BEFORE THE ADMINISTRATOR UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

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IN THE MATTER OF

OXBOW CALCINING LLC JEFFERSON COUNTY, TEXAS

PERMIT NO. O1493

ISSUED BY THE TEXAS COMMISSION ON ENVIRONMENTAL QUALITY PETITION NO. VI-2020-11

ORDER RESPONDING TO PETITION REQUESTING OBJECTION TO THE ISSUANCE OF TITLE V OPERATING PERMIT

ORDER GRANTING A PETITION FOR OBJECTION TO PERMIT

I. INTRODUCTION

The U.S. Environmental Protection Agency (EPA) received a petition dated October 28, 2020, (the Petition) from the Environmental Integrity Project, Port Arthur Community Action Network, and the Lone Star Chapter of the Sierra Club (the Petitioners), 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 Petition requests that the EPA Administrator object to the proposed operating permit No. O1493 (the Proposed Permit) issued by the Texas Commission on Environmental Quality (TCEQ) to Oxbow Calcining (Oxbow or the facility) in Jefferson County, Texas. The operating 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 referred to as a title V permit or part 70 permit.

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

II. STATUTORY AND REGULATORY FRAMEWORK

A. Title V Permits

Section 502(d)(l) of the CAA, 42 U.S.C. § 766la(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 (December 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. 57 Fed. Reg. 32250, 32251 (July 21, 1992); *see* 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. at 32251. 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.¹ *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

¹ 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*.

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).² Under section 505(b)(2) of the Act, the burden is on the petitioner to make the required demonstration to the EPA.³ 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)).⁴ 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 1130–31.⁵ 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 (August 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).

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

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

³ 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.

⁴ 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)).

⁵ See also Sierra Club v. Johnson, 541 F.3d at 1265–66; Citizens Against Ruining the Environment, 535 F.3d at 678.

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.").⁶ 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).⁷ 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).⁸

Another factor the EPA examines is whether the petitioner has addressed the state or local permitting authority's decision and reasoning. Petitioners are required to 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); *see MacClarence*, 596 F.3d at 1132–33.⁹ 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*.

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) 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

⁶ 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).

 ⁷ 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).
⁸ 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.

⁹ 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 (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 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); 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).

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 making a determination whether to grant or deny the petition. *Id.*

If the EPA grants a title V petition, a permitting authority may address the EPA's objection by, among other things, providing the EPA with a revised permit. *See, e.g.*, 40 C.F.R. § 70.7(g)(4); *see generally* 81 Fed. Reg. 57822, 57842 (August 24, 2016) (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. The permitting authority should determine whether its response is 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 modification 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 (September 14, 2016); *In the Matter of WPSC, Weston*, Order on Petition No. V-2006-4 at 5–6, 10 (December 19, 2007).

III. BACKGROUND

A. The Oxbow Facility

The Oxbow Facility, located in Jefferson County, Texas, is a petroleum coke (pet coke) calcining plant located on a 112-acre waterfront site on the West Turning Basin of the Sabine Neches Ship Canal. The plant produces calcined pet coke which is used to make anodes for the aluminum industry, sized calcined petroleum cokes for the titanium dioxide industry, and other industrial products. The majority of these products are loaded onto vessels for export throughout the world. However, some products may be loaded into railcars and/or trucks for shipment to domestic locations.

Raw petroleum coke is delivered to the Oxbow Facility by railcar, barge, ship, and truck. The raw pet coke is sized by screening to less than twelve (12) inch lump size and transferred to stockpiles by belt conveyors and radial stackers. Frontend loaders retrieve the pet coke from the stockpiles and deposit it into hoppers. The hoppers then discharge the pet coke onto a belt conveyor system for transfer to a crusher for final sizing; the pet coke then arrives at silos adjacent to each process kiln. The feed material is then blended from the silos and transferred to the kilns on a belt conveyor system. The plant is equipped with four rotary kilns that calcine the raw pet coke at a temperature range of 2,200°F to 2,700°F. The calcined coke is then cooled to about 375°F in rotary coolers using quench water. The calcined coke is transferred to storage using covered conveyors or pneumatic transport. Covered conveyors then transfer the calcined coke from the storage silos to ships for transport. The process utilizes conventional distillate technology. The facility is a major source of sulfur dioxide (SO₂), particulate matter (PM), nitrous oxides (NO_X), hazardous air pollutants (HAPs), hydrochloric acid (HCl), and hydrogen flouride (HF).

