



1206 San Antonio St.
Austin, TX 78701
Phone: (512) 316-7194
www.environmentalintegrity.org

March 14, 2023

Ms. Cecilia Mena
Office of Legal Services
Texas Commission on Environmental Quality (MC 205)
Post Office Box 13087
Austin, Texas 78711-3087

via electronic filing

RE: Public Comments Concerning the Texas Commission on Environmental Quality's Quadrennial Review of its Chapter 106 Permit by Rule Regulations, Non-Rule Project Number 2023-024-106-AI

Dear Ms. Mena:

Citizens for Clean Air and Clean Water of Freeport and Brazoria County, Citizens Alliance for Fairness and Progress, Hillcrest Residents Association, Air Alliance Houston, Texas RioGrande Legal Aid, Sierra Club, the Environmental Integrity Project, Earthjustice, and Public Citizen ("Commenters") appreciate this opportunity to submit comments on the Texas Commission on Environmental Quality's ("TCEQ") quadrennial review of its Chapter 106 Permit by Rule ("PBR") regulation.

I. INTRODUCTION

The purpose of the TCEQ's Chapter 106 regulations is to provide a streamlined permitting process for certain types of facilities and changes to facilities that the Commission has determined "will not make a significant contribution of air contaminants to the atmosphere[.]" 30 Tex. Admin. Code § 106.1. The kinds of facilities and changes that may be authorized by PBR are described by regulations in Chapter 106, Subchapters C through X.¹ Each of these subchapters covers a category of facilities and/or projects and contains one or more PBR. Chapter 106, Subchapter A establishes general requirements, including maximum emission limits for PBR eligibility, 30 Tex. Admin. Code § 106.4, generic recordkeeping requirements that apply to all PBR projects, *id.* § 106.8, and provide operators with the option of requesting source-specific emission limits for purposes of avoiding potentially-applicable federal requirements. *Id.* § 106.6.

¹ These comments will use the term "PBR" to refer to standard exemptions as well as PBRs. Provisions of the Texas Health and Safety Code authorizing the TCEQ to promulgate its Chapter 106 regulations distinguish between standard exemptions—used to authorize changes to existing facilities—and PBRs, which are used to authorize construction of new facilities. Tex. Health & Safety Code §§ 382.05196(a), 386.057(a). The TCEQ has determined that standard exemptions codified in Chapter 106 *are* also PBRs. 30 Tex. Admin. Code § 106.13. While following the TCEQ's convention, Commenters do not necessarily agree that the Chapter 106 regulations, which do not distinguish between PBRs and standard exemptions comply with the Texas Legislature's directives.

EPA approved the TCEQ's Chapter 106, Subchapter A regulations into the Texas State Implementation Plan ("SIP") based on its determination that the TCEQ would apply those regulations to limit PBR eligibility to "construction of certain small sources" that the TCEQ as determined "will not make a significant contribution of air contaminants to the atmosphere." *Approval and Promulgation of Implementation Plans; Texas; Revisions to Regulations for Permits by Rule, Control of Air Pollution Permits for New Construction or Modification, and Federal Operating Permits*, 68 Fed. Reg. 64543, 64,544 (November 14, 2003). Though it is not directly required by Texas's Subchapter A regulations, EPA also presumed that PBRs established using the Subchapter A regulations would be clearly and narrowly defined such that public notice and opportunity to comment on each PBR at the time it was created would satisfy 40 C.F.R. § 51.161 "which requires the permitting authority to provide for opportunity for public comment on the State's analysis of the effect of construction or modification on ambient air quality." *Id.* at 65,545.

The TCEQ's Chapter 106 regulations, however, wholly fail to constrain PBR eligibility to insignificant facilities and changes to facilities. EPA was wrong in its determination that Texas's Chapter 106 regulations would only apply to "certain small sources." Instead, the Texas PBR program is used and abused to authorize significant emissions increases at major industrial complexes; PBRs impermissibly avoid public notice and comment opportunities supposedly guaranteed by 40 C.F.R. § 51.161; and the Subchapter A regulations are insufficient to ensure that PBR projects do not cause or contribute to significant deterioration of air quality, including violations of National Ambient Air Quality Standards ("NAAQS").

In practice, Texas's PBR program has been used by the largest sources of pollution across the state to authorize projects resulting in significant emissions increases, circumvention of preconstruction permitting requirements for significant projects, and is likely driving continuing violations of NAAQS for ozone in the Houston, Galveston Brazoria ("HGB") severe nonattainment area and for ozone and causing violations of the sulfur dioxide NAAQS in the Permian Basin.

These comments cite, *inter alia*, the following documents regarding TCEQ's Chapter 106 regulations, which are attached or linked and incorporated by reference into these comments:

- Letter to Earthea Nance, Administrator, EPA Region 6 from Ilan Levin, Associate Director, Environmental Integrity Project, Re: Unhealthy Air Quality in the Permian Basin ("Ozone Letter"), dated February 14, 2023;²
- (Attachment A) Letter to Erica Hauk, Project Director, Office of Inspector General, from Gabriel Clark-Leach, Senior Attorney, Environmental Integrity Project, dated January 24, 2020;
- Letter to Lawrence Starfield, Acting Assistant, Office of Enforcement and Compliance Assurance, EPA from Gabriel Clark-Leach, Senior Attorney,

² Available electronically at: https://environmentalintegrity.org/wp-content/uploads/2023/02/Unhealthy-Levels-of-Ozone-Persist-in-the-Permian-Basin_Letter-to-USEPA_Feb14.2023.pdf

Environmental Integrity Project, Re: Repeated Violations of Texas Permit by Rule Requirements by Permian Basin Source (“Permian Letter”), dated March 31, 2021;³ and

- Petition for Reconsideration of Air Quality Designation for Ector County, Texas for the 2010 Sulfur Dioxide Primary National Ambient Air Quality Standard—Round 3; Final Rule, EPA-HQ-OAR-2017-0003; FRL-9972-73-OAR (“SO₂ Petition”), dated October 22, 2020.⁴

These comments address specific problems with the TCEQ’s Chapter 106 regulations, which the Commission should correct as part of its quadrennial review. Changes to ensure that PBRs are not be used to circumvent more stringent preconstruction permitting requirements or to authorize cumulatively significant emission increases without any public participation and a thorough impacts analysis will improve public health, will facilitate economic growth by hastening attainment with federal health-based NAAQS and the lifting of stringent pollution control requirements that apply to sources in nonattainment areas, and will make emission limits clearer and easier to enforce. These changes will also help reduce the disproportionate harms of the TCEQ’s flawed permitting system on communities of color and economically underprivileged populations. Commenters recommend specific changes the TCEQ should make to its Chapter 106 regulations to resolve these issues in the Conclusion below.

II. COMMENTERS

Citizens for Clean and Clean Water is a nonprofit organization formed to educate Freeport residents about environmental issues and to advocate for solutions to protect and improve air and water quality. To accomplish this, Citizens for Clean Air and Clean Water holds community meetings to raise awareness about potentially harmful air and water pollution events in Freeport. The group communicates with the TCEQ and other state and local governmental entities to remain up to date on the latest developments in the area. Citizens for Clean Air and Clean Water continues to engage with the public participation component of the environmental permitting process by submitting comments, and engaging in hearings on air, water, and waste permits. The goal of the organization is to encourage protection of public health through compliance with environmental laws.

Citizens Alliance for Fairness and Progress is a community advocacy group of residents from the Hillcrest and Washington-Coles neighborhoods of Corpus Christi, Texas founded out of concern for the deteriorating conditions in the neighborhoods as a result of heavy industry.

Hillcrest Residents Association was formed for the purpose of protecting public health, safety, the environment, and the quality of life for residents in the Hillcrest neighborhood and the immediately surrounding area along the Northside of Corpus Christi, and to combat community

³ Available electronically at: <https://environmentalintegrity.org/wp-content/uploads/2023/03/Permian-PBR-letter.pdf>

⁴ Available electronically at: <https://environmentalintegrity.org/wp-content/uploads/2020/10/Petition-for-Reconsideration-Odessa-Texas-SO2-NAAQS-Oct2020.pdf>

deterioration. With this purpose as the focus, HRA represents its members by participating in the decision-making process of local, state, and federal officials on issues related to pollution and protection of natural resources and other quality of life issues.

Air Alliance Houston is a non-profit advocacy organization working to reduce the public health impacts from air pollution and to advance environmental justice.

Texas RioGrande Legal Aid provides free legal services to people who cannot afford an attorney in 68 southwestern counties, including the entire Texas-Mexico border. TRLA attorneys specialize in more than 45 areas of law, including disaster assistance, family, employment, landlord-tenant, housing, education, immigration, farmworker, and civil rights.

Sierra Club is the nation's largest grassroots environmental organization, with millions of members and supporters. In addition to protecting every person's right to get outdoors and access the healing power of nature, the Sierra Club works to promote clean energy, safeguard the health of our communities, protect wildlife, and preserve our remaining wild places through grassroots activism, public education, lobbying, and legal action. **Sierra Club Lone Star Chapter** is the oldest grassroots environmental organization in Texas and has over 20,000 members.

Environmental Integrity Project is a nonpartisan, nonprofit environmental watchdog with offices and programs in Washington, D.C. and Austin, Texas dedicated to improving implementation and enforcement of federal and state anti-pollution laws.

Earthjustice is a nonprofit public interest environmental law organization that wields the power of law and the strength of partnership to protect people's health, to preserve magnificent places and wildlife, to advance clean energy, and to combat climate change.

Public Citizen is a nonprofit consumer advocacy organization that champions the public interests in the halls of power. It defends democracy, resists corporate power and works to ensure that government works for the people, not for big corporations. Founded in 1971, Public Citizen now has 500,000 members and supporters throughout the country.

III. ARGUMENT

A. Texas's Chapter 106 Regulations do not Comply with Federal Standards for Public Participation.

Texas's PBR program is the most widely used preconstruction permitting mechanism in the state by a wide margin.⁵ It is used to authorize thousands of construction projects each year, including projects at major sources and synthetic minor sources, located in attainment areas and

⁵ According to the TCEQ's Biennial Report to the 88th Legislature for Fiscal Years 2021 and 2022 at B-2, the TCEQ processed 6,674 PBRs in FY 2021 and 6,667 in FY 2022. By way of contrast, the TCEQ only issued 88 major New Source Review ("NSR") permits, including Nonattainment NSR permits and Prevention of Significant Deterioration ("PSD") permits in FY 2021 and 82 in FY 2022. Standard Permits without public notice are the second most utilized permitting mechanism in Texas during this period, with 3,497 applications processed in FY 2021 and 3,513 in FY 2022. After that comes minor amendments to Chapter 116 NSR permits, with 623 applications processed in 2021 and 616 in FY 2022.

non-attainment areas. This widespread use of PBRs to authorize changes at major sources and to equipment that has the potential to emit significant quantities of air pollution is a big problem, because Texas PBRs are almost uniformly practically unenforceable.⁶ This failure is even more problematic, because unenforceable PBRs are used to authorize emissions increases from major sources and significant emissions units without any meaningful opportunity for public participation. Due to the number of PBR authorizations claimed each year, the public is not notified about or given the opportunity to comment on the vast majority of permits authorizing pollution increases from synthetic minor sources in Texas each year.

The permitting process used to authorize construction of a new major source of air pollution or major modifications to existing sources of pollution requires TCEQ to establish a source-specific permitting document that contains special conditions and emission limits that are often specifically tailored to the project being authorized. By contrast, TCEQ's PBR program is supposed to create a streamlined approach to authorize construction and modification of insignificant projects using generic authorizations established by rule in the Texas Administrative Code. But in practice, Texas' PBR program allows operators to craft source-specific conditions and limits to avoid triggering more stringent Clean Air Act requirements. These source-specific requirements are often based on inadequate information and are practically unenforceable.

In addition, while project-specific permits authorizing the construction of a new major source or a major modification to an existing source require the applicant to publish notice of the project and to solicit public comments at least twice during the permitting process, there is no notice or opportunity for members of the public to comment on projects authorized by PBR. The TCEQ contends that public notice and comment for PBR projects is unnecessary because PBRs are only available to authorize projects that the TCEQ has determined do not have the potential to significantly affect air quality and because members of the public have an opportunity to comment on PBRs at the time their generic terms are adopted into the Texas Administrative Code. However, in practice PBRs may be used to authorize nearly any kind of project at nearly any kind of source because the terms of PBRs found in the Chapter 106, Subchapter C through X regulations are often very vague. *See, e.g.,* Objection to Title V Permit No. O2269 for ExxonMobil's Baytown Chemical Plant, dated January 23, 2020 at 9 (describing the PBR at 106.261, 106.262, and 106.263 as "very general," stating these permits "can be used to authorize a wide variety of emission units."). This vagueness also makes it impossible for members of the public to determine how these permits will be used, rendering the public participation for PBR projects inconsistent with EPA's public participation requirements for permitting programs implementing the federal Clean Air Act, listed

⁶ EPA has recognized this problem in a series of Title V objections addressing the use of PBRs at major sources of air pollution. *See, e.g.,* *In the Matter of Motiva Enterprises Port Arthur Refinery*, Order on Petition No. VI-2016-23 (May 1, 2018) at 23-26; Objection to Title V Permit No. 02269, ExxonMobil Corporation, Baytown Chemical Plant at 7-10 (January 23, 2020); *In the Matter of Sandy Creek Services*, Order on Petition No. III-2018-1 at (June 30, 2021) at 10-16; *In the Matter of BP Amoco Chemical Company*, Order on Petition No. VI-2017-6 (July 20, 2021) at 33-37; *In the Matter of Blanchard Refining Company*, Order on Petition No. VI-2017-7 (August 9, 2021) at 18-23; *In the Matter of Phillips 66 Company*, Order on Petition No. VI-2017-16 (September 22, 2021) at 11-17; *In the Matter of Oak Grove Management Company*, Order on Petition No. VI-2017-12 (October 15, 2021) at 14-20; *In the Matter of Premcor Refining Group Inc.*, Order on Petition No. VI-2018-4 (November 30, 2021) at 13-19.

at 40 C.F.R. § 51.161.

EPA's regulations provide that state major and minor preconstruction permitting programs must: "[r]equire the State or local agency to provide opportunity for public comment on information submitted by owners and operators[.]" including "the agency's analysis of the effect of construction or modification on ambient air quality[.]" and "the agency's proposed approval or disapproval." 40 C.F.R. § 51.161. Thus, members of the public must receive notice and have an opportunity to comment on this information submitted by the applicant where a generic authorization does not specifically identify: the kind of source or process it may be claimed to authorize, the amount of pollution such sources and processes may emit under the claimed permit, and in cases where applicants must supply project-specific information for the permitting agency to determine the effect of construction or modification on ambient air quality.

To ensure that the terms of PBRs (or general permits) are generic enough to provide meaningful opportunities for public participation at the time they are promulgated, EPA has provided the following criteria for PBR program general rules:

- (1) general permits apply to specific and narrow categories of sources; (2) sources electing coverage under general permits where coverage is not mandatory, provide notice or reporting to the permitting authority; (3) general permits provide specific and technically accurate (verifiable) limits that restrict the potential to emit; (4) general permits contain specific compliance requirements; (5) limits in general permits are established based on practicably enforceable averaging times; and (6) violations of the permit are considered violations of the state and federal requirements and result in the source being subject to major source requirements.

Guidance on Enforceability Requirements for Limiting Potential to Emit through SIP and § 112 Rules and General Permits ("PTE Memo"), Kathie A. Stein, Director EPA Air Enforcement Division, dated January 25, 1995 at 10.⁷

Consistent with these criteria, EPA has repeatedly warned that PBRs should not be available to large and complicated sources of pollution. John Seitz, Director, Office of Air Quality Planning and Standards, and Eric Schaeffer, Director, Office of Regulatory Enforcement, *Potential to Emit Guidance for Specific Source Categories* ("PTE Memo"), dated April 14, 1998 at 4.⁸ Complicated sources of air pollution do not lend themselves to coverage by a PBR, because the kinds of equipment that constitute these sources, the specific processes this equipment implement, the kinds of raw materials and feedstocks transformed by these process, the kinds and amounts of pollution resulting from the operation of this equipment, and the methods for determining compliance with emission limits for such sources may vary widely from source to source, or even within a single source.

Similarly, EPA has counseled against the use of PBRs to authorize projects involving major

⁷ Available electronically at: <https://www.epa.gov/sites/default/files/2015-07/documents/potoem.pdf>

⁸ Available electronically at: <https://www.epa.gov/sites/default/files/2015-07/documents/lowmarch.pdf>

or synthetic minor sources that have the potential to significantly diminish air quality. *Review of New Sources and Modifications in Indian Country*, 76 Fed. Reg. 38,748, 38,770 (July 1, 2011) (“We also disagree with the commenter that would like us to allow the use of general permits for synthetic minor sources since these sources are major sources until they are approved to construct under a synthetic minor source permit. We believe that the size and amount of emissions from these sources warrants a case-by-case review of the source and their proposed emission limitations.”). Indeed, EPA has determined that in some cases PBRs should not be used to authorize projects at true minor sources in cases where emissions authorized by PBR would approach major source thresholds. PTE Memo at 4 (“For sources with numerous categories at the plant site and/or that emit amounts just below the major source threshold, EPA believes that there is generally no feasible way to ensure their minor source status without a case-by-case permitting process.”).

Even with these constraints, establishing specific practically enforceable PBR terms and technically accurate emission limits sufficient to ensure that projects authorized by a PBR will not cause violations of SIP control strategies or interfere with attainment and maintenance of national standards is very difficult. This is so because permitting agencies—in most cases—cannot know in advance how many projects will be authorized under the PBR or where they will be located (unless the PBR may only be applied in areas specified by the rule). Thus, EPA emphasizes that PBRs should only be used to authorize well-defined and relatively simple projects at true minor sources such as gas stations or dry cleaners that do not have the potential to contribute to significantly to local air pollution concentrations and that will emit pollutants with similar characteristics and warrant similar permit terms:

General permits may be issued to cover any category of numerous similar sources, provided that such sources meet the appropriate criteria. For example, permits can be issued to cover small businesses such as gas stations or dry cleaners. General permits may, in some circumstances, be issued to cover discrete emissions units, such as individual solvent cleaning machines at industrial complexes.

In addition, in setting criteria for sources to be covered by general permits, your reviewing authority will consider the following factors. First, categories of sources or emissions units covered by a general permit should be generally homogenous in terms of operations, processes, and emissions. All sources or emissions units in the category should have essentially similar operations or processes and emit pollutants with similar characteristics. Second, the sources or emissions units should be expected to warrant the same or substantially similar permit requirements governing operation, emissions, monitoring, recordkeeping and reporting.

Review of New Sources and Modifications in Indian Country, 76 Fed. Reg. 38,748, 38,768 (July 1, 2011).⁹

⁹ See also PTE Memo at 4 (“In identifying source categories to be covered within this guidance, the EPA included those categories for which a single type of activity tends to dominate emissions, and for which most sources in the category actually emit at levels well below their potential, and well under the major source thresholds.”); EPA, Background Document: Air Quality Permit by Rule for New or Modified True Minor Source Auto Body Repair and

The TCEQ's failure to follow EPA's recommendations for PBR programs has resulted in several important deficiencies in its Chapter 106 regulations. Specifically, EPA has repeatedly found that generic PBR requirements incorporated by reference into Title V permits fail to make it clear how claimed PBRs apply to the permitted source, how much and what type of pollution apply to specific units at a permitted source from claimed PBRs, and how compliance with applicable PBR emission limits is to be determined. Because this kind of source-specific information is not contained in claimed PBRs promulgated by TCEQ, EPA has directed TCEQ to require operators to provide it as part of the Title V permitting process. (Attachment B), Letter from Tonya Baer, TCEQ, Deputy Director, Office of Air to David Garcia, EPA Region 6, Director, Air and Radiation Division, Re: Permits by Rule Programmatic Changes, dated May 11, 2020.

But if such source-specific information is necessary to establish how claimed PBRs apply to specific sources, how much and which pollutants a source is authorized to emit, and to identify how compliance with emissions limits are determined and enforced, then the notice and comment opportunity provided when generic PBR terms are established does not satisfy EPA regulations. 40 C.F.R. § 51.161(a) (requiring that members of the public have an opportunity to comment on this kind of "information submitted by owners and operators.") and the TCEQ's proposed changes to its Title V application problem do not resolve that issue. Additionally, because the generic terms of Texas PBRs do not contain source-specific terms or information used to establish such terms for purposes of avoiding more stringent federal pollution control requirements, members of the public must have an opportunity to comment on information the TCEQ relies upon to determine whether source-specific PBR requirements successfully render more stringent federal pollution control requirements inapplicable and whether air quality impacts from such emissions from major sources or significant emission units at synthetic minor sources are acceptable. 30 Tex. Admin. Code § 106.6 (allowing operators to claim source-specific emission limits that are lower than generic limits in PBR rules to avoid otherwise applicable federal requirements). This information is "information about the agency's analysis of the effect of construction or modification on ambient air quality" and "the agency's proposed approval or disapproval" that must be subject to public notice and comment requirements before the project authorized by the PBR may be constructed. 40 C.F.R. § 51.161(a).

1. Case-Specific Registrations Should be Subject to Public Notice and Comment Requirements.

Several Texas PBRs require operators to submit case-specific registrations to establish that projects authorized under a PBR will comply with all applicable PBR requirements. For example, under the "General" PBR that is available for use for the broad category of "facilities," the operator must provide notice of the project to the TCEQ (but not to the public) if a project will result in emission increases of five tons per year or greater. This notice must include "a description of the project, calculations, data identifying specific chemical names, limit values, and a description of pollution control equipment, if any." 30 Tex. Admin. Code § 106.261(a)(6). Many other PBRs

Miscellaneous Surface Coating Operations in Indian Country, dated March 23, 2015. Available electronically at https://www.epa.gov/sites/default/files/2017-03/documents/autobody_background_document_version_1.0_0.pdf.

have similar notice requirements. *See e.g. id.* §§ 106.144(4), 106.145(5), 106.146(8), 106.150(5), 106.161(8), 106.162(6), 106.224(5), 106.262(a)(3), 106.263(e)(7), 106.264(7), 106.283(2)(D), 106.322(8), 106.351(4), 106.352(f)(5)(B), (6)(B), (7), (l)(5), 106.373(3), 106.392(1)(A), 103.396, 106.416(4), 106.417(4), 106.418(2), 106.433(6)(D), (9), 106.436(1), 106.452(2)(D), (E), 106.454(1)(A)(i), 106.477(6), 106.478(7), 106.491(d)(1), 106.492(2)(B), 106.494(b)(2)(A), 106.495(1), 106.496(h)(2)(A), 106.512(1), 106.513(c), 106.533(j)(1), and. Members of the public have no opportunity to review and comment on the project-specific information contained in these notices which are intended to demonstrate that potential project will not violate SIP control strategies, including applicable PBR emission limits.

2. Project Specific Air Modeling Submitted in Support of a PBR Registration Should be Subject to Public Notice and Comment Requirements.

Similarly, several Texas PBRs require operators to perform project-specific air quality modeling analyses to demonstrate that projects will not result in unacceptable air quality impacts. *See e.g.* 30 Tex. Admin. Code §§ 106.225 (Semiconductor Manufacturing), 106.512 (Stationary Engines and Turbines), 106.352 (Oil and Gas Handling and Production Facilities). Such modeling is necessary because these PBRs are not specific enough to exclude projects that have the potential to result in unacceptable air quality impacts. The fact that TCEQ must conduct additional modeling to determine whether projects eligible for authorization under a PBR indicates that the terms of the PBR alone are not sufficient to prevent violations of applicable SIP control strategies and interference with the attainment and maintenance of national standards. Under EPA regulation, the public has a right to notification of the air-modeling and an opportunity to comment on its content. 40 C.F.R. § 51.161. However, for emissions authorized by these PBRs, the public is denied that right.

3. Certifications of Source Specific Limitations Should be Subject to Public Participation Requirements.

The TCEQ's rule at 30 Tex. Admin. Code § 106.6 allows owners and operators to certify source-specific emission limits lower than the generic limits established by the TCEQ's regulations to avoid triggering major NSR preconstruction permitting requirements or other potentially applicable federal requirements. This rule directs operators to submit certified registrations identifying the source-specific emission limits claimed by the operator and to include documentation of the basis of the operator's emissions estimates and a written statement certifying that the maximum emission rates listed on the registration reflect "the reasonably anticipated maximums for operation of the facility." *Id.* § 106.6(d). The rule, however, does not require certified registrations to be submitted prior to construction of a project, nor does it require any review or approval by the TCEQ or review or comment by the public. In the past EPA has correctly determined that this kind of process is incompatible with CAA requirements:

A [general permit or PBR] rule that allows sources to submit the specific parameters and associated limits to be monitored may not be enforceable because the rule itself does not set specific technical limits. The submission of these voluntarily accepted limits on parameters or monitoring requirements would need to be federally

enforceable. Absent a source-specific permit appropriate review *and public participation o[n] the limits*, such a rule is not consistent with the EPA’s enforceability principles.

Guidance on Enforceability Requirements for Limiting Potential to Emit through SIP and § 112 Rules and General Permits, Kathie A. Stein, Director EPA Air Enforcement Division (“Enforceability Memo”), dated January 25, 1995 at 8 (emphasis added).¹⁰

The TCEQ’s PBR program ignores this longstanding EPA guidance and routinely denies the public an opportunity to participate in the permitting process where source-specific emission limitations are set. This is so, even in cases where a source-specific certification establishes limits that are more stringent than those contained in an applicable rule. Operators claim more stringent emission limits than required by a PBR to avoid even more stringent federal pollution control requirements. In cases where a source or unit has the physical capacity to emit pollution in quantities that exceed federal major source thresholds or other federal applicability thresholds, members of the public must have an opportunity to review the source specific limits taken to avoid federal requirements to ensure that they are actually achievable, and that the authorization establishes monitoring and testing requirements sufficient to make the emission limits practically enforceable.

4. Source’s Ability to Use Multiple PBRs to Authorize Emissions allows for Complex Permitting Should be Subject to Notice and Comment Requirements.

The TCEQ allows permit applicants to claim multiple PBRs for a single project. This practice allows for complex modifications to existing permits without any of the public participation of source-specific permitting. This mix and match process allows operators to piece together existing PBRs to form an authorization for source and project categories that are not included in TCEQ’s PBR regulations. For instance, at its chemical plant in Freeport, Dow was able to authorize a complicated project to increase production at its polyurethane copolymer section solely with PBRs. Dow SPC Plant, Production Project PBR Registration, dated August 8, 2014 at 10 (emphasis added).¹¹ Dow achieved this by claiming four separate PBRs to authorize two new storage tanks, update fugitives, and authorize maintenance, startup, and shutdown emissions from the new tanks and other pieces of the process. *Id.* This impacted several different emissions units, facilities, and activities at the plant. *Id.* (listing “the fugitive area, the MeC12 wash operation, a loading rack, a flameless thermal oxidizer, plant clearing with the flameless thermal oxidizer, equipment opening, pipe clearing emissions, and centrifugal pump clearing emissions.”). Because none of Texas’s PBRs authorized this kind of project, members of the public did not have an opportunity to comment on whether this kind of project was the proper subject of a PBR authorization when each of the PBRs claimed for this project were promulgated.

Dow is not the only operator to mix and match PBRs in this way to form new authorizations for complex projects at major and synthetic minor sources. This is a widely used practice that highlights how Texas’s PBR program undermines effective public participation. Because such

¹⁰ Available electronically at: <https://www.epa.gov/sites/default/files/2015-07/documents/potoem.pdf>

¹¹ Available electronically at: <https://www.epa.gov/sites/default/files/2015-07/documents/potoem.pdf>

customized patchwork PBRs are not included in the Texas Administrative Code, operators must provide information to TCEQ explaining how various claimed PBRs work together to authorize the proposed project. This is “information submitted by the owner or operator” that must be subject to public participation requirements. 40 C.F.R. § 51.161. Members of the public must receive notice of and an opportunity to comment on this kind of combined PBRs project.

5. Texas’s PBR Program Improperly Authorizes Significant Cumulative Emissions Increases Without Public Notice and Opportunity to Comment.

Texas PBRs are routinely claimed to authorize multiple projects at some of the largest sources of pollution in the United States and to authorize construction of synthetic minor sources. While Texas’ PBR General Requirements prohibit the use of PBRs to authorize the construction of a new major source or major modification, 30 Tex. Admin. Code § 106.4(a)(2), (3), the rules fail to require the TCEQ to limit the kinds of sources and projects eligible for a PBR to those that do not have the potential to trigger major NSR preconstruction permitting requirements or to establish maximum emission limits for PBR projects below all potentially applicable major source thresholds. Specifically, many of the emission limits for PBR uses (“PBR thresholds”) are higher than applicable major source or major modifications thresholds. As described in Section III.B of the comments below, this is particularly serious problem in severe ozone nonattainment areas, like the Houston, Galveston, Brazoria area because major source and major modification thresholds for volatile organic compounds and nitrogen oxides are much lower than they are in attainment areas. Specifically, the 106.4(a)(1) provides that PBRs may be used to authorize up to 250 tons per year of nitrogen oxides, while the major source and major modification threshold for that pollutants for the Houston, Galveston, Brazoria severe ozone nonattainment area is 25 tons per year. *Id.* § 116.12, Table I.

What’s more, the PBR emission limit applies to “facilities” and a single source may have hundreds of different facilities. This means that emissions which exceed major source or major modifications thresholds may be authorized by PBR at multiple facilities at a single source, all without a notice to the public or an opportunity to comment on the authorization.

The only source-wide constraint in these general requirements is that at least one facility at the source must have undergone source-specific permitting before emissions at a single source can exceed the PBR thresholds. *Id.* § 106.4(a)(1). As illustrated by the permitting history for ExxonMobil’s Baytown Technology and Engineering Complex demonstrates, this is not a true constraint. In 2016, the TCEQ realized that ExxonMobil had claimed 24 PBRs authorizing approximately 43 tons per year of VOC for emissions units at its Baytown Technology and Engineering Complex without going through the public notice and comment period for a Chapter 116 NSR preconstruction permit. Technical Review Document, Permit No. 124215, Project No. 252859.¹² This was a violation of 30 Tex. Admin. Code § 106.4(a)(4). To remedy this problem, ExxonMobil elected to obtain a Chapter 116 NSR preconstruction permit re-authorizing less than a single ton of VOC each year that had been previously authorized by a PBR. *See* Permit and

¹² Available electronically at:

https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=5291262&Rendition=Web

Technical Review Document for Permit No. 142313, Project No. 257045.¹³ Having received this reauthorization, ExxonMobil has been allowed to claim PBRs authorizing approximately 80 tons of VOC each year. This kind of paper shuffling is meaningless and demonstrates that the source-wide caps established by 30 Tex. Admin. Code § 106.4(a)(4) do not meaningfully constrain the amount of pollution major and synthetic minor sources can authorize by PBR without meaningful public participation or the kind of thorough application review required by Chapter 116.

