ Claim that “The Assumptions Regarding the Project’s Crude Slate Are Flawed.”

Petitioners’ Claim: The Petitioners assert that various faulty emissions assumptions led to an underestimate of the Project’s required offsets. Petition at 14. Specifically, the Petitioners claim that assumptions used in the Proposed Application Review are not consistent with the importation, storage, and processing of the crude oil anticipated to be processed by the Project. *Id.* at 12–13. The Petitioners assert that the objective of the Project is to import and process light Bakken crude oil, and that the emissions assumptions used in the Proposed Application Review do not reflect this type of oil. *Id.*

To support this assertion, the Petitioners rely on three arguments. First, the Petitioners claim that the Proposed Application Review uses an unrepresentative value for crude oil density. *Id.* at 13. The Petitioners state that the Proposed Application Review uses a crude oil density of 0.915 grams per milliliter (g/ml) for the new railcar unloading rack. This density, according to Petitioners, is within the appropriate range for heavy crude oil, not light crude oil. The Petitioners cite sources stating that Bakken crude can have a density as low as 0.8165 g/ml. The Petitioners argue that the value used in the Proposed Application Review “does not represent the worst case in terms of VOC emissions.” *Id.*

Second, the Petitioners claim that the assumed Reid Vapor Pressure (RVP) of 9 pounds per square inch absolute (psia) for the oil stored in floating roof tanks is not representative of Bakken crude oils. The Petitioners cite sources claiming that Bakken crude oils typically have a higher RVP than other light crude oils, which would result in significantly higher emissions of VOCs and toxic air contaminants. *Id.* The Petitioners assert that SJVUAPCD’s emissions analysis should have reflected this higher RVP, and associated greater VOC and toxic air contaminant emissions. *Id.*

Third, the Petitioners claim that tank inspection and monitoring requirements are too weak to ensure that fugitive emissions from tanks associated with the project are adequately controlled. *Id.* The Petitioners state that SJVUAPCD Rule 4623 § 6.1 only provides for annual tank inspections. The Petitioners assert that there are no monitoring measures to ensure that the Project’s tanks do not exceed the RVP assumed in SJVUAPCD’s analysis, or that fugitive emissions will not exceed the limits set forth in the ATC. *Id.*

The Petitioners conclude that because SJVUAPCD used faulty emissions assumptions that led to an underestimate of the Project’s required offsets, the Administrator must object to the Permit. *Id.* at 14.

EPA's Response: For the following reasons, the EPA denies the Petitioners' request for an objection on this claim. The Petitioners have not demonstrated any deficiency with respect to the quantity of offsets required for the Crude Flexibility Project.²⁴ The Petitioners' specific arguments are addressed in turn below.

Issue 1: Crude Oil Density

The Petitioners have failed to demonstrate that the assumptions about crude oil density used in the Proposed Application Review led to a Permit deficiency. As discussed in section II.D of this Order, the Petitioners have the burden to demonstrate that the Permit is deficient with respect to an applicable CAA requirement.

The Petitioners claim that the density value of 0.915 g/ml “does not represent the worst case in terms of VOC emissions.” Petition at 13. The Petitioners do not cite an applicable requirement mandating the use of “worst case” assumptions for VOC emissions. Additionally, the Petitioners do not explain why this value does not represent the “worst case” scenario. Based on Petitioners' general assertion that “the Air District used faulty emissions assumptions that lead to an underestimate of the Project's required offsets,” the Petitioners appear to argue that the District is required to use a value lower than 0.915 g/ml, and that such a value would lead to greater emissions, and, thus, a larger number of required offsets. *See* Petition at 13–14. However, the Petitioners do not explain *why* the use of a lower density value would result in higher emissions, in light of how this density value was used in the District's emission calculations.

In fact, the permit record indicates that the Petitioners are incorrect in asserting that the use of a lower density value would lead to increased emissions from the railcar unloading rack. On the contrary, for the railcar unloading rack, the District's use of a higher density value actually resulted in a more conservative (*i.e.*, higher) emissions estimate. The District explained that the crude oil density assumption was only used for calculations involving spillage emissions from the unloading of railroad cars. RTC at 5; Final Decision Application Review at 19. Assuming, as the District did, that all oil spilled will eventually evaporate and be emitted as VOC, using a higher density in the calculation will result in a larger quantity (mass) of emissions from a given volume of spilled oil, and, thus, is a more conservative assumption. Because the use of a lower value, as suggested by the Petitioners, would result in lower Project emissions, the Petitioners have not shown why the 0.915g/ml value resulted in an underestimate of the Project's required offsets. Accordingly, the Petitioners have failed to meet their burden of showing that the Permit is deficient with respect to an applicable CAA requirement.

Issue 2: Reid Vapor Pressure

The Petitioners have failed to demonstrate that the assumptions about RVP used in the Proposed Application Review led to a Permit deficiency. As discussed in section II.D of this Order, the Petitioners have the burden to demonstrate that the permit is deficient with respect to an applicable CAA requirement.

²⁴ The EPA notes that, as discussed above with respect to Claim II, the Petitioners have not in Claim III provided any citations to or analysis of applicable requirements (such as specific provisions of SJVUAPCD Rule 2201) that govern the calculation of required offsets.

The Petitioners claim that the assumed value of 9 psia for the RVP of crude oil stored in floating roof tanks is not representative of Bakken crude oils. Petition at 13. In making this argument, the Petitioners do not cite to particular equipment, permit numbers, specific permit conditions, or pages within the hundreds of pages that make up the permit and its supporting documents. This lack of citation renders the Petitioners' claim vague and difficult to evaluate. It is the Petitioners' burden to demonstrate a permit deficiency; "A petitioner may not merely raise an issue for EPA and thereby obligate EPA to investigate, and, if appropriate, object." *Georgia Power Plants Order* at 10.