EPA conducted an analysis using EPA's EJScreen¹⁰ to assess key demographic and environmental indicators within a five-kilometer radius of the Oxbow Facility. This analysis showed a total population of approximately 2,719 residents within a five-kilometer radius of the facility, of which approximately 97 percent are people of color and 60 percent are low income. In addition, the EPA reviewed the EJScreen Environmental Justice Indices, which combine certain demographic indicators with eleven environmental indicators. All twelve environmental justice (EJ) indices in this five-kilometer area exceed the 50th percentile for the State of Texas, with the Hazardous Waste Proximity and Lead Paint indices exceeding the 80th percentile and the Risk Management Plan Facility Proximity index exceeding the 90th percentile.

B. Permitting History

Oxbow submitted an application for a title V permit renewal on March 5, 2018. TCEQ published notice of the draft permit and Statement of Basis on June 18, 2019, subject to a 30-day public comment period. A public hearing was held on November 14, 2019. Per a letter dated July 10,

¹⁰ EJSCREEN is an environmental justice mapping and screening tool that provides EPA with a nationally consistent dataset and approach for combining environmental and demographic indicators; *see* <u>https://www.epa.gov/ejscreen/what-ejscreen</u>.

2020, TCEQ transmitted the Proposed Permit, along with its Response to Comments (RTC), to the EPA for its 45-day review. The EPA's 45-day review period began on July 14, 2020, and ended on August 28, 2020, during which time the EPA did not object to the Proposed Permit. TCEQ issued the final title V permit for the Oxbow facility on September 9, 2020.

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 August 28, 2020. Thus, any petition seeking the EPA's objection to the Proposed Permit was due on or before October 28, 2020. The Petition was received October 28, 2020, and, therefore, the EPA finds that the Petitioners timely filed the Petition.

D. 2010 1-Hour Sulfur Dioxide (SO₂) National Ambient Air Quality Standard (NAAQS) Implementation

National 2010 1-Hour SO₂ NAAQS Implementation

The Administrator signed a final rule under CAA § 109 revising the primary SO₂ NAAQS on June 2, 2010 (2010 1-hour SO₂ NAAQS). The rule was published in the Federal Register on June 22, 2010, 75 Fed. Reg. 35520, and became effective on August 23, 2010. Based on the Administrator's review of the air quality criteria for oxides of sulfur and the primary NAAQS for oxides of sulfur as measured by SO₂, the EPA revised the primary SO₂ NAAOS to provide requisite protection of public health with an adequate margin of safety. Specifically, the EPA established a new 1-hour SO₂ standard at a level of 75 parts per billion (ppb), which is met at an ambient air quality monitoring site when the 3-year average of the annual 99th percentile of daily maximum 1-hour average concentrations is less than or equal to 75 ppb, as determined in accordance with Appendix T of 40 C.F.R. part 50. 40 C.F.R. § 50.17(a)-(b). The EPA also established provisions to revoke both the existing 24-hour and annual primary SO₂ standards following designation of areas under the 1-hour NAAQS, subject to certain conditions. 40 C.F.R. § 50.4(e). The 2010 1-hour SO₂ NAAQS was challenged by certain industry and state litigants, and these challenges were fully rejected by the U.S. Court of Appeals for the District of Columbia. See National Environmental Development Association's Clean Air Project v. EPA, 686 F.3d 803 (D.C. Cir. 2012).

After the EPA promulgates a new or revised NAAQS, the EPA is required to designate all areas of the country as either "nonattainment," "attainment," or "unclassifiable," for that NAAQS pursuant to section 107(d)(1) of the CAA. Section 107(d)(1)(A)(i) of the CAA defines a nonattainment area as "any area that does not meet (or that contributes to ambient air quality in a nearby area that does not meet) the national primary or secondary ambient air quality standard for the pollutant." If an area meets this definition, then the EPA is obligated to designate the area as "nonattainment." Section 107(d)(1)(A)(ii) defines an attainment area as any area other than a nonattainment area that meets the NAAQS, and section 107(d)(1)(A)(iii) defines an unclassifiable area as any area that cannot be classified on the basis of available information as meeting or not meeting the NAAQS.