Another example of a major industrial site currently undergoing significant expansion using PBRs to avoid public notice and permit oversight is the Enbridge (formerly Moda) Ingleside Terminal, near Corpus Christi. (Attachment C), Letter from Ilan Levin, Associate Director, Environmental Integrity Project, to Lawrence Starfield, Acting Assistant Director, EPA Office of Enforcement and Compliance Assurance, dated March 31, 2021. In January 2021, the Terminal filed an application seeking several changes to its major New Source Review permit. Among the numerous changes requested was the incorporation of some, but not all, of the source's PBRs. Local residents including Ingleside on the Bay Coastal Watch Association filed comments seeking a hearing. Instead, the application has remained in technical review while in the meantime Enbridge has significantly expanded its operations: PBR No. 154997 authorized five new storage tanks and also increased the throughput of marine loading; PBR 155902 authorized two new emergency tanks. On March 18, 2020, TCEQ approved Moda's registration of yet another PBR (No. 159913); On October 14, 2020, TCEQ approved a "Standard Permit for a Pollution Control Project" (Registration No. 162551) which authorized the addition of an eighth marine loading vapor combustion unit in order to increase the site's operational flexibility and increase throughput.

B. PBRs Claimed by Sources in TCEQ Region 12 (Houston) Authorize Significant Increases of Air Pollution and Interfere with Permitting Programs Designed to Improve Air Quality in the Region.

Texas's implementation of its Chapter 106 regulations for sources located in TCEQ Region 12, which contains the Houston, Galveston, Brazoria severe ozone Nonattainment area provides an illustrative snapshot of the PBR program's shortcomings for projects in areas where air quality already fails to protect public health. The HGB area has been in perpetual nonattainment with federal health-based ozone NAAQS since the 1990's. Texas's plan for achieving compliance with the NAAQS and making air in the HGB area safe to breathe involves stringent offset and technology-based pollution control requirements that apply to construction of new major sources and major modifications to existing major sources of the ozone forming pollutants Volatile Organic Compounds ("VOC") and Nitrogen Oxides ("NOx"). 30 Tex. Admin. Code § 116.150(d); 40 C.F.R. § 52.2270(c) (approving this regulation into the Texas SIP). In order to obtain a permit authorizing a new major source or a major modification to an existing source of ozone-forming pollutants, an operator must offset all new emissions of VOC and NOx with reductions at existing sources at a ratio of greater than one to one. *Id.* §§ 116.12 Table I, 116.150(d)(3). Thus, in theory,

¹³ Available electronically at:

https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=5288975&Rendition=Web

a project in the HGB nonattainment area significantly increasing the amount of ozone-forming pollution emitted by a major source should actually result in a net reduction in area emissions of ozone-forming pollutants. Likewise, the stringent Lowest Achievable Emission Rate (“LAER”) standard that applies to major projects in the HGB area, which requires use of the best available controls regardless of cost to reduce emissions of ozone-forming pollution, should ensure that significant increases in the amount of ozone-forming pollution are controlled to the maximum extent possible. *Id.* §§ 116.12, 116.150(d)(1).

These stringent requirements for major projects in a nonattainment area are intended to ensure not only that major projects will not interfere with attainment of the NAAQS, but to provide a cushion to accommodate the construction of smaller projects that are not subject to offsets and stringent pollution control requirements while still moving the region towards attainment. But there is a problem with this plan. Sources in TCEQ Region 12 almost never ask for a permit authorizing construction of a major project. Instead, projects in this area are almost exclusively authorized under the Chapter 106 PBR regulations or the TCEQ’s Chapter 116, Subchapter F Standard Permits, which are intended to create a streamlined process for authorizing minor sources and minor modifications to existing sources. So, while nearly 82 percent (9,874) of all active preconstruction authorizations in TCEQ Region 12 are PBR registrations, only 0.64 percent (77) are major nonattainment NSR permits establishing pollution offset requirements and LAER-based pollution control requirements.

Table B-1: Number of Active Permits for TCEQ Region 12 Sources by Permit Category¹⁴

Permit Type	Major Nonattainment Pollutants (Y/N)	Number of Active Permits	Percentage of Active Preconstruction Permits in TCEQ Region 12
Permit by Rule Registrations (Minor)*	N	9,874	81.98
Standard Permits	N	970	8.05
Minor NSR Preconstruction Permits (Minor)	N	923	7.66
Prevention of Significant Deterioration Permits (Major for Attainment Pollutant)	N	99	0.82
Nonattainment New Source Review Permits	Y	77	0.64

¹⁴ This table is based on active permit numbers returned by the TCEQ’s New Source Review Air Permits Website, <https://www2.tceq.texas.gov/airperm/index.cfm?fuseaction=airpermits.start>, in response to a query requesting all permits for sources in TCEQ Region 12 and specifying “initial permit review” for project type. Data returned for permits that do not authorize construction, including alternative means of control, construction operating permits, plantwide applicability limit permits, and special construction and operating permits are not included in the table.

(Major for Nonattainment Pollutant(s))			
Flexible Permits (Minor)	N	32	0.27
Special Construction Permits (Minor)	N	29	0.24
GHG Prevention of Significant Deterioration Permits (Major for Greenhouse Gasses)	N	20	0.17
De Minimis Permits (Minor)	N	20	0.17

* Includes PBRs and Standard Exemptions as per 30 Tex. Admin. Code § 106.13.

In many cases, it appears that large sources of ozone-forming pollutants have been able to bypass major NSR preconstruction permitting requirements despite the relatively low applicability threshold, currently 25 tons per year, by artificially breaking significant projects into separate apparently-insignificant projects authorized by multiple minor NSR permits, including PBRs. The pattern of PBR utilization by major sources in TCEQ Region 12 bears this out. The 9,874 active TCEQ Region 12 PBR registrations have been claimed by 4,690 different stationary sources. But one percent of these sources (47) have claimed nearly one third (29.2) of all active PBR registrations in the region. And all but five of these sources emitted VOC and/or NO_x above the major source threshold in 2021.

Table B-2: Combined 2021 NO_x and VOC Emissions for 47 TCEQ Region 12 Sources with at least 25 PBR Registrations¹⁵

Combined VOC Emissions (tons)	13,657.56
Combined NO _x Emissions (tons)	17,505.12
Average VOC Emissions (tons)	317.62
Average NO _x Emissions (tons)	407.1
Number of Sources Reporting NO _x and VOC Emissions Below the Applicable Major Source Threshold (25 tons)	3 of 43

And while PBRs *should not* provide an alternative to major NSR preconstruction permitting for significant pollution increases, the TCEQ's Chapter 106 regulations do not establish safeguards to prevent it. Most notably, the Chapter 106 regulations do not establish any cumulative source-wide limits on the amount of pollution, including nonattainment pollutants, a major source operator may authorize by PBR. Instead, for sources that have been through the public notice and comment process as part of the Chapter 116 public notice and comment process, the emission limits at § 106.4(a)(1) apply only on a unit-by-unit basis. Again, there are no cumulative source-wide limits on the amount of pollution a major source may authorize by PBR.

¹⁵ The table used to create this summary is included as (Attachment D) to these comments.

And putting aside the absence of a source-wide limit, the unit-by-unit limits for VOC and NOx are far too high to prevent circumvention of major source preconstruction permitting requirements. The VOC limit is the same as the applicable major source threshold for the HGB nonattainment area, 25 tons per year. The NOx limit, 250 tons per year, is ten times higher than the applicable major source threshold.

Thus, the TCEQ's Chapter 106 regulations allow the largest sources of pollution in Texas nonattainment areas to repeatedly claim PBRs to authorizing emissions that are only constrained by the number of units at the source. For example, the Environmental Integrity Project reviewed PBRs registered by Motiva for its Port Arthur Refinery as of January 24, 2020 and determined that these registrations authorized more than 88 tons of VOC pollution each year. (Attachment A), Letter to Erica Hauk, Project Director, Office of Inspector General, from Gabriel Clark-Leach, Senior Attorney, Environmental Integrity Project, dated January 24, 2020.¹⁶ This is double the amount of VOC considered significant for purposes of preconstruction permitting at existing major sources in attainment areas, like Jefferson County where Motiva's refinery is located. 40 C.F.R. § 52.21(b)(23)(i).

And while the Chapter 106 regulations do prohibit use of PBRs to authorize construction of a new major source or a major modification to an existing major source, 30 Tex. Admin. Code § 106.4(a)(2), (3), this regulation does not prevent operators of major sources of pollution from artificially breaking major projects into smaller projects authorized by multiple permitting actions, none of which triggers major NSR preconstruction permitting requirements.

Making matters worse, most of the PBRs promulgated by the TCEQ and used to authorize projects at large sources of pollution fail to establish monitoring, testing, recordkeeping, and reporting requirements sufficient to make PBR limits practically enforceable. Very few of the most frequently claimed PBRs established by Chapter 106, Subchapters C through X include meaningful provisions explaining how to determine compliance with applicable PBR limits and operating requirements. Instead, the TCEQ relies on the catch-all recordkeeping rule at 30 Tex. Admin. Code § 106.8 to allow operators to decide how they wish to determine compliance with applicable PBR requirements. This regulation only requires operators to "maintain records containing sufficient information to demonstrate compliance with" Chapter 106, Subchapter A general requirements and all applicable conditions established by the claimed PBR(s). It does not specify *how* compliance with any particular limit should be demonstrated and it leaves it up to an operator to decide how accurate a method must be to satisfy the "sufficient information to demonstrate compliance" requirement. While this kind of set up may make sense for a PBR program that only applied to de minimis increases and true minor sources, it is not appropriate for a program that allows operators of major sources to bypass source-specific permit reviews for a potentially unlimited amount of pollution. *See e.g.* PTE Memo at 4 ("For sources with numerous categories at the plant site and/or that emit amounts just below the major source threshold, EPA

¹⁶ The spreadsheet used to calculate VOC emissions at Motiva's Port Arthur Refinery is Attachment L to the referenced letter. The letter's attachments are all include as part of Attachment A to these comments.

believes that there is generally no feasible way to ensure their minor source status without a case-by-case permitting process.”).

EPA has repeatedly explained this problem to the TCEQ in its objection to Texas Title V permits, both in terms addressing the Chapter 106 program generally, *see e.g. In the Matter of BP Amoco Chemical Company, Texas City Chemical Plant*, Order on Petition No. VI-2017-6 (July 20, 2021) at 34-35, and in terms that singled out specific PBRs as not practically enforceable as written, including the PBRs at: 106.144, 106.183, 106.227, 106.261, 106.262, 106.263, 106.264, 106.265, 106.371, 106.545, 106.472, 106.473, and 106.511 among others. *In the Matter of ExxonMobil Corp. Baytown Chemical Plant*, Order on Petition No. VI-2020-9 (March 18, 2022) at 31; *In the Matter of Sandy Creek Services*, Order on Petition No. III-2018-1 at (June 30, 2021) at 10-11.

Four of the PBRs singled out by EPA, 106.261, 106.262, 106.263, and 106.264 are particularly worthy of attention because they are extremely broad and fail altogether to establish any methods for determining compliance with applicable limits. *See e.g. Objection to Title V Permit No. O2269, ExxonMobil Baytown Chemical Plant* (January 23, 2020) at 9 (explaining that these PBRs are “very general and can be utilized to authorize a wide range of emission units” and “contain[] no monitoring or testing requirements to show compliance with the 25 TPY of any contaminant emission limitation in the PBR.”).

The PBR at 106.261 does not specify any particular category of source or project that it may be used to authorize. Instead, any project that complies with various emission limits specified by the rule may be authorized by it, unless another more specific PBR or standard permit may be used to authorize the project. 30 Tex. Admin. Code § 106.261(b). For emissions increases totaling more than five tons per year, notification of the project must be provided to the TCEQ within ten days *following* construction of the project. *Id.* § 106.261(a)(6). The PBR at 106.262 is similar to the PBR at 106.261 in that it may be used to authorize almost any kind of project. The project establishes an equation that operators are to use to determine applicable limits based on values listed by the rule and the distance to the nearest off-plant receptor. *Id.* § 106.262(a)(2).

The TCEQ allows operators to use the PBRs at 106.261 and 106.262 to modify the terms of projects authorized both by other PBRs, *see e.g. TCEQ Interoffice Memorandum Re: Storage Tank Construction Under Permit by Rule* (September 1, 2006)¹⁷, and source-specific major and minor permits issued under the TCEQ’s Chapter 116 regulations. 30 Tex. Admin. Code § 116.116(d).

The PBR at 106.263 authorizes routine maintenance, startup and shutdown of facilities at a wide variety of sources and generally does not require registration with the TCEQ unless it is claimed to authorize construction of a new temporary pollution control. While it does not authorize construction of new equipment, it may be used to establish new emission limits for planned maintenance, startups, and shutdown activities that are higher than the limits that apply during periods of routine operation. While EPA has claimed that this permit should only be used to authorize emissions for “small minor sources” and should not be used as “a vehicle for major

¹⁷ Available electronically at: https://www.tceq.texas.gov/assets/public/permitting/air/memos/tank_under_pbr06.pdf

sources to supplement emission limits or conditions in a Federally enforceable permit,” the TCEQ allows major sources to use the PBR in exactly this way. Letter from Jeff Robinson, Chief, EPA Region 6 Air Permits Section to Richard Hyde, TCEQ, Director, Air Permits Division, dated May 21, 2008.¹⁸

The PBR at 106.264 authorizes sources to replace any kind of equipment with similar equipment, so long as emissions from the replacement equipment will not exceed 25 tons per year of any air contaminant. Operators claiming this PBR must notify the Executive Director within ten days *following* installation of the replacement equipment. 30 Tex. Admin. Code § 106.264(7).

These broadly-written and practically unenforceable PBRs are commonly claimed by major sources of pollution in attainment and nonattainment areas. The case of Dow’s Freeport Plant and Blue Cube’s chemical manufacturing plant is instructive. These two sources are collocated in the same complex in Freeport, Texas. Of the 727 separate active PBR registrations held by these sources, 646—nearly 90 percent—include authorizations under the PBR at 106.261 and/or 106.262 (either alone or in conjunction with other PBRs).¹⁹ As illustrated by the tables below, each of these plants is a major source of nonattainment pollution:

Table B-3: VOC and NO_x Emissions Reported by Dow and Blue Cube for Their Collocated Freeport Sources in 2017-2021 (Tons)

<i>Year</i>	<i>PM_{2.5}</i>	<i>VOC</i>	<i>CO</i>	<i>NO_x</i>	<i>S₀₂</i>	<i>PM₁₀</i>
Major Source Threshold	100	25	100	25	100	100
Major Modification Threshold	10	25	100	25	40	15
Dow Freeport’s Self-Reported Criteria Pollutants Emissions Inventory in tons per year 2017-2021						
2017	221.0351	582.7536	1031.0273	1439.0612	11.0341	236.5732
2018	258.5554	577.5401	668.6842	1345.3033	13.4405	271.9671
2019	244.4642	532.3379	823.6857	1505.6190	12.9027	258.9691
2020	332.6553	537.0337	903.9464	1498.6235	12.2389	346.1558
2021	326.9564	780.9709	1056.5630	1508.5811	13.1990	334.6283
Blue Cube Freeport’s Self-Reported Criteria Pollutants Emissions Inventory in tons per year 2017-2021						
<i>Year</i>	<i>PM_{2.5}</i>	<i>VOC</i>	<i>CO</i>	<i>NO_x</i>	<i>S₀₂</i>	<i>PM₁₀</i>
2017	129.8446	104.4207	206.7932	473.7147	2.5162	146.0061
2018	175.7336	96.6065	237.2359	593.3010	2.9370	184.4443
2019	144.7781	93.9289	225.4814	565.9969	3.3310	153.0388
2020	145.1081	88.4183	179.1884	571.7485	4.3055	154.2021
2021	135.3459	80.6731	181.3206	599.7296	2.2777	143.8019

¹⁸ Available electronically at: <https://www.epa.gov/sites/default/files/2015-07/documents/tceqssm.pdf>

¹⁹ Dow holds 519 active PBR registrations, while Blue Cube holds 208.

Even though Blue Cube’s Freeport plant has emitted NOx and VOC pollution far exceeding the applicable major source preconstruction permitting thresholds, none of the active permits for this source are major Nonattainment NSR permits. And while Dow has obtained four major Nonattainment NSR permits for its Freeport Chemical Plant, N59, N260, N268, and N274, none of these permits has been amended to authorize a major modification after is initially issued. This is not enough, perhaps, to establish that Dow or Blue Cube has used PBRs to circumvent major NSR preconstruction permitting requirements. But the fact that Dow and Blue Cube have each claimed two of the TCEQ’s most generic PBRs—authorizations which do not actually establish any monitoring, testing, recordkeeping, or reporting requirements sufficient to determine whether an operator is actually complying with applicable limits or not—for nearly 650 projects resulting in pollution increases without triggering major NSR preconstruction permitting requirements shows that the TCEQ’s Chapter 106 regulations may easily be used in this way.

When the Texas Legislature amended the Texas Health and Safety Code to dictate the conditions for the TCEQ’s PBR (and standard exemption) programs, it specifically required the TCEQ to conduct an investigation to ensure that its PBRs would only be used for changes that “will not make a significant contribution of air contaminants to the atmosphere.” Tex. Health & Safety Code § 382.057(a); *see also id.* § 382.05196(a). The TCEQ has not conducted an investigation demonstrating that cumulative increases authorized by repeated claims of generic and unenforceable PBRs by major sources of pollution in a severe nonattainment area, which may be used to modify the terms of major and minor NSR permits previously issued to the source, 30 Tex. Admin. Code § 116.116(d), ensure that all such increases are insignificant.

The Legislature also directed the TCEQ to “adopt rules specifically defining the terms and conditions for an exemption under this section in a nonattainment area defined by Title I of the federal Clean Air Act. *Id.* § 382.057(b). While the TCEQ’s Chapter 106, Subchapter A rule prohibits use of PBR to authorize construction of a new major source or a major modification of an existing sources of nonattainment pollution, the TCEQ’s rules do not establish specific conditions for use of PBRs in nonattainment areas necessary to ensure that PBRs will not circumvent applicable major source preconstruction permitting requirements or interfere with prompt attainment of the NAAQS as directed by the Texas Legislature.

Stacking unenforceable PBRs as Dow and Blue Cube (and the other 45 sources listed in Attachment D) have done at their collocated Freeport plants is not the only way PBRs may be used to undermine major NSR preconstruction permitting requirements necessary to improve unhealthy air quality in the HGB nonattainment area. Consider the case of Intercontinental Terminals Company’s (“ITC”) Pasadena Terminal. Construction of the terminal was first authorized in 2012 and the source has been in a state of ongoing construction and expansion since then. The primary permit for the terminal, Permit No. 95754, currently authorizes VOC emissions totaling 147.51 tons per year. Despite this authorization, ITC has only been subject to minor NSR preconstruction permitting even though the current major source threshold and the major source threshold when the Terminal was first authorized was 25 tons of VOCs per year, and the threshold in intervening years was 50-100 tons per year. This is so, even though the permit engineer responsible for approving ITC’s initial application for a minor NSR permit understood that ITC intended to

operate the Terminal as a major source²⁰ and despite EPA’s clear guidance that issuance of a minor permit for a source the applicant intends to operate as major is improper.²¹

ITC has skirted nonattainment NSR review by piecemealing construction and operation of its Terminal into three separate projects that the TCEQ has (improperly) agreed not to aggregate for purposes of major NSR applicability.²² Though these three projects share common equipment, each is subject to a separate VOC emissions cap in Permit No. 95754 just below the applicable major source threshold at the time the project was authorized. (Table B-4). Thus, even a very small exceedance of any of these caps would be sufficient to trigger nonattainment NSR requirements.²³

Table B-4: ITC Pasadena’s Authorized VOC Emissions and Major Source Thresholds at the time of the Authorization

Cap	VOC authorized (TPY)	VOC Major Source Threshold at Time Cap was Established (TPY)
A	24.9	25
B	24.9	25
C	97.71	100

Under TCEQ's Chapter 106, Subchapter A regulations, an operator may claim PBRs authorizing up to 25 tons per year of VOC from each facility—meaning emissions unit—at an existing source, like ITC’s Pasadena Terminal, which has been through the public notice and comment process for a Chapter 116 preconstruction permit, so long as the changes authorized by PBR do not constitute a major modification. 30 Tex. Admin. Code § 106.4(a)(3), (4). Here, an emissions increase consistent with these requirements would trigger major modification requirements if it caused an exceedance of any of the synthetic minor emission caps in Permit No. 95754 without being—in and of itself—a major modification. For example, a VOC increase of less than five tons per year authorized by PBR is not significant under applicable federal NSR regulations and does not trigger the requirement for netting to determine whether cumulative emissions during the contemporaneous period exceed the major modification threshold. It is not a major modification. But, if the equipment and activities causing this increase are substantially related to any of the projects subject to the synthetic minor caps in Permit No. 95754 and are also sufficient to push emissions for one or more of the projects subject to the synthetic minor caps to exceed the relevant cap(s), the increase would trigger major modification preconstruction

²⁰ Technical Review Document, Permit No. 95754, Project No. 164990 (“Although the site will ultimately be major, this initial construction will be limited to VOC emissions less than 25 tpy[,] so the site is minor.”) (emphasis added).

²¹ See EPA, *New Source Review Workshop Manual*, draft October 1990 at c.6 (Sham “[p]ermits with conditions that do not reflect a source’s planned mode of operation may be considered void and cannot shield the source from the requirement to undergo major source preconstruction review.”).

²² See (Attachment E), Petition to Object to Title V Permit No. O3785 Issued by the Texas Commission on Environmental Quality, filed on August 30, 2022 at 21-35 for a more detailed account of this permitting history.

²³ EPA has already objected to ITC’s Title V permit, because it fails to make the synthetic minor caps in Permit No. 95754 practically enforceable. Because these synthetic limits are not practically enforceable, they do not actually constrain emissions below the applicable major source thresholds. Accordingly, Commenters contend that major NSR preconstruction permitting requirements already apply to the Pasadena Terminal.

permitting requirements for all equipment and activities authorized under the relevant cap(s). 83 Fed. Reg. 57324 (November 15, 2018).

And in August of 2021, this is exactly what happened. ITC applied for and received PBR registration 166799 authorizing construction of a new dock, increased emissions from existing docks, and increased emissions from existing storage tanks covered by the synthetic minor emission caps in Permit No. 95754. This PBR registration authorizes new VOC emissions totaling 4.35 tons per year, sufficient to push each of the caps in Permit No. 95754 past the major source threshold.²⁴ Despite complaints from residents living near ITC’s Pasadena Terminal and clear evidence of sham permitting, the TCEQ has not only failed to revoke this PBR registration and to require ITC to comply with nonattainment NSR; the agency also renewed ITC’s operating permit, allowing ITC to continue operating as a major source of nonattainment pollutants without complying with permitting requirements established to bring air quality in the HGB severe nonattainment area into compliance with EPA’s health-based ozone NAAQS.

C. The TCEQ’s Chapter 106 Regulations Interfere with Major Source Preconstruction Permitting Requirements and Regulations Established to Maintain NAAQS Attainment in Texas Attainment Areas.

1. Flaring Authorized by PBR is Degrading Air Quality in the Permian Basin.

Just as in TCEQ’s Region 12, air permitting projects in TCEQ Region 7, which covers much of the Texas Permian Basin, is almost exclusively accomplished using PBRs.

Table C-1: Number of Active Permits for TCEQ Region 7 Sources by Permit Category²⁵

Permit Type	Major Permit (Y/N)	Number of Active Permits	Percentage of Active Preconstruction Permits in TCEQ Region 7
Permit by Rule Registrations (Minor)*	N	12,871	84.52
Standard Permits	N	2,129	13.98
Minor NSR Preconstruction Permits (Minor)	N	205	1.35

²⁴ Permit by Rule § 106.261 and § 106.511 Registration, ITC Pasadena Terminal, dated August 2021 at Table 1-1. Available electronically at: https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=6400319&Rendition=Web

²⁵ This table is based on active permit numbers returned by the TCEQ’s New Source Review Air Permits Website, <https://www2.tceq.texas.gov/airperm/index.cfm?fuseaction=airpermits.start>, in response to a query requesting all permits for sources in TCEQ Region 12 and specifying “initial permit review” for project type. Data returned for permits that do not authorize construction, including alternative means of control, construction operating permits, plantwide applicability limit permits, and special construction and operating permits are not included in the table.

Prevention of Significant Deterioration Permits (Major for Attainment Pollutant)	Y	14	0.09
GHG Prevention of Significant Deterioration Permits (Major for Greenhouse Gasses)	N	3	0.02
De Minimis Permits (Minor)	N	3	0.02
Flexible Permits (Minor)	N	2	0.01
Special Construction Permits (Minor)	N	2	0.01

* Includes PBRs and Standard Exemptions as per 30 Tex. Admin. Code § 106.13.

The most frequently claimed PBRs in this region are 106.352 for Oil and Gas Facilities and 106.492 for flares, which makes sense given that upstream and midstream oil and gas operations are responsible for a vast majority of air pollution in the Region. While the region is formally designated as attainment for EPA's SO₂ and ozone NAAQS, flaring from Permian Basin sources threatens this designation. EIP has performed modeling demonstrating that flaring emissions in the Texas Permian Basin are causing SO₂ NAAQS violations in Ector County, *see* SO₂ Petition and Ozone NAAQS violations in Texas and New Mexico. *See* Ozone Letter.

Environmental Integrity Project reviewed information in Texas's STEERS database to determine self-reported emissions from sources authorized by PBR in the Permian Basin during unplanned maintenance, startup, shutdowns, and malfunctions from 2015 through 2020.²⁶ Table C-2 identifies sources that reported more than 25 tons of sulfur dioxide per year from facilities authorized by PBR for at least three years during this six-year period. Unless these sources have been through the public notice and comment process to obtain a Chapter 116 New Source Review permit, they are ineligible for a PBR authorization because source-wide actual SO₂ emissions from PBR sources that have not been subject to public notice and comment proceedings may not exceed 25 tpy SO₂. 30 Tex. Admin. Code § 106.4(a)(4). None of the sources listed on Table C-2 currently holds a Chapter 116 permit requiring public notice and comment.

²⁶ The Texas SIP requires operators to notify the TCEQ of the amount of pollution released during emissions events, which include malfunctions as well as unauthorized startups, shutdowns, and maintenance. 30 Tex. Admin. Code §§ 101.201, 101.211; 40 C.F.R. § 52.2270(c) (incorporating §§ 101.201 and 101.211 into the Texas SIP). EIP and Environment Texas obtained compilations of these reported emissions from the TCEQ for each year from 2015-2020 through Texas's Public Information Act records request process. These compilations provided by the TCEQ are the basis for the emissions data discussed in this letter.

Table C-2: Permian Basin Sources Violating 25 Ton per Year PBR Limit for at least Three Years Between 2015 and 2020

Owner/ Operator	Source Name	County	Notices of Violation	Tons of Sulfur Dioxide Emitted					
				2015	2016	2017	2018	2019	2020
ConocoPhillips	Embar B-1 Battery	Andrews	0	3.76	<u>187.4</u>	<u>144</u>	<u>224</u>	<u>197</u>	12.5
ConocoPhillips	University Andrews 1E & 11T Battery	Ector	0	<u>33.5</u>	0	15.1	<u>106</u>	<u>228</u>	7.7
XTO Energy	Goldsmith CO2 Pilot Phase II Facility	Ector	0	<u>118</u>	<u>80.8</u>	<u>234.2</u>	<u>115</u>	<u>100</u>	<u>50.9</u>
OXY USA WTP	Johnson GBSA Unit CB	Ector	2	<u>55.1</u>	<u>43.4</u>	12.7	<u>28.6</u>	<u>109</u>	<u>85.2</u>
OXY USA WTP	Rhodes Cowden Unit Central Battery	Ector	3	<u>248</u>	12.0	<u>50.2</u>	<u>57.8</u>	<u>48.0</u>	<u>75.3</u>
Kinder Morgan	Tall Cotton Compression Station	Gaines	0	0	<u>72.6</u>	10.5	<u>106</u>	<u>60.3</u>	6.16
ConocoPhillips	Gandu 36 Battery	Ector	7	<u>80.7</u>	<u>57.8</u>	<u>33.3</u>	<u>98.1</u>	<u>55.7</u>	3.48
Occidental Permian	Goldsmith Landreth Deep Unit Station 6	Ector	5	<u>33.2</u>	<u>45.4</u>	<u>26.4</u>	<u>57.2</u>	<u>60.1</u>	<u>34.6</u>
Occidental Permian	Goldsmith Landreth Deep Unit Station 12	Ector	1	<u>52.6</u>	<u>48.9</u>	<u>25.4</u>	<u>67.2</u>	<u>56.2</u>	<u>25.45</u>
ConocoPhillips	Clyde Cowden Battery 7	Ector	3	20.2	<u>50.7</u>	18.4	<u>33.4</u>	<u>100</u>	1.99
Occidental Permian	Rhodes A Central Battery	Ector	2	0	0	18.4	<u>35.2</u>	<u>54.3</u>	<u>27.7</u>

ConocoPhillips	Gandu Battery 34	Ector	3	28.1	<u>82.2</u>	<u>46.1</u>	<u>67.5</u>	<u>36.1</u>	3.06
XTO Energy	CAG 437 Satellite Battery	Ector	0	19.6	4.52	<u>29.8</u>	<u>26.1</u>	<u>62.9</u>	0
ConocoPhillips	Clyde Cowden Battery 2	Ector	2	<u>34.2</u>	<u>43.6</u>	15.7	15.9	<u>62.7</u>	3.05
Blackbeard Operating	EWR Satellite 38 N	Crane	1	<u>31.7</u>	<u>38.7</u>	<u>36.0</u>	18.7	<u>32.7</u>	0.62

While the TCEQ takes the position that unauthorized SO₂ emissions from these sources exceeding 25 tons per year is consistent with its PBR rules, because the 25 tpy limit on source-wide *actual* emissions at § 106.4(a)(4) does not apply and *unauthorized* emissions reported to STEERS from these facilities do not count towards the § 106.4(a)(1)(B) limit, this argument misses the point. Even if *authorized* emissions from these PBR source comply with applicable emission limits, the flares authorized by PBR are not facilities that “will not make a significant contribution of air contaminants to the atmosphere[.],” as required by 30 Tex. Admin. Code § 106.1 and Texas Health and Safety Code §§ 382.01196(a), 382.057.

Each of the sources listed in Table C-2 has emitted significant quantities of air pollution in three of the six years reviewed. The factors that cause these unauthorized emissions are recurring. The emissions are foreseeable and significant. Accordingly, these sources should not be eligible to claim PBRs. While the TCEQ must be aware that flares at oil and gas sources in the Permian Basin have the potential to and often do emit significant quantities of SO₂, the agency has done nothing to prevent these sources from claiming PBRs to authorize construction of the flares. The agency has also done next to nothing in terms of enforcement to discourage repeated violations of applicable PBR limits when they occur. For example, the TCEQ has never initiated an enforcement action against any of the sources listed in Table C-2. This is so, even in cases where a source has repeatedly failed to timely notify the TCEQ of emission events. The TCEQ has issued Notices of Violation (“NOVs”) to eight of the 15 facilities listed in Table C-2 for failing to timely report the unauthorized emissions. Occidental Permian’s Goldsmith Landreth Deep Unit Station 6 received five NOVs for failing to timely report unauthorized emissions in a single year, 2020, and violated the 25 tpy SO₂ PBR limit/eligibility threshold every year between 2015 and 2020. Texas’s failure to initiate even a single enforcement action against this or any of the other sources listed in Table C-2 suggests that Texas does not have a problem with the way Permian Basin operators are abusing the PBR program. Thus, the PBR program is serving as a *de facto* exemption from Texas SIP pollution control, monitoring, and public participation requirements that apply to other significant sources of air pollution. This is inconsistent with the scope of EPA’s approval of the Texas PBR program.

