

BEFORE THE ADMINISTRATOR  
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

_____	)	PETITION NOS. VI-2016-24 AND
IN THE MATTER OF	)	VI-2017-014
	)	
SOUTH LOUISIANA METHANOL, LP	)	
ST. JAMES METHANOL PLANT	)	
ST. JAMES PARISH, LOUISIANA	)	ORDER RESPONDING TO
	)	PETITIONS REQUESTING
PERMIT No. 2560-00292-V1	)	OBJECTION TO THE ISSUANCE OF
	)	A TITLE V OPERATING PERMIT
ISSUED BY THE LOUISIANA DEPARTMENT OF	)	
ENVIRONMENTAL QUALITY	)	
_____	)	

**ORDER DENYING PETITIONS FOR OBJECTION TO PERMIT**

**I. INTRODUCTION**

The U.S. Environmental Protection Agency (the EPA) received two petitions, dated December 29, 2016, and August 10, 2017, (collectively the Petitions), each of which were submitted by both Sierra Club and Louisiana Environmental Action Network (the Petitioners) pursuant to section 505(b)(2) of the Clean Air Act (CAA or Act), 42 U.S.C. § 7661d(b)(2). The Petitions request that the EPA object to two versions of operating permit no. 2560-00292-V1 (the Permit) issued by the Louisiana Department of Environmental Quality (LDEQ) to South Louisiana Methanol, LP, for the St. James Methanol Plant (SLM or the facility) in St. James Parish, Louisiana. The operating permit was issued on June 30, 2017, pursuant to title V of the CAA, CAA §§ 501–507, 42 U.S.C. §§ 7661–7661f, and Louisiana Administrative Code (LAC) 33.III.507. *See also* 40 C.F.R. part 70 (title V implementing regulations). This type of operating permit is also referred to as a title V permit or part 70 permit.

Based on a review of the Petitions and other relevant materials, including the Permit, the permit record, and relevant statutory and regulatory authorities, and as explained further below, the EPA denies the Petitions requesting that the EPA object to the Permit.

**II. STATUTORY AND REGULATORY FRAMEWORK**

**A. Title V Permits**

Section 502(d)(1) of the CAA, 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 state of Louisiana submitted a title V program governing the issuance of operating permits on November 15, 1993, and revised this program on November 10, 1994. 40 C.F.R. part 70, Appendix A. The EPA granted full approval

to Louisiana's title V operating permits program in 1995. 60 Fed. Reg. 47296 (September 12, 1995); 40 C.F.R. part 70, Appendix A. This program, which became effective on October 12, 1995, is codified in LAC, Title 33, Part III, Chapter 5.

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 compiling the air quality control requirements as they apply to the facility's emission units and for providing adequate monitoring, recordkeeping, and reporting to assure compliance with such requirements.

## **B. Review of Issues in a Petition**

State and local permitting authorities issue title V permits pursuant to their EPA-approved title V programs. Under CAA § 505(a), 42 U.S.C. § 7661d(a), and the relevant implementing regulations found at 40 C.F.R. § 70.8(a), states 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 under the Act. CAA § 505(b)(1), 42 U.S.C. § 7661d(b)(1); *see also* 40 C.F.R. § 70.8(c). If the EPA does not object to a permit on its own initiative, any person may, within 60 days of the expiration of the EPA's 45-day review period, petition the Administrator to object to the permit. CAA § 505(b)(2), 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

The petition shall be based only on objections to the permit that were raised with reasonable specificity during the public comment period provided by the permitting authority (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). 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).<sup>1</sup> Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to the EPA.<sup>2</sup>

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<sup>1</sup> *See also New York Public Interest Research Group, Inc. v. Whitman*, 321 F.3d 316, 333 n.11 (2d Cir. 2003) (*NYPIRG*).

<sup>2</sup> *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,” under which the Administrator determines whether a petition demonstrates that a permit is not in compliance with the requirements of the Act, and a nondiscretionary duty on the Administrator’s part 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)).<sup>3</sup> 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.<sup>4</sup> Certain aspects of the petitioner’s demonstration burden are discussed below. 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 considers 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 state’s response to comments), where these documents were available during the timeframe for filing the petition. *See MacClarence*, 596 F.3d at 1132–33.<sup>5</sup> Another factor the EPA examines 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 the 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

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

<sup>3</sup> *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)).

<sup>4</sup> *See also Sierra Club v. Johnson*, 541 F.3d at 1265–66; *Citizens Against Ruining the Environment*, 535 F.3d at 678.

<sup>5</sup> *See also, e.g., In the Matter of Noranda Alumina, LLC*, Order on Petition No. VI-2011-04 at 20–21 (December 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 (January 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.”).<sup>6</sup> Relatedly, the EPA has pointed out in numerous previous orders that general assertions or allegations did not meet the demonstration standard. *See, e.g., In the Matter of Luminant Generation Co., Sandow 5 Generating Plant*, Order on Petition Number VI-2011-05 at 9 (January 15, 2013).<sup>7</sup> Also, the failure to address a key element of a particular issue presents further grounds for the EPA to determine that a petitioner has not demonstrated a flaw in the permit. *See, e.g., In the Matter of EME Homer City Generation LP and First Energy Generation Corp.*, Order on Petition Nos. III-2012-06, III-2012-07, and III-2013-02 at 48 (July 30, 2014).<sup>8</sup>

The information that the EPA considers in making a determination whether to grant or deny a petition submitted under 40 C.F.R. § 70.8(d) on a proposed permit 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.

### C. New Source Review

The major New Source Review (NSR) program is comprised of two core types of preconstruction permit requirements for major stationary sources. Part C of title I of the CAA establishes the Prevention of Significant Deterioration (PSD) program, which applies to new major stationary sources and major modifications of existing major stationary sources for 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 new major stationary sources and major modifications of existing major stationary sources for those NAAQS pollutants for which an area is designated as nonattainment. CAA §§ 171–193, 42 U.S.C. §§ 7501–7515. The EPA has two largely identical sets of regulations implementing the PSD program. One set, found at 40 C.F.R. § 51.166, contains the requirements that state PSD programs must meet to be approved as part of a state

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<sup>6</sup> *See also In the Matter of Murphy Oil USA, Inc.*, Order on Petition No. VI-2011-02 at 12 (September 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*).

<sup>7</sup> *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 (April 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 (March 15, 2005).

<sup>8</sup> *See also In the Matter of Hu Honua Bioenergy*, Order on Petition No. IX-2011-1 at 19–20 (February 7, 2014); *Georgia Power Plants Order* at 10.

implementation plan (SIP). The other set of regulations, found at 40 C.F.R. § 52.21, contains the EPA’s federal PSD program, which applies in areas without a SIP-approved PSD program. The EPA’s regulations specifying requirements for state NNSR programs are contained in 40 C.F.R. § 51.165.

While parts C and D of title I of the Act address the major NSR program for major sources, section 110(a)(2)(C) addresses the permitting program for new and modified minor sources and for minor modifications to major sources. The EPA commonly refers to the latter program as the “minor NSR” program. States must also develop minor NSR programs to attain and maintain the NAAQS. The federal requirements for state minor NSR programs are outlined in 40 C.F.R §§ 51.160 through 51.164. These federal requirements for minor NSR programs are less prescriptive than those for major sources, and, as a result, there is a larger variation of requirements in EPA-approved state minor NSR programs than in major source programs.