After the EPA promulgates or revises a NAAQS, states are directed by CAA § 110(a)(1) to submit to the EPA, no later than three years after promulgation of the NAAQS, plans that implement, maintain and enforce the NAAQS. These state implementation plans (SIPs) are required for all states, regardless of whether the EPA has formally designated areas within the state, and are commonly called "infrastructure SIPs" since they reflect the basic elements, specified in CAA § 110(a)(2), that all SIPs must contain. These elements include, among others, enforceable emission limitations, monitoring and modeling provisions, enforcement and new source review programs, provisions to prohibit interstate pollution causing NAAQS violations in downwind states, adequate governmental capacity and authority, and provisions to address imminent and substantial endangerment.

In addition, for any areas designated as nonattainment under the SO₂ NAAQS, within 18 months of such designation, the CAA directs states to develop and submit SIPs that meet the requirements of sections 172(c) and 191–192 of the CAA. These SIPs must provide for attainment of the NAAQS as expeditiously as practicable, but not later than five years from the effective date of the nonattainment designation. These SIPs must provide for implementation of all reasonably available control measures, including emission reductions from existing sources in the area as may be obtained through the adoption of reasonably available control technology, and they must require reasonable further progress towards attainment. Moreover, the SIPs for nonattainment areas must include a comprehensive, accurate, and current inventory of actual emissions from all sources in the nonattainment area, along with a permit program for new and modified major sources that requires emissions offsets. The SIP must include enforceable emission limitations and other control measures as necessary and appropriate to provide for attainment, as well as contingency measures that will take effect without further action by the state in the event the area fails to attain on time.

The EPA published the first round of SO₂ designations for the 2010 1-hour SO₂ NAAQS for 29 areas on August 5, 2013. 78 Fed. Reg. 47191. Industry challenges to the first round of designations were rejected by the U.S. Court of Appeals for the D.C. Circuit in *Treasure State Resource Industry Association v. USEPA*, 805 F.3d 300 (D.C. Cir. 2015). The EPA then issued a second round of SO₂ designations for 65 areas on July 12, 2016, 81 Fed. Reg. 45039, and December 13, 2016, 81 Fed. Reg. 89870. The EPA issued the third round of SO₂ designations on January 9, 2018, 83 Fed. Reg. 1098. The Round 4 2010 SO₂ NAAQS designations were published on March 26, 2021, 86 Fed. Reg. 16055.

2010 1-hour SO2 NAAQS Implementation in Texas

Jefferson County, Texas, which is where the Oxbow facility is located, was designated as attainment/unclassifiable effective April 30, 2021, in Round 4. *See* 86 Fed. Reg. 16055 (March 26, 2021), codified at 40 C.F.R. 81.344. Consequently, all three of the primary SO₂ NAAQS at 40 C.F.R. 50.4 and 50.17 apply in the area, but pursuant to 40 C.F.R. 50.4(e) the two 1971 primary SO₂ NAAQS were revoked for the area as of April 30, 2022. The state is thus currently not subject to the CAA §§ 172 and 191–192 requirements to develop a SIP applicable to that area to bring any nonattainment area into attainment of the 2010 1-hour SO₂ NAAQS. However,

Texas's infrastructure SIP under CAA § 110(a) is applicable statewide to the extent approved by the EPA, including in the area containing the Oxbow Facility.¹¹

In 2016, TCEQ proposed a location for an SO₂ monitor approximately 1,500 meters (0.93 miles) north of the Oxbow Facility.¹² The EPA subsequently reviewed the 2016 Annual Monitoring Plan and approved the SO₂ monitoring location at West 7th Street, Valero Port Arthur Gate 2 in Port Arthur, Jefferson County, Texas.¹³ This monitor has been operating since September 30, 2016, under Texas continuous air monitoring station number 1071 and EPA's Air Quality System number 482451071.¹⁴

IV. DETERMINATIONS ON CLAIMS RAISED BY THE PETITIONERS

Claim A: The Petitioners Claim That "The Proposed Permit Fails to Include Monitoring and Recordkeeping Provisions Sufficient to Ensure Compliance with Sulfur Dioxide National Ambient Air Quality Standards"

Petitioners' Claim: The Petitioners claim that the proposed permit does not contain adequate monitoring, recordkeeping, and reporting provisions to assure compliance with the 2010 SO₂ NAAQS, which the Petitioners claim is an applicable requirement as incorporated into the Texas SIP. Petition at 6 (citing Texas Administrative Code (TAC) §§ 101.3, 101.21, 116.115(b)(2)(H)(i); 40 C.F.R.§ 50.17(a); and Texas Health & Safety Code § 382.085(b)). Specifically, the Petitioners claim that the proposed permit does not assure compliance with General Condition 13 and Special Condition 25 of NSR Permit No. 45622 (General Condition 13 and Special Condition 25), which are incorporated into the title V permit. *Id.* Further, the Petitioners claim that the various hourly and annual SO₂ emission limits and associated monitoring, recordkeeping, and reporting in the permit cannot assure compliance with ambient levels of SO₂ like the NAAQS. *Id.* at 9.

