# BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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Petition Nos. VI-2024-11 & VI-2024-12

In the Matter of

Flint Hills Resources Ingleside, LLC, Ingleside Terminal

Permit No. O3454

Issued by the Texas Commission on Environmental Quality

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# ORDER GRANTING IN PART AND DENYING IN PART PETITIONS FOR OBJECTION TO A TITLE V OPERATING PERMIT

#### I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received two petitions dated July 10, 2024 (collectively the Petitions) pursuant to section 505(b)(2) of the Clean Air Act (CAA or Act), 42 United States Code (U.S.C.) § 7661d(b)(2). The first petition (the Environmental Integrity Project (EIP) Petition) was submitted by EIP and Ingleside on the Bay Coastal Watch Association (the EIP Petitioners). The second petition (the TCHD Petition) was submitted by TCHD Consulting LLC and Ingleside on the Bay Coastal Watch Association (the TCHD Petitioners). Both Petitions request that the EPA Administrator object to operating permit No. O3454 (the Permit) issued by the Texas Commission on Environmental Quality (TCEQ) to the Flint Hills Resources Ingleside, LLC, Ingleside Terminal (Flint Hills) in San Patricio County, Texas. The Permit was issued pursuant to title V of the CAA, 42 U.S.C. §§ 7661–7661f, and Title 30, Chapter 122 of the Texas Administrative Code (TAC). See also 40 Code of Federal Regulations (C.F.R.) part 70 (title V implementing regulations). This type of operating permit is also known as a title V permit or part 70 permit.

Based on a review of the two Petitions and other relevant materials, including the Permit, the permit record, and relevant statutory and regulatory authorities, and for the reasons explained in Section IV of this Order, the EPA grants in part and denies in part the two Petitions and objects to the issuance of the Permit. Specifically, the EPA grants Claim C of the EIP Petition and Issue 3 of the TCHD Petition<sup>1</sup> and denies the rest of the claims.

<sup>&</sup>lt;sup>1</sup> The EIP Petition contains three separate claims, and the TCHD Petition contains three claims similar to those in the EIP Petition, as well as one additional claim. Claim C of the EPA Petition and issue 3 of the TCHD Petition are similar. The EPA has combined and re-labeled the similar claims in the two Petitions. Claim C of the EIP Petition and Issue 3 of the TCHD Petition have been combined and re-labeled Claim 3.

### 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 Texas submitted a title V program governing the issuance of operating permits on September 17, 1993. The EPA granted interim approval of Texas's title V operating permit program in 1996 and granted full approval in 2001. See 61 Fed. Reg. 32693 (June 25, 1996) (interim approval effective July 25, 1996); 66 Fed. Reg. 63318 (Dec. 6, 2001). This program, which became effective on November 30, 2001, is codified in 30 TAC Chapter 122.

All major stationary sources of air pollution and certain other sources are required to apply for and operate in accordance with 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. 42 U.S.C. §§ 7661a(a), 7661b, 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 compliance with applicable requirements. 40 C.F.R. § 70.1(b); 42 U.S.C. § 7661c(c). One purpose of the title V program is to "enable the source, States, 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. 32250, 32251 (July 21, 1992). Thus, the title V operating permit program is a vehicle for compiling the air quality control requirements as they apply to the source'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) 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. 42 U.S.C. § 7661d(a). 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. 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. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d).

Each petition must identify the proposed permit on which the petition is based and identify the petition claims. 40 C.F.R. § 70.12(a). Any issue raised in the petition as grounds for an objection must be based on a claim that the permit, permit record, or permit process is not in compliance with applicable requirements or requirements under part 70. 40 C.F.R. § 70.12(a)(2). Any arguments or

claims the petitioner wishes the EPA to consider in support of each issue raised must generally be contained within the body of the petition.<sup>2</sup> *Id.* 

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). 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); see also 40 C.F.R. § 70.12(a)(2)(v).

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. 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(c)(1).3 Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to the EPA.<sup>4</sup> 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>5</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 1130–31.6 Certain aspects of the petitioner's demonstration burden are discussed in the following paragraph. A more detailed discussion can be found in the preamble to the EPA's proposed petitions rule. See 81 Fed. Reg. 57822, 57829–31 (Aug. 24, 2016); see also 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).

<sup>&</sup>lt;sup>2</sup> If reference is made to an attached document, the body of the petition must provide a specific citation to the referenced information, along with a description of how that information supports the claim. In determining whether to object, the Administrator will not consider arguments, assertions, claims, or other information incorporated into the petition by reference. *Id*.

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

<sup>&</sup>lt;sup>4</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 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>&</sup>lt;sup>5</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>&</sup>lt;sup>6</sup> See also Sierra Club v. Johnson, 541 F.3d at 1265–66; Citizens Against Ruining the Environment, 535 F.3d at 678.

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 a petitioner has provided the relevant analyses and citations to support its claims. For each claim, the petitioner must identify (1) the specific grounds for an objection, citing to a specific permit term or condition where applicable; (2) the applicable requirement as defined in 40 C.F.R. § 70.2, or requirement under part 70, that is not met; and (3) an explanation of how the term or condition in the permit, or relevant portion of the permit record or permit process, is not adequate to comply with the corresponding applicable requirement or requirement under part 70. 40 C.F.R. § 70.12(a)(2)(i)–(iii). If a petitioner does not identify these elements, 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 persuasive."). 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 (Jan. 15, 2013).8 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).9

Another factor the EPA examines is whether the petitioner has addressed the state or local permitting authority's decision and reasoning contained in the permit record. 81 Fed. Reg. at 57832; see Voigt v. EPA, 46 F.4th 895, 901–02 (8th Cir. 2022); MacClarence, 596 F.3d at 1132–33.<sup>10</sup> This includes a requirement that petitioners address the permitting authority's final decision and final reasoning (including the state's response to comments) where these documents were available during the timeframe for filing the petition. 40 C.F.R. § 70.12(a)(2)(vi). Specifically, the petition must identify where the permitting authority responded to the public comment and explain how the permitting authority's response is inadequate to address (or does not address) the issue raised in the public comment. Id.

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<sup>&</sup>lt;sup>7</sup> 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).

8 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); In the Matter of Georgia Power Company, Order on Petitions at 9–13 (Jan. 8, 2007) (Georgia Power Plants Order); In the Matter of Chevron Products Co., Richmond, Calif. Facility, Order on Petition No. IX-2004–10 at 12, 24 (Mar. 15, 2005).

<sup>&</sup>lt;sup>9</sup> See also In the Matter of Hu Honua Bioenergy, Order on Petition No. IX-2011-1 at 19–20 (Feb. 7, 2014); Georgia Power Plants Order at 10.

<sup>&</sup>lt;sup>10</sup> See also, e.g., Finger Lakes Zero Waste Coalition v. EPA, 734 Fed. App'x \*11, \*15 (2d Cir. 2018) (summary order); 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 why 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); Georgia Power Plants Order at 9–13 (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).