Where the EPA has approved a state’s title I permitting program (whether PSD, NNSR, or minor NSR), duly issued preconstruction permits will establish the NSR-related “applicable requirements,” and the terms and conditions of those permits should be incorporated into a source’s title V permit without a further round of substantive review as part of the title V process. *See generally In the Matter of PacifiCorp Energy, Hunter Power Plant*, Order on Petition No. VIII-2016-4 at 8–21 (October 16, 2017) (*PacifiCorp-Hunter Order*); *In the Matter of Big River Steel, LLC*, Order On Petition No. VI-2013-10 at 8–20 (October 31, 2017) (*Big River Steel Order*); 56 Fed. Reg. 21712, 21738–39 (May 10, 1991).<sup>9</sup> The legality of a permitting authority’s decisions undertaken in the course of preconstruction permitting is not a subject the EPA will consider in a petition to object to a source’s title V permit. *See PacifiCorp-Hunter Order* at 8, 13–19; *Big River Steel Order* at 8–9, 14–20.<sup>10</sup> Rather, any such challenges should be raised through the appropriate title I permitting procedures or enforcement authorities.

The EPA has approved Louisiana’s PSD program as part of its SIP. *See* 52 Fed. Reg. 13671 (April 24, 1987); 40 C.F.R § 52.970 (EPA-approved regulations in Louisiana SIP), 40 C.F.R § 52.986 (SIP approvals relevant to PSD program). Louisiana’s PSD provisions, as approved by the EPA into Louisiana SIP, are principally contained in LAC 33.III.509, which reference other portions of LAC Title 33, Part III, Chapter 5.

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<sup>9</sup> As the EPA has explained, “[A] decision by the EPA not to object to a title V permit that includes the terms and conditions of a title I permit does not indicate that the EPA has concluded that those terms and conditions comply with the applicable SIP or the CAA. However, until the terms and conditions of the title I permit are revised, reopened, suspended, revoked, reissued, terminated, augmented, or invalidated through some other mechanism, such as a state court appeal, the ‘applicable requirement’ remains the terms and conditions of the issued preconstruction permit and they should be included in the source’s title V permit.” *Big River Steel Order* at 19; *see PacifiCorp-Hunter Order* at 19; *id.* at 20 (“That the EPA views the incorporation of the terms and conditions of these preconstruction permits into the title V operating permit as proper for purposes of title V does not indicate that the EPA agrees that the state reached the proper decision when setting terms and conditions in the preconstruction permits. . . . The EPA’s lack of objection to the inclusion of that requirement in the title V permit does not indicate that the EPA agrees that it is legal or complies with the Act; it merely indicates that a title V permit is not the appropriate venue to correct any such flaws in the preconstruction permit.”).

<sup>10</sup> The EPA does view monitoring, recordkeeping, and reporting to be part of the title V permitting process and will therefore continue to review whether a title V permit contains monitoring, recordkeeping, and reporting provisions sufficient to assure compliance with the terms and conditions established in the preconstruction permit. *See PacifiCorp-Hunter Order* at 16, 17, 18, 18 n.33, 19; *Big River Steel Order* at 17, 17 n.30, 19 n.32, 20.

### **III. BACKGROUND**

#### **A. The SLM Facility**

SLM has proposed to construct and operate a new methanol manufacturing facility in St. James Parish, Louisiana. Among other air pollutants, the facility will emit carbon monoxide (CO), volatile organic compounds (VOC), particulate matter (PM), nitrogen oxides (NO<sub>x</sub>), and greenhouse gases (GHG, expressed as carbon dioxide equivalent or CO<sub>2e</sub>) from various emission units, including two boilers, a reformer, a flare, multiple engines, and cooling towers. The SLM facility is subject to various New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAP), and is permitted as a major source for NSR purposes.

#### **B. Permitting History**

LDEQ issued an initial title V permit (Permit No. 2560-0292-V0) and an initial PSD permit (Permit No. PSD-LA-780) to the SLM facility on December 23, 2013. Based on an application from SLM requesting to modify both of these permits, LDEQ published notice of proposed permit modifications to both permits on September 15, 2016 (the September 2016 Permit).<sup>11</sup> The proposed permit modifications were subject to a public comment period that initially ended on October 20, 2016, but which was later extended.<sup>12</sup> The title V permit modification, Permit No. 2560-0292-V1 (the September 2016 Permit) was transmitted to the EPA for review at the same time that it was released to the public for public comment. Accordingly, the EPA's public website initially indicated that the EPA's 45-day review of the title V permit would begin on September 15, 2016, and end on October 31, 2016, with a public petition period ending on January 2, 2017. The Petitioners submitted a petition on the September 2016 Permit on December 29, 2016 (the December 2016 Petition).

Subsequently, based on comments submitted during the public comment period, LDEQ made changes to the September 2016 Permit and submitted a revised title V permit modification (still termed Permit No. 2560-0292-V1) to the EPA on April 27, 2017 (the April 2017 Permit). Accompanying the April 2017 Permit was a document containing LDEQ's Public Comments Response Summary (RTC).<sup>13</sup> The EPA updated its public website to indicate that the EPA's 45-day review of the April 2017 Permit began on April 28, 2017, and would end on June 11, 2017, with a public petition period beginning on June 12, 2017, and ending on August 10, 2017. LDEQ finalized the title V permit modification (Final Permit) and RTC on June 30, 2017. The

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<sup>11</sup> During the same time period that LDEQ processed the title V permit modification described in this paragraph, LDEQ also processed a modification to the facility's PSD permit, Permit No. PSD-LA-780(M-1). This modified PSD permit, issued as a separate document, was finalized on June 30, 2017. The terms and conditions of this PSD permit are reflected in the facility's title V permit.

<sup>12</sup> In a public notice dated December 1, 2016, LDEQ extended the public comment period and provided a public hearing.

<sup>13</sup> The RTC accompanying the April 2017 Permit does not have an associated Electronic Document Management System (EDMS) document number. Citations to the RTC below refer to the RTC made available publicly through the LDEQ EDMS along with the Final Permit in June of 2017 (EDMS Doc. No. 10693710).

Petitioners submitted a petition on the April 2017 Permit, addressing the Final Permit and RTC, on August 10, 2017 (the August 2017 Petition).<sup>14</sup>

### C. Timeliness of Petitions

Pursuant to the CAA, 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. 42 U.S.C. § 7661d(b)(2). As noted above, the EPA's 45-day review period of the April 2017 Permit ended on June 11, 2017. Thus, any petition seeking the EPA's objection to the April 2017 Permit was due on or before August 10, 2017. The August 2017 Petition was submitted and received on August 10, 2017, and, therefore, the EPA finds that the August 2017 Petition was timely filed.

Regarding the December 2016 Petition, the EPA acknowledges that it may initially have been unclear whether the September 2016 Permit might also have served as the “proposed permit” as that term is referenced in the Act and defined in the EPA's regulations,<sup>15</sup> and, as such, whether it was appropriate to submit a petition on the September 2016 Permit. As noted above, the EPA identified the September 2016 Permit on its public website as a proposed permit subject to an EPA review period that concluded on October 31, 2016, and a petition period that concluded on January 2, 2017.<sup>16</sup> However, the transmission of the April 2017 Permit to the EPA suggested that the September 2016 Permit, initially submitted to the EPA, may no longer be the “proposed permit” contemplated by CAA § 505(a)(1)—i.e., the permit that LDEQ “proposed to . . . issue[]”—subject to the EPA's objection authority and the opportunity for a public petition. The September 2016 Permit may better be thought of as simply an early draft of the modification to SLM's permit, subject to additional consideration and revision before it was formally proposed to the EPA.