Texas's implementation of its flawed Chapter 106 PBR program regulations has serious consequences. Emissions of sulfur dioxide resulting from flaring in the Permian Basin is causing NAAQS violations in Ector County. SO₂ Petition. These violations, in part, are the result of Texas's use of the PBR program to allow sources to circumvent key requirements in Texas's federally-approved plan for maintenance of the NAAQS. For example, projects authorized by PBR are not subject to Texas (or federal) Best Available Control Technology ("BACT") requirements or more robust impacts review requirements that apply to projects that are ineligible for a streamlined permitting through the PBR program.²⁷ See 30 Tex. Admin. Code § 116.111 (listing requirements for obtaining major or minor NSR permit in Texas). Likewise, PBR projects are not subject to public notice and public participation requirements that apply to sources ineligible for PBRs. See *id.* at § 39.402(b)(3).

2. Sources in Corpus Christi have used PBRs to Circumvent Major NSR Preconstruction Permitting Requirements.

Section II.B above explains how Texas's PBR program is being used to undermine the effectiveness of major NSR preconstruction permitting requirements Texas relies upon to improve air quality in the HGB severe ozone nonattainment area. The major NSR circumvention problem is especially serious for the HGB area because the major source threshold is very low and air quality already fails to meet federal health-based NAAQS. But this problem is not limited to sources in nonattainment areas. While stacking PBRs to authorize emissions that exceed applicable major source thresholds for attainment areas may be more difficult, sources may still claim PBRs to artificially carve up a major project, like ITC's Pasadena Terminal, or stack PBRs to authorize emissions increases that would otherwise trigger preconstruction permitting requirements for major modifications. The example of Enbridge's (formerly Moda) Ingleside Terminal discussed above on page 12 and the following discussion of a recent project at Buckeye Texas Processing's ("BTP") Corpus Christi facility illustrate how this can be done under the TCEQ's Chapter 106 regulations.

BTP's Corpus Christi Facility used a PBR to circumvent PSD major source preconstruction requirements for projects in attainment areas triggered by construction of two crude separation units and associated support utilities and infrastructure at its Corpus Christi source.²⁸

The primary New Source Review permit for this source is Permit No. 109923/PSDTX1502. Though the site was initially characterized as minor for NSR when the first two separation units were authorized, as-built changes to Permit No. 109923 pushed the source past the major NSR threshold (100 tons per year) for VOC. Preliminary Determination Summary

²⁷ In Texas, the federal definition of BACT at 40 C.F.R. § 52.21(b)(12) applies in Chapter 116 proceedings to authorize construction of a new major source or a major modification to an existing source, 30 Tex. Admin. Code § 116.160(c)(1)(A), and a different definition established by the TCEQ applies in proceedings to authorize construction of a new minor source or a minor modification to an existing source. *Id.* at § 116.111(a)(2)(C).

²⁸ A third separator unit was authorized concurrently with BTP's as-built changes for the first two separator units. The TCEQ determined that construction of the third separator unit should not be aggregated with construction of the first two units for purposes of PSD applicability. We have not evaluated the merits of this non-aggregation determination.

at 3.²⁹ Buckeye's as-built application represented that carbon monoxide emissions from its first two separation units totaled 99.47 tons per year, which is less than the 100 ton per year PSD major source/major modification threshold for carbon monoxide. *Id.* BTP also represented that fine particulate matter ("PM2.5") emissions authorized by the as-built amendment totaled 9.20 tons per year, which is 0.8 tons per year below the applicable PSD major modification threshold of 10 tons per year. *Id.* Accordingly, neither the initial permitting of the first two separation units, nor the as-built changes triggered PSD preconstruction permitting requirements for carbon monoxide or PM2.5.

Permit No. 109923 authorized construction of eight emergency generators. *Id.* at 7. In March of 2022, BTP submitted a PBR registration for the 106.511 PBR (Portable and Emergency Engines and Turbines) to register additional emissions from four of these previously-authorized emergency engines. According to the registration, "BTP recently discovered that four engines at the site are not consistent with the 2018 air permit application submitted to TCEQ" and the "application seeks to correct those discrepancies to reflect correct engine ratings." Registration for PBR No. 168933 ("Registration") at 1.³⁰ The PBR registration proposed to authorize carbon monoxide and PM2.5 emission increases for the four emergency generators. Registration at 2. According to the Registration and the TCEQ's technical review document for the project, the PBR registration would authorize an increase in carbon monoxide emissions of 0.73 tons per year. Various documents for this same project contain conflicting information about the amount of the increase for PM2.5. The Registration requested a PM2.5 increase of 0.10 tons per year. *Id.* at 2. The technical review document for the project listed a PM2.5 increase of 0.06 tons per year. Technical Review Document at 2.³¹ But correspondence from the TCEQ staff responsible for reviewing BTP's PBR registration indicated that the PM increase was more significant:

Ms. Banoo: Yes, you only need to submit ... a Table 1(a) showing only the emissions increases above the NSR permit allowables.

We are going to call PM emissions **PM as a product of combustion** and authorize it under 106.261(a)(3) with a limit of 1 lb/hr and 4.38 tpy.

Email from Guillermo Reyes to Shahana Banoo, Re: TCEQ Air Permit No. 168933/Project No. 341820 at Buckeye Texas Processing LLC's Ef90 Corpus Christi Facility site, dated May 26, 2022 (emphasis in original).³²

²⁹ The Preliminary Determination Summary for this project is available electronically at: https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=5241854&Rendition=Web

³⁰ Available electronically at: https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=6733865&Rendition=Web

³¹ Available electronically at: https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=6732946&Rendition=Web

³² This email is included in the TCEQ's project review file, which is available electronically at: https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=6824845&Rendition=Web

The TCEQ reviewer assigned to consider BTP's PBR registration initially determined that the BTP could not use a PBR to correct NSR permit representations:

The application requests to correct engine ratings representations made in NSR permit No. 109923. We cannot authorize this project as represented; PBR's are not the proper mechanism to correct NSR permits representations. Changes in representations to NSR permits can only be authorized by an amendment.

Please withdraw this project.

Email from Guillermo Reyes to Shahana Banoo, Re: TCEQ Air Permit No. 168933/Project No. 341820 at Buckeye Texas Processing LLC's Ef90 Corpus Christi Facility site, dated May 18, 2022.³³

However, after talking with BTP's representative, the TCEQ reviewer appears to have decided that BTP should be allowed to use a PBR to correct previous NSR permit representations:

As we discussed; we can only authorize this project under 106.261 so the total emission increases from all engines beyond what is authorized by the NSR permits will have to meet the limits of 106.261.

You will have to submit the Permits by Rule General Facilities Workbook for the project. You will also need to answer the following questions:

USE OF PBRs TO MAKE CHANGES IN REPRESENTATIONS IN NSR PERMITS

It is our policy that the use of a PBR to correct emission representations of a permitted unit after stack sampling or company audits, etc. is okay if the following are met:

1. The company must certify (A PI-7 Certification was submitted)
2. The increases do not affect original BACT determination
3. The increases do not trigger a different LDAR program. (Must show site-wide totals)
4. The increases do not result in a change to the impacts analysis.
5. There is no change in the public notice and would not require public notice if the project had been submitted under an amendment.
6. There is no PSD applicability.
7. There is no Nonattainment applicability.
8. The project does not resolve past compliance issues.
9. The increases do not include air pollutants that are listed for the site on the Houston Toxics List.

³³ This email is included in the TCEQ's project review file linked in note 32.

Email from Guillermo Reyes to Shahana Banoo, Re: TCEQ Air Permit No. 168933/Project No. 341820 at Buckeye Texas Processing LLC's Ef90 Corpus Christi Facility site, dated May 26, 2022.³⁴

According to BTP's response to these questions, there was no PSD applicability because the proposed increases above existing NSR limits were all below applicable PSD thresholds. Email from Guillermo Reyes to Shahana Banoo, Re: TCEQ Air Permit No. 168933/Project No. 341820 at Buckeye Texas Processing LLC's Ef90 Corpus Christi Facility site, dated June 2, 2022.³⁵ But this conclusion was unwarranted.

The carbon monoxide and PM_{2.5} emissions increases authorized by the PBR registration were not the result of any modifications to existing equipment at the Corpus Christi Facility. As the TCEQ reviewer and BTP both acknowledged, these were corrections to prior representations the TCEQ had relied upon to issue NSR Permit No. 109923/PSDTX1502. Accordingly, the PBR registration emission increase should have been considered together with increases for the as-built project because they were part of that project. BTP's correction of its previous misrepresentation and emissions increases resulting from this correction does not constitute a new project that can be disaggregated from the as-built project. When the PBR registration carbon monoxide increases are added to carbon monoxide increases represented in the "as-built" application—99.47 tons per year + 0.73 tons per year—total carbon monoxide increases—100.2 tons per year—exceed the 100 ton per year PSD applicability threshold for carbon monoxide, triggering PSD preconstruction permitting requirements for carbon monoxide. When the PM increase of 4.38 tons per year the TCEQ's permit reviewer stated were part of the 106.261 PBR registration are added to the 9.20 ton per year PM_{2.5} increase represented in the as-built application, total PM_{2.5} increases—13.58 tons per year—exceed the 10 ton per year PSD applicability threshold for PM_{2.5}.

In this way, BTP was able to use a Texas PBR to circumvent applicable PSD preconstruction permitting requirements without any notice or opportunity for public comment concerning the increase triggering these requirements. Additionally, the TCEQ determined that this project could not be authorized under the PBR specifically established to authorize emissions from emergency generators, 106.511, at BTP's Corpus Christi site. Instead, the TCEQ determined that the general PBR at 106.261 was a more appropriate instrument to authorize corrections to enforceable representations for an existing NSR permit. The vague language in 106.261, even when considered together with the TCEQ's Chapter 106, Subchapter A General Requirements, was not sufficient to put members of the public on notice that it would be used to authorize changes to major NSR permits for a category of equipment that was already subject to its own PBR. Thus, public notice at the time PBRs 106.261 and 106.511 were promulgated was not sufficient to put members of the public on notice that these authorizations could be used to authorize projects like this one. Finally, members of the public did not receive notice of or an opportunity to comment on BTP's responses to the nine questions the TCEQ stated were necessary to determine whether the project could be authorized by PBR. This conflicts with 40 C.F.R. § 51.161(a), which provides that State Implementation Plans must "provide opportunity for public comment on information

³⁴ This email is included in the TCEQ's project review file. See note 31.

³⁵ *Id.*

submitted by owners and operators,” which must include “the agency’s analysis of the effect of construction or modification on ambient air quality, including the agency’s proposed approval or disapproval.”

Additionally, even if additional PM2.5 emissions authorized by the PBR Registration were not sufficient to push authorized emission of PM2.5 past the 10 ton per year PSD applicability threshold, the limits in the PBR Registration are not sufficient to constrain the emergency generators’ potential to emit, because EPA has determined that the PBR at 106.261 fails to include monitoring, testing, and recordkeeping requirements that are sufficient to make certified 106.261 emission limits practicably enforceable.³⁶

D. Harm Caused by Flaws in the TCEQ’s Chapter 106 PBR Program Rules Disproportionately Harm Communities of Color and Low-Income Communities.

Texas’s low-income communities and communities of color are disproportionately burdened by the cumulative emissions authorized by PBRs and disproportionately shut-out of public participation processes that should be available when major and synthetic minor facilities wish to obtain new pre-construction permits or modify existing permits.

In 2021, EIP obtained a list of all PBR registrations from 1996-2021 at facilities in the greater Houston area,³⁷ Dallas, Beaumont, Corpus Christi, and El Paso (hereinafter “analyzed areas”). In 2022, EIP obtained a list of all PBRs registered at facilities in Dallas County from 1996 to 2022. Table D-1 provides the total number of registered entities which have registered PBRs and the total number of PBRs registered for each of the analyzed areas.

Table D-1: Total Facility and PBR Registrations by Area

<i>Geographic Area</i>	<i>No. of Registered Entities which have registered PBRs</i>	<i>No. of PBRs registered</i>	<i>Time Range of Data</i>
Greater Houston Area	4,908	22,637	1996-2021
Beaumont	31	1,982	1996-2021
Dallas County	30	810	1996-2022
Corpus Christi	21	890	1996-2021
El Paso	6	157	1996-2021

Data analysts at Texas RioGrande Legal aid mapped the location of these facilities.³⁸ The analysts identified the census block group each facility is located in. The vast majority of PBR

³⁶ See EPA objection orders listed at Petition for Action Regarding Deficiencies in the Texas Air Permitting Program Related to Environmental Justice & Public Participation at note 155.

³⁷ The greater Houston area covers many cities, including Conroe, Baytown, Galveston, and Freeport.

³⁸ The mapping and the following demographics exclude facilities in the greater Houston area which registered less than 20 PBRs between 1996 and 2021. This is because the use of PBRs are so prolific in the greater Houston area that verifying the location of each facility was too time-consuming for the legal aid team. In total, 4908 unique registration numbers had registered at least 1 PBR in the greater Houston area between 1996 and 2021. The median number of PBRs registered to a facility was 1. By limiting our analysis to only facilities with 20 or more PBR registrations in the greater Houston area, we were able to identify the location of the facilities with a higher incidence of cumulative PBR

registrations in the analyzed areas are in census block groups that are majority populations of color. Table D-2 identifies the total number of PBRs registered to regulated entities in census block groups that have populations that are a majority or minority non-Hispanic white. More than two thirds, 68%, of all registered PBRs are in census block groups whose populations are majority people of color.³⁹

Table D-2: Race/Ethnicity Demographics of Census Block Groups where PBRs are Registered⁴⁰

<i>Demographic of Census Block Groups</i>	<i>No. of PBRs registered</i>	<i>Pct. of Total Registered PBRs</i>
Majority (>50%) non-Hispanic white	3,801	32.58
Majority POC (<50% non-Hispanic White)	8,237	68.42

The figures in Table D-2 clearly demonstrate a disparity in which populations are subject to cumulative emissions increases without public notice, comment, or judicial review of TCEQ's decisions to allow increased emissions. However, it is likely that the disparity is underestimated. A review of the analyzed areas indicates there are registered entities that have registered a significant number of PBRs and which are located in majority non-Hispanic white census block groups, but the entities are more closely situated to communities that are majority populations of color.

registrations and thus, the location of the facilities likely utilizing the PBR program in a manner not contemplated by the public or EPA when the program began.

Also excluded from these figures are mobile sources of emissions, such as trench burners.

³⁹ By comparison, according to the American Communities Survey Estimates 2015-2019, only 56% of all census block groups in Texas have populations that are majority of communities of color. 2015-2019 ACS 5-Year Estimates, Table BO3002. Available electronically at: <https://data.census.gov/cedsci/table?t=Race%20and%20Ethnicity&g=0400000US48%241500000&y=2019&d=ACS%205-Year%20Estimates%20Detailed%20Tables&tid=ACSDT5Y2019.B03002>

⁴⁰ Census Block data was obtained from the 2017-2021 ACS 5-year estimates.

Table D-3: Race/Ethnicity Demographics of populations of Selected Registered Entities with Registered PBRs⁴¹

<i>Geographic Scope</i>	<i>Est. Population Total</i>	<i>Pct. Non-Hispanic White</i>	<i>Pct. Population of Color</i>	<i>No. of Registered PBRs</i>
<u>ExxonMobil Baytown, RN: 102574803</u>				
Census Block Group	1,740	52.3	47.7	409
3-Mile Radius from Facility	24,523	25	75	
1-Mile Radius from Facility	80	26	74	
<u>BASF Freeport, RN: 100218049</u>				
Census Block Group	738	63.9	36.1	189
3-Mile Radius from Facility	25,128	38	62	
1-Mile Radius from Facility	614	27	73	
<u>Flint Hills Refinery West Corpus Christi, RN: 100235266</u>				
Census Block Group	329	60.2	39.8	300
3-Mile Radius from Facility	7,974	30	70	
1-Mile Radius from Facility	157	17	83	

The registered entities in Table D-3 are all located in census block groups where the population is majority non-Hispanic white. Yet, the populations closely situated to each entity – those withing 3- and 1-mile radii – are majority people of color. The PBRs registered to these facilities make up nearly a quarter of PBRs allocated to census block groups that are majority non-Hispanic white in Table D-2. This suggests a much deeper disparity is likely between majority white populations and majority communities of color in being subjected to cumulative increases in air emissions without access to public participation measures.

The data also reveals there is a disparity in the distribution of PBRs, and the cumulative emissions and lack of public participation that accompany their registration, between low- and high-income communities. As shown in Table D-4, nearly 72% of all registered PBRs are registered in census block groups where the median income is below the State of Texas’s median income. If PBR registrations were evenly distributed between lower income and higher income areas, you would expect there to be closer to a 50/50 split. In addition, more than a third (36.87%)

⁴¹ Demographic data for the 3- and 1-mile radii was obtained through the EPA’s EJ screen for facility by searching for the facility’s address and generating the standard ACS report.

of all PBRs are registered in communities where the median income is less than 200% of the federal poverty line for a family of four.⁴²

Table D-4: Income Demographics of Census Block Groups where PBRs are Registered⁴³

<i>Demographic of Census Block Groups</i>	<i>No. of PBRs registered</i>	<i>Pct. of Total Registered PBRs</i>
Average income is above the statewide median income	3,395	28.2
Average income is below the statewide median income	8,643	71.8

It's likely that this income demographic data also doesn't show the true depth of disparity of PBR registrations between low- and high-income areas due to the same limitation of the race and ethnicity data. For instance, according to census block data, the 409 PBRs registered to ExxonMobil Baytown are in area where the median income exceeds that of Texas's. But, according to EJScreen, 53% of the population that lives within a 1-mile radius and 41% that live within a 3-mile radius of the facility are low-income.

TCEQ's PBR program allows facilities to circumvent public participation and scrutiny over increased emissions. The distribution of PBRs in major industrialized areas indicates that the Texans shut out of public participation are largely low-income and Texans of color. This is serious Environmental Justice and Access to Justice issue that TCEQ must remedy.

IV. CONCLUSION

For decades, Texas polluters have relied on the TCEQ's PBR program to elude enforcement for unauthorized pollution releases, to avoid stringent major source pollution control requirements necessary to attain and maintain compliance with federal health-based NAAQS, and to lock the public out of the permitting process. The program not only contributes to ongoing nonattainment in the HGB severe nonattainment area, it has long raised Environmental Justice concerns (as acknowledged by the TCEQ),⁴⁴ has made it impossible for regulators and members of the public to readily identify applicable emission limits for significant equipment at major

⁴² This is a common definition of "low-income". See Kilduff, Lillian, Population Reference Bureau, *How Poverty in the United States is Measured and Why it Matters*, (Jan. 31, 2022). Available at https://www.prb.org/resources/how-poverty-in-the-united-states-is-measured-and-why-it-matters/#_ednref11.

⁴³ Census Block data was obtained from the 2017-2021 ACS 5-year estimates.

⁴⁴ See e.g. TCEQ Interoffice Memorandum Re: Incorporating Permit by Rule Emissions in Permit Review – Pilot Study, dated April 15, 2005 ("[T]he cumulative impacts of emissions from the use of PBRs at a site have raised concerns that efforts to improve air quality might be effected. As part of the settlement of environmental justice lawsuits, the Texas Commission on Environmental Quality has agreed to address the issue of cumulative emissions from the multiple use of PBRs at a single site." Available electronically at: https://www.tceq.texas.gov/assets/public/permitting/air/memos/pbrstudy05_05.pdf The results of the study announced by this memorandum do not appear to be available online and the Chapter 106 regulations have not been revised to resolve the problem of cumulative impacts from repeated PBRs at a single source or at closely located sources.

sources of pollution. These are serious problems, as the program is the most used air permitting mechanism in Texas, by a wide margin.

Despite its long and troubled history, and despite the availability of relevant guidance, the TCEQ has not attempted to reform its program to actually resolve these serious problems. We urge the Commission to undertake that effort now. Specifically, the Chapter 106 should not be readopted, unless the regulations are revised to:

- Restrict use of the program to true minor sources and prohibit use of the program to authorize changes with multiple, distinct processes. As EPA has explained, “[f]or sources with numerous categories at the plant site and/or that emit amounts just below the major source threshold, ... there is generally no feasible way to ensure their minor source status without a case-by-case permitting process.” PTE Memo at 4; *see also* 76 Fed. Reg. 38,770;
- Require PBRs established by the TCEQ to authorize only well-defined and relatively simple projects, such as gas stations or dry cleaners that do not have the potential to contribute significantly to local air pollution concentrations, and that will emit pollutants with similar characteristics and warrant similar permit terms. 76 Fed. Reg. 38,768; *see also* PTE Memo at 4 (“In identifying source categories to be covered within this guidance, the EPA included those categories for which a single type of activity tends to dominate emissions, and for which most sources in the category actually emit at levels well below their potential, and well under the major source thresholds.”);
- Require each PBR established by the TCEQ contain specific and technically accurate limits that restrict the potential to emit and specific compliance requirements. The scope of PBRs issued by the TCEQ should be sufficiently specific and narrowly-defined to make this feasible. Enforceability Memo at 8;
- Establish cumulative emission limits for projects authorized by PBR below the applicable netting threshold for major sources and impose additional requirements necessary to “protect the public from cumulative risks in areas of concentrated operations[.]” Texas Water Code § 5.130(1);
- Establish specific criteria the TCEQ must consider when conducting investigations required by Tex. Health and Safety Code §§ 382.05196(a) and 382.057(a) and require such investigations to be conducted whenever a new PBR is announced, when an existing PBR is amended, and as part of the TCEQ’s quadrennial review of the PBR program regulations;
- Establish regulations specifically defining the terms and conditions for a PBR in nonattainment areas necessary to facilitate prompt compliance with the NAAQS and to prevent circumvent other, more stringent, preconstruction permitting and pollution control requirements, Tex. Health & Safety Code § 382.057(b);

- Prohibit the use of multiple PBRs to authorize project types that are not covered by a single PBR;
- Ensure consistency with EPA public participation requirements at 40 C.F.R. § 51.161; and
- Revoke PBRs that are inconsistent with the above recommendations, including but not limited to Chapter 106, Subchapter K PBRs 106.261, 106.262, 106.263, and 106.264.

The TCEQ's Chapter 106 PBR program absolves industry and allows the TCEQ to turn a blind eye to many actions that threaten public health, undermine federal public participation requirements, and impair economic growth by prolonging regulatory constraints on development established by nonattainment NSR preconstruction permitting requirements. The program removes opportunities guaranteed by federal law for members of the public—mostly people of color and low-income communities—to protect their interests by providing input on significant projects authorized by PBR. In short, the PBR program as currently written and implemented poses one of the most significant threats to the TCEQ's integrity and its ability to protect the public from the harmful effects of air pollution. It is long past time for the TCEQ to confront and resolve longstanding problems with its program identified by Commenters and others.

Sincerely,

A handwritten signature in black ink, appearing to read 'G. Clark-Leach', with a stylized flourish at the end.

Gabriel Clark-Leach
Senior Attorney
ENVIRONMENTAL INTEGRITY PROJECT
1206 San Antonio St.
Austin, Texas 78701
(512) 316-7194

(Attachment A)

Letter to Erica Hauk, Project Director,
Office of Inspector General, from
Gabriel Clark-Leach, Senior Attorney,
Environmental Integrity Project, dated
January 24, 2020



1206 San Antonio St.
Austin, TX 78701
Phone: (512) 637-9478
Fax: (512) 584-8019
www.environmentalintegrity.org

January 24, 2020

Erica Hauck
Project Director
Re: EPA Oversight of Synthetic Minor Sources
1200 Pennsylvania Avenue, N.W. (241OT)
Washington, D.C. 20460

Dear Ms. Hauck,

I am writing to follow-up on our previous letter to you and our phone meeting regarding the Office of the Inspector General's pending investigation regarding Clean Air Act synthetic minor permitting. In our previous letter, we indicated that we would follow up with additional information demonstrating that Texas's Permit by Rule ("PBR") program could be used to undermine major NSR requirements. This letter provides some information about that problem, but focusses more directly on issues related to Texas's treatment of synthetic minor sources. After our phone conference, I believe this information is more directly relevant to the Inspector General's present inquiry.

EIP's concerns about Texas's permitting of synthetic minor sources involves problems in the Texas State Implementation Plan ("SIP") as well as the state's failure to properly implement and enforce its programs. As we explain below, Texas's SIP-approved PBR and standard permit program rules appear to allow Texas to issue permits for synthetic minor sources without any public participation. Synthetic minor source authorizations issued pursuant to these programs are often not practically enforceable, because they do not include any specific monitoring requirements. As we explained in our previous letter, Texas allows sources authorized by PBRs to emit significantly more than the program allows year after year without taking action to penalize the unauthorized emissions or requiring sources to obtain a permit authorizing what appear to significant routine emissions.¹ In rare cases where Texas actually brings an enforcement action to address a "minor" source's violation of major source requirements, the punishment it imposes is not a significant deterrent.² Unless and until EPA takes action to address these SIP deficiencies

¹ See also, Environmental Integrity Project, *Breakdowns in Enforcement*, July, 2017, available electronically at: <https://www.environmentalintegrity.org/wp-content/uploads/2017/02/Breakdowns-in-Enforcement-Report.pdf>

² For example, the TCEQ has issued two enforcement orders against the Waha Gas Plant for unauthorized construction of a major modification. These two orders, (Attachments A and B), impose insignificant fines without requiring Waha to obtain a major New Source Review Permit. The Waha Gas Plant is a major source for purposes of Title V, but purports to be a minor source for purposes of NSR.

and implementation problems, Texas will continue to implement its permitting authority in ways that undermine the Clean Air Act's major source requirements.

I. Synthetic Minor Source Permitting in Texas

A. Texas's Process for Authorizing Synthetic Minor Sources Fails to Provide Meaningful Opportunities for Public Participation and Results in Limits that are not Practically Enforceable

Unlike EPA's permitting rules for Indian Country and federally approved programs in some other states, the Texas SIP does not include any program or set of rules specifically designed for the review and authorization of synthetic minor sources.³ Instead, sources in Texas may use any preconstruction permitting instrument in the Texas SIP to obtain artificial limits on emissions without necessarily indicating that the source is a synthetic minor. This makes it very difficult to differentiate synthetic minor sources from true minor sources in Texas.

The Texas SIP also differs from EPA's Indian Country permitting scheme in that the availability of general permits, like PBRs and standard permits, is not limited to true minor sources.⁴ Synthetic minor sources, major sources, and true minor sources in Texas may all claim PBRs and standard permits. These Texas general permit programs, moreover, both expressly allow operators to establish limits below major source thresholds to avoid otherwise-applicable major source requirements.⁵ EPA specifically declined to make general permits available to synthetic minor sources and major sources for good reason:

We also disagree with the commenter that would like us to allow the use of general permits for synthetic minor sources since these sources are major sources until they are approved to construct under a synthetic minor source. We believe that the size and amount of emissions from these sources warrants a case-by-case review of the source and their proposed emission limitations. Therefore, in the final rule, we are not allowing general permits for synthetic minor sources.⁶

³ EPA's Indian Country synthetic minor permits rule is found at 40 C.F.R. § 49.158.

⁴ Compare 40 C.F.R. § 49.156(f)(4)(i) ("The reviewing authority will determine which categories of *true minor* sources are appropriate for coverage as a permit by rule") (emphasis added) with 30 Tex. Admin. Code § 106.1 and 106.4 (providing that PBRs may be used to authorize construction of equipment that "will not make a significant contribution of air contaminants" whether or not such equipment is located at a true minor, synthetic minor, or major source). Texas's PBR rules do provide that a PBR may not be claimed to authorize construction of a new major source or major modification, 30 Tex. Admin. Code § 106.4, but the agency allows major sources and synthetic minor sources to use PBRs to authorize projects that do not trigger major modification requirements. Because there is no requirements to determine whether equipment authorized by multiple PBR registrations at a single source are part of the same project, there is a significant risk that projects are piecemealed across several PBRs to circumvent major NSR requirements.

⁵ 30 Tex. Admin. Code §§ 106.6, 116.611(c).

⁶ *Review of New Sources and Modifications in Indian Country*, 76 Fed. Reg. 38748, 38770 (July 1, 2011).

Synthetic minor sources are, by definition, sources that have the potential to significantly affect air quality and should be subject to public participation requirements. Thus, EPA's rules make synthetic minor permits subject to public notice, comment, and hearing requirements.⁷ Unlike EPA's Indian Country rules, the Texas SIP allows operators to claim PBRs or standard permits that establish synthetic minor limits without triggering public participation requirements.⁸ These provisions appear to conflict with EPA's rule at 40 C.F.R. § 51.161.

Texas PBR and standard permit program rules do not establish any source-specific review process to ensure that limits claimed to establish a synthetic minor source are practically enforceable. Instead, these programs establish generic recordkeeping requirements that apply to all projects, including those at major sources and synthetic minor sources.⁹ EPA has held that these requirements are insufficient to assure compliance with PBR emission limits incorporated into a Title V permit, but has not addressed the problem of enforceability in the context of synthetic minor sources.¹⁰ While some PBRs and standard permits do contain basic monitoring requirements in addition to the generic program recordkeeping provisions, many do not.¹¹ Where a PBR actually specifies monitoring or testing requirements, those requirements are often insufficient to make emission limits practically enforceable. While the review process for source-specific preconstruction permits issued pursuant to Texas's Chapter 116, Subchapter B permitting rules for major and minor sources is more robust, these permits still often fail to specify monitoring and testing requirements sufficient to make emission limits practically enforceable.¹²

Unlike EPA's Indian Country rules, the Texas SIP does not require sources to indicate whether requested emission limits and operation or production limits are intended to establish the source as a synthetic minor.¹³ Thus, in many cases, it is nearly impossible—or actually impossible—to identify a source's total physical capacity to emit pollution by reviewing publicly-accessible permitting documents. Instead, one is left to determine a source's PTE by adding up the emission limits contained in its various preconstruction permits without knowing whether these limits reflect the source's actual capacity, as designed, or impose artificial limits on PTE for the

⁷ 40 C.F.R. § 49.157.

⁸ No public notice is required to claim any PBR. While some Texas standard permits do contain public notice requirements, others do not. *See, e.g.*, 30 Tex. Admin. Code § 116.620 (standard permit for installation or modification of oil and gas facilities does not include public notice requirements).

⁹ 30 Tex. Admin. Code §§ 106.8(c), 116.615(8).

¹⁰ *In the Matter of Motiva Enterprises Port Arthur Refinery* ("Motiva Order"), Order on Petition No. VI-2016-23 (May 1, 2018) at 23-26 (objecting to permit because generic PBR recordkeeping requirement was insufficient to make requirements enforceable), available electronically at: https://www.epa.gov/sites/production/files/2018-06/documents/motiva_port_arthur_response2018.pdf.

¹¹ Motiva Order at 23-26; *see also, e.g.*, PBRs at 30 Tex. Admin. Code §§ 106.124, 106.261, and 106.262, which are discussed in more detail below.

¹² *See, e.g., In the Matter of Shell Deer Park Chemical Plant and Shell Deer Park Refinery*, Order on Petition Nos. IV-2014-04 and VI-2014-05 (September 24, 2015) at 17-30, available electronically at: https://www.epa.gov/sites/production/files/2015-09/documents/dpr_response2014.pdf

¹³ 40 C.F.R. § 49.158(a)(1)(ii)(A) (Applications for a synthetic minor permit must include "[t]he proposed emission limitation and a description of its effect on actual emissions or the potential to emit.") (emphasis added).

purpose of avoiding major source requirements. The task of adding up applicable emission limits is made more difficult by Texas's new practice of omitting certified PBR emission limits from the face of its registration letters.¹⁴ In such cases, a person wishing to determine the permit limits must obtain and review the relevant applications.