The information that the EPA considers in determining whether to grant or deny a petition submitted under 40 C.F.R. § 70.8(d) generally includes, but is not limited to, the administrative record for the proposed permit and the petition, including attachments to the petition. 40 C.F.R. § 70.13. 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 required by § 70.7(a)(5) (sometimes referred to as the "statement of basis"); any comments the permitting authority received during the public participation process on the draft permit; the permitting authority's written responses to comments, including responses to all significant comments raised during the public participation process on the draft permit; and all 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). *Id.* 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 when determining whether to grant or deny the petition. *Id.* 

If the EPA grants a title V petition and objects to the issuance of a permit, a permitting authority may address the EPA's objection by, among other things, providing the EPA with a revised permit. 42 U.S.C. § 7661d(b)(3), (c); 40 C.F.R. § 70.8(d); see id. § 70.7(g)(4); 70.8(c)(4); see generally 81 Fed. Reg. at 57842 (describing post-petition procedures); Nucor II Order at 14–15 (same). In some cases, the permitting authority's response to an EPA objection may not involve a revision to the permit terms and conditions themselves, but may instead involve revisions to the permit record. For example, when the EPA has issued a title V objection on the ground that the permit record does not adequately support the permitting decision, it may be acceptable for the permitting authority to respond only by providing an additional rationale to support its permitting decision.

When the permitting authority revises a permit or permit record in order to resolve an EPA objection, it must go through the appropriate procedures for that revision. If a final permit has been issued prior to the EPA's objection, the permitting authority should determine whether its response to the EPA's objection requires a minor modification or a significant modification to the title V permit, as described in 40 C.F.R. § 70.7(e)(2) and (4) or the corresponding regulations in the state's EPA-approved title V program. If the permitting authority determines that the revision is a significant modification, then the permitting authority must provide for notice and opportunity for public comment for the significant modification consistent with 40 C.F.R. § 70.7(h) or the state's corresponding regulations.

In any case, whether the permitting authority submits revised permit terms, a revised permit record, or other revisions to the permit, and regardless of the procedures used to make such revision, the permitting authority's response is generally treated as a new proposed permit for purposes of CAA § 505(b) and 40 C.F.R. § 70.8(c) and (d). See Nucor II Order at 14. As such, it would be subject to the EPA's 45-day review per CAA § 505(b)(1) and 40 C.F.R. § 70.8(c), and an opportunity for the public to petition under CAA § 505(b)(2) and 40 C.F.R. § 70.8(d) if the EPA does not object during its 45-day review period.

When a permitting authority responds to an EPA objection, it may choose to do so by modifying the permit terms or conditions or the permit record with respect to the specific deficiencies that the EPA identified; permitting authorities need not address elements of the permit or the permit record that are unrelated to the EPA's objection. As described in various title V petition orders, the scope of the EPA's review (and accordingly, the appropriate scope of a petition) on such a response would be

limited to the specific permit terms or conditions or elements of the permit record modified in that permit action. *See In the Matter of Hu Honua Bioenergy, LLC*, Order on Petition No. VI-2014-10 at 38–40 (Sept. 14, 2016); *In the Matter of WPSC, Weston*, Order on Petition No. V-2006-4 at 5–6, 10 (Dec. 19, 2007).

#### III. BACKGROUND

# A. The Flint Hills Facility

The Flint Hills Ingleside Terminal is a bulk petroleum and crude oil terminal located in Ingleside, San Patricio County, Texas. The facility includes a ship and barge dock for loading and unloading bulk liquids as well as seventeen crude or product storage tanks. The facility also includes an onsite vapor combustor for volatile organic compound (VOC) emissions from barge and ship crude oil loading. The facility is a major source of VOC emissions.

# B. Permitting History

Flint Hills Resources Ingleside, LLC first obtained a title V permit for the Ingleside Terminal in 2012, which was subsequently renewed. On July 1, 2022, Flint Hills Resources Ingleside, LLC applied for a title V permit renewal. TCEQ published notice of a draft permit on December 27, 2022, subject to a public comment period that ran until May 25, 2023. On March 25, 2024, TCEQ submitted the Proposed Permit, along with its responses to public comments (RTC), to the EPA for its 45-day review. The EPA's 45-day review period ended on May 10, 2024, during which time the EPA did not object to the Proposed Permit. TCEQ issued the final title V renewal permit for the Ingleside Terminal on May 23, 2024.

#### C. Timeliness of Petition

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). The EPA's 45-day review period expired on May 10, 2024. The EPA's website indicated that any petition seeking the EPA's objection to the Permit was due on or before July 10, 2024. The Petitions were received July 10, 2024. Therefore, the EPA finds that both sets of Petitioners timely filed their Petitions.

## D. Environmental Justice

The EPA conducted an analysis using EJScreen<sup>11</sup> to assess key demographic and environmental indicators within a five-kilometer radius of the Flint Hills Ingleside Terminal. This review showed a total population of approximately 3,605 residents within a five-kilometer radius of the facility, of which approximately 52 percent are people of color and 30 percent are low income. In addition, the EPA reviewed the EJScreen Environmental Justice Indexes, which combine certain demographic indicators with 13 environmental indicators. The following table identifies the Environmental Justice Indexes for

<sup>&</sup>lt;sup>11</sup> EJScreen is an environmental justice mapping and screening tool that provides the EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators. *See https://www.epa.gov/ejscreen/whatejscreen*. The information herein is based on a September 12, 2024 report using EJScreen version 2.3.

the five-kilometer radius surrounding the facility and their associated percentiles when compared to the rest of the State of Texas.

EJ Index	Percentile in State
Particulate Matter 2.5	70
Ozone	33
Nitrogen Dioxide	3
Diesel Particulate Matter	25
Toxic Releases to Air	76
Traffic Proximity	14
Lead Paint	55
Superfund Proximity	95
RMP Facility Proximity	41
Hazardous Waste Proximity	42
Underground Storage Tanks	21
Wastewater Discharge	93
Drinking Water Non-Compliance	94

#### IV. EPA DETERMINATIONS ON PETITION CLAIMS

The EIP Petition contains three separate claims, and the TCHD Petition contains three claims similar to those in the EIP Petition, as well as one additional claim. Because the similar claims are labeled in different orders in the two Petitions, the EPA has combined and re-labeled the similar claims in the two Petitions and re-labeled the final claim of the TCHD Petition. Claim A of the EIP Petition and Issue 2 of the TCHD Petition have been combined and re-labeled Claim 1. Claim B of the EIP Petition and Issue 1 of the TCHD Petition have been combined and re-labeled Claim 2. Claim C of the EIP Petition and Issue 3 of the TCHD Petition have been combined and re-labeled Claim 3. Issue 4 of the TCHD Petition has been re-labeled Claim 4.

# A. Claim 1: The EIP Petitioners and TCHD Petitioners Claim That "The Proposed Permit fails to include adequate monitoring sufficient to assure compliance with incorporated Permits-by-Rule ("PBR")."

**Petition Claim:** The EIP Petitioners assert that Flint Hills claims its emissions are authorized via, among other permits, several Permits-by-Rule (PBR), and specifically cite to PBR Supplemental Table D (Monitoring Requirements for registered and claimed PBRs for the Application Area) in the permit application, which specifies the monitoring requirements for the registered and claimed PBRs that have been incorporated by reference into the Title V permit. EIP Petition at 9. Both sets of Petitioners claim that the monitoring requirements for many of the units identified in PBR Supplemental Table D only require the facility to keep records of the duration of the event and "any other inputs necessary to calculate emissions" and that these are so vague as to be meaningless. EIP Petition at 9 and TCHD Petition at 10. Additionally, the EIP Petitioners note that they are unable to ascertain what monitoring, if any, is used to determine compliance with the limits in PBR No. 107625. EIP Petition at 9.