The EPA need not decide the extent to which the September 2016 Permit should be treated as the “proposed permit” for purposes of CAA § 505(b). The April 2017 Permit effectively superseded the September 2016 Permit in its entirety, rendering the December 2016 Petition moot.<sup>17</sup> Each of the claims in the December 2016 Petition referred to permit terms reflected in the September

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<sup>14</sup> Given that the Final Permit was issued prior to the submission of the Petition, the Petition addresses the permit terms as reflected in the Final Permit. *See* August 2017 Petition at 4. Therefore, this Order also cites to the terms of the Permit as reflected in the Final Permit, contained in EDMS Doc. No. 10693678.

<sup>15</sup> *See* 42 U.S.C. § 7661d(a)(1)(B) (requiring that permitting authorities transmit to the EPA “each permit proposed to be issued”); § 7661d(a)(2), (b)(1) (characterizing the permit submitted to and reviewed by the EPA as the “proposed permit”); § 7661d(b)(2) (referring to the permit subject to the petition opportunity as the “permit” discussed in section (b)(1), i.e., the proposed permit); 40 C.F.R. § 70.8(c), (d) (mirroring terms used in 42 U.S.C. § 7661d(b)(1) and (2) to describe the EPA review and petition opportunities); § 70.2 (defining “proposed permit” as “the version of a permit that the permitting authority proposes to issue and forwards to the Administrator for review in compliance with § 70.8”); *compare id.* (defining “draft permit” as “the version of a permit for which the permitting authority offers public participation under § 70.7(h) or affected State review under §70.8 of this part”).

<sup>16</sup> Therefore, to the extent the December 2016 Permit should be treated as a “proposed permit” for the purposes of CAA § 505(b), the EPA finds that the March 2017 Petition was timely filed.

<sup>17</sup> *See, e.g., In the Matter of Wheelabrator Frackville Energy, Inc.*, Order on Petition No. III-2016-17 at 4–9 (October 6, 2017) (“A title V petition may be rendered moot when the version of the permit on which it is based has been withdrawn, superseded, or otherwise no longer operative.”) (citations omitted).

2016 Permit, many of which were updated in the April 2017 Permit. Additionally, the claims in the December 2016 Petition are essentially the same as those re-raised in the August 2017 Petition (although the August 2017 Petition claims include consideration of more of the permit record, including updates to the Permit as well as LDEQ's RTC). Therefore, the EPA's responses to the issues raised in the August 2017 Petition will also resolve the similar (but less up-to-date) claims in the December 2016 Petition. Any additional consideration of the specific claims raised in the December 2016 Petition with respect to the now-superseded September 2016 Permit would be redundant and is, therefore, unnecessary.<sup>18</sup>

#### IV. DETERMINATIONS ON CLAIMS RAISED BY THE PETITIONERS

##### **Claim IV:<sup>19</sup> The Petitioners Claim That “The Permits Fail To Propose Emission Limits That Reflect the Use of Best Available Control Technology.”**

**Petitioners' Claim:** The Petitioners claim that the limits in the Permit “do not represent [Best Available Control Technology] BACT because they fail to reflect the maximum emission reductions that are achievable.” August 2017 Petition at 6. The Petitioners provide a lengthy background section describing their interpretation of what the PSD provisions of the Act require with respect to BACT and how permitting authorities should make BACT determinations. *See id.* at 6–12. The Petitioners then challenge 5 separate BACT determinations: In Claim IV.B, the Petitioners challenge the GHG BACT analysis for combustion sources at the facility (including the boilers and steam methane reformer). *See id.* at 12–24. In Claim IV.C, the Petitioners challenge the VOC and CO BACT determinations for Boilers 1 and 2. *See id.* at 24–30. In Claim IV.D, the Petitioners challenge the PM, PM<sub>10</sub>, and PM<sub>2.5</sub> BACT determinations for the Econamine Cooling Tower. *See id.* at 30–31. In Claim IV.E, the Petitioners challenge the VOC BACT analysis for the Methanol Product Tanks. *See id.* at 31–36. In Claim IV.F, the Petitioners challenge the VOC BACT analysis for the Crude Methanol Tank Scrubber. *See id.* at 36–38.

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

Claim IV of the Petition challenges BACT determinations and resulting BACT limits established by LDEQ in PSD Permit No. PSD-LA-780(M-1). This PSD permit was issued pursuant to regulations approved by the EPA under title I of the CAA. As explained above in Part II.C of this Order, a duly issued preconstruction permit defines the “applicable requirements” for purposes of title V permitting, and the terms and conditions of such a preconstruction permit should be incorporated into the source's title V permit without further review. *See Big River Steel Order* at 9–11; *PacifiCorp-Hunter Order* at 8–11.<sup>20</sup>

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<sup>18</sup> *See id.* at 8.

<sup>19</sup> This Order responds to the Petition claims as they are numbered in the Petition, which begin under Section IV of the Petition.

<sup>20</sup> As noted above and discussed further below, the EPA will review whether a title V permit contains monitoring, recordkeeping, and reporting provisions sufficient to assure compliance with the terms and conditions established in the preconstruction permit. *See supra* note 10; *PacifiCorp-Hunter Order* at 16, 17, 18, 18 n.33, 19; *Big River Steel Order* at 17, 17 n.30, 19 n.32, 20. Moreover, as the EPA has explained, “[A] decision by the EPA not to object to a title V permit that includes the terms and conditions of a title I permit does not indicate that the EPA has concluded



The EPA’s determination that a source-specific preconstruction permitting decision under regulations approved pursuant to title I of the CAA “define certain applicable SIP requirements for the title V source,” 57 Fed. Reg. 32250, 32259 (July 21, 1992), is based on a variety of factors. First, while section 504 of the CAA requires title V permits to “include enforceable emissions limits and standards . . . to assure compliance with applicable requirements of this chapter,” 42 U.S.C. § 7661c(a), the term “applicable requirements” is not defined in the Act and the Act does not specify how to determine what the “applicable requirements” are for a particular title V permit. The EPA’s regulations do define the “applicable requirements” under title V. However, in *Big River Steel* and *PacifiCorp-Hunter*, the EPA noted that there is an ambiguity in the regulation when a source has obtained a preconstruction permit. To resolve this ambiguity and avoid an incongruous result of requiring permitting agencies or the EPA to use the title V permit or petition process to reconsider whether a validly issued preconstruction permit complies with all of the requirements of the applicable implementation plan, the EPA interprets its regulations such that a duly issued preconstruction permit defines the applicable requirements for the title V permit as the terms and conditions of that preconstruction permit. This interpretation of the EPA’s regulations and the rationale supporting this interpretation are more fully explained in the *Big River Steel* and *PacifiCorp-Hunter* Orders.