Because the Petitioners refer to the 9 psia assumption in the context of "crude oil that will be stored in floating roof tanks," it appears that Petitioners are referring to ATCs S-33-446-0 and S-33-447-0. Petition at 13; *see* Proposed Application Review at 20. These ATCs authorize construction of two new floating roof tanks, and the "Assumptions" section of the Proposed Application Review states that a value of 9 psia will be assumed for these units. *Id.* at 21.

To the extent that the Petitioners claim that the RVP of crude oil stored in these units could potentially exceed 9 psia, any such concern does not demonstrate a permit deficiency. This is because the Permit contains binding conditions requiring the source to meet the 9 psia value used in the emissions estimates. *See* Final Permit ATCs S-33-446-0 and S-33-447-0, condition 4; *see also* Proposed Permit ATCs S-33-446-0 and S-33-447-0, condition 4. These permit conditions must be incorporated into the facility's federally enforceable title V permit prior to operation. As a result, if the RVP of crude in these tanks exceeds the 9 psia value used in the Proposed Application Review, the facility would have to report such an exceedance and could be subject to enforcement action for violating its permit. *See* 42 U.S.C. § 7661a(a). Available remedies for a permit violation include issuance of an order requiring the permittee to comply with the permit condition, and the pursuit of injunctive relief in civil judicial enforcement. *See* 42 U.S.C. § 7413(a)(3), (b)(1). Because the 9 psia assumption has been embodied in a binding limit that must be incorporated as a condition in a valid title V permit prior to operation, and because such a condition is federally enforceable under the CAA, the EPA need not evaluate the use of the 9 psia assumption in the Proposed Application Review.²⁵ The Petitioners did not directly acknowledge or address the Permit's RVP limit, nor have the Petitioners demonstrated that this limit is not enforceable.²⁶ Accordingly, the Petitioners have not demonstrated that the 9 psia value cannot be relied upon to determine the quantity of offsets required for the Crude Flexibility Project.

Issue 3: Tank Inspection and Monitoring Requirements

The Petitioners have failed to provide an explanation as to why any particular inspection and monitoring requirements associated with the tanks are inadequate, and have failed to provide citations or analysis to support this assertion. As the EPA has repeatedly explained, general

²⁵ *See, e.g.,* In the Matter of *Yuhuang Chemical Inc. Methanol Plant*, Order on Petition No. VI-2015-03 at 17 (not resolving issues related to emissions calculations in an application that were later embodied in a binding limit).

²⁶ To the extent that the Petitioners' discussion related to the permit's monitoring is relevant to this RVP limit, the Petitioners have not demonstrated that the monitoring in the permit is inadequate, or accordingly that the RVP limit is not enforceable. For further discussion, see the EPA's response to Issue 3 below.

assertions are insufficient to demonstrate a flaw in a permit. *See, e.g., Luminant Sandow Order* at 9. In the context of claims challenging the adequacy of monitoring requirements, the Petitioners must demonstrate why the monitoring, viewed as a whole, is insufficient to assure compliance with applicable requirements. *See, e.g., In the Matter of Public Service of New Hampshire, Schiller Station*, Order on Petition No. VI-2014-04 at 14 (July 28, 2015) (*Schiller Order*).

Moreover, the Petitioners do not cite any specific regulatory provisions or permit conditions—such as an emission limit or RVP limit—for which the Permit’s inspection and monitoring requirements are not sufficient to assure compliance. The only provision cited by Petitioners, District Rule 4623 § 6.1, requires, *inter alia*, an annual tank inspection, and gap measurements for the primary and/or secondary seal every 60 months. The ATCs for these units contain permit conditions requiring such inspections and gap measurements. *See* Final Permit ATCs S-33-446-0 and S-33-447-0, conditions 39, 40. Accordingly, the Petitioners have not cited an applicable requirement for which inspection and monitoring are insufficient.

In addition, the Petitioners do not cite or acknowledge any of the permit conditions concerning monitoring associated with these floating-roof tanks. *See* Final Permit ATCs S-33-446-0 and S-33-447-0, conditions 45–51 (specifying, among other things, recordkeeping and testing requirements and calculation methodologies related to RVP, TVP, storage temperature, and API gravity for products stored in the floating roof tanks); Proposed Permit ATCs S-33-446-0 and S-33-447-0, conditions 46, 59–64 (same).²⁷ In order to meet their burden, the Petitioners must address these conditions and explain why they are insufficient to assure compliance with an applicable requirement. *See Schiller Order* at 16 (“Because the Petitioner did not address the overall monitoring scheme for the . . . limits in the permit, the Petitioner did not demonstrate that the monitoring requirements in the permit are insufficient to assure compliance with the . . . limits.”). Because the Petitioners have not addressed the Permit’s overall monitoring scheme or otherwise explained why the monitoring included in the Permit is insufficient to assure compliance with any particular applicable requirement, the Petitioners have not met their burden to demonstrate a flaw in the permit.

For the foregoing reasons, the EPA denies the Petitioners’ request for an objection on this claim.

²⁷ In light of these conditions, the Petitioners’ allegation that “[t]here are no other monitoring measures to ensure that the Project’s tanks do not exceed the Reid Vapor Pressure assumed in the Air District’s analysis and that fugitive emissions will not exceed the limits set forth in the Authority to Construct” is incorrect. Petition at 13–14.