Both sets of Petitioners then list a number of statutory and regulatory requirements for monitoring, recordkeeping, reporting, and emission limitations and standards necessary to assure compliance with all applicable requirements. EIP Petition at 9–10 and TCHD Petition at 9–10 (citing 30 TAC § 122.142(b)(2)(B); 40 C.F.R. § 70.6(a)(1), (a)(3), (c); 42 U.S.C. § 7661c(a) and (c)). The EIP Petitioners also claim that the conditions in NSR permits incorporated by reference into the Proposed Permit are applicable requirements, citing 40 C.F.R. § 70.2 and Proposed Permit Special Condition 9. EIP Petition at 10. Accordingly, the EIP Petitioners assert that the rationale for the selected monitoring requirements must be clear and documented in the permit record. *Id.* (citing 40 C.F.R. § 70.5(a)(5) and *In the Matter of United States Steel Corp., Granite City Works,* Order on Petition No. V-2009-03 at 7–8 (Jan. 21, 2011)).

The EIP Petitioners state that their public comments raised concerns with the purported lack of monitoring in the PBR supplemental table and suggested a possible remedy of updating the PBR table to indicate 1) how the monitoring is to be performed; 2) the frequency for performing any monitoring; and 3) what emission factors and calculation methodology are used to determine the emissions. EIP Petition at 11. The EIP Petitioners claim that TCEQ's RTC only offered cosmetic modifications to the Permit and that TCEQ's only responses that addressed the EIP Petitioners' comment are that: 1) the facility listed all applicable PBRs in a revised PBR Supplemental Table; 2) a revised PBR Supplemental Table D dated November 10, 2023 lists the monitoring requirements for the incorporated PBRs; (3) detailed representations such as emission factors and calculation methods can be found in the original PBR applications; 4) a revised Special Term and Condition number 9 in the Proposed Permit enhances PBR monitoring and enforceability; 5) the New Source Review Authorization References by Emissions Unit table in the Proposed Permit was updated to include the emission units listed in the OP-PBRSUP tables; and 6) the Statement of Basis was revised to include a reference to the PBR Supplemental Table and Special Term and Condition 9. EIP Petition at 11–12 (citing RTC at 3-4<sup>12</sup>).

Both sets of Petitioners argue that this response and the purported modifications merely incorporate the active PBRs and do not address the claimed lack of monitoring and enforceability of the incorporated PBRs. EIP Petition at 12 and TCHD Petition at 9. The EIP Petitioners claim that the RTC essentially "doubles down on the State's position that PBRs are, in and of themselves, adequately enforceable—a position with which EPA disagrees" citing to the EPA's objection to a title V permit for Equistar Chemicals. EIP Petition at 10. The EIP Petitioners contend that in the Equistar Chemicals Title V objection, the EPA explained:

When TCEQ relies on Table D to incorporate additional monitoring requirements, the monitoring and recordkeeping terms must be sufficient to assure compliance with emission limitations and operational requirements. When records are identified as being maintained, it would be practical and necessary to include a frequency for the recordkeeping. Table D for Equistar contains very simplistic monitoring that does not establish a practically enforceable permit limit or condition. The monitoring requirements are vague without specifying what exactly is being monitored, at what frequency, and how that information is used to determine the emissions. The table should be updated to

 $<sup>^{12}</sup>$  Because TCEQ's RTC is not labeled with page numbers, the EPA has included the page numbers as found in the PDF document version of the RTC.

<sup>&</sup>lt;sup>13</sup> EPA Objection to Title V Permit No. O1426, Equistar Chemicals, LP. Channelview Facility (May 18, 2023) ("Equistar Chemicals Title V Objection").

indicate how the monitoring is to be performed, the frequency for performing any monitoring, and specify what emission factors are being used (if applicable) and the calculation methodology for determining the emissions.

Equistar Chemicals Title V Objection at 4.

The EIP Petitioners argue that in the case of Flint Hills, the PBR Supplemental Table simply references the PBRs themselves and "these are the same vague and generic monitoring, reporting, and recordkeeping requirements EPA as previously determined to be inadequate." The EIP Petitioners add that the monitoring requirements do not specify what is to be monitored, at what frequency, or how that information is used to estimate emissions. EIP Petition at 10–11.

The EIP Petitioners then contend that the statutory obligations at 42 U.S.C. § 7661c(a) and (c) that each title V permit contains "enforceable emission limitations and standards" supported by "monitoring . . . requirements to assure compliance with the permit terms and conditions," apply independently from and in addition to the underling regulations and permit actions that give rise to the emission limits and standards that are included in a title V permit."<sup>14</sup> EIP Petition at 13. The EIP Petitioners conclude that regardless of the monitoring, recordkeeping, and reporting initially associated with a minor NSR permit, including a PBR, TCEQ has an obligation independent of the NSR permitting process to evaluate monitoring, recordkeeping and reporting in the title V permit. EIP Petition at 13 (citing Sierra Club v. EPA, 536 F.3d 673 (D.C. Cir. 2008) and In the Matter of Motiva Enterprises, LLC, Port Arthur Refinery, Order on Petition No. IV-2016-23 at 25–26 (May 31, 2008)).

The EIP Petitioners then claim that TCEQ failed to meet these statutory obligations, generally stating that TCEQ "simply re-states their position that the incorporated PBRs are fine as-is." As an example, the EIP Petitioners point to the Statement of Basis, asserting that TCEQ explains that it simply applies existing policy that PBRs are sufficiently enforceable:

This interpretation is consistent with how TCEQ has historically determined compliance with the emission limits...This interpretation also provides for effective and practical enforcement of 30 TAC §106.4(a), ...

The permit holder is required to keep records for demonstrating compliance with PBRs in accordance with 30 TAC § 106.8 for the following categories: • As stated in 30 TAC § 106.8(a), the permit holder is not required to keep records for de minimis sources as designated in 30 TAC § 116.119. • As stated in 30 TAC § 106.8(b) for PBRs on the insignificant activities list, the permit holder is required to provide information that would demonstrate compliance with the general requirements of 30 TAC § 106.4. • As stated in 30 TAC § 106.8(c) for all other PBRs, the permit holder must maintain sufficient records to demonstrate compliance with the general requirements specified in 30 TAC § 106.4

<sup>14</sup> The EIP Petitioners cite *In the Matter of South Louisiana Methanol, LP*, Order on Petition Nos. VI-2016-24 and VI -2017-14 at 10 (May 29, 2018); *In the Matter of Yuhuang Chemical Inc. Methanol Plant*, Order on Petition Nos. VI-2017-5 & VI-2017-13 at 7–8 (Apr. 2, 2018); *In the Matter of Big River Steel, LLC,* Order On Petition No. VI-2013-10 at 17, 17 n.30, 19, n.32, 20 (Oct. 31, 2017); and *In the Matter of PacifiCorp Energy, Hunter Power Plant,* Order on Petition No. VIII-2016-4 at 16, 17, 18, 18 n.33, 19 (Oct. 16, 2017).

9

and to demonstrate compliance with the emission limits and any specific conditions of the PBR as applicable.

EIP Petition at 13–14 (citing Statement of Basis at 17).

The EIP Petitioners then cite to *In the Matter of DCP Operating Company, L.P., Mobile Bay Gas Treating & Processing Facility,* Order on Petition No. IV-2024-1 (May 10, 2024) (*DCP Mobile Bay Order*), asserting that the EPA based its objection on "inadequate monitoring for compliance with a General Permit — analogous to Texas' PBR" and that the EPA agreed with petitioners that the Title V Permit's General Permit proviso failed to establish monitoring, recordkeeping, and reporting requirements to assure compliance. EIP Petition at 14. The EIP Petitioners note that the EPA "agreed that the permit record did not provide a reasoned explanation as to how the lack of these requirements assures compliance" and that the EPA objected on the grounds that the petitions demonstrated that the Alabama Department of Environmental Management (ADEM) failed to respond to public comments regarding the need for supplemental monitoring, recordkeeping, and reporting for fugitive dust. *Id* (citing *DCP Mobile Bay Order* at 12). The EIP Petitioners then compare this to the Flint Hills title V permit, claiming that TCEQ points to the underlying PBR and directs commenters to the PBR permit applications should they attempt to check compliance. *Id.* at 15.