In this case, those emissions units at the site required to undergo PSD review are found in the PSD permit for SLM. This PSD permit—Permit No. PSD-LA-780(M-1)—was issued in a separate permit document<sup>21</sup> from the title V permit, pursuant to regulations approved by the EPA under title I of the CAA. As such, this PSD permit, including the BACT limits established in that permit, establishes the NSR-related “applicable requirements” that must be incorporated into the title V permit. *See Big River Steel Order* at 9–11; *PacifiCorp-Hunter Order* at 8–11. The fact that the PSD permit was finalized at the same time as the title V permit does not affect this determination. *See Big River Steel Order* at 11–12, 18. Therefore, the task of LDEQ in issuing or modifying the title V permit is to incorporate the terms and conditions of the underlying title I permit (PSD-LA-780(M-1)), and to ensure that the title V permit contains adequate monitoring, recordkeeping, and reporting requirements to assure compliance with those terms and conditions. *See Big River Steel Order* at 8–9, 14–20; *PacifiCorp-Hunter Order* at 8, 13–18. Any challenges to the validity of decisions made during the PSD permit proceeding—including the determination of BACT and the establishment of BACT limits—should have been raised through the appropriate title I avenues or through an enforcement action. *See Big River Steel Order* at 15–20; La. R.S. 30:2050.11 (administrative adjudicatory hearings); La. R.S. 30:2050.21 (judicial review, appeal). The Petitioners may not now use the title V petition process to raise concerns

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that those terms and conditions comply with the applicable SIP or the CAA. However, until the terms and conditions of the title I permit are revised, reopened, suspended, revoked, reissued, terminated, augmented, or invalidated through some other mechanism, such as a state court appeal, the ‘applicable requirement’ remains the terms and conditions of the issued preconstruction permit and they should be included in the source’s title V permit.” *Big River Steel Order* at 19; *see PacifiCorp-Hunter Order* at 19; *id.* at 20 (“That the EPA views the incorporation of the terms and conditions of these preconstruction permits into the title V operating permit as proper for purposes of title V does not indicate that the EPA agrees that the state reached the proper decision when setting terms and conditions in the preconstruction permits. . . . The EPA’s lack of objection to the inclusion of that requirement in the title V permit does not indicate that the EPA agrees that it is legal or complies with the Act; it merely indicates that a title V permit is not the appropriate venue to correct any such flaws in the preconstruction permit.”).

<sup>21</sup> The rationale applied here does not depend on the fact that the PSD permit was issued in a separate permit document. *Big River Steel Order* at 11–12, 18 (explaining why this rationale applies even where a PSD permit is issued in a single combined document with a title V permit).

over those PSD decisions. Accordingly, the challenges in Claim IV of the Petition to the BACT determinations made in Permit No. PSD-LA-780(M-1) are denied.

**Claim V: The Petitioners Claim That “The Conditions in the Permits Are Not Enforceable.”**

In Claim V, the Petitioners argue that various permit limits are not enforceable. The Petitioners note that section 504(a) of the Act requires that title V permits include “*enforceable* emission limitations and standards, . . . and such other conditions as are necessary to assure compliance with applicable requirements of [the Act], including the requirements of the applicable implementation plan.” August 2017 Petition at 40 (quoting 42 U.S.C. § 7661c(a)) (emphasis in Petition).<sup>22</sup> The Petitioners claim that permit limits must be both legally and practically enforceable (i.e., enforceable as a practical matter). *Id.* at 38, 40. In order to be enforceable as a practical matter, the Petitioners assert that, among other things, “[T]he permit must clearly specify how emissions will be measured or determined for purposes of demonstrating compliance.” *Id.* at 38 (quoting *In the Matter of Yuhuang Chemical Inc. Methanol Plant*, Order on Petition No. VI-2015-03 at 14 (August 31, 2016) (*2016 Yuhuang Order*)). Additionally, the Petitioners claim that “[p]ermit limitations or conditions must be supported by monitoring, recordkeeping, and reporting requirements which are sufficient to enable both regulators and citizens alike to determine whether a limit has been exceeded, and if so, to take appropriate enforcement action.” *Id.* at 38 (citing *2016 Yuhuang Order* at 14). The Petitioners assert that “[m]any conditions in the modified permits are not practically enforceable.” *Id.* at 38. The Petitioners identify seven specific claims concerning permit conditions that are allegedly not enforceable, as discussed below.

Unlike the BACT determination claims discussed above, claims concerning whether a title V permit contains enforceable permit terms, supported by monitoring sufficient to assure compliance with an applicable requirement or permit term (such as an emission limit established in a PSD permit), *are* properly reviewed during title V permitting. The statutory obligations to ensure that each title V permit contains “enforceable emission limitations and standards” supported by “monitoring . . . requirements to assure compliance with the permit terms and conditions,” 42 U.S.C. § 7661c(a), (c), apply independently from and in addition to the underlying regulations and permit actions that give rise to the emission limits and standards that are included in a title V permit.<sup>23</sup> Therefore, the EPA will address the merits of those portions of

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<sup>22</sup> The Petitioners also specifically claim that BACT emission limits must be enforceable. *See id.* at 38–40 (citing Draft NSR Workshop Manual (1990)).

<sup>23</sup> The EPA, in both the *PacifiCorp-Hunter Order* and *Big River Steel Order*, expressly indicated that even where it is not appropriate to reevaluate NSR determinations in the title V context, title V permits must still include adequate monitoring, recordkeeping, and reporting to assure compliance with the applicable NSR requirements. *PacifiCorp-Hunter Order* at 17 (“In the case of a preconstruction permit, the EPA’s oversight role under title V is to ensure that the terms and conditions of the preconstruction permit are properly included as ‘applicable requirements,’ and that the permit contains monitoring, recordkeeping, and reporting sufficient to assure compliance with those permit terms and conditions.”); *id.* at 16, 18, 18 n.33, 19; *Big River Steel Order* at 17 n.30 (“The EPA’s review of the title V permit will still consider whether the permit has adequate monitoring, recordkeeping, and reporting to assure compliance with all applicable requirements, including the preconstruction permit requirements.”); *id.* at 17, 19 n.32, 20; *see supra* note 10.

the Petition that challenge the enforceability of emission limits and the sufficiency of monitoring conditions in the Permit.

As described further below, the EPA is denying these claims on the basis that the Petitioners have failed to demonstrate that the limits are not enforceable as a practical matter or that the Permit lacks monitoring, recordkeeping, and reporting sufficient to assure compliance with these limits. The EPA's response should not be interpreted as a judgment regarding the enforceability of these limits or the adequacy of associated monitoring provisions.

**Claim V.A: The Petitioners Claim That “Emissions from the Boilers Are Not Enforceable.”**

***Petitioners' Claim:*** The Petitioners claim that compliance with multiple emission limits from two boilers should be determined using either continuous emission monitoring systems (CEMS)—which the Petitioners allege is used for NO<sub>x</sub> from the boilers and is available for these other pollutants—or by annual stack tests, if justified. August 2017 Petition at 42.<sup>24</sup>

Regarding CO, the Petitioners acknowledge that LDEQ added a requirement to the Permit for annual performance testing of CO from the boilers. *Id.* (citing Final Permit Specific Requirement (SR) 49). However, the Petitioners claim that “LDEQ did not demonstrate that annual testing of CO can assure compliance with the CO BACT limit.” *Id.* The Petitioners conclude that a CO CEMS must be required. *Id.*

Regarding VOC, the Petitioners also claim that LDEQ did not justify its decision not to require CEMS or other testing for VOC emissions. *Id.* The Petitioners claim that because the boilers are combustion sources, they emit VOC. *Id.* The Petitioners conclude that “[t]o assure that the VOC emission limits for the boilers are enforceable as a practical matter, monitoring must be required.” *Id.*

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

The Petitioners, in identifying the BACT emission limits that are allegedly unenforceable due to the lack of adequate monitoring, cite exclusively to tables contained in a draft version of the facility's PSD permit. August 2017 Petition at 42 (citing EDMS Document No. 10329019, pdf p. 121). However, in a petition to object to a title V permit, the petitioners must demonstrate flaws with the terms *of the title V permit*. Given that the PSD permit BACT limits identified by the Petitioners are also embodied in the SLM title V permit,<sup>25</sup> and notwithstanding the fact that the Petitioners failed to identify these specific title V provisions, the EPA will address the

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<sup>24</sup> The Petitioners specifically claim that “the permit must be modified to require testing to confirm compliance with the limits for all of the criteria pollutants in Table 2.” Table 2 includes limits for PM/PM<sub>10</sub>/PM<sub>2.5</sub>, NO<sub>x</sub>, CO, VOC, and GHG (expressed as CO<sub>2</sub>e). *Id.* However, the Petitioners do not make any specific claims with respect to PM, NO<sub>x</sub> (which the Petitioners acknowledge is already monitored by CEMS), or GHG/CO<sub>2</sub>e (which is not a “criteria pollutant”). As discussed below, the Petitioners' specific claims relate only to CO and VOC emissions from the boilers.