The Petitioners assert that General Condition 13 prohibits Oxbow from causing air pollution pursuant to the Texas-approved SIP requirement Texas Health & Safety Code § 382.085. *Id.* The Petitioners claim that the 2010 SO₂ NAAQS meets the definition of air pollution in the Texas SIP under Texas Health & Safety Code § 382.003(3) because the NAAQS were set "to prevent injurious or adverse effects from SO₂ exposure to human health and welfare, including sensitive populations including children, the elderly, and people with asthma, with a margin for error." *Id.* at 6–7. Further, the Petitioners contend that an exceedance of the 2010 SO₂ NAAQS constitutes air pollution under the approved SIP. *Id.* at 7. In addition, the Petitioners contend that Special Condition 25 "prohibits violations of allowable emission rates or other standards, such as the NAAQS, and includes a non-exhaustive list of corrective measures to be taken in the event of a violation." *Id.* at 6.

¹¹ Various portions of Texas's infrastructure SIP for the 2010 1-hour SO₂NAAQS were approved on January 11, 2016. *See* 81 Fed. Reg. 1127.

¹² TCEQ 2016 Annual Monitoring Plan at (June 29, 2016).

 ¹³ Letter from Mark Hanse, Acting Associate Director, U.S. EPA to Richard C. Chism, TCEQ (October 27, 2016).
¹⁴ For more information, *see*

https://www17.tceq.texas.gov/tamis/index.cfm?fuseaction=report.view_site&formSub=1&showActiveOnly=1&showActiveInly=1&siteID=1232.

Petitioners contend that TAC §§ 101.3, 101.21, 116.115(b)(2)(H)(i); 40 C.F.R.§ 50.17(a), and Texas Health & Safety Code § 382.085(b) are "applicable requirements" of the CAA and that violations of the 2010 SO₂ NAAQS are violations of the permit terms in General Condition 13 and Special Condition 25. In support of this argument, Petitioners cite to a 2019 Agreed Order between TCEQ and Oxbow, in which TCEQ asserted one allegation against Oxbow that it had violated these state and federal regulations and conditions by causing an exceedance of the NAAQS at the nearby monitoring station, Continuous Ambient Monitoring Station 1071. *Id.* at 10–11 (citing *In the Matter of an Enforcement Action Concerning Oxbow Calcining LLC*, TCEQ, 2 (August 14, 2019) ("2019 Agreed Order")). The 2019 Agreed Order states that Oxbow denied this allegation. However, Oxbow agreed to pay assessed financial penalties and agreed to certain technical requirements and certifications of compliance.

The Petitioners acknowledge that the NSR and title V permits include numerous terms and conditions related to SO₂ emissions; however, the Petitioners claim that these limits "assure compliance only with hourly and annual emission limits from specific emission points, not ambient levels of SO₂ like those in the NAAQS." *Id.* at 9. The Petitioners claim that annual testing and recordkeeping of feed rate and sulfur content of fuel in order to assure compliance with these emission limits does not demonstrate ongoing compliance with the NAAQS. *Id.*

In addition, the Petitioners assert that the title V permit does not contain any "condition requiring air quality monitoring or air quality modeling" related to the Continuous Ambient Monitoring Station 1071 near the facility that was installed as a result of the SO₂ Data Requirements Rule. *Id.* (citing 79 Fed. Reg. at 27446 (May 13, 2014)).

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

Relevant Permit and Agreed Order Terms

General Condition 13 states:

Emissions from this facility must not cause or contribute to "air pollution" as defined in Texas Health and Safety Code (THSC) § 382.003(3) or violate THSC § 382.085. If the executive director determines that such a condition or violation occurs, the holder shall implement additional abatement measures as necessary to control or prevent the condition or violation.

Special Condition 25¹⁵ states:

If this permitted facility or any portion of it exceeds any of the applicable allowable emission rates or other standards, the holder of this permit must take immediate corrective action to comply with the applicable standards and record the event. These actions may include (but are not limited to) reducing operating

¹⁵ Note that Special Condition 25 existed in the February 28, 2019 version of NSR Permit No. 45622. The Final Title V Permit incorporates the October 30, 2019 version of NSR Permit No. 45622. In that version of the NSR Permit, Special Condition 25 is now Special Condition 24.

temperature, reducing throughput, and the installation of additional control equipment. These corrective actions shall not be considered complete until compliance with the allowable emission rates and/or other standards has been demonstrated. Demonstration may include testing.