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

Both sets of Petitioners claim that the proposed title V permit, in particular the PBR Supplemental Table D in the title V permit application that has been incorporated by reference into the title V permit, contains insufficient monitoring to assure compliance with the incorporated PBRs. The EIP Petitioners acknowledge that, in response to their comment on this issue, TCEQ made a number of revisions to the Permit, the Statement of Basis and, most importantly, the PBR Supplemental Table D (with the revision dated November 10, 2023); TCEQ's response to comment also references specific parts of the permit applications containing detailed emission calculations and emission factors. EIP Petition at 11-12, quoting RTC Response to Comment 1. The TCHD Petition also mentions the November 10, 2023 revision to the PBR Supplemental Table D. TCHD Petition at 3. Upon examination of the revised PBR Supplemental Table D, the EPA notes that it contains additional monitoring requirements, such as the specific parameters being monitored, the source of calculation methodologies, and frequency of emission calculations, <sup>15</sup> that were not in the prior PBR Supplemental Table D that was incorporated into the draft permit for notice and comment. <sup>16</sup>

Despite the additional monitoring requirements in the revised Supplemental Table D, the EIP Petitioners claim that none of the responses TCEQ provided in its RTC address their claim of

<sup>&</sup>lt;sup>15</sup> See PBR Supplemental Table D dated November 10, 2023 as part of the revised title V permit renewal application (Permit No. O3454, Project 33957, Agency Review Document, WCC Content ID No. 7108547 at 39-40).

<sup>&</sup>lt;sup>16</sup> See PBR Supplemental Table D included in the July 1, 2022 title V renewal application (Permit No. O3454, Project 33957, Agency Review Document, WCC Content ID No. 7108547 at 152–155).

inadequate monitoring<sup>17</sup> and that there is "no additional, meaningful, monitoring." EIP Petition at 12. The TCHD Petitioners inexplicably claim that "[n]o additional monitoring requirements were added to the Statement of Basis or the proposed revised permit." TCHD Petition at 4. Neither set of Petitioners discuss in their respective Petition how the changes made to PBR Supplemental Table D as part of the November 10, 2023 application are not responsive to the comment regarding the purported lack of monitoring for the PBRs. In fact, both sets of Petitioners do not even identify any of the additional monitoring requirements in the revised PBR Supplemental Table D, much less explain why they are inadequate to assure compliance with the incorporated PBRs. Both Petitions simply reiterate the EIP Petitioners' comment on the draft permit that the PBR supplemental table should be updated to indicate: 1) how monitoring is performed, 2) the frequency of monitoring, and 3) what emission factors and calculation methodologies are used to determine emissions. EIP Petition at 10–11 and TCHD Petition at 9.

Because both sets of Petitioners do not attempt to assess the new and additional requirements included in the updated PBR Supplemental Table D, which was explicitly referenced in the RTC, and because both sets of Petitioners fail to explain how the revisions made to PBR Supplemental Table D are not responsive to the EIP Petitioners' suggestion on how the PBR supplemental table should be updated, both sets of Petitioners have failed to demonstrate that the monitoring requirements in the revised PBR Supplemental Table D are inadequate to assure compliance with the incorporated PBRs.

Additionally, the EIP Petitioners assert that TCEQ's RTC "essentially doubles down on the State's position that PBRs are, in and of themselves, adequately enforceable," claiming that the EPA disagrees with this statement as evidenced by the EPA's Equistar Chemicals Title V Objection. The EPA disagrees with this assertion regarding both TCEQ's RTC and EPA's position in the EPA's Equistar Objection. As mentioned above, TCEQ's RTC describes numerous changes to monitoring, which both sets of Petitioners fail to address. Further, contrary to the EIP Petitioners' characterization of the EPA's position in the Equistar Objection, in addressing the PBR Supplemental Table D in that title V permit, the EPA states that the "EPA supports TCEQ's efforts to incorporate PBRs into the title V permit in a manner that clearly identifies each registration and the emission unit(s) to which it applies through the use of the PBR Supplemental Table." Equistar Chemicals Title V Objection at 3 (emphasis added).

Lastly, the *DCP Mobile Bay Order* that the EIP Petitioners cited also provides no support for their claim. As the Petitioners note, the EPA objected to that title V permit on the basis that the petitioners "demonstrated that ADEM has failed to respond to significant public comments as required by 40 C.F.R § 70.7(h)(6)," EIP Petition at 14. In contrast, as disscused above, in response to comment, TCEQ made a number of changes to the permit and permit record, including additional monitoring in the Supplemental Table D to assure compliance with the incorporated PBRs, and both sets of Petitioners fail to explain why the changes are inadequate.

For the reasons stated above, the EPA denies both sets of Petitioners' request for an objection on this claim.

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<sup>&</sup>lt;sup>17</sup> The EIP Petitioners also claim the RTC fails to address the "related lack of enforceability of the incorporated PBRs" but does not explain why they think the incorporated PBRs are not enforceable. EIP Petition at 12. To the extent the EIP Petitioners are claiming that the alleged lack of enforceability stems from the allegedly inadequate monitoring requirements in the incorporated PBRs, as discussed above, the Petitioners have failed to explain why the monitoring requirements are inadequate; therefore, they also have failed to justify their claim that the PBRs are not enforceable.

# B. Claim 2: The EIP Petitioners and TCHD Petitioners Claim That "The Permit Fails to Assure Compliance with Emissions Limits for the Marine Vapor Combustion Units."

**Petition Claim:** The EIP Petitioners claim that the Permit is deficient because it fails to specify monitoring, testing, and recordkeeping requirements to assure continuous compliance with hourly and annual limits on emissions from three marine vapor combustion units (MVCU) authorized by NSR Permit No. 6606. EIP Petition at 15–16. The EIP Petitioners also argue that the permit record does not contain a reasoned justification for TCEQ's determination that monitoring, testing, and recordkeeping requirements in the Permit assure compliance with emission limits established in NSR Permit No. 6606. *Id.* at 16. The EIP Petitioners state that NSR Permit No. 6606 is incorporated in the New Source Review Authorization Reference Table and Permit Special Condition 9. *Id.* at 15. The EIP Petitioners contend that these units are a significant source of criteria pollutants and VOCs, the Permit offers no monitoring or reporting related to these limits, and NSR Permit No. 6606 only requires a single stack test for carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), sulfur dioxide (SO<sub>2</sub>) and VOCs. *Id.* 

Both sets of Petitioners list a number of statutory and regulatory requirements for monitoring, recordkeeping, and reporting, and the requirement that the permit shall include emission limitations and standards that assure compliance with all applicable requirements. EIP Petition at 16 and TCHD Petition at 5 (citing 30 TAC § 122.142(b)(2)(B); 40 C.F.R. § 70.6 (a)(1), (a)(3) and (c)(1); 42 U.S.C. § 7661c(a) and (c)).. The EIP Petitioners also claim that the conditions in NSR permits incorporated by reference into the Proposed Permit are applicable requirements, citing 40 C.F.R. § 70.2, the Permit's NSR Authorization Table, and Special Condtion No. 8. EIP Petition at 16. Additionally, the EIP Petitioners contend that the rationale for the selected monitoring requirements must be clear and documented in the permit record. *Id.* (citing 40 C.F.R. § 70.5(a)(5) and *In the Matter of United States Steel Corp., Granite City Works,* Order on Petition No. V-2009-03 at 7–8 (Jan. 21, 2011)).