Making matters worse, the TCEQ allows operators to designate operational and production limits, which may be taken to avoid major source status, as well as compliance demonstration requirements as confidential.¹⁵ Where a throughput or operational limit is identified as confidential, the permit face will reference limits proposed in a confidential application file without specifying the applicable limit.¹⁶ In other cases, the TCEQ will omit specific information about how emissions should be calculated for compliance purposes from a permit face if the relevant information, e.g., emission factors and calculation methods, are contained in the emissions calculation section of a permit application. These sections of air permit applications are routinely marked confidential.¹⁷ In such cases, the applicable limits are clearly not practically enforceable.

Texas's loose confidentiality practice not only undermines the practical enforceability of confidential requirements, it also interferes with the public's ability to participate in the permitting process. Texas's rules require members to request and participate in a contested case hearing to exhaust their administrative remedies. Texas's contested case hearing rules, however, require members of the public to identify disputed issues of fact and law to be considered at a contested case hearing for minor NSR permits within 30 days after public notice of an application (not a draft permit) is published.¹⁸ It is impossible to challenge an applicant's claim that application contents are confidential within this 30-day period. Accordingly, it is impossible, as a practical matter, to timely raise issues related to confidential application representations for review during a contested case hearing.

B. A Case Study: ExxonMobil's Baytown Technology and Engineering Complex

A review of the permitting history for one of the few sources in Texas that self-identifies as a synthetic minor puts these problems in context: ExxonMobil's Baytown Technology and Engineering Complex ("BTEC"). This source is located at ExxonMobil's Baytown complex in

¹⁴ See, e.g., (Attachment C), PBR Registration Letter, Permit No. 156188 (May 16, 2019). Until recently, certified PBR registration letters did include source-specific maximum emission rates. We are uncertain why this practice changed.

¹⁵ See, e.g., TCEQ's Confidential Information in Air Permit Applications webpage at: <https://www.tceq.texas.gov/permitting/air/confidential.html>. The webpage states that emission limits may not be treated as confidential, but does not limit the eligibility of any other kind of information for treatment as classified.

¹⁶ (Attachment D), Excerpts from Texas construction permits establishing confidential requirements. These examples are not exhaustive.

¹⁷ Many of the Technical Review Documents attached to this letter indicate that emissions calculations were submitted in a confidential permit application.

¹⁸ See, TCEQ, Public Participation in Environmental Permitting Applications Filed on or After September 1, 2015 at Request for a Contested Case Hearing, available electronically at: https://www.tceq.texas.gov/assets/public/comm_exec/pubs/gi/gi-445.pdf

the Harris County severe nonattainment area.¹⁹ The Baytown complex also contains three separately permitted, but physically integrated major sources: the Baytown Refinery, the Baytown Olefins Plant, and the Baytown Chemical Plant. These sources, along with the BTEC, comprise the largest integrated petrochemical complex in the United States. ExxonMobil identifies the BTEC as a separate synthetic minor source even though it is co-located with three major sources and actually shares equipment with the Baytown Chemical Plant.²⁰ The TCEQ has issued *31 separate active authorizations* covering various equipment at the BTEC.²¹ None of the publicly-available documents related to these authorizations contains a meaningful and comprehensive account of the physical PTE of equipment at the source. In most cases, the emissions calculations used to establish limits in the authorizations were marked “confidential.” According to an application filed in 2014, “[t]he BTEC is a synthetic minor source as established in 2003 with form PI-8.”²² The PI-8 form indicates that site-wide emission rates (in 2003) for the BTEC are below Title V, NESHAP, and NSR major source thresholds, but does not contain any information supporting that claim.²³ Nor does the form, or any subsequent publicly accessible document reviewed by EIP, indicate which pollutant(s) the source—as designed—has the potential to emit at levels that exceed major source thresholds.

While the BTEC is authorized to emit nearly 80 tons of VOC,²⁴ well above the currently-applicable 25 ton major source threshold for Harris County, only one of the active preconstruction permits for the source, authorizing less than a single ton of VOC, has been subject to public notice and comment requirements.²⁵ The other active authorizations for this source are all certified PBR registrations. And ExxonMobil only sought a permit subject to notice and comment process requirements after the TCEQ realized that ExxonMobil had failed to comply with the State’s PBR rule limiting site-wide emissions of VOC to 25 tons for sources that have not been subject to public notice and comment procedures.²⁶ To avoid this site-wide limit, ExxonMobil obtained Permit No. 142313 that simply reauthorized a small fraction of emissions at the BTEC, which had been previously authorized by PBR.²⁷

All of the PBR certifications for the BTEC fall under one, or in some cases two, of three PBRs: 106.124 (Pilot Plants), 106.261(Facilities-General), 106.262 (Facilities-General).²⁸ None

¹⁹ A list of the active preconstruction permits covering equipment at the BTEC is included as Attachment E to this letter.

²⁰ See, e.g., Technical Review Document for Permit Nos. 87134 (Attachment F) and 124215 (Attachment G) indicating that emissions from the BTEC are released from flares at the Baytown Chemical Plant.

²¹ The TCEQ has issued more than 31 authorizations, but some of those authorizations have been voided.

²² (Attachment H), Technical Review Document for Permit No. 118344.

²³ (Attachment I), PI-8 Form.

²⁴ See Attachment E.

²⁵ (Attachment J), Permit and Technical Review Document for Permit No 142313.

²⁶ 30 Tex. Admin. Code § 106.4(a)(4); (Attachment K), Deficiency Technical Review Document for Permit No. 124215.

²⁷ See, Attachment J.

²⁸ The requirements of these PBRs may be found at 30 Tex. Admin. Code §§ 106.124, 106.261, and 106.262.

of these PBRs specify the applicable monitoring and testing requirements that assure compliance with any applicable emission limit. Thus, these permits are not practically enforceable. It also appears that several of these authorizations have expired. The PBR at 106.124 provides that “[o]peration of the pilot plant ... may not occur beyond the end of the fifth calendar year from the year of the initial production ... unless a permit is obtained under § 116.110[.]”²⁹ Certified PBR Registration Nos. 55901, 71765, 74339, 82901 were all issued under 106.124 between 2003 and 2007. They should have been voided long ago or amended to authorize the use of existing equipment for a different purpose.

The BTEC’s relationship to the separately-permitted major sources at ExxonMobil’s Baytown Complex is also fluid. Several PBRs authorizing projects at the BTEC involve flares located at and authorized permits issued for the adjacent Baytown Chemical Plant, which is a major source for purposes of Title V, PSD, NNSR, and NESHAP standards.³⁰ It is not clear that the BTEC and the chemical plant (or other sources included in the Baytown complex) are being operated as separate and distinct sources. Thus, it is possible that ExxonMobil is using its synthetic minor designation for the BTEC to mask emissions increases from its major source chemical plant and vice versa.

II. PBRs and Major Sources

In its approval of Texas’s general PBR rules, EPA explained that PBRs “provide a streamlined mechanism for approving the construction of certain small sources” that the TCEQ determined “will not make a significant contribution of air contaminants to the atmosphere.”³¹ Contrary to this understanding, Texas allows the largest sources in Texas to avoid otherwise-applicable preconstruction permitting requirements, including public participation requirements, by claiming PBRs.³² For example, 889 of the 1,291 active PBR registrations for the heavily-industrialized Jefferson County authorize equipment and emissions at major sources. Motiva’s Port Arthur Refinery, which is the largest petroleum refinery in the United States, has 48 active PBRs. Most of these PBRs revise requirements or authorize new emissions from equipment previously authorized by a source-specific NSR permit.³³ Thus, in many cases the effective requirements for equipment authorized by one of Motiva’s PSD permits are actually different from those listed in the applicable PSD permit.

In Harris County, which is part of the HGB severe ozone nonattainment region, approximately 1,800 out of nearly 4,500 active PBR registrations authorize equipment and emissions at major sources. The extensive use of PBRs at major sources is problematic for many of the same reasons it is problematic for synthetic minor sources. It allows significant cumulative

²⁹ 30 Tex. Admin. Code § 106.124(3).

³⁰ See *supra* n20.

³¹ 68 Fed. Reg. 64543, 64544 (November 14, 2003).

³² See, e.g., 30 Tex. Admin. Code § 116.116(d)(1) (providing that changes to NSR permit requirements may be authorized by PBR instead of a permit amendment).

³³ (Attachment L), Motiva Port Arthur Refinery PBR Summary.

emissions increases without any public participation and creates the risk that significant emissions increases otherwise triggering major NSR requirements can be divided into multiple minor permits to avoid netting demonstration requirements. It also allows permittees to modify major NSR permit requirements without public notice.³⁴ While EPA has objected to several Title V permits that fail to include information necessary to make PBR requirements enforceable as a practical matter at major sources, the suitability of PBR procedures for authorizing emissions at major sources has largely escaped EPA scrutiny.

If you would like additional detailed information about the matters addressed by this letter, please let us know. Also, do not hesitate to contact us if there is any other way we can be helpful to your review.

Gabriel Clark-Leach, gclark-leach@environmentalintegrity.org; 512-637-9478
Eric Schaeffer, eschaeffer@environmentalintegrity.org; (202) 263-4440

Sincerely,

A handwritten signature in black ink, appearing to read 'GCL' followed by a stylized flourish.

Gabriel Clark-Leach
Senior Attorney
Environmental Integrity Project
1206 San Antonio Street
Austin, Texas 78701

cc: Richard Jones, EPA/OIG

³⁴ See, e.g., (Attachment M), Technical Review Document for Permit No. 156220.

ATTACHMENT LIST:

<u>Attachment A</u>	Waha Enforcement Order, Docket No. 2005-1529-AIR-E
<u>Attachment B</u>	Waha Enforcement Order, Docket No. 2005-0035-AIR-E
<u>Attachment C</u>	PBR Registration Letter, Permit No. 156188
<u>Attachment D</u>	Excerpts from Texas Construction Permits Establishing Confidential Requirements
<u>Attachment E</u>	Summary of Preconstruction Authorizations for ExxonMobil's Baytown Technology and Engineering Complex
<u>Attachment F</u>	Technical Review Document for Permit No. 87134
<u>Attachment G</u>	Technical Review Document for Permit No. 124215
<u>Attachment H</u>	Technical Review Document for Permit No. 118344
<u>Attachment I</u>	PI-8 Form for ExxonMobil BTEC
<u>Attachment J</u>	Permit and Technical Review Document for Permit No. 142313
<u>Attachment K</u>	Deficiency Technical Review Document for Permit No. 124215
<u>Attachment L</u>	Motiva Port Arthur Refinery PBR Summary
<u>Attachment M</u>	Technical Review Document for Permit No. 156220

ATTACHMENT A:

Waha Enforcement Order, Docket No. 2005-1529-AIR-E

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



IN THE MATTER OF AN
ENFORCEMENT ACTION
CONCERNING
REGENCY GAS SERVICES WAHA, LP
RN100211408

§ BEFORE THE
§
§ TEXAS COMMISSION ON
§
§ ENVIRONMENTAL QUALITY

AGREED ORDER DOCKET NO. 2005-1529-AIR-E

I. JURISDICTION AND STIPULATIONS

At its **MAR 29 2006** agenda, the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding Regency Gas Services Waha, LP ("Regency") under the authority of TEX. HEALTH & SAFETY CODE ch. 382 and TEX. WATER CODE ch. 7. The Executive Director of the TCEQ, through the Enforcement Division, and Regency appear before the Commission and together stipulate that:

1. Regency owns and operates oil and gas production facilities at 2821 Waha Road, Pecos County, Texas (the "Plant").
2. The Plant consists of one or more sources as defined in TEX. HEALTH & SAFETY CODE § 382.003(12).
3. The Commission and Regency agree that the Commission has jurisdiction to enter this Agreed Order, and that Regency is subject to the Commission's jurisdiction.
4. Regency received notice of the violations alleged in Section II ("Allegations") on August 15, 2005.
5. The occurrence of any violation is in dispute and the entry of this Agreed Order shall not constitute an admission by Regency of any violation alleged in the Allegations, nor of any statute or rule.
6. An administrative penalty in the amount of Thirty Thousand Six Hundred Twenty-Five Dollars (\$30,625) is assessed by the Commission in settlement of the violations alleged in the Allegations. Regency has paid Twenty-Four Thousand Five Hundred Dollars (\$24,500) of the administrative penalty and Six Thousand One Hundred Twenty-Five Dollars (\$6,125) is deferred contingent upon Regency's timely and satisfactory compliance with all the terms of this Agreed Order. The deferred amount will be waived upon full compliance with the terms of this Agreed Order. If Regency fails to timely and satisfactorily comply with all requirements of this Agreed Order, the Executive Director may require Regency to pay all or part of the deferred penalty.

7. Any notice and procedures which might otherwise be authorized or required in this action are waived in the interest of a more timely resolution of the matter.
8. The Executive Director of the TCEQ and Regency have agreed on a settlement of the matters alleged in this enforcement action, subject to the approval of the Commission.
9. The Executive Director recognizes that Regency was issued New Source Review ("NSR") Permit No. 74857 on August 31, 2005.
10. The Executive Director may, without further notice or hearing, refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings if the Executive Director determines that Regency has not complied with one or more of the terms or conditions in this Agreed Order.
11. This Agreed Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Agreed Order, whichever is later.
12. The provisions of this Agreed Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Agreed Order unenforceable, the remaining provisions shall be valid and enforceable.

II. ALLEGATIONS

As owner and operator of the Plant, Regency is alleged to have:

1. Failed to obtain NSR and Prevention of Significant Deterioration ("PSD") permits, and failed to revise Federal Operating Permit ("FOP") O2546, in violation of FOP O2546, General Terms and Conditions, 30 TEX. ADMIN. CODE §§ 101.20(1), 116.110(a), 116.160(a), 122.121, 122.210(a), 40 CODE OF FEDERAL REGULATIONS § 52.21(a)(2)(iii), and TEX. HEALTH & SAFETY CODE §§ 382.085(b) and 382.0518(a). Specifically, during 2002 and 2003, the Plant's amine system and its control device, Acid Gas Flare (EPN-16), underwent a major modification. This event required NSR and PSD permits, and a FOP revision, but Regency failed to obtain these authorizations and continued operating emission sources, as documented during an investigation conducted on December 17, 2004.
2. Failed to report all deviations for each emission unit addressed in the FOP, in violation of FOP O2546, General Terms and Conditions, 30 TEX. ADMIN. CODE § 122.145(2)(A), and TEX. HEALTH & SAFETY CODE § 382.085(b). Specifically, in the compliance certification dated July 16, 2004, Regency reported four deviations from FOP O2546 for the period March 1, 2004 to June 30, 2004, but there were eight deviations; and in the compliance certification dated January 20, 2005, Regency reported three deviations from FOP O2546 for the period July 1, 2004 to December 31, 2004, but there were five deviations, as documented during an investigation conducted on December 17, 2004.

III. DENIALS

Regency generally denies each allegation in the Allegations.

IV. ORDERING PROVISIONS

1. It is, therefore, ordered by the TCEQ that Regency pay an administrative penalty as set forth in Section I, Paragraph 6 above. The imposition of this administrative penalty and Regency's compliance with all the terms and conditions set forth in this Agreed Order resolve only the allegations in Section II. The Commission shall not be constrained in any manner from requiring corrective action or penalties for violations which are not raised here. Administrative penalty payments shall be made payable to "TCEQ" and shall be sent with the notation "Re: Regency Gas Services Waha, LP, Docket No. 2005-1529-AIR-E" to:

Financial Administration Division, Revenues Section
Attention: Cashier's Office, MC 214
Texas Commission on Environmental Quality
P.O. Box 13088
Austin, Texas 78711-3088

2. It is further ordered that Regency shall undertake the following technical requirements:
 - a. Within 30 days after the effective date of this Agreed Order, submit revised compliance certifications for the periods March 1, 2004 to June 30, 2004 and July 1, 2004 to December 31, 2004, in accordance with 30 TEX. ADMIN. CODE § 122.145(2)(A);
 - b. Within 30 days after the effective date of this Agreed Order, in order to address the issuance of NSR Permit No. 74857, submit an application to revise FOP O2546, in accordance with 30 TEX. ADMIN. CODE § 122.210, to the TCEQ Air Permits Division, MC 162, Texas Commission on Environmental Quality, P.O. Box 13087, Austin, Texas 78711-3087;
 - c. Within 45 days after the effective date of this Agreed Order, certify compliance with Ordering Provisions 2.a. and 2.b.;
 - d. Respond completely and adequately, as determined by the Air Permits Division, to all letters requesting information concerning the revision request within 30 days of the date of such letters, or by any other deadline specified in writing;
 - e. Within 330 days after the effective date of the Agreed Order, certify compliance with Commission rules regarding authorization to operate a source of air emissions under the Operating Permits program or cease operations until appropriate authorization is obtained;
 - f. The certifications required by Ordering Provisions 2.a., 2.c., and 2.e. shall include detailed supporting documentation including receipts, and/or other records to demonstrate

compliance, be notarized by a State of Texas Notary Public and include the following certification language:

"I certify under penalty of law that I have personally examined and am familiar with the information submitted and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations;" and

- g. Submit the certifications required by these Ordering Provisions to:

Work Leader
Team 7, Section IV
Enforcement Division, MC 128
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

with a copy to:

Manager
Air Section
Midland Regional Office
Texas Commission on Environmental Quality
3300 N. A Street, Building 4-107
Midland, Texas 79705-5451

3. The provisions of this Agreed Order shall apply to and be binding upon Regency. Regency is ordered to give notice of the Agreed Order to personnel who maintain day-to-day control over the Plant operations referenced in this Agreed Order.
4. If Regency fails to comply with any of the Ordering Provisions in this Agreed Order within the prescribed schedules, and that failure is caused solely by an act of God, war, strike, riot, or other catastrophe, Regency's failure to comply is not a violation of this Agreed Order. Regency shall have the burden of establishing to the Executive Director's satisfaction that such an event has occurred. Regency shall notify the Executive Director within seven days after Regency becomes aware of a delaying event and shall take all reasonable measures to mitigate and minimize any delay.
5. The Executive Director may grant an extension of any deadline in this Agreed Order or in any plan, report, or other document submitted pursuant to this Agreed Order, upon a written and substantiated showing of good cause. All requests for extensions by Regency shall be made in writing to the Executive Director. Extensions are not effective until Regency receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director.

6. This Agreed Order, issued by the Commission, shall not be admissible against Regency in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Agreed Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.
7. This agreement may be executed in multiple counterparts, which together shall constitute a single original instrument. Any executed signature page to this Agreement may be transmitted by facsimile transmission to the other parties, which shall constitute an original signature for all purposes.
8. Under 30 TEX. ADMIN. CODE § 70.10(b), the effective date is the date of hand-delivery of the Order to Regency, or three days after the date on which the Commission mails notice of the Order to Regency, whichever is earlier. The Chief Clerk shall provide a copy of this Agreed Order to each of the parties.

SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Kathleen H. White
For the Commission

Robertson Perdue
For the Executive Director

2/17/06
Date

I, the undersigned, have read and understand the attached Agreed Order. I am authorized to agree to the attached Agreed Order on behalf of the entity, if any, indicated below my signature, and I do agree to the terms and conditions specified therein. I further acknowledge that the TCEQ, in accepting payment for the penalty amount, is materially relying on such representation.

I also understand that my failure to comply with the Ordering Provisions, if any, in this order and/or my failure to timely pay the penalty amount, may result in:

- A negative impact on my compliance history;
- Greater scrutiny of any permit applications submitted by me;
- Referral of this case to the Attorney General's Office for contempt, injunctive relief, additional penalties, and/or attorney fees, or to a collection agency;
- Increased penalties in any future enforcement actions against me;
- Automatic referral to the Attorney General's Office of any future enforcement actions against me; and
- TCEQ seeking other relief as authorized by law.

In addition, any falsification of any compliance documents may result in criminal prosecution.

Mike Perryman
Signature

12-02-05
Date

Mike Perryman
Name (Printed or typed)
Authorized Representative of
Regency Gas Services Waha, LP

Mgr.-Env. Affairs
Title

Instructions: Send the original, signed Agreed Order with penalty payment to the Financial Administration Division, Revenues Section at the address in Section IV, Paragraph 1 of this Agreed Order.

Kathleen Hartnett White, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

April 11, 2006

CERTIFIED MAIL

Mike Perryman
Regency Gas Services LLC
401 Edwards Street, Suite 1320
Shreveport, Louisiana 71101-3289

C T Corporation, Registered Agent
Regency Gas Services Waha, LP
350 North St. Paul Street
Dallas, Texas 75201

RE: Regency Gas Services Waha, Lp
TCEQ Docket No. 2005-1529-AIR-E; Account No. PE-0024-Q
Agreed Order assessing administrative penalties

Enclosed is a copy of an order issued by the Commission.

Questions regarding the order should be directed to the Enforcement Coordinator or the Staff Attorney. If there are questions pertaining to the mailing of the order, then please contact Irma Salazar of the Texas Commission on Environmental Quality's Office of the Chief Clerk (MC 105) at (512) 239-1328.

Sincerely,

A handwritten signature in cursive script, reading "LaDonna Castañuela".

LaDonna Castañuela
Chief Clerk

LDC/is

Enclosure

cc: Debbie McMaryion, Field Investigator, TCEQ Region 7
Terry Murphy, Enforcement Coordinator, TCEQ Enforcement Division (MC 149)
Christopher B Amantes, Vinson & Elkins, First City Tower, 1001 Fannin Street, Suite
2300, Houston, Texas 77002-6760

ATTACHMENT B:

Waha Enforcement Order, Docket No. 2005-0035-AIR-E

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY



IN THE MATTER OF AN
ENFORCEMENT ACTION
CONCERNING
DUKE ENERGY FIELD SERVICES
L.P. DBA WAHA GAS PLANT
AIR ACCOUNT NO. PE0024Q
RN100211408

§ BEFORE THE
§
§
§ TEXAS COMMISSION ON
§
§
§ ENVIRONMENTAL QUALITY

AGREED ORDER DOCKET NO. 2005-0035-AIR-E

I. JURISDICTION AND STIPULATIONS

At its **DEC 14 2005** agenda, the Texas Commission on Environmental Quality ("the Commission" or "TCEQ") considered this agreement of the parties, resolving an enforcement action regarding Duke Energy Field Services L. P. dba Waha Gas Plant ("Duke Energy") under the authority of TEX. HEALTH & SAFETY CODE ch. 382 and TEX. WATER CODE ch. 7. The Executive Director of the TCEQ, through the Enforcement Division, and Duke Energy appear before the Commission and together stipulate that:

1. Duke Energy owned and operated an oil and gas plant located: from Farm-to-Market Road 1450, go 0.5 mile south on Farm-to-Market Road 1776, then one mile west, near Waha, Pecos County, Texas (the "Plant").
2. The Plant consists of one or more sources as defined in TEX. HEALTH & SAFETY CODE § 382.003(12).
3. The Commission and Duke Energy agree that the Commission has jurisdiction to enter this Agreed Order, and that Duke Energy is subject to the Commission's jurisdiction.
4. Duke Energy received notice of the violations alleged in Section II ("Allegations") on or about November 23, 2004.
5. The occurrence of any violation is in dispute and the entry of this Agreed Order shall not constitute an admission by Duke Energy of any violation alleged in Section II ("Allegations"), nor of any statute or rule.
6. An administrative penalty in the amount of One Hundred Fifty Thousand One Hundred Fifty Dollars (\$150,150) is assessed by the Commission in settlement of the violations alleged in Section II ("Allegations"). Duke Energy has paid Sixty Thousand Sixty Dollars (\$60,060) of the administrative penalty and Thirty Thousand Thirty Dollars (\$30,030) is deferred contingent upon Duke Energy's

timely and satisfactory compliance with all the terms of this Agreed Order. The deferred amount will be waived upon full compliance with the terms of this Agreed Order. If Duke Energy fails to timely and satisfactorily comply with all requirements of this Agreed Order, the Executive Director may require Duke Energy to pay all or part of the deferred penalty. Sixty Thousand Sixty Dollars (\$60,060) shall be conditionally offset by Duke Energy's completion of a Supplemental Environmental Project.

7. Any notice and procedures which might otherwise be authorized or required in this action are waived in the interest of a more timely resolution of the matter.
8. The Executive Director of the TCEQ and Duke Energy have agreed on a settlement of the matters alleged in this enforcement action, subject to the approval of the Commission.
9. The Executive Director recognizes that Duke Energy sold the Plant on or about April 16, 2004.
10. The Executive Director may, without further notice or hearing, refer this matter to the Office of the Attorney General of the State of Texas ("OAG") for further enforcement proceedings if the Executive Director determines that Duke Energy has not complied with one or more of the terms or conditions in this Agreed Order.
11. This Agreed Order shall terminate five years from its effective date or upon compliance with all the terms and conditions set forth in this Agreed Order, whichever is later.
12. The provisions of this Agreed Order are deemed severable and, if a court of competent jurisdiction or other appropriate authority deems any provision of this Agreed Order unenforceable, the remaining provisions shall be valid and enforceable.

II. ALLEGATIONS

As owner and operator of the Plant, Duke Energy is alleged to have failed to obtain a Prevention of Significant Deterioration ("PSD") permit prior to construction and operation of a major modification at a major stationary source, in violation of 30 TEX. ADMIN. CODE § 116.160(a) and TEX. HEALTH & SAFETY CODE § 382.085(b), as documented during a record review conducted on November 18, 2004.

III. DENIALS

Duke Energy generally denies each allegation in Section II ("Allegations").

IV. ORDERING PROVISIONS

1. It is, therefore, ordered by the TCEQ that Duke Energy pay an administrative penalty as set forth in Section I, Paragraph 6 above. The imposition of this administrative penalty and Duke Energy's

compliance with all the terms and conditions set forth in this Agreed Order resolve only the allegations in Section II. The Commission shall not be constrained in any manner from requiring corrective action or penalties for violations which are not raised here. Administrative penalty payments shall be made payable to "TCEQ" and shall be sent with the notation "Re: Duke Energy Field Services L. P. dba Waha Gas Plant, Docket No. 2005-0035-AIR-E" to:

Financial Administration Division, Revenues Section
Attention: Cashier's Office, MC 214
Texas Commission on Environmental Quality
P.O. Box 13088
Austin, Texas 78711-3088

2. Duke Energy shall implement and complete a Supplemental Environmental Project ("SEP") in accordance with TEX. WATER CODE § 7.067. As set forth in Section I, Paragraph 6 above, Sixty Thousand Sixty Dollars (\$60,060) of the assessed administrative penalty shall be offset with the condition that Duke Energy implement the SEP defined in Attachment A, incorporated herein by reference. Duke Energy's obligation to pay the conditionally offset portion of the administrative penalty assessed shall be discharged upon final completion of all provisions of the SEP agreement.
3. The provisions of this Agreed Order shall apply to and be binding upon Duke Energy. Duke Energy is ordered to give notice of the Agreed Order to personnel who maintain day-to-day control over the Plant operations referenced in this Agreed Order.
4. This Agreed Order, issued by the Commission, shall not be admissible against Duke Energy in a civil proceeding, unless the proceeding is brought by the OAG to: (1) enforce the terms of this Agreed Order; or (2) pursue violations of a statute within the Commission's jurisdiction, or of a rule adopted or an order or permit issued by the Commission under such a statute.
5. If Duke Energy fails to comply with any of the Ordering Provisions in this Agreed Order within the prescribed schedules, and that failure is caused solely by an act of God, war, strike, riot, or other catastrophe, Duke Energy's failure to comply is not a violation of this Agreed Order. Duke Energy shall have the burden of establishing to the Executive Director's satisfaction that such an event has occurred. Duke Energy shall notify the Executive Director within seven days after Duke Energy becomes aware of a delaying event and shall take all reasonable measures to mitigate and minimize any delay.
6. The Executive Director may grant an extension of any deadline in this Agreed Order or in any plan, report, or other document submitted pursuant to this Agreed Order, upon a written and substantiated showing of good cause. All requests for extensions by Duke Energy shall be made in writing to the Executive Director. Extensions are not effective until Duke Energy receives written approval from the Executive Director. The determination of what constitutes good cause rests solely with the Executive Director.

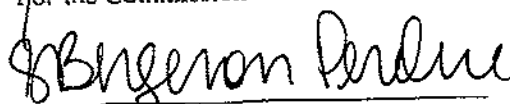
7. This agreement may be executed in multiple counterparts, which together shall constitute a single original instrument. Any executed signature page to this Agreement may be transmitted by facsimile transmission to the other parties, which shall constitute an original signature for all purposes.
8. Under 30 TEX. ADMIN. CODE § 70.10(b), the effective date is the date of hand-delivery of the Order to Duke Energy, or three days after the date on which the Commission mails notice of the Order to Duke Energy, whichever is earlier. The Chief Clerk shall provide a copy of this Agreed Order to each of the parties.

Duke Energy Field Services L. P.
DOCKET NO. 2005-0035-AIR-E
Page 5

SIGNATURE PAGE

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY


For the Commission


For the Executive Director

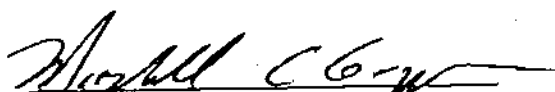
11/18/05
Date

I, the undersigned, have read and understand the attached Agreed Order. I am authorized to agree to the attached Agreed Order on behalf of the entity, if any, indicated below my signature, and I do agree to the terms and conditions specified therein. I further acknowledge that the TCEQ, in accepting payment for the penalty amount, is materially relying on such representation.

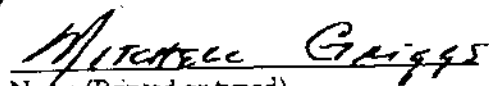
I also understand that my failure to comply with the Ordering Provisions, if any, in this order and/or my failure to timely pay the penalty amount, may result in:

- A negative impact on my compliance history;
- Greater scrutiny of any permit applications submitted by me;
- Referral of this case to the Attorney General's Office for contempt, injunctive relief, additional penalties, and/or attorney fees, or to a collection agency;
- Increased penalties in any future enforcement actions against me;
- Automatic referral to the Attorney General's Office of any future enforcement actions against me; and
- TCEQ seeking other relief as authorized by law.

In addition, any falsification of any compliance documents may result in criminal prosecution.


Signature

9/23/05
Date


Name (Printed or typed)
Authorized Representative of
Duke Energy Field Services L. P. dba Waha Gas Plant

VP-EHS
Title

Instructions: Send the original, signed Agreed Order with penalty payment to the Financial Administration Division, Revenues Section at the address in Section IV, Paragraph 1 of this Agreed Order.

Attachment A

SUPPLEMENTAL ENVIRONMENTAL PROJECT

The Texas Commission on Environmental Quality ("TCEQ"), agrees to offset a portion of the administrative penalty assessed in this Agreed Order with the condition that Duke Energy Field Services, LP ("Duke Energy") shall perform and comply with the following Supplemental Environmental Project ("SEP") provisions. The total amount of the conditional offset for the SEP, upon completion according to the terms and schedules listed below, shall be Sixty Thousand and Sixty Dollars (\$60,060) of the payable penalty of One Hundred Twenty Thousand and One Hundred Twenty Dollars (\$120,120).