<sup>25</sup> See, e.g., Final Permit, Emission Rates for Criteria Pollutants and CO<sub>2</sub>e (pdf p. 31); Final Permit SR 48.

Petitioners' allegations as they relate to these title V permit terms. This treatment applies to all of the other claims addressed below.

Regarding CO emissions, the Final Permit specifies that compliance with CO emission limits shall be based on annual performance tests. Final Permit SR 49. In its RTC, LDEQ explained that it added this condition in response to public comments requesting additional monitoring. RTC at 54 (pdf p. 69). LDEQ also indicated:

Once the boilers have been demonstrated to meet applicable CO limits, additional measures will ensure that they are maintained and operated properly, thus assuring ongoing compliance. For example, these units will be subject to 40 CFR 63 Subpart DDDDD . . . . In order to comply with Subpart DDDDD, SLM must tune the boilers annually. The tune-up provisions are specifically designed to optimize combustion efficiency, thereby minimizing products of incomplete combustion, such as CO.

*Id.*

Acknowledging that LDEQ added annual stack testing for CO, the Petitioners' sole claim with respect to CO is the one-sentence allegation that "LDEQ does not demonstrate that annual testing of CO can assure compliance with the CO BACT limit." August 2017 Petition at 42. The Petitioners have attempted to shift the burden to LDEQ to demonstrate the adequacy of the monitoring, rather than demonstrating themselves why the annual stack testing is not sufficient. However, the CAA places the burden on *petitioners* to demonstrate to the EPA that the title V permit does not comply with the Act. 42 U.S.C. § 7661d(b)(2). Here, the Petitioners have failed to satisfy this burden. First, the Petitioners do not even directly allege that annual stack testing is inadequate, much less provide any explanation for why they believe that annual stack testing is inadequate. Additionally, the Petitioners themselves requested annual stack testing as an alternative to a CEMS in their public comments,<sup>26</sup> and it is unclear why they now suspect that such testing would be inadequate. Moreover, contrary to the Petitioners' assertions, LDEQ did provide a justification for its decision to require annual stack testing, explaining that once the boilers have been demonstrated to meet applicable CO limits through stack testing, other requirements (including annual tune-ups required by the Subpart DDDDD NESHAP) will assure ongoing compliance with the CO limits. *See* RTC at 54 (pdf p. 69). The Petitioners might not agree with LDEQ, but they neither acknowledged nor attempted to rebut LDEQ's reasoning in the Petition.<sup>27</sup> The Petitioners also note that a different facility's permit requires a CO CEMS, and assert that a CO CEMS must be required at SLM. However, the Petitioners provide no explanation for why a CO CEMS is necessary at the SLM facility: Requirements imposed on a different facility through another title V permit do not themselves constitute grounds for

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<sup>26</sup> *See* Petition, Attachment 1, Exhibit 2 at 45 (comments prepared by Phyllis Fox, Ph.D., PE for Sierra Club, Louisiana Environmental Action Network, Harry Joseph, and Genevieve Butler (December 28, 2016)).

<sup>27</sup> The EPA expects petitioners to address the permitting authority's final decision and reasoning where these documents were available during the petition period. *See supra* note 5 and accompanying text. The Petitioners were clearly aware of LDEQ's RTC, as they addressed it in other portions of the Petition. *See, e.g.*, August 2017 Petition at 4 ("Petitioners address LDEQ's response to public comments and changes that it made in its final permit modification decision."), 45 (addressing LDEQ's RTC concerning VOC emissions from the crude methanol tank, as discussed below).

requiring the same requirements to SLM. Overall, the Petitioners' vague, general, and conclusory claims—unsupported by any citation or analysis—do not demonstrate that the current monitoring does not assure compliance with applicable requirements, or that additional monitoring is necessary.<sup>28</sup>

Regarding VOC emissions, the Final Permit indicates that annual stack testing is not necessary if the boilers are fired exclusively with natural gas (as opposed to gases derived from the Crude Methanol Tank). Final Permit SR 49. In justifying this decision, LDEQ explained:

Based on the magnitude of particulate and VOC emissions from the boilers, and given that these units will be fired with natural gas and will not serve as a control device for any process vent streams, LDEQ will not require SLM to conduct a performance test for particulate matter or VOC emissions.

RTC at 54 (pdf p. 69). Thus, the Petitioners are incorrect in claiming that “LDEQ failed to justify its decision not to require CEMS or other sufficient testing for VOC emissions.” Again, the Petitioners may disagree with LDEQ, but the Petitioners have neither acknowledged nor addressed LDEQ's rationale in the Petition, much less demonstrated that LDEQ's explanation is unreasonable.

The Petitioners claim that the boilers are combustion sources that emit VOC, and, therefore, conclude that monitoring must be required. It appears that the Petitioners are arguing that all combustion sources, or perhaps all sources of pollution, must be directly monitored through stack testing. However, the Petitioners cite no authority to support this assertion. Contrary to the Petitioners' suggestion, while stack testing may be necessary in many cases, it is not always required. *See* 40 C.F.R. § 70.6(a)(3)(i)(B) (“Recordkeeping provisions may be sufficient to meet the requirements of [title V].”). The Petitioners do not provide any specific reasons supporting their assertion that stack testing for VOC is necessary for the natural gas-fired boilers at the SLM facility. Overall, the Petitioners' vague, general, and conclusory claims regarding VOC emissions from the boilers,<sup>29</sup> unsupported by citation and analysis or a rebuttal of LDEQ's reasoning, fail to demonstrate that the current monitoring does not assure compliance with applicable requirements.<sup>30</sup>

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

**Claim V.B: The Petitioners Claim That “Emissions from the Reformer Vent Are Not Enforceable.”**

***Petitioners' Claim:*** The Petitioners claim that the Reformer (consisting of a pre-reformer and a steam methane reformer) constitutes “the major source of PM/PM<sub>10</sub> (75%), PM<sub>2.5</sub> (82%), NO<sub>x</sub>

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<sup>28</sup> *See supra* notes 6, 7, and accompanying text.

<sup>29</sup> Although the Petitioners cited a table containing PM/PM<sub>10</sub>/PM<sub>2.5</sub> limits, the Petitioners do not make any specific arguments with respect to PM monitoring. The EPA notes that LDEQ's treatment of PM emissions from the boilers mirrored its treatment of VOC emissions. Therefore, to the extent that the Petitioners intended to argue that additional testing for PM is necessary, the same rationale discussed above with respect to VOC would also apply to PM emissions.

<sup>30</sup> *See supra* notes 5–7 and accompanying text.