Both sets of Petitioners note that these concerns were raised in Comment 2 of the EIP comments, with the EIP Petitioners also claiming that the EPA raised similar objections in comments on NSR Permit No. 6606. EIP Petition at 17–18 and TCHD Petition at 4–6 (citing EIP comments at 6–8). The EIP Petitioners quote the RTC on NSR Permit No. 6606, which they purport states:

The vapor combustion units (VCUs) are required to achieve 99.9-percent control of the waste gas. The VCU has a combustion chamber firebox temperature monitor. The pilot flame is also required to be monitored. The applicant is required to perform sampling after achieving the maximum operation rate to establish the minimum temperature at which the VCUs must operate to achieve the required minimum control efficiency. After sampling is conducted, the minimum actual temperature must be maintained above the minimum temperature established during the stack test during loading operations. Additionally, per Special Condition 20(D), if the "maximum...crude oil and stabilized condensate loading operations recorded...is greater than that recorded during the test periods, stack sampling shall be performed at the new operating conditions..." The applicant is restricted from installing (and operating) an atmospheric bypass without a flow monitor or installing car-seals, a physical restriction to operating the bypass, on the bypass. Car-seals must be inspected monthly to verify the position of the values and that flow out of the bypass is prevented.

The MVCUs are control devices that are subject to Title V Compliance Assurance Monitoring (CAM) requirements. CAM is a federal monitoring program established under 40 CFR Part 64 that ensures control devices have sufficient monitoring, testing, and recordkeeping requirements to show compliance with an emission limitation or standard. The MVCUs meet CAM requirements by continuously monitoring the firebox temperatures at an averaging period of 6 minutes or less with an accuracy of the greater of the plus or minus 2 percent of the temperature being measured expressed in degrees Celsius or plus or minus 2.5 °C. This ensures that the average firebox temperature is kept at a minimum of 1600 °F, which translates into a minimum of 99.9 percent waste gas destruction efficiency and the minimum conversion of 98 percent H2S into SO2 in crude oil through combustion. The monitoring, testing, and recordkeeping requirements for MVCUs can be found in Special Conditions 24, 25, and 26 of the permit.

EIP Petition at 17 (citing RTC on NSR Permit No. 6606).

Both sets of Petitioners then conclude that TCEQ is relying on the existing conditions in NSR Permit No. 6606 to assure compliance with the MVCU limits, specifically asserting that TCEQ relies on the temperature of the firebox and the existence of the pilot flame to assure compliance. EIP Petition at 17 and TCHD Petition at 7. Both sets of Petitioners argue that TCEQ does not verify or explain the connection between a minimum firebox temperature of 1600°F and a minimum of 99.9 percent destruction efficiency. *Id.* 

Both sets of Petitioners then cite to the RTC on the title V Permit, which states:

The MVCUs demonstrate compliance by continuously monitoring the firebox temperatures at an averaging period of 6 minutes or less with an accuracy of the greater of the plus or minus 2 percent of the temperature being measured expressed in degrees Celsius or plus or minus 2.5 °C. This ensures that the average firebox temperature is kept at a minimum of 1600 °F, which translates into a minimum of 99.9 percent waste gas destruction efficiency and the minimum conversion of 98 percent H2S into SO2 in crude oil through combustion.

In addition to the MRRT requirements listed in FOP O3454, the MVCUs related requirements for monitoring, testing, recordkeeping, reporting, emissions factors and calculations, and emissions controls to demonstrate compliance with applicable standards are also stated in NSR permit 6606 conditions 8, 9.A through 9.E, 10.A through 10.E, 11 through 14, 24-25 and 26.A through 26.C. Other requirements in NSR permit 6606 that ensures compliance include routine maintenance of the MVCUs and equipment design and vessel loading interlocks that ensure proper collection and combustion of VOCs. MVCU stack temperatures are recorded continuously while loading, and the MVCUs are monitored for visible emissions to demonstrate compliance with 30 TAC 111.111.

Application representation for NSR permit 6606 dated April 2021, version 4.1, page 34-36 document monitoring requirements for MVCUs on a per pollutant basis (see monitoring

tab in 20210422\_143525\_ATTACH\_20210408-03\_PI-1 Workbook.xlsx). Emission rates are calculated using the methodology summarized on pages 17-20 of the application representation (WCC content ID 6476737, see pdf document AIR NSR\_6606-327436\_Permits\_Public\_20221011\_Agency Review\_6476737\_ .pdf) including stack testing data, manufacturer's specifications, engineering estimates, mass balances, TCEQ guidance, and EPA's Compilation of Air Emission Factors (AP-42). These approaches and emission factors were determined to be correct and applicable by TCEQ staff during the technical review based on standard industry air permitting practices. The Applicant represented the appropriate methodologies to control and minimize emissions and utilized corresponding control efficiencies when calculating the emission rates. As provided in 30 TAC § 116.116(a), the Applicant is bound by this representation, including the represented performance characteristics of the control equipment. In addition, the permit holder must operate within the limits of the permit, including the emission limits as listed in the MAERT.

EIP Petition at 18–19 and TCHD Petition at 6–7 (citing RTC at 5).

The EIP Petitioners conclude that TCEQ is solely relying on the stack temperatures to assure compliance, and for those who wish to check whether the MVCU complies with the permitted emission limits "TCEQ tells us to dig up the incorporated permit's (No. 6606) Application representation." The EIP Petitioners contend that was not the intention of title V. EIP Petition at 19. The TCHD petitioners assert that the EPA has questioned the rationale related to 99.9 percent destruction efficiencies, as they argue it does not take into account that the MVCU must be accurately sized, operated and maintained to achieve the efficiency levels claimed by manufacturers, suggesting the use of optical gas imaging. TCHD Petition at 7–8. The TCHD Petitioners also conclude that TCEQ did not address its rationale to "ignore its historical experiences in addressing overstated combustion efficiency declarations, as permitting actions often lean on early EPA flare studies that were conducted decades ago," and as a result, TCEQ should ensure that the title V permit includes monitoring, recordkeeping, and operational parameters and limits to assure compliance with destruction efficiency declarations. TCHD Petition at 8.

**EPA Response:** For the following reasons, the EPA denies both sets of Petitioners' requests for an objection on this claim.

The EPA disagrees with the EIP Petitioners' assertion that NSR Permit No.6606 *only* specifies monitoring to demonstrate initial compliance with some of the emission limits via an initial stack test for CO, NOx, SO<sub>2</sub>, and VOCs. Special Condition 23 of NSR Permit No. 6606<sup>18</sup> states:

The firebox temperatures of EPNs MVCU1, MVCU2, and MVCU3 shall be monitored continuously and recorded whenever waste generated from the loading of crude oil and stabilized condensate with a maximum true vapor pressure equal to or greater than 0.50

<sup>&</sup>lt;sup>18</sup> The EPA notes that since the filing of the Petitions, NSR Permit No. 6606 was split into two permits on August 6, 2024. The tank farm portion of the facility is included under NSR Permit No. 6606, and the marine loading facilities are included under NSR Permit No. 176404. For clarity, at the time of the Petition, NSR Permit No. 6606 covered both portions of the facility and will be the only permit referenced. Special Condition 23 of the original NSR Permit No. 6606 is now included as Special Condition 14 of NSR Permit No. 176404, but the content remains the same.

psia is directed to any of these units. The temperature measurement devices shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The firebox temperature monitors shall be installed, calibrated at least annually and maintained according to the manufacture/s specifications. The temperature monitors shall have an accuracy of the greater of ±2 percent of the temperature being measured expressed in degrees Celsius or ±2.5°C. During inerted or non-inerted vessel loading activities of chemicals that require VOC abatement, the average firebox temperature for any of the Marine Vapor Combustion Units in use shall not fall below 1600°F over the entire loading period. Upon completion of the stack tests required under Special Condition No. 19, alternate firebox temperature limits may be requested from the Air Permits Division.