The 2019 Agreed Order explains the alleged violation by Oxbow as follows:

During a record review conducted on October 24, 2018 through October 25, 2018, an investigator documented that the Respondent failed to comply with the national primary one hour annual ambient air quality standard for SO₂, in violation of 30 TEX. ADMIN. CODE §§ 101.21, 116.115(b)(2)(H)(i) and (c), and 122.143(4), 40 CODE OF FEDERAL REGULATIONS § 50.17(a), New Source Review ("NSR") Permit No. 45622, General Conditions No. 13 and Special Conditions No. 25, Federal Operating Permit No. 01493, General Terms and Conditions and Special Terms and Conditions No. 8, and TEX. HEALTH & SAFETY CODE § 382.085(b). Specifically, the Respondent exceeded the national primary one-hour annual ambient air quality standard for SO₂ of 75 ppb at the TCEQ Continuous Ambient Monitoring Station 1071 by an average of 16.16 ppb for two hours on January 10, 2017, one hour on February 11, 2017, one hour on March 7, 2017, one hour on April 2, 2017, two hours on May 3, 2017, and one hour on May 26, 2017.

Id. at 2.

TCEQ's Response

In response to public comments, TCEQ generally explained that the title V permit contained SO₂ emission limits in the NSR Maximum Allowable Emissions Rate Table (MAERT), as well as monitoring requirements to assure compliance with those limits. RTC at 30–32. Further, TCEQ clarified that the Port Arthur Area, in which Oxbow is located, is in attainment with the NAAQS. *Id.* at 31. Finally, TCEQ explained that individual facilities are not subject to the SO₂ NAAQS and that the Beaumont Port Arthur area was designated as attainment. *Id.*

EPA Analysis

The Petitioners have demonstrated that the record is inadequate for EPA to determine if the title V permit contains adequate monitoring, recordkeeping, and reporting to assure compliance with General Condition 13 and Special Condition 25 of NSR Permit No. 45622 with regard to SO₂. In previous orders, EPA has determined that the NAAQS themselves are not applicable requirements and that general SIP requirements related to the NAAQS do not generally require monitoring, recordkeeping, and reporting for individual facilities.¹⁶ However, EPA has also granted petitions where the state record does not explain how applicable requirements such as

¹⁶ In the Matter of Marcal Paper Mills, Inc., Order on Petition No. II2006-001 at 13 (November 30, 2006); In the Matter of Public Service of New Hampshire, Schiller, Order on Petition No. VI-2014-04 at 6 (July 28, 2015) (2015 Schiller Order); In the Matter of EME Homer City Generation LP, et al., Order on Petition No. III-2012-06, III-2012-07, and III-2013-02 at 11, 19 (July 30, 2014) (2014 Homer City Order).

elements of the state's SIP relating to the NAAQS are implemented in the title V permit.¹⁷ In this case, the Petitioners have demonstrated that TCEQ appears to view General Condition 13 and Special Condition 25 of NSR Permit No. 45622 as permit conditions that that can be violated if an off-site monitor shows an exceedance, and can result in enforcement actions. Specifically, the 2019 Agreed Order between TCEQ and Oxbow was premised upon a number of exceedances of the 75 ppb level of the 1-hour 2010 SO₂ NAAQS at the Continuous Ambient Monitoring Station 1071, and General Condition 13 and Special Condition 25 formed part of the basis of TCEQ's enforcement action. *See* 2019 Agreed Order at 2.

Although TCEQ explained that the NAAQS themselves do not apply to individual sources, TCEQ did not address General Condition 13 and Special Condition 25. Neither the RTC nor the permit record explain the discrepancy between the current permit record and the 2019 Agreed Order. While the permit record states that no monitoring, recordkeeping, and reporting is necessary to assure that the facility does not violate General Condition 13 and Special Condition 25, the 2019 Agreed Order assessed penalties against Oxbow for violating General Condition 13 and Special Condition 25 because Monitoring Station 1071 showed multiple exceedances of the NAAQS. Based on this information, the Petitioners have demonstrated that General Condition 13 and Special Condition 25 appear to be permit conditions that can be violated by Oxbow if an offsite air monitor records an exceedance. Because General Condition 13 and Special Condition 25 are applicable requirements of the title V permit, the permit should include sufficient monitoring, recordkeeping, and reporting. Therefore, EPA is granting the Petitioners' claim.