1. Project Description

A. Project

1. Duke Energy will contribute Thirty Thousand Thirty Dollars (\$30,030) to the Texas Association of Resource Conservation and Development Areas, Inc. ("RC&D") for its Wastewater Treatment Assistance project in Pecos County, Texas. The contribution will be used in accordance with the *Supplemental Environmental Project Agreement between the Texas Association of Resource Conservation and Development Areas, Inc. and the Texas Commission on Environmental Quality*. Specifically, the contribution will be used to cover the direct cost of providing low-income rural homeowners with assistance to repair or replace their failing on-site wastewater treatment systems. SEP monies will be used to pay for the labor and materials costs associated with repairing or replacing of the systems. The recipients are low-income and will not be charged for the cost of the repairs or replacements of their wastewater systems.

Duke Energy will also contribute Thirty Thousand Thirty Dollars (\$30,030) to RC&D's Household Hazardous Waste Clean-Up project in Pecos County, Texas. The contribution will be used in accordance with the *Supplemental Environmental Project Agreement between Texas Association of Resource Conservation & Development Areas, Inc. and the Texas Commission on Environmental Quality*. Specifically, the contribution will be used to pay for the direct cost of the project, which provides local residents a means of properly disposing of household hazardous wastes such as paint, thinners, pesticides, oil and gas, corrosive cleaners, and fertilizers in one day collection events. SEP monies will be used to pay for the associated labor, materials, and disposal costs. Citizens will not be charged disposal fees. The project is administered in accordance with TCEQ guidance on household hazardous waste and in compliance with federal, state, and local environmental laws and regulations. SEP monies are used solely for collection, recycling, and disposal.

All monies contributed will be used solely for the direct cost of the project and no portion will be spent on administrative costs. The SEP will be done in accordance with all federal, state and local environmental laws and regulations.

Duke Energy certifies that there is no prior commitment to make this contribution and that it is being done solely in an effort to settle this enforcement action.

This SEP will provide a discernible environmental benefit by preventing possible contamination of watersheds resulting from household wastewater of failing septic systems entering roadside ditches and yards. This SEP will also provide a means of properly disposing household hazardous waste which might otherwise be disposed of in storm drains, the sewage system, or by other means detrimental to the environment.

B. Minimum Expenditure

The offset of Sixty Thousand and Sixty Dollars (\$60,060) of the administrative penalty is based upon Duke Energy's agreement to contribute Sixty Thousand and Sixty Dollars (\$60,060) to the project described above and to comply with all other provisions of this SEP.

2. Performance Schedule

Within 30 days after the effective date of this Agreed Order, Duke Energy will pay the required contributions to RC&D. These contributions, with a copy of the Agreed Order, will be mailed to:

Texas Association of RC&D Areas
c/o Leon-Bosque RC&D Council
P.O. Box 359
Glen Rose, TX 76043

3. Records and Reporting

Concurrent with the payment of these SEP contributions, Duke Energy shall provide the TCEQ SEP Coordinator with a copy of the check and transmittal letter indicating full payment of the contribution to RC&D. A copy of the check and transmittal letter will be mailed to:

Litigation Division
Attention: SEP Coordinator, MC 175
Texas Commission on Environmental Quality
P.O. Box 13087
Austin, Texas 78711-3087

4. Failure to Fully Perform

If Duke Energy does not perform its obligations under this SEP in any way, including full expenditure of all required funds and the submittal of adequate reports, the Executive Director may require immediate payment of all or part of the Sixty Thousand and Sixty Dollars (\$60,060).

The check for any amount due shall be made out to "Texas Commission on Environmental Quality" and mailed to:

Texas Commission on Environmental Quality
Financial Administration Division, Revenues
Attention: Cashier, MC 214
P.O. Box 13088
Austin, Texas 78711-3088

A copy of the check shall be mailed to the TCEQ SEP Coordinator at the address in Section 3 above.

5. **Publicity**

Any public statements concerning this SEP made by, or on behalf of, Duke Energy must include a clear statement that the project was performed as part of the settlement of an enforcement action brought by the TCEQ. Such statements include, but are not limited to, advertising, public relations, and press releases.

6. **Clean Texas Program**

Duke Energy shall not include this SEP in any application made to TCEQ under the "Clean Texas" (or any successor) program(s). Similarly, Duke Energy may not seek recognition for these contributions in any other state or federal regulatory program.

7. **Other SEPs by TCEQ or Other Agencies**

The SEP identified in this Agreed Order has not been, and shall not be, included as a SEP for Duke Energy under any other Agreed Order negotiated with the TCEQ or any other agency of the state or federal government.

Kathleen Hartnett White, *Chairman*
R. B. "Ralph" Marquez, *Commissioner*
Larry R. Soward, *Commissioner*
Glenn Shankle, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 27, 2005

CERTIFIED MAIL

Mitchell Griggs, Vice President, EHS
Albert Glasgow, Vice President
Duke Energy Field Services L.P.
P.O. Box 50020
Midland, Texas 79710

RE: Duke Energy Field Services L.P. dba Waha Gas Plant
TCEQ Docket No. 2005-0035-AIR-E; TCEQ Account No. PE0024Q
Agreed Order Assessing Administrative Penalties and Requiring Certain Actions

Enclosed is a copy of an order issued by the Commission.

Questions regarding the order should be directed to the Enforcement Coordinator or the Staff Attorney. If there are questions pertaining to the mailing of the order, then please contact Timothy Mees of the Texas Commission on Environmental Quality's Office of the Chief Clerk (MC 105) at (512) 239-3319.

Sincerely,

A handwritten signature in black ink, appearing to read "LaDonna Castañuela".

LaDonna Castañuela
Chief Clerk

LDC/tm

Enclosure

cc: Debbie McMaryion, Field Investigator, TCEQ Regional Office (MC R-07)
Norma Kernell, SEP Coordinator, TCEQ General Law Division (MC 173)
Pamela Campbell, Enforcement Coordinator, TCEQ Enforcement Division (MC 169)

ATTACHMENT C:

PBR Registration Letter, Permit No. 156188



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 16, 2019

Mr. James Barron
Nsr Permitting Team Lead
Exxon Mobil Corporation
PO BOX 4004
Baytown, TX 77522

Permit by Rule Registration Number: 156188
Exxon Mobil Corporation
Project Description/Unit: Baytown Technology And Engineering Complex
City: Baytown, Harris County
Regulated Entity Number: RN103774212
Customer Reference Number: CN600123939
30 TAC § 106.261
Affected Permit(s): 142313

This is in response to your Permit by Rule (PBR) registration submitted through the online ePermits process for your facility located near Baytown, Harris County. Based on the information submitted and review completed by the Rule Registration Section, this is an acknowledgement that Exxon Mobil Corporation has certified emissions associated with Baytown Technology And Engineering Complex under the Permit By Rule(s) listed above. For rule information see: www.tceq.texas.gov/permitting/air/nav/numerical_index.html. Records must be maintained in accordance with Title 30 Texas Administrative Code § 106.8 to demonstrate compliance with the claimed PBRs.

As referenced in 30 TAC § 116.116(d)(2), all changes authorized under Chapter 106 to a permitted facility shall be incorporated into the NSR Permit No. 142313 when it is amended or renewed.

As a reminder, regardless of the authorization mechanism, all facilities must be in compliance and operate in accordance with all rules and regulations of the TCEQ and the U.S. Environmental Protection Agency. Facilities not operating in accordance with these rules and regulations, or that misrepresented or failed to fully disclose all relevant facts in obtaining this authorization may be subject to formal enforcement action.

This action is taken under authority delegated by the Executive Director of the TCEQ. If you need further information or have questions, please contact the Rule Registrations Section at (512) 239-1250 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

Sincerely,

A handwritten signature in black ink that reads "Mark T. Meyer".

Mark Meyer, Manager

Rule Registrations Section
Air Permits Division
Texas Commission on Environmental Quality

[Project Number: 299238]

ATTACHMENT D:

Excerpts from Texas NSR Permits Establishing Confidential Requirements

Permit No.	Source Name
770	Dow Freeport Chemical Plant
18561	Dow Freeport Chemical Plant
1105	Eastman Oxo Aldehydes Plant
8586	ExxonMobil Baytown Chemical Plant
28441	ExxonMobil Baytown Chemical Plant
96220	ExxonMobil Baytown Chemical Plant
18999	Flint Hills Houston Chemical Plant
80931	Kaneka North America
6141A	Union Carbide UCC Seadrift Operations

Special Conditions

Permit Number 770

Emission Standards and Operational Limits

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit. **(07/03)**
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the maximum allowable emission rates table. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with the exception of those listed below:

PVRV-106E	PVRV-20	PVRV-25-1X	PVRV-25-2	PVRV-D1B	PVRV-D28B
PVRV-28C	PVRV-D60B	PVRV-D-60D	PVRV-D-60C	PVRV-60X	

These PSVs do not need rupture discs. **(12/13)**

3. Rupture discs shall be installed upstream of the relief valve for VOC relief valves on the Chlorination Reactor R-1 and Diluent Recovery Flash Drum D-80, for the NH₃ relief devices on the Aminate Hold Tank K5A & B, and for the Cl₂ relief valve on the Chlorination Reactor R-1. A pressure-sensing device shall be installed between the relief valve and rupture disc to monitor and record disc integrity. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.
4. This permit authorizes planned emissions from the Fugitives Area (EPN A32FU1) for the following maintenance, startup, and shutdown activities:

Tank Emptying: Limited to 1 process water tank emptied at any given time

Plant Maintenance: Opening of Pressure Relief Valves on tanks

Pump Maintenance: Limited to 4 VOC pump & 2 carbon tetrachloride pump clearings per hour

These emissions are subject to the maximum allowable emission rates indicated on the MAERT. Any maintenance, start-up, and shutdown activities not in the above list or either Attachment A, B, or C are not authorized by this permit. **(12/13)**

5. Total unit inventory of chlorine (Cl₂) shall not exceed 700 pounds in the Picloram process.
6. The fuel gas used in the combustion units covered by this permit shall not exceed the sulfur concentration represented in the confidential submittal dated October 6, 2005.
7. Instrumentation shall be maintained in good working condition that will alarm operating personnel in case of a high pressure or high temperature on the NH₃ distillation tower; in case of a high temperature, high pressure, or high liquid level in the reflux/NH₃ storage tank; or in case of a high pressure or high temperature in the amination reactor or condensers. Total inventory of NH₃ shall not exceed 61,000 pounds during normal operations.

8. The tank trucks shall be checked semi-annually when loading the diluent streams at EPN A32LR06C/D. Leak checking shall be performed according to the standards in Title 40 Code of Federal Regulations §§ 63.126(e) and 63.130(e) [40 CFR §§ 63.126(e) and 63.130(e)]. Records of semi-annual leak checking shall be kept at the site and shall be made available to the staff of the Texas Commission on Environmental Quality (TCEQ) Region 12 and to the representatives of any other local program having jurisdiction. **(03/06)**

Federal Program Requirements

9. These facilities shall comply with all requirements of the U.S. Environmental Protection Agency (EPA) regulations on:
 - A. New Source Performance Standards (NSPS) promulgated for Volatile Organic Liquid Storage Vessels in 40 CFR Part 60, Subparts A and Kb.
 - B. National Emission Standards for Hazardous Air Pollutants (NESHAPS) promulgated for Benzene Waste Operations in 40 CFR Part 61, Subparts A and FF.
 - C. The NESHAPS promulgated for Equipment Leaks in 40 CFR Part 63, Subparts A and H; and Pesticide Active Ingredient Production in 40 CFR 63, Subpart MMM. **(03/06)**

Storage Tank

10. Storage tank PT-31 (EPN A28ST31) is subject to the following requirements: **(01/19)**
 - A. Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum.
 - B. The annual throughput and maximum hourly filling rate for tank PT-31 shall be limited to that listed in the confidential emissions calculations of the alteration request dated November 29, 2018 (TCEQ Project no. 293612). The PT-31 tank service shall comply with Attachment D. Additional authorizations and limitations are as follows:
 - (1) For Tank PT-31, along with tanks authorized under Permit No. 22070 (EPNs A22ST3011, A22ST3060, A22ST3061, A22ST4041, A22ST4043, A28ST1, A28ST100, A28ST1202, A28ST1401, A28ST1402, A28ST1403, A28ST1404, A28ST1405, A28ST1406, A28ST2, A28ST3, A28ST3062, A30ST137, and A30ST4008) that are in service with 2-butoxyethanol or methoxy-acetoxyp propane , the combined fill rate shall not exceed 15,000 gallons per hour (gal/hr) for all tanks being concurrently loaded with the same compound.
 - (2) For Tank PT-31, along with tanks authorized under Permit No. 22070 (EPNs A22ST10002, A22ST3011, A22ST3060, A22ST3061, A22ST4041, A22ST4043, A28ST1, A28ST100, A28ST1202, A28ST1401, A28ST1402, A28ST1403, A28ST1404, A28ST1405, A28ST1406, A28ST2, A28ST3, A28ST3062, A30ST137, and A30ST4008) that are in service with ethanolamine or low vapor pressure VOC, the combined fill rate shall not exceed 60,000 gal/hr for all tanks being concurrently loaded with ethanolamine or the same low vapor pressure VOC compound.
 - C. Low vapor pressure VOCs stored in Tank PT-31 (EPN A28FUST) authorized by this permit are limited to materials listed in Attachment D.

- D. Records shall be kept to demonstrate compliance with the tank service, annual throughput and maximum hourly filling rates limitations specified in this special condition.

Baghouses

11. Particulate matter grain loading shall not exceed 0.01 grain per dscf of air from any vent. There shall be no visible emissions exceeding 30 seconds in any six-minute period as determined using U.S. Environmental Protection Agency (EPA) Test Method 22. **(12/13)**
12. The vents covered by this permit shall not operate unless control devices and associated equipment are maintained in good working order and operating. All vents will be inspected for visible emissions once per day and a spare-parts filter inventory will be maintained on site. Records shall be maintained of all inspections and maintenance performed. **(12/13)**
13. The differential pressure across each bag filter shall be continuously monitored and be recorded at least once an hour. The Maximum and minimum pressure drops will be determined and the permit altered appropriately prior to operation.

Each monitoring device shall be calibrated at a frequency in accordance with the manufacturer's specifications or at least annually, whichever is more frequent, and shall be accurate to within 0.5 inches water gauge pressure or 0.5 percent of span.

Quality assured (or valid) data must be generated when the aminate loading is being conducted except during the performance of a daily zero check. Loss of valid data due to periods of monitor breakdown, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in hours) that the aminate loading is operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

14. Special Conditions 12 and 13 will be modified after testing on the process aminate is completed. **(12/13)**

Thermal Oxidizer (THROX/TOX)

15. The TOX shall be equipped with burners capable of obtaining 0.06 pound (lb) nitrogen oxide (NO_x)/MMBtu fuel gas fired, on an hourly basis.
16. The total VOC feed rates to the THROX and TOX (EPNs A32STHROX and A32TO560, respectively) shall not exceed the rates listed on Table 4A submitted in the confidential file dated February 2013. Feed rates to both THROX and TOX shall be continuously monitored and recorded. This information shall be maintained on-site for a period of two years and made available to representatives of the TCEQ or local program upon request. **(12/13)**
17. The opacity of emissions from the THROX/TOX incinerator/scrubber stacks shall not exceed 5 percent averaged over a six-minute period.
18. All storage tanks containing VOCs with a vapor pressure greater than 0.5 psia shall be routed to the THROX/TOX vapor control system or the flare. **(12/13)**

19. The permit holder shall comply with the following conditions for the THROX (EPN A32STHROX) and the TOX (A32TO560).

A. The THROX and TOX vent control system, which includes the scrubbers, shall: **(05/10)**

- (1) Maintain the hydrogen chloride (HCl) concentration at no more than 20 ppmv or operate with no less than 99.99 percent efficiency based on an hourly basis in removing HCl,
- (2) Maintain the chlorine (Cl₂) concentration at no more than 20 ppmv or operate with no less than 99.9 percent efficiency based on an hourly basis in removing Cl₂, and
- (3) Maintain the VOC concentration in the exhaust gas less than 10 ppmv on a dry basis, corrected to 3 percent oxygen, or achieve a VOC destruction efficiency greater than 99.9 percent.

B. Whenever the THROX or TOX is burning waste vent gas, the firebox temperatures of the THROX shall not operate below 1400°F and the TOX shall not operate below a temperature of 1650°F on a rolling hourly average basis. The annual average firebox temperatures for the THROX and TOX shall not exceed the values listed on their respective Table 6s located in the confidential file dated July 10, 2008. The exhaust oxygen concentration shall not be less than 3 percent. The firebox temperatures of both units shall be continuously monitored and recorded when waste gas is directed to the oxidizer. The temperature measurement device shall reduce the temperature readings to an averaging period of 6 minutes or less and record it at that frequency. The temperature measurement device shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The device shall have an accuracy of the greater than ±0.75 percent of the temperature being measured expressed in degrees Celsius or ± 2.5oC. The six-minute data collection and storage shall be implemented within 60 days of the date of issuance of this permit.

Quality assured (or valid) temperature data must be generated when the THROX and TOX are operating. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the THROX and TOX operated over the previous rolling 12-month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded. **(12/09)**

C. Whenever the THROX or TOX is burning waste vent gas, that unit shall have all needed flow meters and excess oxygen analyzers in working order.

- (1) The total vent flow rate to the THROX/TOX shall be maintained at a level which ensures a minimum residence time as shown on the respective Table 6s located in the confidential file submittal dated July 10, 2008. **(12/09)**
- (2) Burning of all waste gas shall be discontinued whenever the excess oxygen concentration in the exit gas is less than 3 percent by volume on a rolling hourly average basis.
- (3) The total vent flow rate and the excess oxygen levels shall be continuously monitored and recorded whenever the units are receiving waste vent gas. Analyzers shall reduce the flow rate and oxygen readings to an averaging period of 6 minutes or less and record it at that frequency. The flow rate and oxygen analyzers shall be installed, calibrated, and maintained according to accepted practice and the manufacturer's specifications. The six-minute data collection and storage shall be implemented within 60 days of the date of issuance of this permit.

The oxygen analyzer shall be zeroed and spanned daily and corrective action taken when the 24-hour span drift exceeds two times the amounts specified Performance Specification No. 3, 40 CFR Part 60, Appendix B. Zero and span is not required on weekends and plant holidays if instrument technicians are not normally scheduled on those days.

The analyzer shall be quality-assured at least semiannually using cylinder gas audits (CGAs) in accordance with 40 CFR Part 60, Appendix F, Procedure 1, § 5.1.2, with the following exception: a relative accuracy test audit is not required once every four quarters (i.e., two successive semiannual CGAs may be conducted). An equivalent quality-assurance method approved by the TCEQ may also be used. Successive semiannual audits shall occur no closer than four months. Necessary corrective action shall be taken for all CGA exceedances of ± 15 percent accuracy and any continuous emissions monitoring system downtime in excess of 5 percent of the incinerator operating time. These occurrences and corrective actions shall be reported to the appropriate TCEQ Regional Director on a quarterly basis. Supplemental stack concentration measurements may be required at the discretion of the appropriate TCEQ Regional Director. (There may be other case specific ways that are used to ensure adequate oxygen concentration.)

Quality assured (or valid) oxygen data must be generated when the THROX and TOX are operating except during the performance of a daily zero and span check. Loss of valid data due to periods of monitor break down, out-of-control operation (producing inaccurate data), repair, maintenance, or calibration may be exempted provided it does not exceed 5 percent of the time (in minutes) that the THROX and TOX operated over the previous rolling 12 month period. The measurements missed shall be estimated using engineering judgment and the methods used recorded.

These records shall be maintained on-site for a period of two years and made available to representatives of the TCEQ or local programs upon request. **(12/09)**

- D.** Whenever Train I and/or Train II in the Huntsman's Ethyleneamines Unit is sending waste vents to the THROX or TOX unit, the following conditions will apply:

Permit holder shall monitor the ammonia in the Ethyleneamines Unit vent stream using an on-line ammonia analyzer and record the ammonia concentrations. The maximum amount of ammonia from the Ethyleneamines vent shall not exceed the amount represented in the confidential file submittal dated October 6, 2005. The permit holder will calibrate and maintain the analyzer per the manufacturer's recommendations. **(03/06)**

Compliance Assurance Monitoring (12/13)

20. The following requirements apply to capture systems for the THROX/TOX.

- A. For control of VOC, either:
- (1) Conduct a once a month visual, audible, and/or olfactory inspection of the capture system to verify there are no leaking components in the capture system; or
 - (2) Once a year, verify the capture system is leak-free by inspecting in accordance with 40 CFR Part 60, Appendix A, Test Method 21. Leaks shall be indicated by an instrument reading greater than or equal to 500 ppmv above background.
- B. The control device shall not have a bypass.

Or

If there is a bypass for the control device, comply with either of the following requirements:

- (1) Install a flow indicator that records and verifies zero flow at least once every fifteen minutes immediately downstream of each valve that if opened would allow a vent stream to bypass the control device and be emitted, either directly or indirectly, to the atmosphere; or
- (2) Once a month, inspect the valves, verifying the position of the valves and the condition of the car seals prevent flow out the bypass.

A deviation shall be reported if the monitoring or inspections indicate bypass of the control device.

- C. The date and results of each inspection performed shall be recorded. If the results of any inspection are not satisfactory, the deficiencies shall be recorded and the permit holder shall promptly take necessary corrective action, recording each action with the date completed.

21. The pH and solvent flow rate of the THROX/TOX absorbers shall be continuously monitored and recorded. The monitoring system shall provide a visible and/or audible alarm to indicate when the effluent pH and/or solvent flow rate are below the values specified in the confidential file dated July 18, 2005 and November 8, 2005. **(03/06)**

22. The holder of this permit shall perform stack sampling and other testing, as required, to establish the actual pattern and quantities of air contaminants being emitted into the atmosphere from the THROX (EPN A32STHROX) and TOX (EPN A32TO560) Units. The holder of this permit is responsible for providing sampling and testing facilities and conducting the sampling and testing operations at his expense. (Required testing was performed on 1/5/2000 for the TOX and, on 1/26/2000 and 3/23/2000 for the THROX. The test results were submitted to TCEQ Region 12 on 2/1/2000 for the TOX and 2/22/2000 and 4/14/2000 for the THROX.)

- A. The appropriate TCEQ Regional Office in the region where the source is located shall be contacted as soon as testing is scheduled, but not less than 45 days prior to sampling to schedule a pretest meeting.

The notice shall include:

- (1) Date for pretest meeting
- (2) Date sampling will occur.
- (3) Name of firm conducting sampling.
- (4) Type of sampling equipment to be used.
- (5) Method or procedure to be used in sampling.

The purpose of the pretest meeting is to review the necessary sampling and testing procedures, to provide the proper data forms for recording pertinent data, and to review the format procedures for submitting the test reports.

A written proposed description of any deviation from sampling procedures specified in permit conditions or TCEQ or EPA sampling procedures shall be made available to the TCEQ prior to the pretest meeting. The TCEQ Regional Director shall approve or disapprove of any deviation from specified sampling procedures.

- C. The flare shall be operated with no visible emissions except periods not to exceed a total of five minutes during any two consecutive hours. This shall be ensured by the steam or air assist to the flare.

Heaters

25. Dowtherm Vaporizer/Heaters (EPN A32CPH44) shall be equipped with burners capable of obtaining 0.06 lb NO_x/MMBtu of fuel gas fired, on an hourly basis. **(12/13)**

Scrubbers

26. If the Ammonia (NH₃ Vent Scrubber, Emission Point No. (EPN) A32SV10, is not operational, the plant shall stop feeding the amination reactors. The ammonia (NH₃) Vent Scrubber shall operate with no less than 99.9 percent efficiency averaged over an hour in removing ammonia. **(11/05)**
27. The total solvent flow rate of the Acid Vent Scrubber, EPN A32V36, shall be continuously monitored and recorded. The monitoring system shall provide a visible and/or audible alarm to indicate when the total solvent flow rates are below the values specified on Table 14 in the confidential file dated July 10, 2008. **(12/09)**

Cooling Towers

28. The cooling tower water shall be monitored monthly for VOC leakage from heat exchangers in accordance with the requirements of the TCEQ Sampling Procedures Manual, Appendix P (dated January 2003 or a later edition) or another air stripping method approved by the TCEQ Executive Director.

The holder of this permit shall perform sampling and other testing, as necessary, to establish the pounds per hour of VOC being emitted into the atmosphere from the cooling towers associated with this permit. All sampling and testing methods shall be subject to approval of the TCEQ Executive Director prior to their implementation. The VOC concentration (parts per million by volume [ppmv]) in the exhaust from the air stripping system or equivalent and the corresponding pounds of strippable VOC/gallon of cooling water should be reported. These will be used to determine the level (either ppmv or lb/VOC/gal) at which a leak into cooling water will be assumed in the ongoing monitoring program. Within 30 days after completion of sampling, copies of the test report shall be submitted to the TCEQ Office of Permitting, and Registration, Air Permits Division and the TCEQ Regional Office.

Cooling water shall be sampled once a week for total dissolved solids (TDS). Dissolved solids in the cooling water drift are considered to be emitted as PM₁₀. The data shall result from collection of water samples from the cooling tower feed water and represent the water being cooled in the tower. Water samples should be capped upon collection, and transferred to a laboratory area for analysis. The analysis method for TDS shall be EPA Method 160.1, ASTM D5907, and SM 2540 C [SM - 19th edition of Standard Methods for Examination of Water]. Use of an alternative method shall be approved by the TCEQ Regional Director prior to its implementation. Cooling Tower Monitoring for Total Dissolved Solids shall be implemented within 90 days of the effective date of this permit amendment. **(12/09)**

components being returned to service. Adjustments shall be made as necessary to obtain leak free performance.

7. In addition to the weekly physical inspection required by Item E of Special Condition No. 6, all connectors in gas/vapor and light liquid service containing butylene oxide, 1,3 butadiene, butanol, ethylene oxide, and propylene oxide shall be monitored annually with an approved gas analyzer in accordance with Items F through J of Special Condition No. 6. Alternative monitoring frequency schedules of 40 CFR Part 63, Subpart H, National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks may be used in lieu of the monitoring frequency required by this permit condition. Compliance with this condition does not assure compliance with requirements of applicable state or federal regulation and does not constitute approval of alternative standards for these regulations.

Storage

8. Tanks are approved to store the liquids on the Approved Product Storage Tank List, Attachment 1. The tank throughputs shall not exceed the throughputs represented in the confidential portion of the permit renewal application dated July 30, 2013 or the permit amendment application dated May 22, 2019. **(09/19)**

9. Storage tanks are subject to the following requirements: **(09/19)**

- A. Vents from the storage tank D-1221 shall be routed to the Throx Unit B19S2 for abatement. The Throx Unit is authorized under Permit No. 104098 and is subject to the requirements in Permit No. 104098. Vents from Tanks D-870, D-871 shall be routed to the Scrubber B13SV2 for abatement.
- B. Except for labels, logos, etc., not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum. Storage tanks must be equipped with permanent submerged fill pipes except the storage tanks D-3, D-105, D-130, D-1222, D-2004 and D-3009 which store material with vapor pressure less than 0.05 psia.
- C. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12 month. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, VOC molecular weight, VOC monthly average material temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, and VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.

Emissions from tanks shall be calculated using the methods that were used to determine the MAERT limits in the permit application(s). Sample calculations from the application shall be attached to a copy of this permit at the plant site.

The permit holder shall maintain a record of tank throughput for the previous month and the past consecutive 12 month period for each tank.

Tank throughputs include water filling for Maintenance, Startup and Shutdown activities except for tank D-1222.

- D. If throughput records are specified in the special conditions of this permit, the holder of this permit may keep such records in lieu of the records required in paragraph C.
- E. In lieu of Special Condition No. 8 and the above paragraphs of this condition, service and throughputs of Tank D-1222 shall be subject to the Special Conditions of this permit dated January 7, 2016 if Tank D-1222 is still vented to the Throx Unit (EPN B19S2).

Loading

- 10. Loading operations are limited to the products and by-products and in the quantities listed in the confidential section of the permit amendment application submitted on July 30, 2013.
- 11. All loading shall be submerged, except the AEEA which can be loaded by splash loading due to its viscosity. Rolling 12 month rack throughput record shall be updated on a monthly basis for each product loaded.
- 12. All lines and connectors shall be visually inspected for any defects prior to hookup. Lines and connectors that are visibly damaged shall be removed from service. Operations shall cease immediately upon detection of any liquid leaking from the lines and connections.
- 13. When unloading ethylene diamine at the Loading Area (EPN B13LR1 or B13LR2) by rail tank car or tank truck, emissions from the receiving vessels shall be vented directly to the SC-2 Scrubber (EPN B13SV2) for abatement.
- 14. For loading VOC materials with true vapor pressure 0. psia at maximum liquid surface temperature or 95°F (whichever is greater) and vacuum loading will not be used, each tank truck shall pass vapor-tight testing every 12 months using the methods described in Title 40 Code of Federal Regulations Part 60 (40 CFR 60), Subpart XX. If the tank truck is pressure-rated (zero leakage), each tank truck shall be leak checked and certified annually in accordance with 49 CFR 180.407 Department of Transportation (DOT), for pressure tank trucks rated at 15 psig or greater. The permit holder shall not allow a tank truck to be filled unless it has passed a leak tight test within the past year as evidenced by a certificate which shows the date the tank truck last passed the leak-tight test required by this condition and the identification number of the tank truck.
- 15. Loading of liquids with vapor pressures greater than or equal to 0.5 psia into drums shall only be performed within a total enclosure or within a partial enclosure designed and operated with a capture velocity of at least 200 fpm at the drum vent. The enclosure shall be designed and operated consistent with the specifications in Industrial Ventillation: A Manual of Recommended Practice.
- 16. Operation without visible liquid leaks or spills shall be maintained at all loading/unloading facilities, regardless of vapor pressure. This does not apply to momentary dripping associated with the initial connection or disconnection of fittings. Sustained dripping from fittings during loading/unloading operations is not permitted. Any liquid spill that occurs during loading/unloading activities shall be reported pursuant to 30 TAC § 101.201 and shall be cleaned up immediately to minimize air emissions.
- 17. The permit holder shall maintain and update monthly an emission record which includes calculated emissions of VOC from all loading operations over the previous rolling 12 month period. The record shall include the loading rack, control method

- A. pumping out and when necessary bottom loading tank contents to clean tank trucks or isocontainers; then
 - B. filling the equipment with water to the extent practicable and draining to the enclosed sewer system.
28. Piping and components containing acetic acid and liquids with VOC vapor pressures under 0.5 psia at 95°F shall be cleared for maintenance activities that involve opening the equipment by one of the following methods:
- A. Pushing the liquid into other parts of the process using nitrogen or air, depressuring the nitrogen or air to the atmosphere and then draining any remaining liquid into containers. The piping and components then may be washed with water but the water shall be collected into a sump and then pumped to wastewater treatment or pumped directly to wastewater treatment through an enclosed system.
 - B. Pushing the liquid out of the piping and components using water and routing the water mixture either to a sump and then to wastewater treatment or to wastewater treatment through an enclosed system.
29. Piping and components containing ethylene oxide (EO), propylene oxide (PO), or butylene oxide (BO) shall be cleared by washing with water. The wash water shall be routed to the wastewater treatment plant via an enclosed system. The liquid may be pushed out of the piping into the process using nitrogen but when completed the nitrogen remaining in the piping shall be released to the wastewater system through an enclosed system.
30. Tanks containing methyl amine shall not be opened to atmosphere if the methyl amine concentration is greater than or equal to 10,000 ppmv unless the tank is vented to temporary control, EPN B13MECFU1.
31. Piping and components containing methyl amine shall be cleared by washing with water. The wash water shall be routed to the wastewater treatment plant via an enclosed system. The liquid may be pushed out of the piping into the process using nitrogen but when completed the nitrogen remaining in the piping shall be released to the wastewater system through an enclosed system. The nitrogen and water from clearing piping and components containing no more than 0.35 lbs of methyl amine may be routed to a sump and then pumped to the wastewater treatment system. The mass of methyl amine may be calculated using the same method represented in the confidential permit application.
32. The acetic acid tank shall be cleared for maintenance activities that involve opening the tank by pumping the acetic acid out of the tank then filling the tank with water to the extent practicable and pushing the vapors from the tanks to the Scrubber-1 (EPN B43SV1) for control, then draining the tank to the wastewater treatment system.
33. Methyl amine concentrations, during tank clearing activities, shall be measured using instruments/detectors meeting the requirements specified below.
- A. Concentrations measured using a flame ionization or photo ionization detector instrument must meet all the requirements specified in EPA Method 21 (40 CFR 60, Appendix A) or SC.33A with the following exceptions:

Permit No. 18561

Attachment 1

Approved Products Storage Tank List

Tank ID	EPN	Service	Control Device
D-3	B13ST3	Process wastewater	-
D-105	B43ST105	Butyl Phenol	-
D-130	B43ST130	PG Mixture	-
D-661	B13V661	Dowanol DPNB	-
D-670	B13V670	Butanol	-
D-870	B13SV2	Ethylenediamine	Scrubber
D-871	B13SV2	Ethylenediamine	Scrubber
D-1221	B19S2*	PG Mixture	Throx Unit
D-1222	B13ST222	PG Mixture	-
D-2004	B13ST2004	MMEA	-
D-3006A	B13ST3006A	MDEA	-
D-3009	B13ST3009	AEEA	-

PG: Polyglycol

MMEA: Methylmonoethanolamine

MDEA: Methyldiethanolamine

AEEA: Aminoethylethanolamine

*B19S2 (Throx Unit) is authorized under Permit No. 104098 and is subject to the requirements in Permit No. 104098.