. . .

The presence of a pilot flame shall be confirmed by a pilot ultra violet scanner, a thermocouple, a temperature element or an agency approved equivalent measurement device before crude oil and stabilized condensate with a maximum true vapor pressure equal to or greater than 0.50 psia is initiated for loading onto an inerted or non-inerted vessel. If the pilot flame is lost during inerted or non-inerted vessel loading operation, then an orderly system shutdown shall occur.

From this condition, it is clear that the monitoring of the firebox temperature and monitoring the presence of the pilot light are used demonstrate ongoing compliance. Both sets of Petitioners acknowledge these monitoring requirements but claim that TCEQ has made no attempt to explain or verify their statement that a firebox temperature of 1600°F translates into a minimum of 99.9 percent waste gas destruction efficiency and a minimum conversion of 98 percent H<sub>2</sub>S. However, contrary to both sets of Petitioners' claim, TCEQ has provided an explanation for the establishment of the minimum firebox temperature in its RTC on NSR Permit No. 6606, which the EIP Petitioners themselves cite in their petition.<sup>19</sup> Most importantly, TCEQ states:

The applicant is required to perform sampling after achieving the maximum operation rate to establish the minimum temperature at which the VCUs must operate to achieve the required minimum control efficiency. After sampling is conducted, the minimum actual temperature must be maintained above the minimum temperature established during the stack test during loading operations. Additionally, per Special Condition 20(D), if the "maximum...crude oil and stabilized condensate loading operations recorded...is greater than that recorded during the test periods, stack sampling shall be performed at the new operating conditions..."

RTC on NSR Permit No. 6606 at 14.

From this response, it appears that an initial sampling at the maximum operation rate established the minimum temperature (1600°F) to achieve the minimum control efficiency (99.9 percent) and that minimum temperature must be maintained to assure that destruction efficiency, which is reflected in

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<sup>&</sup>lt;sup>19</sup> The EIP Petitioners observed that "TCEQ has included the RTC for Permit 6606 as an attachment to the FHR Title V application." EIP Petition at 17. As such, it is considered part of the Flint Hill's title V permitting record.

the permit condition requiring the continuous monitoring of the firebox temperature. In addition, if those operating conditions that were used to establish the temperature change, the facility is required to perform additional stack sampling.

Neither sets of Petitioners address or refute this explanation. The EIP Petitioners simply conclude that "TCEQ clearly relies solely on 'MCVU stack temperatures. . . recorded continuously while loading,' as the method to assure compliance" EIP Petition at 19. This general conclusory statement does not attempt to demonstrate a flaw in the permit, the established minimum firebox temperature, or TCEQ's explanation for the establishment of the minimum firebox temperature and continuous monitoring of the firebox temperature and presents no reasonable objection to the Permit.

The TCHD Petitioners instead generally claim that the EPA has questioned "this type of rationale" in the past. However, it is unclear, and the TCHD Petitioners do not describe, what they mean by "this type of rationale," nor have they identified any instance where such rationale was questioned by the EPA. The TCHD Petitioners assert that "the marine vapor combustors must be accurately sized, operated, and maintained to achieve the purposed combustion efficiency levels claimed by manufactures;" however, the TCHD Petitioners do not claim, nor have they provided any evidence, that the marine vapor combustors at Flint Hills were not accurately sized, operated or maintained during the initial testing that established the firebox temperature to be monitored or thereafter. Additionally, the TCHD Petitioners generally assert that TCEQ's alleged destruction efficiency shortcomings are a result of leaning on manufacturer combustion efficiency declarations, despite optical gas imagery observations documenting significant emissions from waste control devices that do not meet manufacturer specification. TCHD Petition at 8. However, as TCEQ has explained in its RTC and the TCHD Petitioners quote in their Petition, calculations were performed based on "testing data, manufacturer's specifications, engineering estimates, mass balances, TCEQ guidance, and EPA's Compilation of Air Emission Factors (AP-42)." This goes beyond solely relying on manufacturer declarations, as the TCHD Petitioners claim.

## The RTC on the title V permit further states:

Application representation for NSR permit 6606 dated April 2021, version 4.1, page 34-36 document monitoring requirements for MVCUs on a per pollutant basis (see monitoring tab in 20210422 143525 ATTACH 20210408-03 PI-1 Workbook.xlsx). Emission rates are calculated using the methodology summarized on pages 17-20 of the application representation (WCC content ID 6476737, see pdf document AIR NSR\_6606-327436 Permits Public 20221011 Agency Review 6476737 .pdf) including stack testing data, manufacturer's specifications, engineering estimates, mass balances, TCEQ guidance, and EPA's Compilation of Air Emission Factors (AP-42). These approaches and emission factors were determined to be correct and applicable by TCEQ staff during the technical review based on standard industry air permitting practices. The Applicant represented the appropriate methodologies to control and minimize emissions and utilized corresponding control efficiencies when calculating the emission rates. As provided in 30 TAC § 116.116(a), the Applicant is bound by this representation, including the represented performance characteristics of the control equipment. In addition, the permit holder must operate within the limits of the permit, including the emission limits as listed in the MAERT.

#### RTC at 5.

In questioning the accuracy of the established firebox temperature, the EIP Petitioners do not make any claims regarding the actual substance of the referenced application representations; rather, the EIP Petitioners criticize this response for suggesting that they themselves "dig up" an incorporated application representation referenced in the RTC. The EIP Petitioners also do not claim that they could not find the referenced application representation cited in the RTC, which is available on TCEQ Records Online.<sup>20</sup> Without providing any supporting analysis, the EIP Petitioners fail to show any inadequacy with the application representation itself and have not demonstrated that it is impracticable to locate the referenced application representation.

In fact, other than questioning the relation of the firebox temperature to the destruction efficiency and objecting to having to look up the referenced application representation, both sets of Petitioners offer no additional objections related to this response from TCEQ, which provides further justifications for the sufficiency of the monitoring requirements contained in the title V permit, NSR Permit No. 6606, and application representations referenced in the RTC. For the reasons stated above, both sets of Petitioners have failed to demonstrate that the permit record does not contain a reasoned justification for TCEQ's determination that the monitoring, testing, and recordkeeping requirements assure compliance with the emission limits established in NSR Permit No. 6606. Accordingly, the EPA denies the Petitions on this claim.

# C. Claim 3: The EIP Petitioners and TCHD Petitioners Claim That "The Draft Permit Fails to Assure Compliance with Emission Limits for All Storage Tanks."

**Petition Claim:** Both sets of Petitioners claim that the Permit's reliance on AP-42 emission factors is inadequate to assure compliance with emission limits for storage tanks at the facility. EIP Petition at 20–21 and TCHD Petition at 12. Both sets of Petitioners claim that EPA has stated that AP-42 emission factors "are not likely to be accurate predictors of emissions from any one specific source, except in very limited scenarios" and are "intended for developing area-wide annual or triannual inventories." EIP Petition at 21 and TCHD Petition at 12 (citing EPA Enforcement Alert, Publication no. EPA 325-N-20-001 at 1 (Nov. 2020) ("EPA Enforcement Alert")). Both sets of Petitioners criticize the use of AP-42 emission factors, as they assert that the AP-42 manual includes a disclaimer that:

Use of these factors as source-specific permit limits and/or as emission regulation compliance determinations is not recommended by EPA. Because emission factors essentially represent an average of a range of emission rates, approximately half of the subject sources will have emission rates greater than the emission factor and the other half will have emission rates less than the factor. As such, a permit limit using an AP-42 emission factor would result in half of the sources being in noncompliance.