Direction to TCEQ

TCEQ should explain how the title V permit assures compliance with General Condition 13 and Special Condition 25 of NSR Permit 45622. While EPA agrees with TCEQ that the SO₂ NAAQS is not an applicable requirement for individual facilities, TCEQ appears to have determined that Oxbow has previously violated General Condition 13 and Special Condition 25 by causing an exceedance of the NAAQS at an off-site monitoring location. TCEQ should explain the apparent inconsistency between its interpretation of these conditions in the RTC and the basis of its alleged violation of these condition 25 such that TCEQ and the public may bring an enforcement action against a source for causing an exceedance of the NAAQS (as done in the 2019 Agreed Order), then one would generally expect that the title V permit must contain adequate monitoring, recordkeeping, and reporting to assure compliance with General Condition 13 and Special Condition 25 as applicable requirements. On the other hand, if the 2019 Agreed Order is not consistent with TCEQ's interpretation of these provisions, TCEQ should provide the interpretation on the record and explain the discrepancy.

¹⁷ 2015 Schiller Order at 8–11; In the Matter of Duke Energy LLC, Roxboro, Order on Petition No. IV-2016-07 at 10–15 (June 30, 2017); In the Matter of Duke Energy LLC, Asheville, Order on Petition No. IV-2016-06 at 11–17 (June 30, 2017).

Claim B: The Petitioners Claim That "The Permit Fails to Establish Monitoring, Testing, and Recordkeeping Provisions that Assure Compliance with Lead and Volatile Organic Compound Limits from Kiln Stacks 2, 3, 4, and 5 in NSR Permit No. 45622."

The Petitioners claim that the title V permit does not assure compliance with lead (Pb) and VOC limits in NSR Permit No. 45622 because it does not include specific monitoring for these requirements as required by 42 U.S.C. § 7661c(a), (c); 40 C.F.R. § 70.6(a)(3), (c)(1). Petition at 11–16. Specifically, the Petitioners assert that the title V permit only contains initial stack testing requirements to assure compliance with Pb and VOC emission limits for Kiln stacks 2, 3, 4, and 5, and does not contain monitoring, recordkeeping, and reporting to assure ongoing compliance. *Id.* at 13.

The Petitioners contend that the permit contains ongoing testing requirements for all other pollutants in the permit, except for Pb and VOCs. *Id.* at 13. The Petitioners claim that the permit contains annual stack testing requirements in Special Condition 30 for NO_x, carbon monoxide (CO), SO₂, HCl, HF, as well as stack sampling procedures for sulfur trioxide and PM limits in Special Condition 36. *Id.* The Petitioners contend that the permit does not, however, contain any annual stack testing or sampling procedures for the Pb and VOC limits. *Id.* Further, the Petitioners assert that Special Condition 41 contains recordkeeping requirements to assure compliance with the hourly and annual Pb and VOC limits. *Id.*

In rebuttal to TCEQ's response to comments, the Petitioners acknowledge that TCEQ cited to the title V special condition 10 and NSR Permit No. 45622 Special Condition 41 as recordkeeping requirements to assure compliance with Pb and VOC limits. *Id.* at 14. However, the Petitioners claim that that these provisions contain a "laundry list" of options that are "so vague as to be meaningless." *Id.* The Petitioners also acknowledge that TCEQ cited to opacity limits and compliance requirements in Special Conditions 4, 5, 6, and 7 of NSR Permit No. 45622 for assuring compliance with the Pb and VOC limits. *Id.* at 15. The Petitioners contend that the permit record does not explain how the opacity provisions or the general recordkeeping provisions assure compliance with the Pb and VOC limits. *Id.*

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

Relevant Permit Terms and Conditions

Special Condition 15 states:

The permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR.

Final Permit at 8.

Special Condition 10 states:

The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) (including the permits by rule identified in the PBR Supplemental Tables in the application) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative of the emission unit's compliance with the PBR or Standard permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, safety data sheets (SDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144. Any monitoring or recordkeeping data indicating noncompliance with the PBR or Standard Permit shall be considered and reported as a deviation according to 30 TAC § 122.145 (Reporting Terms and Conditions).

Final Permit at 9.