(50%), [and] VOC (52%) emissions” at the facility. August 2017 Petition at 43. The Petitioners claim that compliance with PM/PM<sub>10</sub>/PM<sub>2.5</sub>, CO, and VOC emission limits from the Reformer should be determined using CEMS, which the Petitioners note is used for NO<sub>x</sub> from the Reformer. *Id.* The Petitioners acknowledge that LDEQ added a requirement for annual performance tests for PM, CO, and VOC emissions from the Reformer, but claim that “LDEQ does not provide any justification to demonstrate that annual testing can assure compliance with the applicable BACT limits.” *Id.*

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

In response to public comments, LDEQ added a requirement to conduct annual stack testing for PM, CO, and VOC emissions from the Reformer. Final Permit SR 66; RTC at 55 (pdf p. 70). Acknowledging this, the Petitioners’ sole remaining claim is that “LDEQ does not provide any justification to demonstrate that annual testing can assure compliance with the applicable BACT limits.” Although the Petitioners have again attempted to shift the burden to LDEQ, as noted above, the burden is on the Petitioners to demonstrate a flaw in the Permit. Here, the Petitioners have not even directly alleged that (much less explained why) annual stack testing—which the Petitioners themselves requested in their public comments<sup>31</sup>—is inadequate to assure compliance with the PM, CO, or VOC limits on the Reformer. Nor have the Petitioners provided any citation or analysis in support of their generic one-sentence assertion that CEMS must be required.<sup>32</sup> Therefore, and as more fully explained above with respect to essentially identical arguments in Claim V.A, the Petitioners have not demonstrated a flaw in the Permit.

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

**Claim V.C: The Petitioners Claim That “Emissions of CO<sub>2</sub>e from [Natural Gas] Fired Sources Are Not Enforceable.”**

**Petitioners’ Claim:** The Petitioners claim that the GHG limits (expressed in the Permit as CO<sub>2</sub>e limits) are not practically enforceable because Final Permit SR 322 allows CO<sub>2</sub>e emissions to be calculated using “default” emission factors from 40 C.F.R. part 98, Tables C-1 and C-2, based only on fuel type. August 2017 Petition at 43. The Petitioners claim that the emission factor for natural gas is a weighted U.S. average and is not specific to the facility’s natural gas-fired sources and natural gas supply. *Id.* The Petitioners also assert that “the specific monitoring and QA/QC requirements at 40 CFR 98.34 that underpin the use of these factors are not specifically required” in the title V permit. *Id.* The Petitioners request that the Permit “be modified to require that CO<sub>2</sub> be routinely measured from each fired source and the measurements used together with firing rates and production data to estimate unit emissions in tons of CO<sub>2</sub>e per metric ton of methanol produced.” *Id.*

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

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<sup>31</sup> See Petition, Attachment 1, Exhibit 2 at 46 (comments prepared by Phyllis Fox, Ph.D., PE for Sierra Club, Louisiana Environmental Action Network, Harry Joseph, and Genevieve Butler (December 28, 2016)).

<sup>32</sup> See *supra* notes 6, 7, and accompanying text.

Final Permit SR 322 indicates: “To demonstrate compliance with this limit [1.05 Tons CO<sub>2</sub>e/Metric Ton of methanol, on an annual average], the permittee shall record the methanol production monthly. CO<sub>2</sub>e emissions shall be recorded in accordance with the Mandatory Reporting of Greenhouse Gases Rule (40 CFR 98).”

This permit term incorporates an approach prescribed by the EPA through rulemaking to quantify GHG emissions. *See* 40 C.F.R. part 98. The Petitioners are effectively challenging the adequacy of this monitoring scheme to the extent that it relates to the CO<sub>2</sub>e emission limits in the PSD and title V permits. More specifically, the Petitioners claim that the EPA’s emission factors for CO<sub>2</sub> from natural gas should not be used to quantify CO<sub>2</sub>e emissions because the emission factor “is a weighted U.S. average and is thus not specific to the facility’s fired sources and natural gas supply.” August 2017 Petition at 43. However, the Petitioners have provided no citation or analysis to demonstrate why the use of this particular emission factor is inappropriate.<sup>33</sup> For example, the Petitioners have not demonstrated that there is a high expected variability in CO<sub>2</sub> emissions from natural gas combustion, such that the emission factor recently developed by the EPA cannot be relied upon as a reasonable indicator of total CO<sub>2</sub> or CO<sub>2</sub>e emissions. Moreover, LDEQ articulated multiple reasons why it deemed calculations based on the emission factors contained in 40 C.F.R. part 98 to be appropriate. Among other reasons, LDEQ noted that “correlations between the combustion of fuels, such as natural gas . . . and CO<sub>2</sub> emissions have been well established,” and that “the BACT limit itself is based on default values.” RTC at 56 (pdf p. 71). The Petitioners entirely fail to acknowledge LDEQ’s reasoning, much less demonstrate that it was unreasonable.<sup>34</sup> Overall, the Petitioners have not demonstrated why the use of the calculation methods and emission factors contained in the EPA’s part 98 rules is not adequate to assure compliance with the CO<sub>2</sub>e BACT limit.<sup>35</sup> Therefore, the Petitioners have not demonstrated that additional monitoring is necessary.<sup>36</sup>

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

**Claim V.D: The Petitioners Claim That “Emissions from the Flare Are Not Enforceable.”**

***Petitioners’ Claim:*** The Petitioners claim that the only monitoring specified in the Permit with respect to BACT limits on the flare (including PM/PM<sub>10</sub>, PM<sub>2.5</sub>, NO<sub>x</sub>, CO, and VOC limits) is monitoring of flow rate. August 2017 Petition at 44 (citing Final Permit SR 108). The Petitioners claim that none of the limits are enforceable because the Permit lacks a number of different components, including: limits on factors used to calculate flare emissions, monitoring to assure that assumptions underlying flare emission estimates are achieved in practice, calculation procedures for estimating flare emissions, and a requirement to estimate or report flare

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<sup>33</sup> *See supra* notes 6, 7, and accompanying text.

<sup>34</sup> *See supra* note 5 and accompanying text.

<sup>35</sup> *See supra* notes 5–7 and accompanying text.

<sup>36</sup> For example, the Petitioners have not demonstrated that direct periodic monitoring of CO<sub>2</sub>, or the “monitoring and QA/QC requirements at 40 CFR 98.34,” August 2017 Petition at 43—which the Petitioners cite but do not discuss—are necessary. The Petitioners’ conclusory allegation that the QA/QC requirements of 40 C.F.R. § 98.34 “underpin” the use of CO<sub>2</sub> emissions factors is also flawed, given that not all sources under the GHG Reporting Rule are required to follow the QA/QC procedures in 40 C.F.R. § 98.34 in order to rely on the relevant emission factors (specifically, Tier I sources are not required to do so).

emissions. *Id.* The Petitioners also claim that the AP-42 emission factors used to estimate flare emissions are not representative of flares at methanol plants, and that methods do not exist to convert flare inlet concentrations into outlet emissions. *Id.*

The Petitioners assert that flare control efficiency can and should be demonstrated. *Id.* The Petitioners also claim that flare emissions can be monitored in real time using passive Fourier-transform infrared (pFTIR) spectroscopy or differential absorption LIDAR. *Id.* Alternatively, the Petitioners claim that compliance could be demonstrated using a combination of three methods, including vendor guarantees, video monitoring, and remote combustion efficiency measurements. *Id.* at 44–45.