EIP Petition at 21 and TCHD Petition at 12 (citing AP-42 Manual at 2).

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 $<sup>{}^{20}\</sup> See\ generally\ https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ\_SEARCH.$ 

The EIP Petitioners assert that in addition to Special Condition 6 of NSR Permit No. 6606, which authorizes the storage of fuel products such as naptha, diesel, No. 6 oil, and coker gas oil, Special Condition 17 lists monitoring requirements for heated and unheated tanks, which suggests that some tanks may be heated some of the time depending on the product being stored. EIP Petition at 20. The EIP Petitioners then point to NSR Permit No. 6606 Special Condition 15(F), which states that emissions from tanks shall be calculated using AP-42 emission factors, and Special Condition 18, which they contend lists fifteen tanks subject to additional monitoring and recordkeeping to assure that the synthetic minor amendment to NSR Permit No. 6606 (Ingleside Terminal Expansion Project) does not trigger major New Source Review. EIP Petition at 20. Both sets of Petitioners cite to the statutory requirement in 42 U.S.C. § 7661c(c) that each title V permit must "set forth monitoring sufficient to assure compliance with all applicable requirements." EIP Petition at 21 and TCHD Petition at 10 (also citing 42 U.S.C § 7661c(a); 40 C.F.R. § 70.6(a), (a)(3), (c); 30 TAC 122.142(c)).

Both sets of Petitioners contend that the EPA Enforcement Alert for AP-42 emission factors specifically references No. 6 fuel oil being stored in heated tanks as an example of a situation where use of AP-42 factors results in the undercounting of emissions, and in some cases direct testing suggested an understatement of emissions by a factor of 100. EIP Petition at 21–22 and TCHD Petition at 12. Because of this, both sets of Petitioners conclude that because Flint Hills is authorized to store No. 6 fuel oil in tanks that could be heated, reliance on AP-42 emission factors is inappropriate, as the facility could be drastically undercounting emissions from storage tanks, which could be problematic given the existence of the synthetic minor amendment. EIP Petition at 22 and TCHD Petition at 12. The EIP Petitioners add that because the synthetic minor amendment (Permit No. 6606) is "based on maintaining emissions from its tanks below certain levels," minor inaccuracies in calculating emissions could be problematic for surrounding communities. EIP Petition at 22.

Both sets of Petitioners then cite to TCEQ's RTC, which states, in part:

The ED notes storage tanks subject to requirements under NSPS Ka and Kb require storage tank visual inspections and seal gap measurements to verify fitting and seal integrity. In addition, NSR permit 6606 lists conditions 6, 7, 15.A through 15.F, and 17 to document requirements of the storage tank units including sampling methods, emission calculations, control requirements, and recordkeeping requirements. NSR permit 6606, Attachment A shows rates for withdrawal, filling, loading, and throughputs for stored products are calculated on an hourly basis.

TCEQ requires NSR permit holders to use AP-42 factors per TCEQ guidance document APDG 6419 — Short-term Emissions from Floating Roof Storage Tanks to determine permitted hourly emissions rates. Emissions from the tank units were determined by using AP-42, Compilation of Air Pollutant Emission Factors, 5th Edition, Volume I, Chapter 7 Liquid Storage Tanks, Section 7.1 Organic Liquid Storage Tanks, following TCEQ guidance for marine loading and vapor combustion unit (VCU) control emissions, stack testing data, and TCEQ's fugitive guidance document APDG 6422. The Applicant represented the appropriate methodologies to control and minimize emissions and utilized corresponding control efficiencies when calculating the emission rates. As provided in 30 TAC § 116.116(a), the Applicant is bound by this representation, including the represented performance characteristics of the control equipment. In addition, the permit holder

must operate within the limits of the permit, including the emission limits as listed in the MAERT.

In regards to the Commenters assertion that use of AP-42 had resulted in underestimating emissions, e.g., "the use of a default vapor pressure value for estimating VOC emissions from heated tanks that store heavy refinery liquids such as No. 6 fuel oil which all tanks at Flint Hills' Terminal are authorized to store – undercounted VOC emissions by a factor of 100" (emphasis added), the ED notes that all storage tank units at the site operate at ambient temperature.

EIP Petition at 23 and TCHD Petition at 11 (citing RTC at 8).

The EIP Petitioners specifically note that TCEQ's response that all storage tanks are held at ambient temperatures is problematic, as ambient temperatures at the facility are likely to reach the same or higher temperatures as the heated storage tanks referenced in the EPA Enforcement Alert. EIP Petition at 24. Both sets of Petitioners argue that TCEQ dismisses and does not consider optical gas imagery (OGI) as a potential complement to existing monitoring, which they propose is a remedy to the deficiency in the monitoring and reporting requirements included in the Permit and would assist in assuring compliance with hourly and annual limits from all storage tanks. EIP Petition at 22–24 and TCHD Petition at 13–14. Both sets of Petitioners also argue that TCEQ's reliance on seal gap measurements is technically inaccurate, and that the detection of emissions could be an indication of non-compliance as it could indicate a leak from a flange or broken seal. EIP Petition at 24 and TCHD Petition at 13.

Both sets of Petitioners conclude that that TCEQ's reliance on AP-42 emission factors and withdrawal rates included in application representations does not assure compliance with emission limits for storage tanks and may understate and underrepresent emissions. EIP Petition at 24–25 and TCHD Petition at 13.

**EPA Response:** For the following reasons, the EPA grants both sets of Petitioners' request for an objection on this claim.

In general, while the EPA has cautioned against the use of AP-42 emission factors for compliance demonstrations, these cautionary statements do not equate to an EPA finding that AP-42 emission factors may *never* be sufficient to assure compliance with any permit limits, or to a finding that such use is presumptively inadequate to assure such compliance. The determination of whether it is necessary to develop a source-specific emission factor to calculate emissions of a particular pollutant from a particular unit is a highly fact-specific evaluation. *See In the Matter of Suncor Energy (U.S.A.), Inc., Commerce City Refinery, Plant 2 (East), Order on Petition Nos. VIII-2022-13 & VIII-2022-14 at 24–25 (July 31, 2023).* 

Here, both sets of Petitioners do not solely make a general claim against the use of AP-42 factors. They note that No. 6 fuel oil is authorized to be stored at the facility and reference the AP-42 Enforcement Alert (Publication no. EPA 325-N-20-001), which states:

One example of a present-day concern is the use of a default vapor pressure value for estimating VOC emissions **from heated tanks** that store heavy refinery liquids such as No. 6 fuel oil. The true vapor pressure (TVP) of a stored liquid is important when calculating the emissions from tanks using the equations in AP-42, Chapter 7, Liquid Storage Tanks. The default vapor pressure is only an estimate and may not be correct for every blend of No. 6 fuel oil. Direct emissions testing of **No. 6 fuel oil tanks** and TVP testing in 2012 and 2013, suggested that in those cases the use of the default vapor pressure in AP-42 had resulted in **emissions estimates that were understated by a factor of 100** for permitting and reporting purposes.