Special Condition 41¹⁸ states:

Records shall be maintained at this facility site and made available at the request of personnel from the TCEQ or any other air pollution control program having jurisdiction to demonstrate compliance with permit limitations. These records shall be totaled for each calendar month, retained for a rolling 60-month period, and include the following: (6/13)

A. Hourly and annual petroleum coke usage rates (including blended sulfur content) in tons;

B. Seven-day rolling average blended raw feed sulfur content;

C. Seven-day rolling average SO₂ emission rate based on daily production in tons per hour;

D. Confidential Addendum dated November 21, 2011; (11/11)

E. Shutdown, malfunctions in the process, and malfunctions of any air pollution abatement equipment;

F. Hourly additive usage based on a 30-day usage divided by hours operated during the 30-day period and the annual additive usage;

G. Records of site-wide unloading of raw coke and load-out of calcined coke in tons;

H. Observations for visible emissions and/or opacity determinations required by Special Condition No. 4, 5, 6 and 7 and actions taken; and (9/10)

¹⁸ Note that Special Condition 41 existed in the February 28, 2019, version of NSR Permit No. 45622. The Final Title V Permit incorporates the October 30, 2019, version of NSR Permit No. 45622. In that version of the NSR Permit, Special Condition 41 is now Special Condition 38.

I. Records of materials used that have the potential to emit HCl shall be kept in sufficient detail in order to allow all required emission rates to be fully and accurately calculated. Using this recorded data, a report shall be produced for the emission of HCl (in tons per year) over the previous 12 consecutive months. The required records shall be kept with examples of the method of data reduction including units, conversion factors, assumptions, and the basis of the assumptions. (9/10)

J. The description of the heavy material handling activities; and the estimated quantity of heavy material handled on an hourly and annual throughput basis in tons per time and the control method utilized; (9/13)

K. The description of the refractory removal activities; and the estimated quantity of refractory removed on an hourly and annual throughput basis in tons per time and the control method utilized; (9/13)

L. The number of dust collector replacements from baghouses on annual basis; and (9/13)

M. The description of the vacuum truck loading activities; the quantity of vacuum truck liquids loading in barrels summed on a rolling twelve-month basis; and the monthly and rolling twelve months hours of operation from vacuum truck solids loading. (9/13)

NSR Permit No 45622.

TCEQ's Response

In responding to comments regarding the issues raised in these claims, TCEQ stated, in part:

The maintenance of records, whether emission calculations, fuel content information, or some other relevant information such as record listed in Special Term and Condition 10 of the Draft Permit, may be sufficient periodic monitoring for certain emission units, and applicable requirements. For example, record keeping of required work practices, pollutant content of fuel or raw material, and inspections of design or equipment specifications may satisfy periodic monitoring depending on the applicable requirements and the type of emission units.

RTC at 31.

Next, TCEQ explained:

Special Condition 41 in the NSR Permit No. 45622 requires recordkeeping (and hence monitoring) of all materials used (e.g., production rate measured in tons per hour) as input to enable calculation of all emission rates as required in NSR permit 45622. Verification of compliance with SO₂ emission limits is based on the equation shown in Special Term 12. Special Conditions 4, 5, 6 and 7 require observation for visible emissions on a daily basis and if visible emissions exceed threshold criteria then taking corrective action to eliminate the source of the excessive emissions. Special Condition 9 limits the hourly and annual production

rates to limit the pollutant emission rates. Special Conditions 29 and 30 requires stack sampling and/or other testing to demonstrate compliance with the MAERT and with emission performance levels as specified in the special conditions and/or otherwise prove satisfactory equipment performance.

RTC at 32.

Further, TCEQ stated:

With the exception of any emission units listed in the Periodic Monitoring (PM) or CAM Summaries in the FOP, the ED has determined that the Draft Permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements.

RTC at 31.

TCEQ also explained that the monitoring for all pollutants raised in the comments, including Pb and VOCs, was contained in the NSR permits, the SIP regulations TAC Chapters 111, 112, 115 and 117, and the applicable NSPS and NESHAPs. RTC at 31.