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

The Permit contains various terms related to controlling and monitoring the flares, based on NSPS, NESHAP, and SIP requirements. *See* Final Permit SRs 104–121. The Petitioners specifically identify Final Permit SR 108, which requires hourly recordkeeping of the vent stream flow, as the “only monitoring specified.” Petition at 44. Although this provision is specifically associated with compliance with NSPS requirements, the Permit also contains a similar provision that may be more directly relevant to the BACT limits that the Petitioners challenge: Final Permit SR 122, which requires monitoring of the volume of vent gas routed to the flares at all times it is operating. In its RTC, LDEQ further explained:

Because the net heating value of the vent gases are known or can be determined using ASTM D4809-95, compliance with the emission limits of the permit can be readily verified. Therefore, it is not necessary for the permit to restrict parameters such as flow or operating hours.

LDEQ believes it is reasonable for NO<sub>x</sub> emissions to be calculated using an emission factor of 0.068 lb/MM Btu and CO emissions to be calculated using an emission factor of 0.31 lb/MM Btu<sup>133</sup> (in lieu of pFTIR) for several reasons. One, these factors have been recently reviewed (April 2015) and, in the case of CO, updated. The CO factor now accounts for a number of studies utilizing state-of-the-art monitoring techniques, including pFTIR. EPA left the NO<sub>x</sub> factor unchanged at 0.068 lb/MM Btu. In doing so, EPA concluded: . . . [“]that it is not necessary at this time to revise the existing AP-42 NO<sub>x</sub> emissions factor for industrial flares.[”]

Two, . . . the vast majority of the vent gases anticipated to be routed to the flare (i.e., 95 percent based on heat input) will be associated with startup/shutdown events and will contain *no* VOCs. Instead, these streams will consist of carbon monoxide, carbon dioxide, hydrogen, water, nitrogen, and methane. According to EPA, “[a]s natural gas is primarily methane, which is extremely easy to burn, one would generally expect less emissions from a natural gas flare than a flare burning other material.” Further, because significant amounts of hydrocarbons are not associated with startups/shutdowns, fewer carbon atoms will be available to form CO (resulting from incomplete combustion).



VOC emissions from the combustion of pilot and purge gases (i.e., natural gas) may be calculated using the emission factor set forth in AP-42 Section 1.4, Table 1.4-2. However, VOC/methanol emissions from the combustion of process vent streams, such as that from the topping column, should be calculated by applying a 98% control efficiency to the mass of methanol (and other hydrocarbons, if present) directed to the flare.

Reporting of actual emissions from the flare is required by LAC 33:111.919 (Emissions Inventory).

RTC at 57–58 (pdf p. 72–73) (footnotes omitted).

Thus, LDEQ thus provided a detailed response to the allegations raised by the Petitioners in public comments. For example, LDEQ provided a justification for the use of specific emission factors and/or destruction efficiencies for NO<sub>x</sub>, CO, and VOC. The Petitioners claim that it is inadequate to rely on AP-42 emission factors to calculate flare emissions because “the AP-42 emission factors used to estimate flare emissions are not representative of emissions from flares at methanol plants.” August 2017 Petition at 44. However, beyond this conclusory, one-sentence allegation, the Petitioners provide no citation or analysis to support this statement.<sup>37</sup> The Petitioners appear to challenge the use of emission factors for flare emissions generally, but do not evaluate any of the specific emission factors identified by LDEQ or explain why they are not reliable or how they might underestimate emissions. In fact, the Petitioners fail to acknowledge or address any aspect of LDEQ’s explanation.<sup>38</sup>

Regarding the flare destruction efficiency, the Petitioners have not provided any citation or analysis to demonstrate why monitoring of destruction efficiency, through direct measurement or otherwise, is warranted, other than their conclusory assertion that “flare control efficiency is a key factor in the flaring emission calculations and is the basis of the BACT determination.” Petition at 44. The Petitioners similarly do not provide any arguments or evidence to demonstrate why it would be necessary to directly monitor any of the other assumptions underlying emission calculations. Certainly, there are situations in which an assumption underlying an emission calculation should be confirmed. However, the Petitioners simply have not demonstrated why this would be necessary for any of the assumptions at issue here.<sup>39</sup>

Overall, the Petitioners have not provided the requisite citation and analysis, or consideration of LDEQ’s response, to demonstrate that hourly monitoring of vent gas volume, in conjunction with the emission factors and destruction efficiencies identified by LDEQ, does not assure compliance with the various emission limits on the flare.<sup>40</sup> Given that the Petitioners have not

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<sup>37</sup> See *supra* notes 6, 7, and accompanying text.

<sup>38</sup> See *supra* note 5 and accompanying text.

<sup>39</sup> The EPA recognizes its authority to ensure that title V permits contain adequate monitoring, recordkeeping, and reporting “to assure compliance *with the permit terms and conditions*,” including by supplementing existing monitoring where necessary. 42 U.S.C. §7661c(c) (emphasis added); see 40 C.F.R. §70.6(c). However, the assumptions the Petitioners mention (e.g., destruction efficiency) are not emission standards or limits in the title V permit, and the Petitioners have not demonstrated why it is necessary to confirm any specific assumptions in order to assure compliance with any permit terms or conditions.

<sup>40</sup> See *supra* notes 5–7 and accompanying text.

demonstrated that the existing monitoring is inadequate, they have not demonstrated that it is necessary to employ their additional suggested approaches (e.g., pFTIR spectroscopy or differential absorption LIDAR).

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

**Claim V.E: The Petitioners Claim That “Emissions from the Crude Methanol Tank Are Not Enforceable.”**

***Petitioners' Claim:*** The Petitioners claim that VOC emissions from the crude methanol tank are not enforceable because the Permit does not contain any monitoring to confirm that the tank scrubber routinely achieves 95% control efficiency. August 2017 Petition at 45. The Petitioners acknowledge LDEQ's explanation that monitoring is not warranted given the number of hours the scrubber will be used, but assert that “LDEQ's response does not provide a reasonable justification” for not requiring additional monitoring of the scrubber's control efficiency. *Id.* The Petitioners conclude that “[t]he permit should be modified to require periodic scrubber inlet and outlet monitoring to confirm the control efficiency as well as operation in accordance with manufacturer specification, and routine inspections.” *Id.* The Petitioners provide an example of such requirements from another source's permit. *See id.*

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

Final Permit SR 173, SR 184, and SR 189 all require a 95% VOC removal efficiency for the scrubber associated with the tanks. Numerous other provisions within the Permit, derived from the Subpart G NESHAP, are relevant to assuring that the scrubber achieves this removal efficiency. *See* Final Permit SRs 174–181 (requiring, among other things: design evaluations or performance tests; submittal of a monitoring plan as part of a Notice of Compliance Status; monitoring of parameters specified in the Notice of Compliance Status; operation and maintenance of the scrubber such that the monitored parameters remain within the bounds established in the Notice of Compliance Status; annual inspections; and periodic reporting). In responding to comments, LDEQ explained:

Monitoring requirements designed to ensure that the scrubber meets the requisite control efficiency (i.e., minimum scrubber flow based on a design evaluation) have been established for the Crude Methanol Tank Scrubber. Given that the scrubber will serve to control VOC emissions only during eductor downtime (limited to no more than 176 hours per year), additional monitoring such as that suggested by the commenter is not warranted.

RTC at 59 (pdf p. 74).