Note 1: This list contains only the storage tanks emitting VOC. Non-emitting tanks (VOC vapor pressure of material stored in the tanks is ≤ 0.0002 psia and pressure tanks) are not included in this list. Non-emitting tank list can be found on page 23 of the renewal and amendment application dated October 9, 2015.

Note 2: Except for Tank D-1222, throughput for tanks are represented in the confidential portion of the permit amendment and renewal application dated July 30, 2013. Except for Tank D-1222, the throughput includes water filling for maintenance, startup and shutdown activities. Throughput and service for Tank D-1222 shall be limited to the representations in the amendment application dated May 22, 2019.

Date: September 10, 2019

If a component subject to Special Condition 6 is found to be leaking and a determination is made that the component can't be repaired without a process unit shutdown, the repair of the component may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging within 15 days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shut down as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I) or 500 pounds, whichever is greater, or as an alternative to the cumulative emissions until the next scheduled shutdown calculations, when the hourly emissions rate of all components on the delay of repair list exceeds 50% of the hourly allowable fugitive emissions rate on the MAERT, the TCEQ Regional Manager and any local programs shall be notified and the TCEQ Executive Director may require early unit shut down or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

Operation Limits

11. Waste gas from the represented point sources authorized in this permit containing VOC generated during normal operation shall be routed to one or more of the steam boilers (EPNs 030B11, 030B12 and 030B15) authorized in NSR Permit No. 5283 and 92682, or to the facility flare (EPN 027FL1). Each boiler shall operate with no less than 99.0 percent efficiency in disposing of the VOC compounds captured by the collection system. The flare shall operate with no less than 98.0 percent efficiency in disposing of the VOC captured by the collection system. Startup, shutdown and maintenance VOC emissions from the EPN represented in this permit sent to these steam boilers are not authorized by this special condition.
12. The production rates for propionaldehyde, isobutyraldehyde and normal butyraldehyde are limited to the representations presented in Table 2 (Material Balance) in the confidential section of the permit amendment application, PI-1 dated May 29, 2019 and as updated during the project review (TCEQ Project Number 302272). Records shall be kept of the production of each aldehyde for each month (pounds of product per month). These records shall be maintained on at least a five-year retention basis and shall be immediately available upon request to TCEQ personnel. **(01/20)**
13. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from 11 process analyzers (EPN 053GA1) during the previous calendar month and the past consecutive 12-month period. The record shall include analyzer identification number, name of VOC, and percentage in VOC mole. Emissions from analyzers shall be calculated using the methods that were used to determine the MAERT limits in the amendment application (Form PI-1 June 30, 2017). Sample calculations from the application shall be attached to a copy of this permit at the plant site. **(12/17)**

Emissions for tanks shall be calculated using: the TCEQ publication titled "Technical Guidance Package for Chemical Sources - Storage Tanks." Or, if throughput limits are specified in the special conditions of this permit, then the permit holder shall maintain a record of tank throughput for the previous month and the past consecutive 12-month period for each tank.

- F. Annual total throughputs of propionaldehyde Storage Tanks 40TK-113 and 40TK-114 shall be limited to 25,000,000 gallons. VOC emissions from Storage Tanks 40TK-113 and 40TK-114 shall be calculated using the methods that were used to determine the MAERT limits in the permit amendment application, PI-1 dated May 29, 2019 and as updated during the project review (TCEQ Project Number 302272).
15. Storage tanks 43TK-32, 43TK-33, 43TK-35, 43TK-148, 43TK-153, 43TK-154, 43TK-155, 43TK-162, 43TK-163, 43TK-164, and 13TK-502 are subject to the following requirements: **(01/20)**
- A. All vents shall be routed to the facility flare (EPN 027FL1) or recycled back to the process. Alternatively, when Tank 43TK-162 is used for storing PO_x Liquid Feed, Tank 43TK-162 can be vented to an alternative control device provided:
- (1) The alternative control device achieves a minimum VOC destruction or removal efficiency of 99%;
 - (2) The authorization for the alternative control device includes emissions from Tank 43TK-162.
- B. The permit holder shall maintain an emissions record which includes calculated emissions of VOC from all storage tanks during the previous calendar month and the past consecutive 12-month period. The record shall include tank identification number, control method used, tank capacity in gallons, name of the material stored, VOC molecular weight, VOC monthly average temperature in degrees Fahrenheit, VOC vapor pressure at the monthly average material temperature in psia, VOC throughput for the previous month and year-to-date. Records of VOC monthly average temperature are not required to be kept for unheated tanks which receive liquids that are at or below ambient temperatures.
- C. Storage tanks specified in this special condition shall be exempt from the record keeping and calculation requirements in Paragraph B of this special condition provided the total VOC flow to the facility flare (EPN 027FL1) is continuously monitored and records kept.
- D. The following applies to storage tanks 43TK-148 and 43TK-162 only:
- (1) Except for labels, logos, etc. not to exceed 15 percent of the tank total surface area, uninsulated tank exterior surfaces exposed to the sun shall be white or unpainted aluminum. Storage tanks must be equipped with permanent submerged fill pipes.
 - (2) The maximum filling rate and 12 month rolling throughput shall be limited to the representations in Table 7(b) (Horizontal Fixed Roof Storage Tank Summary) in the confidential section of the permit amendment application, PI-1 dated May 29, 2019 and as updated during the project review (TCEQ Project Number 302272). Records shall be updated of the tank 12 month rolling throughput each month (gallons per year). These records shall be maintained on at least a five-year retention basis and shall be immediately available upon request to TCEQ personnel.

Special Conditions

Permit Number 8586

Emission Standards

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit. **(4/03)**

Federal Applicability

2. The facilities below shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources (NSPS) in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60), Subpart A. In addition,
 - A. Tank 3107 shall comply with all applicable requirements in 40 CFR Part 60 Subpart Kb, promulgated for Volatile Organic Liquid Storage Vessels.
 - B. Polymerization Reaction Section and the continuous process vents in the Material Recovery Section of Lines 4 and 8; the shared Raw Material Preparation Section of Lines 4, 5, 6, 7, and 8; the Product Finishing Section of Lines 4, 5, and 8; and the Product Storage Section of Lines 4 and 8 shall comply with all applicable requirements of 40 CFR Part 60, Subpart VV promulgated for Equipment Leaks of Volatile Organic Compounds (VOC) in the Synthetic Organic Chemicals Manufacturing Industry and Subpart DDD promulgated for VOC Emissions from the Polymer Manufacturing Industry. **(3/15)**
3. The facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants (NESHAP) for Source Categories in Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart A (General Provisions), Subpart H (Equipment Leaks), Subpart WW (Storage Vessels - Control Level 2) and Subpart FFFF (Miscellaneous Organic Chemical Manufacturing). **(3/15)**

Operational Limitations

4. The combined authorized production rates of polypropylene for all lines are those represented in the material balance tables included in the confidential section of the application update letter submitted in February of 2003. The total amount of polypropylene produced at each line during each calendar month shall be recorded, and the annual amount for the calendar year shall be reconciled each January. These records shall be maintained at the plant site and cover at least the trailing three-year period. They shall be immediately available upon request to TCEQ personnel. **(04/03)**
5. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration of greater than 1 weight percent are not authorized by this permit unless authorized on the maximum allowable emission rates table (MAERT).

SPECIAL CONDITIONS

Permit Number 28441

Emission Limits

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating conditions specified in this permit.

Federal Applicability

2. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants (NESHAPS) promulgated for Equipment Leaks (Fugitive Emission Sources) of Benzene, for Equipment Leaks (Fugitive Emission Sources), and for Benzene Waste Operations in Title 40 Code of Federal Regulations Part 61, (40 CFR Part 61) Subparts A, J, V, and FF.
3. These facilities shall comply with all applicable requirements of the EPA regulations on NESHAPS promulgated for the Synthetic Organic Chemicals Manufacturing Industry (SOCMI), for SOCMI Process Vents, Storage Vessels, Transfer Operations, and Wastewater, and for Organic Hazardous Air Pollutant Equipment Leaks in 40 CFR Part 63, Subparts A, F, G, and H.

Operational Limitations

4. Toluene Disproportionation Unit (TDU) production is limited to the amount specified on Table 2 (Material Balance Table) of Appendix 1 in the confidential section of the August 2014 permit amendment application. The permit holder shall record all TDU production. (10/14)
5. The firing rate for Furnace F-501 is limited to a maximum of 75 MMBtu/hr. Furnace F-507 is limited to the firing rate specified in Appendix B in the confidential section of the March 1995 permit application.
6. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the maximum allowable emission rates table (MAERT).

Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with the exception of those listed:

OD-0017	OD-0023	OH-0507
OD-0018	OD-0024	OH-0510

Special Conditions
Permit Number 96220

Emission Limitations

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates," and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other operating requirements specified in the special conditions.
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the maximum allowable emission rates table (MAERT). Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.

Federal Applicability

3. This facility shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on:
 - A. Standards of Performance of New Stationary Sources promulgated for Volatile Organic Liquid Storage Vessels, Equipment Leaks of Volatile Organic Compound (VOC) in the Synthetic Organic Chemical Manufacturing Industry (SOCMI), VOC Emissions from the Polymer Manufacturing Industry and VOC emissions from SOCMI Distillation Operations in Title 40 Code of Federal Regulations (40 CFR) Part 60, Subparts A, Kb, VVa, DDD, and NNN, respectively.
 - B. National Emissions Standard for Hazardous Air pollutants (NESHAP) promulgated for Benzene Waste Operations in 40 CFR Part 61, Subparts A and FF.
 - C. NESHAP for Source Categories promulgated for SOCMI for Process vents, Storage Vessels, Transfer Operations, Wastewater and Equipment Leaks in 40 CFR Part 63, Subparts A, G and H, respectively.

Production Limits

4. Production of the Lubricating Oil Unit is limited as follows:
 - A. Polymer production shall not exceed the rates represented in Table 2, "Material Balance" included in the confidential section of the Permit No. 96220 application dated November 2011.
 - B. Records of the monthly production of polymer shall be kept.

Control

5. The vents from the Lubricating Oil Processing Unit that require control, as described in the updated permit application dated November 2011, shall be vented to the Flare Loop System (EPNs FS09, FS23 and FS24) operating under Permit No. 4600.

- B. Air contaminants emitted from the EPN MPUF2074 to be tested for include (but are not limited to) NO_x , CO and SO_2 .
- C. Sampling shall occur within 60 days after achieving the maximum operating rate, but no later than 180 days after initial start-up of the facilities and at such other times as may be required by the TCEQ Executive Director. Requests for additional time to perform sampling shall be submitted to the appropriate regional office.
- D. The facility being sampled shall operate within 5% of the maximum firing rate during stack emission testing. These conditions/parameters and any other primary operating parameters that affect the emission rate shall be monitored and recorded during the stack test. Any additional parameters shall be determined at the pretest meeting and shall be stated in the sampling report. Permit conditions and parameter limits may be waived during stack testing performed under this condition if the proposed condition/parameter range is identified in the test notice specified in paragraph A and accepted by the TCEQ Regional Office. Permit allowable emissions and emission control requirements are not waived and still apply during stack testing periods.

During subsequent operations, if the maximum firing rate is greater than 10% above that recorded during the test period, stack sampling shall be performed at the new operating conditions within 120 days. This sampling may be waived by the TCEQ Air Section Manager for the region.

- E. Copies of the final sampling report shall be forwarded to the offices below within 60 days after sampling is completed. Sampling reports shall comply with the attached provisions entitled "Chapter 14, Contents of Sampling Reports" of the TCEQ Sampling Procedures Manual. The reports shall be distributed as follows:

One copy to the appropriate TCEQ Regional Office.

One copy to each local air pollution control program.

Piping, Valves, Connectors, Pumps, Agitators, and Compressors - 28VHP

- 10. Monitoring of fugitive components in the Lubricating Oil Processing Unit shall be conducted in accordance with Special Condition No. 3 of Permit No. 20211/PAL16.

Storage Tanks

- 11. Tanks (EPNs TK2000, TK2048, TK4013, TK4014, TK4015, TK4016 and TK4017) are limited to storing the liquids in the initial permit application's confidential file dated November, 2011. TK4013 is also authorized to store dodecene as represented in the amendment application dated December 1, 2016. (04/17)

Storage tanks are subject to the following requirements: The control requirements specified in paragraphs A-D of this condition shall not apply (1) where the VOC has an aggregate partial pressure of less than 0.50 psia at the maximum feed temperature or 95 °F, whichever is greater, or (2) to storage tanks smaller than 25,000 gallons.

Special Conditions

Permit Numbers 18999, PSDTX755M1, and N216

Emissions Standards

1. This permit authorizes emissions only from those points listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and the facilities covered by this permit are authorized to emit subject to the emission rate limits on that table and other conditions specified in the special conditions.
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 (one) percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to the atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions with exception for safety relief valves that discharge to the atmosphere as a result of fire, malfunction, or failure of utilities provided that: (a) each valve is equipped with a rupture disc upstream; (b) a pressure gauge is installed between the relief valve and rupture disc to monitor disc integrity; and (c) all leaking discs are replaced at the earliest opportunity but no later than the next process shutdown.

Production Limits

3. The maximum propylene and by-product production rate shall not exceed the pounds per hour and pounds per year levels (based on a 12-month rolling average) indicated in the confidential submittal of the April 17, 2015, amendment application to this permit. Monthly records of the propylene and by-products production rate shall be maintained on-site for a period of five years and made available to representatives of the Texas Commission for Environmental Quality (TCEQ) upon request.

Federal Program Applicability

4. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on Standards of Performance for New Stationary Sources promulgated in Title 40 Code of Federal Regulations Part 60 (40 CFR Part 60):
 - A. Subpart A, General Provisions.
 - B. Subpart Db, Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units.
 - C. Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced after July 23, 1984.
 - D. Subpart NNN, Standards of Performance for Volatile Organic Compound (VOC) Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations.
 - E. Subpart RRR, Standards of Performance for Volatile Organic Compound Emissions from Synthetic Organic Chemical Manufacturing Industry (SOCMI) Reactor Processes.
 - F. Subpart KKKK, Standards of Performance for Stationary Combustion Turbines.

Special Conditions

Permit Number 80931

1. This permit authorizes MS Polymer Production Plant at 6161 Underwood Road, Pasadena, Texas.

This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and those sources are limited to the emission limits and other conditions specified in that table.

2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the maximum allowable emission rates table (MAERT). Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.

Federal Applicability

3. These facilities shall comply with all applicable requirements of the U.S. Environmental Protection Agency (EPA) regulations on National Emission Standards for Hazardous Air Pollutants (NESHAPS) in Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63) promulgated for:
 - A. Subpart A, General Provisions.
 - B. Subpart FFFF, Miscellaneous Organic NESHAPS.

Emission Control and Production Limitations

4. Annual production of modified silyl terminated polyether in the MSA Process Unit shall not exceed the representation in the confidential submittal dated September 7, 2013, without prior review and approval from the Executive Director of the Texas Commission on Environmental Quality (TCEQ). Production records shall be maintained and kept at the plant site. These records shall be made available to the TCEQ personnel and any other authorized air pollution control agency upon request.
5. All process vents that require emission control shall be routed to the product recovery condenser before they are routed to the Flare (Emission Point No. [EPN] MSAZ-S421).
6. The Flare (EPN MSAZ-S421) shall be designed and operated in accordance with the following requirements:
 - A. The flare systems shall be designed such that the combined assist natural gas and waste stream to each flare meets the 40 CFR § 63.11 specifications of minimum heating value and maximum tip velocity under normal, upset, and maintenance flow conditions.

The heating value and velocity requirements shall be satisfied during operations authorized by this permit. Flare testing per 40 CFR § 63.11(b) may be requested by the appropriate regional office to demonstrate compliance with these requirements.
 - B. The flare shall be operated with a flame present at all times and/or have a constant pilot flame. The pilot flame shall be continuously monitored by a thermocouple, infrared monitor, or ultraviolet monitor. The time, date, and duration of any loss of pilot flame shall be recorded. Each monitoring device shall be accurate to, and shall be calibrated or have a

corrective actions shall be kept. If the duration of visible emissions exceeds five aggregate minutes during any two-hour period, the holder of this permit shall notify the appropriate Texas Commission on Environmental Quality (TCEQ) Regional Office within 24 hours of occurrence of the event. Information provided regarding the event shall include date and time of occurrence, duration, cause, and corrective action taken.

Throughput Limits

15. Throughput limits for the permitted facility are defined in terms of polyethylene production from each reactor, pounds per year (lbs/yr). Specific limits are disclosed in the confidential section submitted with the PI-1 Form dated October 31, 2018 and subsequent updates to the application.

Planned Maintenance, Startup and Shutdown

16. This permit authorizes emissions from the Large Flare (EPN 246), the Seed Bed Vents (EPNs 497 and 521), and the Catalyst Wash Pot (EPN 1086) for the following maintenance, start-up, and shutdown activities
 - A. Seed bed transfer into the reaction system.
 - B. Catalyst deactivation in the catalyst wash pot.
 - C. G-1 and G-2 reactor purges.

These emissions are subject to the maximum allowable emission rates indicated on the MAERT. Any maintenance, start-up, and shutdown activities are not authorized by this permit.

17. Emissions of 1-hexene from the Large Flare (EPN 246) due to planned start-up, shutdown, and maintenance activities associated with the G-1, G-2, and G-3 Reactor (Permit Number 18773) are limited to 135 lbs/hr during any one hour period.

Continuous Demonstration of Compliance

18. The permit holder shall grant to TCEQ and EPA confirmed representatives:
 - A. Entry to the premises upon which permitted facilities or other facilities under the permit holder's control is located, or for which any records are required to be kept under the terms and conditions of this permit;
 - B. Access and reproduction rights, at reasonable times, to any records required to be kept under the terms and conditions of this permit or the Act;
 - C. Opportunity to conduct at reasonable times an inspection of:
 - (1) Any monitoring equipment or monitoring method required by this permit; or
 - (2) Operations and maintenance activity at the permitted facility; and
 - D. Opportunity to sample at reasonable times any emissions of pollutants.
19. The methods for demonstration of compliance are as summarized:
 - A. Except for the sources excluded by this condition, all other permitted sources of VOC shall be subject to compliance demonstration by Sealed Can Gas Chromatograph (GC) Method, Leak Detection and Repair (LDAR), or unit material balances and calculations, as appropriate. The sources excluded from these demonstration techniques are EPNs 495, 496, and 523.

ATTACHMENT E:

Summary of Preconstruction Authorizations for ExxonMobil's Baytown Technology and
Engineering Complex

Permit Number	Permit Type	Claimed PBR	Initial Issuance	Last Renewed, Revised, or Amended	Equipment Authorized	VOC (TPY)	NOx (TPY)	CO (TPY)	PM (TPY)	SO2 (TPY)
55901	PBR	106.124	8/14/2003	N/A	Catalyst Pretreatment Regeneration Unit	0.11				
70942	PBR	106.261, 106.262	2/13/2004	N/A	Paraxylene Adsorption Unit Filters 301B, 400A/B	0.04				
71764	PBR	106.261, 106.262	5/4/2004	N/A	Continuous Catalyst Regeneration Units A&B	0.78	0.001	0.01	<0.01	
71765	PBR	106.124	5/20/2004	6/7/2005	Feed Preparation Unit	1.33	0.04	0.22		
74339	PBR	106.124	1/7/2005	N/A	Laboratory Gas Phase Reactor Unit	1.49	2.14	2.19		
75116	PBR	106.261	3/21/2005	N/A	Polyolefin Adhesives Pilot Plant	0.35				
76272	PBR	106.261	7/8/2005	N/A	Methanol to Olefins Pilot Plant	0.3	0.04	0.21		
82901	PBR	106.124	10/4/2007	N/A	Polyolefin Adhesives Pilot Plant	0.35				
86811	PBR	106.262	12/15/2008	N/A	Benzene Filling Facility	<0.01				
87134	PBR	106.261	1/27/2009	N/A	Pilot Plant Isobutane Venting	0.07	<0.01	0.02		
87875	PBR	106.261	4/14/2009	N/A	Dishwasher	0.06				
90063	PBR	106.261	9/11/2009	N/A	Pilot Plant Venting	4.9	0.24	1.71		
92245	PBR	106.261	5/18/2010	N/A	Venting to Flare 12		0.96	4.94		
104215	PBR	106.261	9/18/2012	N/A	Pilot Unit Building Thermal Oxidizer	0.22	0.04	0.04	<0.01	<0.01
108579	PBR	106.261, 106.262	5/31/2013	5/1/2018	Polymer Center Pilot Plant Fugitives	9.67			0.85	
112203	PBR	106.261, 106.262	10/15/2013	10/23/2019	Propylene Reactor Only Process Unit	2.16			0.08	

[illegible]

ATTACHMENT F:

Technical Review Document for Permit No. 87134

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	87134	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Ms. Nancy Akintan
Project No.:	143401	Unit Name:	BTEC Pilot Plant Isobutane Venting	PBR No(s).:	106.261

GENERAL INFORMATION					
Regulated Entity No.:	RN103774212	Project Type:	Permit by Rule Application		
Customer Reference No.:	CN600123939	Date Received by TCEQ:	December 29, 2008		
Account No.:		Date Received by Reviewer:	January 07, 2009		
City/County:	Baytown, Harris County	Physical Location:	5200 Bayway Drive		

CONTACT INFORMATION					
Responsible Official/ Primary Contact Name and Title:	Mr. Jeffrey Kovacs, PE Environmental Supervisor	Phone No.:	(281) 834-0101	Email:	
		Fax No.:	(281) 834-5788		
Technical Contact/ Consultant Name and Title:	Ms. Leslie Tom Air Permit Contact	Phone No.:	(281) 834-1844	Email:	LESLIE.L.TOM@EXXON MOBIL.COM
		Fax No.:	(281) 834-5788		

GENERAL RULES CHECK	YES	NO	COMMENTS
Is confidential information included in the application?		X	
Are there affected NSR or Title V permits for the project?	X		20211. No other pending action in the IMS. Emissions will be incorporated into Flexible Permit 20211 at next amendment or renewal.
Is each PBR > 25/250 tpy?		X	
Are PBR sitewide emissions > 25/250 tpy?		NA	Site has gone through Public Notice.
Are there permit limits on using PBRs at the site?		X	
Is PSD or Nonattainment netting required?		X	PSD or Nonattainment netting is not required
Do NSPS, NESHAP, or MACT standards apply to this registration?		X	NSPS, NESHAP, or MACT standards are not applicable
Does NOx Cap and Trade apply to this registration?		X	NOx Cap and Trade is not applicable
Is the facility in compliance with all other applicable rules and regulations?	X		Company represented that the site is in compliance with all other applicable rules and regulations.

DESCRIBE OVERALL PROCESS AT THE SITE
Exxon Mobil Corporation operated the Baytown Technology and Engineering Complex (BTEC) located at 5200 Bayway Drive in Baytown, Harris County. Flexible Permit Number 20211 will be affected by this project. This registration will authorize an increase in emissions from the Pilot Plant Isobutane Venting activity under 106.261.

DESCRIBE PROJECT AND INVOLVED PROCESS
BTEC Pilot Plant is a research facility which conducts product and process studies for Exxon Mobile Corporation. Occasionally, process studies do not completely consume the purchased feedstock. This project registers an operational activity to vent 6400 lbs of isobutene to Flare Stack 12 (EPN: FS12) at a rate of 300 lb/hr. Company has certified that this additional stream to Flare Stack 12 will not decrease the destruction/removal efficiency of this flare.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES
<u>Compliance with rule 106.261:</u>
1. The facility change is not specifically authorized in another permit by rule.
2. The emission sources are located a >1400 feet from the nearest off-plant receptor.
3. Total new or increased emissions claimed under 106.261(a) are below the required limits.
4. There will be no changes to or additions of any existing air pollution abatement equipment.
5. There will be no visible emissions exceeding 5.0 % opacity in any six-minute period.
6. TCEQ Form PI-7CERT has been submitted to register the project.

COMMUNICATION LOG			
Date	Time	Name/Company	Subject of Communication

PBR Emission Limits						
Chemical	PBR Claimed	L, mg/m³	Emission Limit (E = L/K), lb/hr	Emission Limit tpy	Actual Emissions lb/hr	Actual Emissions tpy
Isobutane	106.261(a)(2)	NA	6.0	10.00	6.0	0.07
NOx	106.261(a)(2)	NA	6.0	10.0	0.28	0.003
CO	106.261(a)(2)	NA	6.0	10.0	2.02	0.02

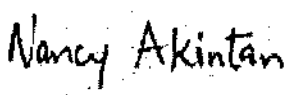
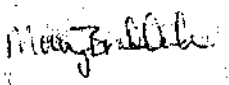

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	87134	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Ms. Nancy Akintan
Project No.:	143401	Unit Name:	BTEC Pilot Plant Isobutane Venting	PBR No(s):	106.261

ESTIMATED EMISSIONS

EPN / Emission Source	Specific VOC or Other Pollutants	VOC		NOx		CO		PM ₁₀		SO ₂		Other	
		lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
FS12 / Flare Stack 12		6.0	0.07	0.28	0.003	2.02	0.02						
TOTAL EMISSIONS (TPY):			0.07		<0.01		0.02						
MAXIMUM OPERATING SCHEDULE:		Hours/Day		Days/Week		Weeks/Year		Hours/Year		24			

SITE REVIEW / DISTANCE LIMIT	Yes	No	Description/Outcome	Date	Reviewed by
Site Review Required?		X			
PBR Distance Limits Met?	X		>1400 feet from the nearest property line and >1400 feet to the nearest off-plant receptor	01/27/09	As represented by the company

	TECHNICAL REVIEWER	PEER REVIEWER	FINAL REVIEWER
SIGNATURE:			
PRINTED NAME:	Ms. Nancy Akintan	Ms. Molly Braddock	Ms. Anne M. Inman, P.E., Manager
DATE:	January 27, 2009	January 27, 2009	January 27, 2009

BASIS OF PROJECT POINTS	POINTS
Base Points:	1.5
Project Complexity Description and Points:	
Technical Reviewer Project Points Assessment:	1.5
Final Reviewer Project Points Confirmation:	

ATTACHMENT G:

Technical Review Document for Permit No. 124215

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	124215	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Ms. Nancy Akintan
Project No.:	219490	Unit Name:	Alkylation Skid	PBR No(s).:	106.261, 106.262

GENERAL INFORMATION					
Regulated Entity No.:	RN103774212	Project Type:	Permit by Rule Application		
Customer Reference No.:	CN600123939	Date Received by TCEQ:	October 14, 2014		
Account No.:		Date Received by Reviewer:	October 22, 2014		
City/County:	Baytown, Harris County	Physical Location:	5200 Bayway Drive		

CONTACT INFORMATION					
Responsible Official/ Primary Contact Name and Title:	Mr. James Barron NSR Permitting Team Lead	Phone No.: Fax No.:	(281) 834-5873 (281) 834-5788	Email:	JAMES.BARRON@EXXO NMOBIL.COM
Technical Contact/ Consultant Name and Title:		Phone No.: Fax No.:		Email:	

GENERAL RULES CHECK	YES	NO	COMMENTS
Is confidential information included in the application?	X		Emission calculations
Is this registration certified?	X		
Is this an APWL site?		X	
Are there any upstream or downstream affects associated with this registration?		X	
Is planned MSS included in the registration?		X	
Are there affected NSR or Title V authorizations for the project?	X		4600. Emissions should be incorporated into permits 4600 at next amendment or renewal
Is each PBR > 25/250 tpy?		X	
Are PBR sitewide emissions > 25/250 tpy?		NA	Site has gone through Public Notice
Are there permit limits on using PBRs at the site?		X	
Is PSD or Nonattainment netting required?		X	
Do NSPS, NESHAP, or MACT standards apply to this registration?		X	None represented
Does NOx Cap and Trade apply to this registration?		X	
Is the facility in compliance with all other applicable rules and regulations?	X		Company represented that the site is in compliance with all other applicable rules and regulations.

DESCRIBE OVERALL PROCESS AT THE SITE
ExxonMobil Chemical Company, Baytown Technology and Engineering Complex (BTEC), located in Baytown, Harris County, operates several pilot plants which are currently authorized under various Texas Commission on Environmental Quality (TCEQ) PBRs and Standard Permits. The purpose of this registration is to authorize emissions associated with the Alkylation Skid. The emissions increase associated with the Alkylation Skid project meet the requirements of Permit by Rule §106.261 and §106.262.