EPA Analysis

The Petitioners have demonstrated that the title V permit does not contain adequate monitoring, recordkeeping, and reporting to assure compliance with the hourly and annual Pb and VOC emission limits in NSR Permit No. 45622. Specifically, the Petitioners have demonstrated that the title V permit does not specify any monitoring, recordkeeping, or reporting specifically designed to assure compliance with the Pb and VOC emission limits in NSR Permit No. 45622 as incorporated into the title V permit. While TCEQ cites to the general monitoring, recordkeeping, and reporting conditions in title V permit Special Condition 10 and Special Condition 41 of the NSR Permit No. 45622, the Petitioners have demonstrated that the general list of recordkeeping provisions in these conditions is not sufficient to assure compliance with the hourly and annual Pb and VOC limit. While Special Condition 41 contains many specific requirements for recordkeeping, such as fuel consumption, the permit record does not provide any confirmation of what recordkeeping requirements in Special Condition 41 specifically assure compliance with the hourly and annual Pb and VOC limits. Further, the permit and permit record do not provide any further requirements to explain how something like fuel usage is used to assure compliance with the hourly and annual Pb and VOC limits. Finally, TCEQ statements that the various SIP requirements, NSPS, NESHAPs, and NSR permits contain sufficient monitoring, recordkeeping, and reporting when developed does not absolve TCEQ of the requirement under title V to evaluate the monitoring, recordkeeping, and reporting in the underlying applicable requirements and supplement that monitoring as necessary. See 40 C.F.R. § 70.6(a), (a)(3), (c).

It is TCEQ's responsibility, as the title V permitting authority, to ensure that the title V permit "set[s] forth" monitoring sufficient to assure compliance with all applicable requirements. 42

U.S.C. § 7661c(c); *see id.* § 7661c(a); 40 C.F.R. § 70.6(a), (a)(3), (c); 30 TAC 122.142(c).¹⁹ Because the Permit does not specify or clearly reference any particular monitoring or recordkeeping requirements for Pb and VOCs, neither the public nor the EPA can ascertain from the permit what monitoring or recordkeeping methodology the source has elected to use, or whether this methodology is sufficient to assure compliance with all applicable requirements. This effectively prevents both the public and the EPA from determining if the chosen monitoring, recordkeeping, and reporting satisfies CAA requirements. *See* 42 U.S.C. § 7661(c); *see also* 40 C.F.R.§ 70.6(a)(3).

Therefore, the Petitioners have demonstrated that the permit does not contain adequate monitoring, recordkeeping, and reporting requirements to assure compliance with the hourly and annual Pb and VOC emission limits.

Direction to TCEQ:

TCEQ must ensure that the title V permit includes monitoring, recordkeeping, and reporting sufficient to assure compliance with the hourly and annual Pb and VOC emission limits under NSR Permit No. 45622. If part of this monitoring, recordkeeping, and reporting is based on other requirements to which Oxbow is subject (whether in EPA regulations, the Texas SIP, or a different permit issued by TCEQ), the title V permit must specifically identify these requirements as the means by which Oxbow will demonstrate compliance with the emission limits in NSR Permit No. 45622. In addition, if part of this monitoring protocol is based on representations in a permit application, like emission calculations based on continuous recordkeeping of fuel usage, TCEQ must appropriately incorporate those representations into a permit document by specifying the version or date of the application and the specific location of the representations. TCEQ could either make these revisions directly to Oxbow's title V permit, or it could add any necessary monitoring, recordkeeping, and reporting to NSR Permit No. 45622 and then promptly revise the title V permit to incorporate the updated version of that permit. In either case, the title V permit must ultimately contain the necessary monitoring, recordkeeping, and reporting, recordkeeping, and reporting to NSR Permit No.

¹⁹ 42 U.S.C. § 7661c(a) ("Each permit issued under [title V of the CAA] shall *include* . . . such other conditions as are necessary to assure compliance with applicable requirements of this chapter, including the requirements of the applicable implementation plan."), 7661c(c) ("Each permit issued under [title V of the CAA] shall *set forth* . . . monitoring and reporting requirements to assure compliance with the permit terms and conditions."); 40 C.F.R. § 70.6(a) ("Each permit issued under this part shall *include* . . ."), 70.6(a)(3)(i) ("Each permit shall *contain* the following requirements with respect to monitoring: . . ."); 70.6(c) ("All part 70 permits shall *contain* the following with respect to compliance: . . testing, monitoring, reporting, and recordkeeping requirements sufficient to assure compliance with the applicable data from the relevant time period that are representative of the emission unit's compliance with the applicable requirement, and testing, monitoring, reporting, or recordkeeping sufficient to assure compliance with the applicable requirement.") (all emphasis added).

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 grant the Petition as described above.

Dated: _____ JUN 1 4 2022

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Michael S. Regan Administrator