The Petitioners claim that LDEQ's response “does not provide a reasonable justification.” August 2017 Petition at 45. In so doing, the Petitioners again attempt to shift the burden to LDEQ, rather than demonstrating that the current permit terms are not adequate to assure compliance with applicable requirements. Moreover, the Petitioners provide no explanation of

what portions of LDEQ's response are unreasonable, nor do the Petitioners attempt to rebut any portion of LDEQ's explanation.<sup>41</sup>

Additionally, the Petitioners are simply incorrect that the Permit does not include any monitoring to assure that the scrubber achieves 95% control efficiency. The Petitioners fail to acknowledge various permit terms, derived from the Subpart G NESHAP, designed to assure compliance with the 95% destruction efficiency required by the Permit. *See* Final Permit SR 174–181.<sup>42</sup>

The Petitioners also provide no basis for their suggestions that additional monitoring is necessary. The Petitioners have not argued (much less presented any technical evidence or analysis to demonstrate) that the scrubber may not be able to achieve the 95% control efficiency. Nor do the Petitioners explain the relevance of the fact that a permit for a different facility has conditions similar to those the Petitioners are requesting for SLM.

Overall, the Petitioners' unsupported claims, which disregard LDEQ's response and relevant permit terms, fail to demonstrate that existing permit terms associated with VOC emissions from the tank are inadequate or why additional monitoring of the crude methanol tank is necessary for the SLM facility.<sup>43</sup>

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

**Claim V.F: The Petitioners Claim That “Emissions from Miscellaneous [Diesel] Fired Sources Are Not Enforceable.”**

***Petitioners' Claim:*** The Petitioners claim that emission limits on all criteria pollutants for a diesel-fired emergency generator and a diesel-fired pump are not enforceable as a practical matter because the Permit relies only on restrictions of operating hours and does not contain any direct monitoring of criteria pollutants. August 2017 Petition at 45.

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

Final Permit SRs 131–142 contain requirements from the subpart III NSPS applicable to the emergency generator, including requirements to operate per manufacturer's instructions, restrictions on operating hours, and other operational restrictions. Final Permit SRs 151–163 contain similar requirements for the diesel fire pump engine, also derived from the subpart III NSPS. Final Permit SRs 150 and 171, reflecting the BACT limits derived from the PSD Permit (which the Petitioners appear to challenge), indicate that BACT was determined to be compliance with the subpart III NSPS standards. In its RTC, LDEQ explained that “additional monitoring of criteria pollutants is not warranted” because:

Both the Diesel Fired Emergency Generator Engine (DEGI-13, EQT 0012) and the Diesel Fire Pump Engine (DFP-1-13, EQT 0013) are subject to the provisions of

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<sup>41</sup> *See supra* note 5 and accompanying text.

<sup>42</sup> *See supra* note 8 and accompanying text.

<sup>43</sup> *See supra* notes 5–8 and accompanying text.

40 CFR 60 Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) for emergency engines. As such, non-emergency use of each engine is limited to 100 hours per year. Permit No. 2560-00292-VI further limits non-emergency use of each engine to 2 hours in any 24-hour period.

Subpart IIII requires SLM to operate and maintain the engines and control devices according to the manufacturer's emission-related written instructions and change only those emission-related settings that are permitted by the manufacturer. If SLM was to deviate from the aforementioned requirements, Subpart IIII obligates SLM to conduct initial and periodic performance tests to demonstrate compliance with applicable emission standards.

RTC at 59 (pdf p. 74) (footnotes omitted).

The Petitioners have failed to acknowledge LDEQ's rationale or any of the permit terms associated with the emergency generator or pump engine.<sup>44</sup> The Petitioners have similarly failed to provide any analysis or reasoning to support their conclusory allegation that direct testing or monitoring of criteria pollutants from these diesel-fired engines is necessary.<sup>45</sup> In fact, the EPA has determined, through rulemaking, that such testing is *not* necessary for this type of engine to comply with the NSPS standard as long as the engines are operated according to manufacturer specifications and consistent with other operating restrictions. *See* 40 C.F.R. § 60.4211. To the extent that the Petitioners believe that the monitoring designed to assure compliance with relevant NSPS standards is not adequate to assure compliance with the BACT limits in the Permit (which are, by definition, identical to the NSPS standards), they have provided no analysis to support such belief. Therefore, the Petitioners have not demonstrated that the Permit does not assure compliance with applicable requirements and permit terms governing emissions from the emergency generator and pump engine.<sup>46</sup>

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

**Claim V.G: The Petitioners Claim That “Emissions from the Cooling Towers Are Not Enforceable.”**

***Petitioners' Claim:*** The Petitioners claim that the Permit only requires monitoring of total dissolved solids (TDS) from the cooling towers. August 2017 Petition at 45. The Petitioners claim that this is not sufficient to assure continuous compliance with the BACT drift rates and PM, PM<sub>10</sub>, and PM<sub>2.5</sub> emission limits on the cooling towers. *Id.* at 45–46. For support, the Petitioners allege that other permits commonly require monitoring of circulating water flow rate, TDS, and drift. *Id.* at 46. The Petitioners also claim that that LDEQ failed to justify why TDS monitoring is sufficient. *Id.* at 46.

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

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<sup>44</sup> *See supra* notes 5, 8, and accompanying text.

<sup>45</sup> *See supra* notes 6, 7, and accompanying text.

<sup>46</sup> *See supra* notes 5–8 and accompanying text.

In response to public comments, LDEQ added SR 191 to the Final Permit. *See* RTC at 60 (pdf p. 75). This provision requires the following:

The permittee shall determine and record the concentration of total dissolved solids (TDS) in the cooling water at least once per week using Standard Method 2540C or EPA Method 160.1. Alternate methods may be used with the prior approval of LDEQ. The efficiency of the drift eliminators shall be verified by the manufacturer's certification. The permittee shall average all recorded TDS concentrations and utilize the manufacturer's drift rate and the design recirculation rate of the cooling water pump(s) to determine compliance with the emission limitations set forth in this permit.

As with other claims discussed above, the Petitioners' claim that LDEQ failed to justify why TDS monitoring is sufficient is an attempt to shift the burden to LDEQ. However, the burden is on the Petitioners to explain why TDS monitoring is inadequate to assure compliance with the BACT drift rates and PM emission limits from the cooling towers. The Petitioners have failed to satisfy this burden, as they provide no analysis whatsoever to suggest that weekly TDS monitoring—which LDEQ added to the Permit in response to the Petitioners' comments—along with manufacturer design values is inadequate.<sup>47</sup> Additionally, the Petitioners have provided no basis to determine that additional monitoring provisions are necessary. The Petitioners do not address the portions of Final Permit SR 191 that relate to drift efficiency (verified by manufacturer certification) or recirculation rate (based on the design rate), or explain why these provisions might be inadequate.<sup>48</sup> The fact that other permits may require monitoring of drift or water recirculation rate does not demonstrate that this is necessary to assure compliance with SLM's PM emission limits. Here, the Petitioners' unsupported conclusory allegations do not demonstrate that these additional monitoring strategies would be necessary or that weekly monitoring of TDS alone is insufficient to assure compliance with limits at the SLM facility.<sup>49</sup>

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

## V. CONCLUSION

For the reasons set forth above and pursuant to CAA § 505(b)(2) and 40 C.F.R. § 70.8(d), I hereby deny the Petitions as described above.

Dated: \_\_\_\_\_

MAY 29 2018



\_\_\_\_\_  
E. Scott Pruitt  
Administrator

<sup>47</sup> *See supra* notes 6, 7, and accompanying text.

<sup>48</sup> *See supra* note 8 and accompanying text.

<sup>49</sup> *See supra* notes 6–8 and accompanying text.