DESCRIBE PROJECT AND INVOLVED PROCESS
This project will construct a new Alkylation Unit to aid in catalyst screening and characterization. Total Alkylation Skid emissions are summarized in Attachment V: Emissions Calculations (Confidential). Fugitive emissions for valves and flanges are calculated using SOCMi Without Ethylene and SOCMi with Ethylene emissions factors from the TCEQ Guidance Package for Chemical Sources, Equipment Leak Fugitives, dated October 2000. Emissions from the thermal oxidizer (authorized under TCEQ Standard Permit Number 51963) and FS23 (authorized under TCEQ Permit Number 4600) are based on TCEQ technical Guidance for Flares and Vapor Oxidizers dated October 2000. NOx and CO factors are from AP-42, Section 1.4, dated July 1998. ExxonMobil will correct the EPN and update the emissions in Standard Permit 51963 during the next renewal.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES
<p><u>PBR 106.261/262 Compliance Demonstration</u></p> <ul style="list-style-type: none"> The emission point(s) associated with the facilities or changes to facilities are located at least 100 ft from the nearest off-site receptor. The total new or increase emissions will comply with the applicable hourly and annual emission limits as represented in the table below. There are no changes to or addition of any pollution abatement equipment. Visible emissions to the atmosphere, from any point or fugitive source, do not exceed 5.0 opacity in any six-minute period. This registration is not for authorization for construction or to change a facility authorized under another section of this chapter or under standard permit.

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	124215	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Ms. Nancy Akintan
Project No.:	219490	Unit Name:	Alkylation Skid	PBR No(s).:	106.261, 106.262

COMMUNICATION LOG				
Date	Time	Name/Company	Subject of Communication	
11/4/2014	1.12pm	Mr. James Barron	Reviewer called to ask why the thermal oxidizer has two different EPNs; it should be the same name. Reviewer will follow up with an email, Mr. Barron will respond via email.	
11/4/2014	1.21pm		Mr. Barron: Per our telephone conversation, I need to know Why the different EPNs for the thermal oxidizer EPNS F-201B /F-202. It needs to be the same on both permits. Thanks	
11/6/2014	11.21am		Mr. Barron: I am still waiting for your response on these permits. Thanks	
11/7/2014	9.28am		Mr. Barron: TCEQ has a 5 day policy on missing/deficient information: http://www.tceq.texas.gov/assets/public/permitting/air/memos/voidguide06.pdf . Please provide the requested information by 5:00pm 11/11/2014 . If this cannot be met, TCEQ can provide an opportunity for additional time (known as a deficiency or void letter) that will provide up to 6 months for the missing/deficient information to be provided. There are no extra fees associated with this process. If this is an option you would like to pursue or the information cannot be gathered in a short period of time, please let me know. Otherwise, we look forward to hearing from you. If you need any assistance or would like to discuss any of the above issues please feel free to call me. Regards, Nancy Akintan	
11/7/2014		Ms. Catherine Fuentes	Ms. Fuentes called reviewer to discuss the previous emails to Mr. Barron. Reviewer advised Ms. Fuentes to follow up by responding via email.	
11/7/2014	10.26am		<p>Ms. Akintan, Thank you for your help today, per our phone conversation I am responding to your requests for information for Permit Numbers 124040 and 124215.</p> <ol style="list-style-type: none"> During the last renewal of PCP Standard Permit 51963, ExxonMobil assigned EPN: F-202 to the thermal oxidizer. For the recent PBR applications Permit Numbers 124040 and 124215, ExxonMobil used EPN: F-201B in reference to this same thermal oxidizer. ExxonMobil would like to replace all references to F-202 with F-201B. There is no F-202 on-site, and ExxonMobil believes there was an error in the nomenclature for this thermal oxidizer during the PCP Standard Permit 51963 renewal. ExxonMobil will correct the EPN in Standard Permit 51963 during the next renewal. For Permit Number 124040 only, ExxonMobil would like to correct the thermal oxidizer from EPN: F-201B to EPN: PUBThOx. The wrong thermal oxidizer was inadvertently included in the PBR application. Per your instructions, an updated emissions summary table is attached with the correct EPN. ExxonMobil will update the increases in emissions at the thermal oxidizers during the next renewal or amendment of PCP Standard Permit 51963 (for EPN: F-201B) and PCP Standard Permit 52572 (for EPN: PUBThOx). <p>Thanks again for your time, if you have any questions or need additional information please contact me at Catherine.fuentes@exxonmobil.com or 281-834-1716.</p>	




PBR 106.261(2)							
Air Contaminant				Emission Limit		Actual Emissions	
				Lb/hr	Tpy	lb/hr	tpy
Ethylene				6.00	10.00	0.09	0.34
Oxides of Nitrogen				6.00	10.00	0.03	<0.001
Carbon Monoxide				6.00	10.00	0.09	<0.001
PBR 106.262							
Air Contaminant	L	D	K	Emission Limit		Actual Emissions	
	mg/m ³	ft		lb/hr	Tpy	lb/hr	tpy
Benzene ¹	3	2600	10.4	0.288	1.263	0.21	0.15
Benzene ²	3	500	81	0.037	0.1622	0.01	
Benzene ³	3			0.037	0.1622	0.03	
Particulate matter	3			0.037	0.1622	6.83E-04	

Note 1 = Benzene emissions from FS23; 2 = Benzene emissions from thermal oxidizer; 3 = Benzene emissions from fugitive sources. Total Benzene emissions meet the 106.262 limitations.

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	124215	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Ms. Nancy Akintan
Project No.:	219490	Unit Name:	Alkylation Skid	PBR No(s).:	106.261, 106.262

ESTIMATED EMISSIONS														
EPN / Emission Source	VOC		NOx		CO		PM ₁₀		PM _{2.5}		SO ₂		Other	
	lb/hr	tpy	lb/hr	tpy	lbs/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
FGBCT/Fugitives	0.11	0.48												
FS23/Flare Stack 23	0.22	0.01	0.02	4.82E-04	0.09	2.46E-03								
F201B/Thermal Oxidizer	0.01	8.73E-04	0.01	6.00E-04	0.01	5.04E-04	0.001	4.56E-05						
TOTAL EMISSIONS (TPY):		0.49		<0.01		<0.01		<0.01						
MAXIMUM OPERATING SCHEDULE:			Hours/Day		Days/Week		Weeks/Year		Hours/Year		8,760			

	TECHNICAL REVIEWER	PEER REVIEWER	FINAL REVIEWER
SIGNATURE:			
PRINTED NAME:	Ms. Nancy Akintan	Ms. Julie Steger	Ms. Anne Inman, P.E., Manager
DATE:	November 3, 2014	November 17, 2014	November 17, 2014

BASIS OF PROJECT POINTS	POINTS
Base Points:	1.5
Project Complexity Description and Points:	0.5
Additional PBR, project completed <21 days, communication	0.5
	1.0
Technical Reviewer Project Points Assessment:	3.5

ATTACHMENT H:

Technical Review Document for Permit No. 118344

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	118344	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Mr. Raymond Lay
Project No.:	207875	Unit Name:	BTEC – mCPU Dual Reactor Sampling	PBR No(s).:	106.261, 106.262

GENERAL INFORMATION					
Regulated Entity No.:	RN103774212	Project Type:	Permit by Rule Application		
Customer Reference No.:	CN600123939	Date Received by TCEQ:	March 25, 2014		
Account No.:	None	Date Received by Reviewer:	June 02, 2014		
City/County:	Baytown, Harris County	Physical Location:	5200 Bayway Drive		

CONTACT INFORMATION					
Responsible Official/ Primary Contact Name and Title:	Mr. Kevin R. Brewer NSR Permitting Team Lead	Phone No.:	(281) 834-2133	Email:	KEVIN.R.BREWER@EXXONMOBIL.COM
Technical Contact/ Consultant Name and Title:	Ms. Wendy E. Merkin Air Permitting Advisor	Phone No.:	(281) 834-5873	Email:	WENDY.E.MERKIN@EXXONMOBIL.COM
		Fax No.:	(281) 834-5788		

GENERAL RULES CHECK	YES	NO	COMMENTS
Is confidential information included in the application?	X		Confidential information was submitted.
Are there affected NSR or Title V permits for the project?		X	No NSR or Title V Permits that are affected by the Dual Reactor Sampling project at ExxonMobil Chemical Company (ExxonMobil), Baytown Technology and Engineering Complex (BTEC).
Is each PBR > 25/250 tpy?		X	See the Estimated Emissions table below.
Are PBR sitewide emissions > 25/250 tpy?	N/A		BTEC has had public notice and public comment.
Are there permit limits on using PBRs at the site?		X	There are no permits under the same commission account number that contain a condition or conditions precluding the use of a PBR under this chapter.
Is PSD or Nonattainment netting required?		X	The BTEC is located in Harris County, which is classified as an attainment county. The project has not triggered a nonattainment review.
Do NSPS, NESHAP, or MACT standards apply to this registration?		X	
Does NOx Cap and Trade apply to this registration?		X	The BTEC is located in Houston/Galveston area. The proposed facility or group of facilities will obtain required allowances for NOx if they are subject to 30 TAC Chapter 101, Subchapter H, Division 3.
Is the facility in compliance with all other applicable rules and regulations?	X		ExxonMobil has demonstrated that the BTEC – mCPU Dual Reactor Sampling project is in compliance under Title 30 Texas Administrative Code (TAC) §§ 106.261 and 106.262.

DESCRIBE OVERALL PROCESS AT THE SITE
ExxonMobil, BTEC, located in Baytown, Harris County, Texas, operates a Vistalon Metallocene Continuous Polymerization Unit (mCPU) pilot plant which is currently authorized under Texas Commission on Environmental Quality (TCEQ) Permit by Rule §§ 106.261 & 106.262 Registration Nos. 47313 & 40429.

DESCRIBE PROJECT AND INVOLVED PROCESS
The purpose of this registration document is to (1) authorize increased emissions associated with the Dual Reactor Sampling System Project and (2) update the mCPU authorization, voiding the existing authorizations. The total mCPU emissions including the increase from the project meet the requirements of Permit by Rule §§ 106.261 & 106.26
The mCPU process consists of two continuously stirred tank reactors in series that convert ethylene, propylene, and co-monomers into a polymerized rubber in solution. At the exit of the reactors the polymer solution is separated from the solvent solution and analyzed. This project will upgrade the reactor sampling system used at the mCPU. This will allow for increased sampling frequency and therefore increased runtime at the unit. With this registration, ExxonMobil is updating the current registration and authorizing the increased fugitives, wastewater, vent, and flaring emissions at the mCPU resulting from the Dual Reactor Sampling System Project.
ExxonMobil intends to use § 106.263 or § 116.119 de minimis for MSS activities at the facilities authorized under the PBR Registration No. 118344.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES

The BTEC is a synthetic minor source as established in 2003 with form PI-8. BTEC will therefore remain under the emissions limits of 106.4(a)(1) with the installation of this project.

Fugitive emissions for valves, pumps, flanges, relief valves, and compressors are calculated using SOCMI with and without ethylene emissions factors from the TCEQ Guidance Package for Chemical Sources, Equipment Leak Fugitives, and dated October 2000. Fugitive emissions are calculated using Leak Detection and Repair program 28VHP.

This document demonstrates that the BTEC – mCPU Dual Reactor Sampling project will comply with the Texas Commission on Environmental Quality (TCEQ) Permit by Rule §§ 106.261 & 106.262 as stated in Chapter 106 Exemptions from Permitting effective November 1, 2003, and with all applicable rules and regulations of the Texas Clean Air Act.

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	118344	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Mr. Raymond Lay
Project No.:	207875	Unit Name:	BTEC – mCPU Dual Reactor Sampling	PBR No(s).:	106.261, 106.262

§ 106.261 Facilities (Emission Limitations)

- (a)(1) The facilities are located 900-feet from the nearest off-site receptor.
- (2) The emissions of Carbon Monoxide (CO), Ethylene, Isohexane, Oxides of Nitrogen (NO_x), & Propylene under this paragraph will not exceed 6-lb/hr and 10-tpy.
- (3) Total emissions of Pentane contaminant, having a limit value (L) greater than 200-milligrams per cubic meter (mg/m³) as listed and referenced in Table 262 of 30 TAC § 106.262, claimed under this paragraph will not exceed 1-lb/hr. Total emissions of Pentane, Ethylidene Norbornene (ENB), Butene-1, Vinyl Norbornene (VNB), 1,9 Decadiene, 1,7 Octadiene, & 1-Octene contaminants, not listed or referenced in Table 262, will not exceed 1-lb/hr. (See PBR Emission Limits below.)
- (4) ExxonMobil represents there are no changes to or additions of any existing air pollution abatement equipment.
- (5) ExxonMobil represents that visible emissions, except uncombined water, emitted to the atmosphere from any point or fugitive source will not be in amounts greater than 5.0% opacity in any six-minute period.
- (6) NA, emissions are increasing by less than 5-tpy.
- (7) Emissions are increasing by less than 5-tpy. The Form PI-7-CERT was submitted.
- (b)(1) This section is not being used to authorize the construction of a facility authorized in another section or for which a standard permit is in effect.
- (b)(2) This section is not being used to authorize the any change to a facility authorized in another section or for which a standard permit is in effect.

§ 106.262 Facilities (Emission and Distance Limitations)

- (a)(1) The facilities are located 900-feet from the nearest off-site receptor.
- (2) Total emissions of Toluene contaminant claimed under this paragraph will not exceed 5-tpy or the value of E as determined by the equation $E = L/K$. (See PBR Emission Limits below.)
- (3) A Form PI-7-CERT was submitted.
- (4) NA, none of the listed compounds is handled as part of the project.
- (5) There are no changes to or additions of any existing air pollution abatement equipment.
- (6) ExxonMobil represents that visible emissions, except uncombined water, emitted to the atmosphere from any point or fugitive source will not be in amounts greater than 5.0% opacity in any six-minute period.
- (b) This section is not being used to authorize the construction of or any change to a facility authorized in another section, but not meeting the requirements of that section, or for which a standard permit is in effect.
- (c) This section is not being used to qualify the use of other chemicals at a facility that has been authorized under another section of this chapter or under a standard permit.

PBR Emission Limits; D = 900-feet; K = 39						
Chemical	PBR Claimed	L, mg/m³	Emission Limit lb/hr	Emission Limit tpy	Actual Emissions lb/hr	Actual Emissions tpy
Ethylene	106.261(a)(2)	N/A	6.00	10.00	0.26	0.72
Propylene	106.261(a)(2)	N/A	6.00	10.00	0.43	1.12
Isohexane	106.261(a)(2)	N/A	6.00	10.00	4.00	3.82
Pentane	106.261(a)(3)	350	6.00	5.00	1.10	3.41
Toluene	106.262(a)(2)	188	4.82	5.00	1.10	3.41
ENB	106.261(a)(3)	N/A	1.00	4.38	0.12	0.53
Butene-1	106.261(a)(3)	N/A	1.00	4.38	0.12	0.53
VNB	106.261(a)(3)	N/A	1.00	4.38	0.12	0.53
1,9 Decadiene	106.261(a)(3)	N/A	1.00	4.38	0.12	0.53
1,7 Octadiene	106.261(a)(3)	N/A	1.00	4.38	0.12	0.53
1-Octene	106.261(a)(3)	N/A	1.00	4.38	0.12	0.53
NO _x	106.261(a)(2)	N/A	6.00	10.00	0.25	0.42
CO	106.261(a)(2)	N/A	6.00	10.00	1.26	2.13
TOTAL VOC					4.33	5.67

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	118344	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Mr. Raymond Lay
Project No.:	207875	Unit Name:	BTEC – mCPU Dual Reactor Sampling	PBR No(s).:	106.261, 106.262



COMMUNICATION LOG			
Date	Time	Name/Company	Subject of Communication
6/2/14	1506	Ms. Wendy Merkin	<p>Sent an email stating: “Good Afternoon Ms. Merkin, I recently received your permit application for the Exxon Mobil Corp. - Dual Reactor Sampling Vistalon mCPU - BTEC / PERMIT No. 118344. After review, there are some additional items/information that will be necessary in order for me to continue my review. Please provide the following:</p> <ol style="list-style-type: none"> The deadlines for MSS for ALL industries have passed. As of January 5, 2013 all planned Maintenance, Start-ups and Shutdowns associate with new projects must be addressed if they are to be authorized. For PBRs, if appropriate, having the company quantify what annual emissions may be so as to ensure that major source netting is not required, or that § 106.4(a)(1) or (a)(4) is complied with. The company can just state that they intend to use 106.263 or de minimis 116.119 for MSS. This PBR to be incorporated into the next amendment or renewal of NSR Permit No. 52572 and/or 51963? <p>TCEQ has a 5 day policy on missing/deficient information http://www.tceq.texas.gov/assets/public/permitting/air/memos/voidguide06.pdf. Please provide the above information before Close of Business June 09, 2014.”</p>
	1739	Mr. James Barron Air Permitting Advisor	<p>Received an email response stating: “Mr. Lay, I am now the ExxonMobil contact for this project. My contact information is provided below. A response to each of your information requests is provided below:</p> <ol style="list-style-type: none"> ExxonMobil intends to use 106.263 or 116.119 de minimis for MSS activities at the facilities authorized under this PBR registration. NSR Permit Nos. 52572 and 51963 are Pollution Control Project Standard Permits which authorize separate thermal oxidizers at the ExxonMobil Baytown Technology and Engineering Complex (BTEC). The pending PBR registration (No. 118344) for this project does not affect or authorize additional emissions from either thermal oxidizer. Therefore, the PBR Registration No. 118344 would not be incorporated into either Standard Permit Registration No. 52572 or 51963. <p>Thanks for your review of this project and please let me know if you have additional questions or information requests. James Barron, Air Permitting Advisor”</p>
6/3/14	751	Mr. James Barron; Mr. Jun Kim; Ms. Wendy Merkin; Mr. Kevin Brewer	<p>Sent a response email stating: “Mr. Barron, Thank you for the quick response to my request. What NSR Permit will PBR registration no. 118344 be referenced or incorporated into at the next amendment or renewal? Regards, Raymond D. Lay”</p>
	1030		<p>Received an email response stating: “Mr. Lay, All the facilities at the ExxonMobil Baytown Technology and Engineering Complex (BTEC) [RN103774212] are either authorized under PBR or Standard Permit (e.g. Thermal Oxidizers). There is not a NSR permit for the PBR Registration 118344 to be incorporated into. Please let me know if you have additional questions or information requests.</p>
6/18/14	920	Mr. Isaac Vela	<p>Received an email response stating: “Signed. I want to point out that the tpy emissions speciated is about double what was listed in the emission summary table for VOC. You may want to clarify in the TRV why this is okay, so it doesn’t get sent back to reviewer.”</p>
	1017	Mr. Isaac Vela	<p>Sent an email response stating: “Isaac, I checked the “CONFIDENTIAL VOC” emission calculations and verified the “NONCONFIDENTIAL Total VOC” (lb/hr & tpy) speciated emissions, and came up with the same VOC lb/hr & tpy emission rates. Thanks, Raymond”</p>

ESTIMATED EMISSIONS												
EPN / Emission Source	VOC		NOx		CO		PM ₁₀		PM _{2.5}		SO ₂	
	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
FGBPC / MCPU Fugitives	0.168	0.738										
WWCVPPU / MCPU Wastewater	0.0181	0.0793										
BTECATM / Atmospheric Vent	0.407	0.0744										
FS12 / Flare Stack 12	3.74	4.78	0.247	0.419	1.26	2.13						
TOTAL EMISSIONS (TPY):	4.3331	5.6717	0.247	0.419	1.26	2.13						
MAXIMUM OPERATING SCHEDULE:	Hours/Day	24	Days/Week	7	Weeks/Year	52	Hours/Year	8,760				

SITE REVIEW / DISTANCE LIMIT	Yes	No	Description/Outcome	Date	Reviewed by
Site Review Required?		X			
PBR Distance Limits Met?	X		900-feet to the nearest property line and 900-feet to the nearest off-property structure.	06/17/2014	Per company's PI-7-CERT Form.

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	118344	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Mr. Raymond Lay
Project No.:	207875	Unit Name:	BTEC – mCPU Dual Reactor Sampling	PBR No(s).:	106.261, 106.262

	TECHNICAL REVIEWER	PEER REVIEWER	FINAL REVIEWER
SIGNATURE:			See Hard Copy.
PRINTED NAME:	Mr. Raymond D. Lay	Mr. Isaac Vela	Ms. Anne M. Inman, P.E., Manager
DATE:	06/17/2014	06/18/2014	06/18/2014

BASIS OF PROJECT POINTS	POINTS
Base Points: 106.261	1.50
Project Complexity Description and Points: 106.262	0.50
Extra speciated chemicals.	1.25
Technical Reviewer Project Points Assessment:	3.25
Final Reviewer Project Points Confirmation:	

ATTACHMENT I:

PI-8 Form for ExxonMobil BTEC



**Texas Natural Resource Conservation Commission
Form PI-8**

SPECIAL CERTIFICATION FORM FOR EXEMPTIONS (Title 30 Texas Administrative Code Chapter 106 [30 TAC Chapter 106]) AND STANDARD PERMITS (30 TAC Chapter 116)

Note: This form should be used to establish enforceable allowable emission rates which are below those allowed by 30 TAC Chapter 106 or 30 TAC § 116.610. Please mail to: Texas Natural Resource Conservation Commission, Office of Permitting, Remediation, and Registration, Air Permits Division, MC-162, P.O. Box 13087, Austin, Texas 78711-3087.

I. APPLICANT INFORMATION						
A. Company Name:		ExxonMobil Chemical Company – Baytown Technology and Engineering Complex				
<i>[Corporation, Company, Government Agency, Firm, etc.]</i>						
B. Mailing Address:		P.O. Box 5200, Baytown, TX 77522-5200				
C. Individual Authorized to Act for Applicant:						
1. Name:		Roger S. Day	2. Title:		Environmental Coordinator	
3. Address:		P.O. Box 5200	4. Telephone:		281-834-2515	
5. Fax: 281-834-1790						
D. Does this action result in the registration of any grandfathered facilities? YES NO X						
II. LOCATION OF FACILITY (LATITUDE AND LONGITUDE MUST BE TO THE NEAREST SECOND)						
A. Name of Plant or Site:		Baytown Technology and Engineering Complex (BTEC)				
B. Name of Facility:		Baytown Technology and Engineering Complex (BTEC)				
C. Street Address:		5200 Bayway Drive				
D. Nearest City:		Baytown	E. Zip Code:	77520	F. County:	Harris
G. Latitude:		29 ° 44 ' 32 "N	H. Longitude:		95 ° 01 ' 31 "W	
I. Does the company (including subsidiaries and parent companies) employ 100 or fewer persons?		YES		NO X		
J. Site Requirements:						
K. Submit a plot plan to scale of the property showing the location of plant boundaries, plant equipment, the exempted facility, and the surrounding areas.						

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Applications Team



**Texas Natural Resource Conservation Commission
Form PI-8**

III. TYPE OF FACILITY						
A. Exemption or Standard Permit Section Number(s):				§106.124		
1. TNRCC Account Identification Number:				HG-0229-F		
B. Associated or Previous Special Exemption or Permit Number (s):				§106.124		
C. Operating Schedule:						
1. Hours/Day:		24	2. Days/Week:		7	3. Weeks/Year: 52
4. Continuous		YES	X	NO	or Hours/Year	
D. Start of Construction (Date): 6/1/03				Start of Operation (Date): 7/15/03		
E. Source	1. New Source		YES		NO	X
	2. Modification of Existing Source		YES		X	NO
	3. Certification of Existing Source		YES		X	NO
IV. PROCESS DESCRIPTION						
A. Submit a summary which describes the construction, process, operation, and compliance of the facility. The description must be in sufficient detail to indicate how the facility conforms to the specified exemption or standard permit and verifies the maximum emission rates indicated below.						
V. MAXIMUM EMISSIONS RATE DATA						
A. Submit documentation which demonstrates the basis for each emission point number's maximum emission rates represented below, including fugitives (calculations, emission factors, equipment capacity, sampling, monitoring, etc.)						
Emission Point Number	Name of Source	Name of Air Contaminant	Emission Rate of Each Air Contaminant			
			Maximum Pound/Hour		Actual Tons/Year	
			Gaseous	Particulate	Gaseous	Particulate
Baytown Technology and Engineering Complex (BTEC) (Site-wide limits)	VOC				<25	
	NOx				<25	
	SO ₂				<100	
	PM-10				<100	
	CO				<100	
	HAP (Individual)				<10	
	HAPs (Total)				<25	
Any additional data required should be shown on an attached sheet.						

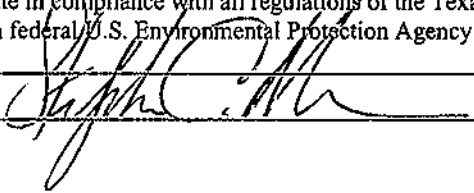
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Air & Waste Applications Form



Texas Natural Resource Conservation Commission
Form PI-8

VI. COPY DISTRIBUTION			
A. Was a copy of this certification sent to the Air Permits Division of the TNRCC?			Date: 7/21/03
YES	X	NO	NA
B. Was a copy of this certification sent to the Regional Office of the TNRCC?			Date: 7/21/03
YES	X	NO	NA
VII. SIGNATURE			
I, Steve C. Mraw		BTEC Site Manager	
(Name)		(Title)	
state that I have knowledge of the facts herein set forth and that the same are true and correct to the best of my knowledge and belief. I also certify that the maximum emission rates listed on this certification reflect the maximum anticipated emissions due to the operation of this facility. To the best of my knowledge and belief, the project will satisfy the conditions and limitations of the indicated exemption or standard permit. The facility will operate in compliance with all regulations of the Texas Natural Resource Conservation Commission and with federal U.S. Environmental Protection Agency regulations governing air pollution.			
DATE: 7/23/03		SIGNATURE: 	

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JUL 30 2003
Air & Waste Applications Team

ATTACHMENT J:

Permit and Technical Review Document for Permit No. 142313

Bryan W. Shaw, Ph.D., P.E., *Chairman*
Toby Baker, *Commissioner*
Jon Niermann, *Commissioner*
Richard A. Hyde, P.E., *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

March 17, 2017

MR KEVIN R BREWER
ENVIRONMENTAL SECTION SUPERVISOR
EXXON MOBIL CORPORATION
PO BOX 4004
BAYTOWN TX 77522-4004

Re: Initial Permit
Permit Number: 142313
Expiration Date: March 17, 2027
Exxon Mobil Corporation
Baytown Technology and Engineering Complex
Baytown, Harris County
Regulated Entity Number: RN103774212
Customer Reference Number: CN600123939

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TCEQ
CENTRAL FILE ROOM

Dear Mr. Brewer:

This is in response to your Form PI-1 (General Application for Air Preconstruction Permits and Amendments) concerning the above-referenced project. Also, this will acknowledge that your application for the above-referenced permit is technically complete as of January 9, 2017.

In accordance with Title 30 Texas Administrative Code (TAC) Chapter 116 and based on our review, your permit is hereby issued. This information will be incorporated into the permit files. Enclosed are general conditions (permit face), special conditions, and a maximum allowable emission rates table. We appreciate your careful review of the permit and assuring that all requirements are consistently met. In addition, the construction and operation of the facilities must be as represented in the application.

You may file a **motion to overturn** with the Chief Clerk. A motion to overturn is a request for the commission to review the executive director's decision. Any motion must explain why the commission should review the executive director's decision. According to 30 TAC §50.139, an action by the executive director is not affected by a motion to overturn filed under this section unless expressly ordered by the commission.

A motion to overturn must be received by the Chief Clerk within 23 days after the date of this letter. An original and 7 copies of a motion must be filed with the Chief Clerk in person, or by mail to the Chief Clerk's address on the attached mailing list. On the same day the motion is transmitted to the Chief Clerk, please provide copies to the applicant, the executive director's attorney, and the Public Interest Counsel at the addresses listed on the attached mailing list. If a motion to overturn is not acted on by the commission within 45 days after the date of this letter, then the motion shall be deemed overruled.

You may also request **judicial review** of the executive director's approval. According to Texas Health and Safety Code §382.032, a person affected by the executive director's approval must

Mr. Kevin R Brewer
Page 2
March 17, 2017

Re: Permit Number: 142313

file a petition appealing the executive director's approval in Travis County district court within 30 days after the **effective date of the approval**. Even if you request judicial review, you still must exhaust your administrative remedies, which includes filing a motion to overturn in accordance with the previous paragraphs.

You are reminded that these facilities must be in compliance with all rules and regulations of the Texas Commission on Environmental Quality (TCEQ) and of the U.S. Environmental Protection Agency at all times.

If you need further information or have any questions, please contact Dr. Ozden Tamer, Ph.D., P.E. at (512) 239-4577 or write to the Texas Commission on Environmental Quality, Office of Air, Air Permits Division, MC-163, P.O. Box 13087, Austin, Texas 78711-3087.

This action is taken under authority delegated by the Executive Director of the TCEQ.

Sincerely,



Michael Wilson, P.E., Director
Air Permits Division
Office of Air
Texas Commission on Environmental Quality

Enclosure

cc: Director, Harris County, Pollution Control Services, Pasadena
Air Section Manager, Region 12 - Houston

Project Number: 257045



Texas Commission on Environmental Quality Air Quality Permit

A Permit Is Hereby Issued To
Exxon Mobil Corporation
Authorizing the Construction and Operation of
Baytown Technology And Engineering Complex
Located at Baytown, Harris County, Texas
Latitude 29° 44' 32" Longitude -95° 1' 31"

Permit Number: 142313

Issuance Date: March 17, 2017

Expiration Date: March 17, 2027

A handwritten signature in black ink, appearing to read "R. A. Hylb".