EPA AP-42 Enforcement Alert at 2 (emphasis added).

Because No. 6 fuel oil is authorized to be stored at the facility, whether or not the tanks at the facility are or could be heated is relevant. In its response to comment on this particular topic, TCEQ notes that "all storage tank units at the site operate at ambient temperature." RTC at 8. While this may be an accurate description of the current tanks, it does not address the tanks' ability to be heated or if there is any authorization for heated tanks at the facility. Additionally, Special Condition 17 of NSR Permit No. 6606 indicates that "records of VOC monthly average temperatures are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperature," which could be read to suggest that there are or could be heated tanks at the facility.

For the reasons stated above, both sets of Petitioners have demonstrated that there is insufficient information in the Permit and permit record to establish the storage tanks at the facility are always unheated tanks or only store No. 6 fuel oil at ambient temperature. Therefore the EPA cannot make a determination on the appropriateness of the use of AP-42 emission factors. Accordingly, the EPA grants the request for an objection on this claim.

Direction to TCEQ: TCEQ must amend the Permit or permit record to clarify whether or not the storage tanks purportedly being held at "ambient temperature" are either authorized to be heated or are unheated tanks that have no capability of being heated. If TCEQ finds that the tanks at the facility are able to be heated (i.e., include existing equipment that can heat the tank or its contents), it must provide an explanation for how keeping these storage tanks at ambient temperature is enforceable. If these requirements are not enforceable, TCEQ must provide an explanation for how AP-42 emission factors are appropriate in light of the AP-42 Enforcement Alert stating that VOC emissions from heated tanks storing No. 6 fuel oil are underestimated through the use of AP-42 emission factors. In regards to the EIP Petitioners' assertion that ambient temperatures at Flint Hills are likely to reach the same or higher temperatures as the heated storage tanks referenced in the EPA AP-42 Enforcement Alert, AP-42 may take into consideration factors such as ambient temperature and insulation of tanks in calculating emissions.<sup>21</sup> TCEQ should provide an explanation for how ambient temperatures or other factors at the Flint Hills facility do or do not create concerns when using AP-42 emission factors.

D. Claim 4: The TCHD Petitioners Claim That "Increased health and safety risks due to an oil spill on Christmas Eve 2022 at the site that is affecting local communities."

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<sup>&</sup>lt;sup>21</sup> See Section 7.1.3 of AP-42, Fifth Edition, Volume I Chapter 7: Liquid Storage Tanks (Oct 10, 2024).

**Petition Claim:** The TCHD Petitioners claim that in its response to comments that expressed concerns with adjacent communities' health and safety related to a December 24, 2022 oil spill and Flint Hill's air permit(s) compliance status, TCEQ discussed the site's compliance history (which is determined to be "satisfactory" based on factors in 30 TAC § 60.2), the process for pursuing violations, and concerns related to NSR Permit No.6606 as not part of the title V permit process. TCHD Petition at 13–14 (quoting RTC at 24–25). The TCHD Petitioners assert that TCEQ has failed to consider the regulatory guidance at 30 TAC § 60.4 adopted on July 23, 2022, which allows for a notice of decision to reclassify the compliance history or evaluation of permit applications. TCHD Petition at 14. The TCHD Petitioners quote the regulatory guidance at 30 TAC § 60.4, which reads:

- "(a)... the executive director may designate a site's current compliance history classification 'under review' if the executive director determines that exigent circumstances exist due to an event at the site. The executive director shall make any such designation no later than 90 days after exigent circumstances begin. The designation as "under review" is effective immediately and written notice will be issued to the site's owner and operator, as readily identifiable through agency .... for the purpose of this section, exigent circumstances must include:
- (1) Significant community disruption; (2) emergency response by a federal or state governmental authority to address an actual, unauthorized release of pollutants, contaminants, or other materials regulated by the agency; and (3) the event must have resulted in one or more of the following:
- (A) the issuance of an emergency order by a federal or state governmental authority; .... (C) the use of significant federal or state resources, such as the activation of an incident command system or: (D) an actual, unauthorized release of pollutants, contaminants, or other materials regulated by the agency, which causes:
- (i) the evacuation of off-site persons from homes, places of employment, or other locations; (ii) the sheltering in place by off-site persons in homes, places of employment, or other locations; (iii) the creation of a traffic hazard or interference with normal use of a navigable waterway, railway, or road."

The TCHD Petitioners state that the December 24, 2022 oil spill occurred after the adoption of the 30 TAC § 60.4 regulation, and TCEQ also did not consider the effects of a more recent oil spill at the facility on January 6, 2024, which they state occurred during the title V permitting process. TCHD Petition at 15. The TCHD Petitioners contend that the January 6, 2024 oil spill resulted in effects that TCEQ did not consider to re-evaluate the Permit. *Id.* The TCHD Petitioners claim that the 30 TAC § 60.4 regulations allow for the TCEQ executive director to reclassify a site's compliance history or to evaluate a permit application as that regulation provides that:

"To the extent any permit applications are pending for authorizations at the site, upon the executive director's written Notice of Decision to Reclassify a site's compliance history to "suspended" and until the agency has evaluated the pending permit application in light of the event, unless legally obligated otherwise or the decision is withdrawn or set aside, the agency shall not take action to issue, renew, amend, or modify a permit specific to the site. Based on the evaluation, the agency may: (1) approve the permit; (2) approve the permit with changes, which may include additional protective measures to address conditions that caused or resulted from the event; or (3) deny the permit."

The TCHD Petitioners conclude that because of the history of oil spills at the Flint Hills facility, TCEQ should re-evaluate its approval of the Permit per 30 TAC § 60.4 and consider denying the Permit and/or "strengthening the proposed permitting language to include enhanced monitoring, recordkeeping, and operational maintenance activities." *Id.* at 16.

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

Pursuant to section 505(b)(2) of the CAA, a 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 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)." 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); see also 40 C.F.R. § 70.12(a)(2)(v). Public comments were made regarding concerns with the effects of the oil spill that occurred on December 24, 2022 as well as concerns related to deviation reports, purported violations, and increases in permitted pollutants (see RTC at 15-25).

However, the TCHD Petitioners' argument regarding TCEQ's discretion to rely on 30 TAC § 60.4 to deny or modify the Permit was not raised during the public comment period, and the TCHD Petitioners do not allege that it was impracticable to do so during the public comment period, nor that the grounds for objection arose after the public comment period. Accordingly, it is barred by CAA § 505(b)(2) and 40 C.F.R. §§ 70.8(d) and 70.12(a)(2)(v).

Even if this issue had been raised with reasonable specificity during the public comment period, the TCHD Petitioners have not demonstrated that 30 TAC § 60.4 is an applicable requirement with which the title V permit must assure compliance. Nor is it clear to the EPA that this is an applicable requirement. It does not appear, for example, to be part of the EPA-approved SIP.

Moreover, as the TCHD Petitioners note, under 30 TAC § 60.4, "the executive director may" but is not required to designate a site's current compliance history classification for review. TCHD Petition at 14. The TCHD Petitioners fail to demonstrate that TCEQ's alleged failure to exercise what appears to be a discretionary authority to review Flint Hill's compliance history under 30 TAC § 60.4 has led to a flaw in the title V permit.

For the reasons stated above, the EPA denies TCHD's Petition on this claim.

# V. CONCLUSION

For the reasons set forth in this Order and pursuant to CAA § 505(b)(2) and 40 C.F.R. § 70.8(d), I hereby grant in part and deny in part the Petitions and object to the issuance of the Permit as described in this Order.

Dated: November 14, 2024

Michael S. Regan Administrator