For the Commission

1. **Facilities** covered by this permit shall be constructed and operated as specified in the application for the permit. All representations regarding construction plans and operation procedures contained in the permit application shall be conditions upon which the permit is issued. Variations from these representations shall be unlawful unless the permit holder first makes application to the Texas Commission on Environmental Quality (commission) Executive Director to amend this permit in that regard and such amendment is approved. [Title 30 Texas Administrative Code (TAC) Section 116.116 (30 TAC § 116.116)]
2. **Voiding of Permit.** A permit or permit amendment is automatically void if the holder fails to begin construction within 18 months of the date of issuance, discontinues construction for more than 18 months prior to completion, or fails to complete construction within a reasonable time. Upon request, the executive director may grant an 18-month extension. Before the extension is granted the permit may be subject to revision based on best available control technology, lowest achievable emission rate, and netting or offsets as applicable. One additional extension of up to 18 months may be granted if the permit holder demonstrates that emissions from the facility will comply with all rules and regulations of the commission, the intent of the Texas Clean Air Act (TCAA), including protection of the public's health and physical property; and (b)(1) the permit holder is a party to litigation not of the permit holder's initiation regarding the issuance of the permit; or (b)(2) the permit holder has spent, or committed to spend, at least 10 percent of the estimated total cost of the project up to a maximum of \$5 million. A permit holder granted an extension under subsection (b)(1) of this section may receive one subsequent extension if the permit holder meets the conditions of subsection (b)(2) of this section. [30 TAC § 116.120]
3. **Construction Progress.** Start of construction, construction interruptions exceeding 45 days, and completion of construction shall be reported to the appropriate regional office of the commission not later than 15 working days after occurrence of the event. [30 TAC § 116.115(b)(2)(A)]
4. **Start-up Notification.** The appropriate air program regional office shall be notified prior to the commencement of operations of the facilities authorized by the permit in such a manner that a representative of the commission may be present. The permit holder shall provide a separate notification for the commencement of operations for each unit of phased construction, which may involve a series of units commencing operations at different times. Prior to operation of the facilities authorized by the permit, the permit holder shall identify the source or sources of allowances to be utilized for compliance with Chapter 101, Subchapter H, Division 3 of this title (relating to Mass Emissions Cap and Trade Program). [30 TAC § 116.115(b)(2)(B)]
5. **Sampling Requirements.** If sampling is required, the permit holder shall contact the commission's Office of Compliance and Enforcement prior to sampling to obtain the proper data forms and procedures. All sampling and testing procedures must be approved by the executive director and coordinated with the regional representatives of the commission. The permit holder is also responsible for providing sampling facilities and conducting the sampling operations or contracting with an independent sampling consultant. [30 TAC § 116.115(b)(2)(C)]

6. **Equivalency of Methods.** The permit holder must demonstrate or otherwise justify the equivalency of emission control methods, sampling or other emission testing methods, and monitoring methods proposed as alternatives to methods indicated in the conditions of the permit. Alternative methods shall be applied for in writing and must be reviewed and approved by the executive director prior to their use in fulfilling any requirements of the permit. [30 TAC § 116.115(b)(2)(D)]
7. **Recordkeeping.** The permit holder shall maintain a copy of the permit along with records containing the information and data sufficient to demonstrate compliance with the permit, including production records and operating hours; keep all required records in a file at the plant site. If, however, the facility normally operates unattended, records shall be maintained at the nearest staffed location within Texas specified in the application; make the records available at the request of personnel from the commission or any air pollution control program having jurisdiction in a timely manner; comply with any additional recordkeeping requirements specified in special conditions in the permit; and retain information in the file for at least two years following the date that the information or data is obtained. [30 TAC § 116.115(b)(2)(E)]
8. **Maximum Allowable Emission Rates.** The total emissions of air contaminants from any of the sources of emissions must not exceed the values stated on the table attached to the permit entitled "Emission Sources--Maximum Allowable Emission Rates." [30 TAC § 116.115(b)(2)(F)]¹
9. **Maintenance of Emission Control.** The permitted facilities shall not be operated unless all air pollution emission capture and abatement equipment is maintained in good working order and operating properly during normal facility operations. The permit holder shall provide notification in accordance with 30 TAC §101.201, 101.211, and 101.221 of this title (relating to Emissions Event Reporting and Recordkeeping Requirements; Scheduled Maintenance, Startup, and Shutdown Reporting and Recordkeeping Requirements; and Operational Requirements). [30 TAC § 116.115(b)(2)(G)]
10. **Compliance with Rules.** Acceptance of a permit by an applicant constitutes an acknowledgment and agreement that the permit holder will comply with all rules and orders of the commission issued in conformity with the TCAA and the conditions precedent to the granting of the permit. If more than one state or federal rule or regulation or permit condition is applicable, the most stringent limit or condition shall govern and be the standard by which compliance shall be demonstrated. Acceptance includes consent to the entrance of commission employees and agents into the permitted premises at reasonable times to investigate conditions relating to the emission or concentration of air contaminants, including compliance with the permit. [30 TAC § 116.115(b)(2)(H)]
11. **This permit may not be transferred, assigned, or conveyed by the holder except as provided by rule.** [30 TAC § 116.110(e)]
12. **There may be additional special conditions attached to a permit upon issuance or modification of the permit.** Such conditions in a permit may be more restrictive than the requirements of Title 30 of the Texas Administrative Code. [30 TAC § 116.115(c)]
13. **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.
14. **The permit holder shall comply with all the requirements of this permit.** Emissions that exceed the limits of this permit are not authorized and are violations of this permit.¹

¹ Please be advised that the requirements of this provision of the general conditions may not be applicable to greenhouse gas emissions.

Special Conditions
Permit Number 142313

Emission Standards and Operational Specifications

1. This permit covers only those sources of emissions listed in the attached table entitled "Emission Sources - Maximum Allowable Emission Rates" (MAERT), and those sources are limited to the emission limits and other conditions specified in that table.
2. Non-fugitive emissions from relief valves, safety valves, or rupture discs of gases containing volatile organic compounds (VOC) at a concentration of greater than 1 percent are not authorized by this permit unless authorized on the MAERT. Any releases directly to atmosphere from relief valves, safety valves, or rupture discs of gases containing VOC at a concentration greater than 1 weight percent are not consistent with good practice for minimizing emissions.
3. The emissions from the Laboratory Gas Phase Reactor (LGPR) Unit shall be routed to the Flare Stack 12 (EPN FS12) operating under Permit No. 20211/PAL16 for abatement.

Production Limits

4. Polymer production rates from the LGPR Unit shall not exceed the rates in the confidential Material Balance table (Table 2) dated November 17, 2016.

Fugitive Monitoring Programs

5. Piping, Valves, Connectors, Pumps, Agitators, and Compressors in Volatile Organic Compounds (VOC) Service - 28VHP

Except as may be provided for in the Special Conditions of this permit, the following requirements apply to the above-referenced equipment:

- A. The requirements of paragraphs G and H shall not apply (1) where the Volatile Organic Compound (VOC) has an aggregate partial pressure or vapor pressure of less than 0.044 pounds per square inch, absolute (psia) at 68°F or (2) operating pressure is at least 5 kilopascals (0.725 psi) below ambient pressure. Equipment excluded from this condition shall be identified in a list or by one of the methods described below to be made readily available upon request.

The exempted components may be identified by one or more of the following methods:

- (1) piping and instrumentation diagram (PID);
 - (2) a written or electronic database or electronic file;
 - (3) color coding;
 - (4) a form of weatherproof identification; or
 - (5) designation of exempted process unit boundaries.
- B. Construction of new and reworked piping, valves, pump systems, and compressor systems shall conform to applicable American National Standards Institute (ANSI),

American Petroleum Institute (API), American Society of Mechanical Engineers (ASME), or equivalent codes.

- C. New and reworked underground process pipelines shall contain no buried valves such that fugitive emission monitoring is rendered impractical. New and reworked buried connectors shall be welded.
- D. To the extent that good engineering practice will permit, new and reworked valves and piping connections shall be so located to be reasonably accessible for leak-checking during plant operation. Difficult-to-monitor and unsafe-to-monitor valves, as defined by Title 30 Texas Administrative Code Chapter 115 (30 TAC Chapter 115), shall be identified in a list to be made readily available upon request. The difficult-to-monitor and unsafe-to-monitor valves may be identified by one or more of the methods described in Paragraph A above. If an unsafe to monitor component is not considered safe to monitor within a calendar year, then it shall be monitored as soon as possible during safe to monitor times. A difficult to monitor component for which quarterly monitoring is specified may instead be monitored annually.
- E. New and reworked piping connections shall be welded or flanged. Screwed connections are permissible only on piping smaller than two-inch diameter. Gas or hydraulic testing of the new and reworked piping connections at no less than operating pressure shall be performed prior to returning the components to service or they shall be monitored for leaks using an approved gas analyzer within 15 days of the components being returned to service. Adjustments shall be made as necessary to obtain leak-free performance. Connectors shall be inspected by visual, audible, and/or olfactory means at least weekly by operating personnel walk-through.
- F. Each open-ended valve or line shall be equipped with an appropriately sized cap, blind flange, plug, or a second valve to seal the line. Except during sampling, both valves shall be closed. If the isolation of equipment for hot work or the removal of a component for repair or replacement results in an open ended line or valve, it is exempt from the requirement to install a cap, blind flange, plug, or second valve for 72 hours. If the repair or replacement is not completed within 72 hours, the permit holder must complete either of the following actions within that time period;
 - (1) a cap, blind flange, plug, or second valve must be installed on the line or valve;
or
 - (2) the open-ended valve or line shall be monitored once for leaks above background for a plant or unit turnaround lasting up to 45 days with an approved gas analyzer and the results recorded. For all other situations, the open-ended valve or line shall be monitored once within the 72 hour period following the creation of the open ended line and monthly thereafter with an approved gas analyzer and the results recorded. For turnarounds and all other situations, leaks are indicated by readings of 500 ppmv and must be repaired within 24 hours or a cap, blind flange, plug, or second valve must be installed on the line or valve.

- G. Accessible valves shall be monitored by leak checking for fugitive emissions at least quarterly using an approved gas analyzer. Sealless/leakless valves (including, but not limited to, welded bonnet bellows and diaphragm valves) and relief valves equipped with a rupture disc upstream or venting to a control device are not required to be monitored. If a relief valve is equipped with rupture disc, a pressure-sensing device shall be installed between the relief valve and rupture disc to monitor disc integrity.

A check of the reading of the pressure-sensing device to verify disc integrity shall be performed at least quarterly and recorded in the unit log or equivalent. Pressure-sensing devices that are continuously monitored with alarms are exempt from recordkeeping requirements specified in this paragraph. All leaking discs shall be replaced at the earliest opportunity but no later than the next process shutdown.

The gas analyzer shall conform to requirements listed in Method 21 of 40 CFR part 60, appendix A. The gas analyzer shall be calibrated with methane. In addition, the response factor of the instrument for a specific VOC of interest shall be determined and meet the requirements of Section 8 of Method 21. If a mixture of VOCs is being monitored, the response factor shall be calculated for the average composition of the process fluid. A calculated average is not required when all of the compounds in the mixture have a response factor less than 10 using methane. If a response factor less than 10 cannot be achieved using methane, then the instrument may be calibrated with one of the VOC to be measured or any other VOC so long as the instrument has a response factor of less than 10 for each of the VOC to be measured.

Replacements for leaking components shall be re-monitored within 15 days of being placed back into VOC service.

- H. Except as may be provided for in the special conditions of this permit, all pump, compressor, and agitator seals shall be monitored with an approved gas analyzer at least quarterly or be equipped with a shaft sealing system that prevents or detects emissions of VOC from the seal. Seal systems designed and operated to prevent emissions or seals equipped with automatic seal failure detection and alarm system need not be monitored. These seal systems may include (but are not limited to) dual pump seals with barrier fluid at higher pressure than process pressure, seals degassing to vent control systems kept in good working order, or seals equipped with an automatic seal failure detection and alarm system. Submerged pumps or sealless pumps (including, but not limited to, diaphragm, canned, or magnetic-driven pumps) may be used to satisfy the requirements of this condition and need not be monitored.
- I. Damaged or leaking valves or connectors found to be emitting VOC in excess of 500 parts per million by volume (ppmv) or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. Damaged or leaking pump, compressor, and agitator seals found to be emitting VOC in excess of 2,000 ppmv or found by visual inspection to be leaking (e.g., dripping process fluids) shall be tagged and replaced or repaired. A first attempt to repair the leak must be made within 5 days and a record of the attempt shall be maintained.
- J. A leaking component shall be repaired as soon as practicable, but no later than 15 days after the leak is found. If the repair of a component would require a unit

shutdown that would create more emissions than the repair would eliminate, the repair may be delayed until the next scheduled shutdown. All leaking components which cannot be repaired until a scheduled shutdown shall be identified for such repair by tagging within 15 days of the detection of the leak. A listing of all components that qualify for delay of repair shall be maintained on a delay of repair list. The cumulative daily emissions from all components on the delay of repair list shall be estimated by multiplying by 24 the mass emission rate for each component calculated in accordance with the instructions in 30 TAC 115.782 (c)(1)(B)(i)(II). The calculations of the cumulative daily emissions from all components on the delay of repair list shall be updated within ten days of when the latest leaking component is added to the delay of repair list. When the cumulative daily emission rate of all components on the delay of repair list times the number of days until the next scheduled unit shutdown is equal to or exceeds the total emissions from a unit shut down as calculated in accordance with 30 TAC 115.782 (c)(1)(B)(i)(I), the TCEQ Regional Manager and any local programs shall be notified and may require early unit shut down or other appropriate action based on the number and severity of tagged leaks awaiting shutdown. This notification shall be made within 15 days of making this determination.

- K. Records of repairs shall include date of repairs, repair results, justification for delay of repairs, and corrective actions taken for all components. Records of instrument monitoring shall indicate dates and times, test methods, and instrument readings. The instrument monitoring record shall include the time that monitoring took place for no less than 95% of the instrument readings recorded. Records of physical inspections shall be noted in the operator's log or equivalent.
 - L. Alternative monitoring frequency schedules of 30 TAC 115.352 - 115.359 or National Emission Standards for Organic Hazardous Air Pollutants, 40 CFR Part 63, Subpart H, may be used in lieu of Items G through H of this condition.
 - M. Compliance with the requirements of this condition does not assure compliance with requirements of 30 TAC Chapter 115, an applicable New Source Performance Standard (NSPS), or an applicable National Emission Standard for Hazardous Air Pollutants (NESHAPS) and does not constitute approval of alternative standards for these regulations.
6. 28CNTQ (Connectors Inspected Quarterly)

In addition to the weekly physical inspection required by Item E of Special Condition 5, all accessible connectors in gas/vapor and light liquid service shall be monitored quarterly with an approved gas analyzer in accordance with Items G through K of Special Condition 5.

- A. Allowance for reduced monitoring frequencies.
 - (1) The frequency of monitoring may be reduced from quarterly to semiannually if the percent of connectors leaking for two consecutive quarterly monitoring periods is less than 0.5 percent.
 - (2) The frequency of monitoring may be reduced from semiannually to annually if the percent of connectors leaking for two consecutive semiannual monitoring periods is less than 0.5 percent.

- B. If the percent of connectors leaking for any semiannual or annual monitoring period is 0.5 percent or greater, the facility shall revert to quarterly monitoring until the facility again qualifies for the alternative monitoring schedules previously outlined in this paragraph. The percent of connectors leaking used in paragraph A shall be determined using the following formula:

$$(Cl + Cs) \times 100/Ct = Cp$$

Where:

- Cl = the number of connectors found leaking by the end of the monitoring period, either by Method 21 or sight, sound, and smell.
Cs = the number of connectors for which repair has been delayed and are listed on the facility shutdown log.
Ct = the total number of connectors in the facility subject to the monitoring requirements, as of the last day of the monitoring period, not including nonaccessible and unsafe-to-monitor connectors.
Cp = the percentage of leaking connectors for the monitoring period.

Recordkeeping

7. A copy of Permit 142313 and Permit 20211/PAL16 shall be kept onsite and shall be made available to the representatives of TCEQ, local programs having jurisdiction and Environmental Protection Agency.

Date March 17, 2017

Emission Sources - Maximum Allowable Emission Rates

Permit Number 142313

This table lists the maximum allowable emission rates and all sources of air contaminants on the applicant's property covered by this permit. The emission rates shown are those derived from information submitted as part of the application for permit and are the maximum rates allowed for these facilities, sources, and related activities. Any proposed increase in emission rates may require an application for a modification of the facilities covered by this permit.

Air Contaminants Data

Emission Point No. (1)	Source Name (2)	Air Contaminant Name (3)	Emission Rates	
			lbs/hour	TPY (4)
FS12	Flare Stack 12	VOC	0.33	0.33
		NO _x	0.04	0.17
		CO	0.20	0.89
		SO ₂	(6)	(6)
LGPRATM	LGPR Analyzer Vent	VOC	0.03	0.15
LGPRRESID	LGPR Product Drum Vent	VOC	0.01	0.01
LGPRFUG	LGPR Fugitives (5)	VOC	0.01	0.04

- (1) Emission point identification - either specific equipment designation or emission point number from plot plan.
- (2) Specific point source name. For fugitive sources, use area name or fugitive source name.
- (3) VOC - volatile organic compounds as defined in Title 30 Texas Administrative Code § 101.1
 NO_x - total oxides of nitrogen
 SO₂ - sulfur dioxide
 CO - carbon monoxide
- (4) Compliance with annual emission limits (tons per year) is based on a 12 month rolling period.
- (5) Emission rate is an estimate and is enforceable through compliance with the applicable special condition(s) and permit application representations.
- (6) SO₂ emissions from combustion of supplemental natural gas at Flare Stack 12 are authorized by Permit No.20211/PAL16.

Date: March 17, 2017

Construction Permit Source Analysis & Technical Review

Company	Exxon Mobil Corporation	Permit Number	142313
City	Baytown	Project Number	257045
County	Harris	Account Number	N/A
Project Type	Initial	Regulated Entity Number	RN103774212
Project Reviewer	Ozden Tamer, Ph.D., P.E.	Customer Reference Number	CN600123939
Site Name	Baytown Technology And Engineering Complex		

Project Overview

Exxon Mobil Corporation submitted this initial permit application to obtain a New Source Review (NSR) permit for their Laboratory Gas Phase Reactor (LGPR) Unit which is currently authorized under Permit by Rule Registration Number 75725.

There will be no physical change or change in method of operation as a result of authorizing the LGPR Unit under the NSR permit 142313.

Emission Summary

Air Contaminant	PBR 75725 Allowable Emission Rates (tpy)	Proposed Initial Permit No. 142313 Allowable Emission Rates (tpy)	Difference in Allowable Emission Rates (tpy)
VOC	1.25	0.53	-0.72
NO _x	0.15	0.17	0.02
CO	0.78	0.89	0.11
PM ₁₀ /PM _{2.5}	0.01	0.00	-0.01
SO ₂	0.01	0.00	-0.01

Compliance History Evaluation - 30 TAC Chapter 60 Rules

A compliance history report was reviewed on:	December 1, 2016
Site rating & classification:	Unclassified
Company rating & classification:	2.36 / Satisfactory
If the rating is 50<RATING<55, what was the outcome, if any, based on the findings in the formal report:	NA
Has the permit changed on the basis of the compliance history or rating?	No

Public Notice Information - 30 TAC Chapter 39 Rules

Rule Citation	Requirement	
39.403	Date Application Received:	August 17, 2016
	Date Administratively Complete:	August 26, 2016
	Small Business Source?	No
	Date Leg Letters mailed:	August 26, 2016
	Date Published:	September 18, 2016
39.603	Publication Name:	<i>The Baytown Sun</i>
	Pollutants:	carbon monoxide, nitrogen oxides and organic compounds
	Date Affidavits/Copies Received:	September 23, 2016
	Is bilingual notice required?	Yes
	Language:	Spanish

Construction Permit Source Analysis & Technical Review

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Regulated Entity No. RN103774212

Rule Citation	Requirement	
	Date Published:	September 18, 2016
	Publication Name:	<i>El Perico</i>
	Date Affidavits/Copies Received:	September 23, 2016
	Date Certification of Sign Posting / Application Availability Received:	October 24, 2016
39.604	Public Comments Received?	No
	Hearing Requested?	No
	Meeting Request?	No
	Date Response to Comments sent to OCC:	NA
	Consideration of Comments:	NA
	Is 2nd Public Notice required?	Yes
39.602(c)	Date SB 709 Legislative Notification Sent:	November 1, 2016
39.419	Date 2nd Public Notice/Preliminary Decision Letter Mailed:	January 19, 2017
39.413	Date Cnty Judge, Mayor, and COG letters mailed:	NA
	Date Federal Land Manager letter mailed:	NA
39.605	Date affected states letter mailed:	NA
39.603	Date Published:	January 29, 2017
	Publication Name:	<i>Baytown Sun</i>
	Pollutants:	carbon monoxide, nitrogen oxides, organic compounds and sulfur dioxide
	Date Affidavits/Copies Received:	February 9, 2017
	Is bilingual notice required?	Yes
	Language:	Spanish
	Date Published:	January 29, 2017
	Publication Name:	<i>El Perico</i>
	Date Affidavits/Copies Received:	February 9, 2017
	Date Certification of Sign Posting / Application Availability Received:	March 6, 2017
	Public Comments Received?	No
	Meeting Request?	No
	Date Meeting Held:	NA
	Hearing Request?	No
	Date Hearing Held:	NA
	Request(s) withdrawn?	NA
	Date Withdrawn:	NA

Construction Permit Source Analysis & Technical Review

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Regulated Entity No. RN103774212

Rule Citation	Requirement	
	Consideration of Comments:	NA
39.421	Date RTC, Technical Review & Draft Permit Conditions sent to OCC:	NA
	Request for Reconsideration Received?	No
	Final Action:	Issue
	Are letters Enclosed?	

Construction Permit & Amendment Requirements - 30 TAC Chapter 116 Rules

Rule Citation	Requirement	
116.111(a)(2)(G)	Is the facility expected to perform as represented in the application?	Yes
116.111(a)(2)(A)(i)	Are emissions from this facility expected to comply with all TCEQ air quality Rules & Regulations, and the intent of the Texas Clean Air Act?	Yes
116.111(a)(2)(B)	Emissions will be measured using the following method:	Fugitive monitoring programs
	Comments on emission verification:	calculations
116.111(a)(2)(D)	Subject to NSPS?	No
116.111(a)(2)(E)	Subparts & Subject to NESHAP?	No
116.111(a)(2)(F)	Subparts & Subject to NESHAP (MACT) for source categories?	No
116.111(a)(2)(H)	Nonattainment review applicability: The site is located in Harris County which is in a moderate nonattainment area. The flare (EPN FS12) used for the project is under the PAL, therefore, flare emissions of NO and VOC are excluded from this project's federal applicability review. There are no other NO emission sources from the project. Therefore, nonattainment review is not applicable for NO. Assuming the baseline emissions as being zero, project increase of VOC from the other sources (EPNs LGPRATM, LGPRRESID and LGPRFUG) is 0.2 tpy. The project increase of VOC is less than the nonattainment review trigger level of 40 tpy for Harris County. Therefore, nonattainment review does not apply for VOC.	
116.111(a)(2)(I)	PSD review applicability: The flare (EPN FS12) used for the project is under the PAL, therefore, flare emissions of NO, CO and SO ₂ are excluded from this project's federal applicability review. There are no other NO, CO and SO ₂ emissions from the project, therefore, PSD review is not applicable.	
116.111(a)(2)(L)	Is Mass Emissions Cap and Trade applicable to the new or modified facilities? If yes, did the proposed facility, group of facilities, or account obtain allowances to operate:	No
116.140 - 141	Permit Fee: \$ 900	Fee certification: P100274370

Construction Permit Source Analysis & Technical Review

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Regulated Entity No. RN103774212

Title V Applicability - 30 TAC Chapter 122 Rules

Rule Citation	Requirement
122.10(14)	Title V applicability: The LGPR Unit will be located at a site that is not required to obtain a federal operating permit. Title V does not apply.
122.602	Periodic Monitoring (PM) applicability: Flare12 which will be used for abatement of emissions from the LGPR is operating under the Permit 20211/PAL16. Special Conditions Nos. 10, 38, 81E and 82 in the PAL permit has PM requirements for the flare. Fugitives from the LGPR will be monitored by 28VHP and 28CNTQ Leak Detection and Repair Programs included in Special Condition Nos. 5 and 6 of the draft permit 142313.
122.604	Compliance Assurance Monitoring (CAM) applicability: LGPR Unit is not subject to CAM requirements.

Request for Comments

Received From	Program/Area Name	Reviewed By/Date	Comments
Region:	12	NA	No comments received
City:	Baytown	NA	
County:	Harris	NA	No comments received
ADMT:	NA		
EB&T:	NA		
Toxicology:	NA		
Compliance:	Checked		
Legal:	NA		
Comment resolution and/or unresolved issues:	None		

Process/Project Description

The Laboratory Gas Phase Reactor (LGPR) Unit is a continuous fluidized-bed gas phase polymerization pilot plant. During the polymerization process, all feeds, catalyst, and co-catalyst are continuously added into the reactor to maintain a constant reaction. Polymer produced in the reactor is periodically withdrawn from the reactor through a product discharge valve to the Product Purge Drum. Vent gases from the reactor is routed to the Flare Stack 12 (EPN FS12) operating under Permit No. 20211/PAL16. A more detailed process description can be found in the confidential file.

LGPR Unit is currently authorized under Permit by Rule Registration No. 75725. With this initial permit application, ExxonMobil proposes to authorize the LGPR Unit under an NSR permit. There will be no changes to the current operations.

Pollution Prevention, Sources, Controls and BACT- [30 TAC 116.111(a)(2)(C)]

Flare 12 (EPN FS12):

This flare is operating under Permit 20211/PAL16, meets the requirements of 40 CFR 60.18 and achieves a control efficiency of 98% for VOC. BACT is met.

LGPR Analyzer Vent (EPN LGPRATM) and LGPR Product Drum Vent (LGPRRESID):

Analyzer vent emits less than 0.03 lb/hr and 0.15 tpy of VOC. Drum vent emits 0.01 lb/hr and 0.01 tpy of VOC. Due to the low emissions of VOC from these vents, no control is accepted as BACT.

LGPR Fugitives (EPN LGPRFUG):

28 VHP and 28CNTQ Fugitive Emission Leak Detection and Repair (LDAR) programs will be employed. This meets BACT.

Construction Permit Source Analysis & Technical Review

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MSS

According to the application, emissions associated with MSS activities at the LGPR Unit will be authorized as needed under PBR 106.263.

Impacts Evaluation - 30 TAC 116.111(a)(2)(J)

Was modeling conducted? Yes	Type of Modeling: Screen 3
Will GLC of any air contaminant cause violation of NAAQS?	No
Is this a sensitive location with respect to nuisance?	No
[§116.111(a)(2)(A)(ii)] Is the site within 3000 feet of any school?	No
Additional site/land use information: None	

Summary of Modeling Results

NAAQS Analysis

A Screen 3 Modeling was conducted for the NO_x and CO emissions from the F12 flare. The modeling results and comparison to the significant impact levels (SILs) are tabulated below:

Pollutant	Averaging Time	GLCmax (ug/m ³)	SIL (ug/m ³)	% of SIL
CO	1-hr	0.10	2000	0.005
	8-hr	0.07	500	0.01
NO ₂	1-hr	0.02	7.5	0.25
	annual	1.5E-3	1	0.15

As seen from the table above, the GLCmax for both CO and NO₂ for all averaging times are much less than the respective SIL levels. Therefore, impacts are acceptable. No further analysis is needed.

Health Effects

Hexene met the criteria (annual ESL ≥ 10% of short-term ESL and sum of emission increases ≤ 0.1 lb/hr and short-term ESL ≥ 500, but, <3500 ug/m³), therefore dropped out of the flowchart at step 4C(ii).

Butane, isobutene, isopentane/n-pentane, neopentane and toluene met the criteria (annual ESL ≥ 10% of short-term ESL and sum of emission increases ≤ 0.4 lb/hr and short-term ESL ≥ 3500 ug/m³), therefore, dropped out of the flowchart at step 4C(iii).

At Step 5, butene, ethylene and isohexane/n-hexane were modeled using SCREEN3 modeling program. The results are tabulated below:

Constituent	ESL-1hr (ug/m ³)	GLCmax-1hr (ug/m ³)	% of ESL-1-hr	ESL-annual (ug/m ³)	GLCmax-annual (ug/m ³)	% of ESL-annual
Butene	19000	10.38	0.05	1600	0.83	0.05
Ethylene	1400	30.97	2.2	34	2.48	7.3
Isohexane/n-Hexane	6200	1.43	0.02	0.11	200	0.06

As seen from the table above, for all three constituents, both GLCmax-1hr and GLCmax-annual were less than 10% of their respective ESLs. Therefore, no further modeling analysis is needed.

**Construction Permit
Source Analysis & Technical Review**

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Regulated Entity No. RN103774212

Permit Concurrence and Related Authorization Actions

Is the applicant in agreement with special conditions?	Yes
Company representative(s):	James Barron
Contacted Via:	Phone, e-mail
Date of contact:	Last Contact:
Other permit(s) or permits by rule affected by this action:	Yes
List permit and/or PBR number(s) and actions required or taken:	PBR Registration No. 75275 will be voided upon the issuance of this initial permit

<i>M. O. Tamer</i>		<i>Daniel Guthrie</i>		
	3/9/2017		3/10/2017	
Project Reviewer	Date	Team Leader	Date	
Ozden Tamer, Ph.D., P.E.		Daniel Guthrie		

ATTACHMENT K:

Deficiency Technical Review for Permit No. 124215

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	124215	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Sabrina Coty-Butler
Project No.:	252859	Unit Name:	Baytown Technology And Engineering Complex	PBR No(s):	106.261, 106.262

DEFICIENCY

GENERAL INFORMATION			
Regulated Entity No.:	RN103774212	Project Type:	Permit by Rule Application
Customer Reference No.:	CN600123939	Date Received by TCEQ:	May 17, 2016
Account No.:		Date Received by Reviewer:	June 13, 2016
City/County:	Baytown, Harris County	Physical Location:	5200 Bayway Dr

CONTACT INFORMATION					
Responsible Official/ Primary Contact Name and Title:	Mr. James Barron NSR Permitting Team Lead	Phone No.:	(281) 834-5873	Email:	JAMES.BARRON@EXXO NMOBIL.COM
		Fax No.:	(281) 834-5788		

GENERAL RULES CHECK	YES	NO	COMMENTS
Is confidential information included in the application?	X		
Has the PBR fee been paid?	X		
Is this registration certified?	X		
Is this an APWL site?		X	
Are there any upstream or downstream affects associated with this registration?	UNK		
Is planned MSS included in the registration?		X	
Are there affected NSR or Title V authorizations for the project?		X	Several PBRs and PCP SP No 51963
Is each PBR > 25/250 tpy?	UNK		
Are PBR sitewide emissions > 25/250 tpy?	X		Sitewide VOC > 40 tpy
Are there permit limits on using PBRs at the site?		X	
Is PSD or Nonattainment netting required?	UNK		County is in nonattainment area
Do NSPS, NESHAP, or MACT standards apply to this registration?		X	
Does NOx Cap and Trade apply to this registration?	UNK		
Is the facility in compliance with all other applicable rules and regulations?		X	Site has not been to public notice and VOC emissions surpass 106.4 limits.

DESCRIBE OVERALL PROCESS AT THE SITE
ExxonMobil Chemical Company operates several research and development units located at the Baytown Technology and Engineering Complex (BTEC), located in Baytown, Harris, County, Texas.

DESCRIBE PROJECT AND INVOLVED PROCESS
The Alkylation Skid aids in catalyst screening and characterization. The purpose of this registration is to update the authorized emissions associated based on the as-built unit. With this submittal, BTEC is updating the authorized emissions from the Alkylation Skid.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES
<p>PBR 106.261/262 Compliance Demonstration</p> <ul style="list-style-type: none"> The emission point(s) associated with the facilities or changes to facilities are located at least 200 ft from the nearest off-site receptor. The total new or increase emissions will comply with the applicable hourly and annual emission limits as represented in the table below. There are no changes to or addition of any pollution abatement equipment. Visible emissions to the atmosphere, from any point or fugitive source, do not exceed 5.0 opacity in any six-minute period. This registration is not for authorization for construction or to change a facility authorized under another section of this chapter or under standard permit. <p>Notes</p> <ul style="list-style-type: none"> Thermal Oxide calculations using 99.8% DRE. Fugitive emissions for valves, pumps, flanges, relief devices, and compressors are calculated using SOCMI with and without ethylene emissions factors from the TCEQ Guidance Package for Chemical Sources, Equipment Leak Fugitives, dated October 2000. Emissions from the thermal oxidizer (authorized under TCEQ Standard Permit Number 51963) are based on TCEQ Technical guidance for Flares and Vapor Oxidizers dated October 2000.

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	124215	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Sabrina Coty-Butler
Project No.:	252859	Unit Name:	Baytown Technology And Engineering Complex	PBR No(s):	106.261, 106.262

DEFICIENCY

- PBRs need to be revised to reflect the actual emissions to demonstrate compliance, or
- Apply case-by-case permit, which will allow the site to go to public notice.

PBR 106.261(2)							
Air Contaminant				Emission Limit		Actual Emissions	
				Lb/hr	Tpy	lb/hr	tpy
Ethylene				6.00	10.00	0.4025	1.7582
Oxides of Nitrogen				6.00	10.00	0.0019	0.0034
CO				6.00	10.00	0.0099	0.0039
PBR 106.262							
Air Contaminant	L	D	K	Emission Limit		Actual Emissions	
	mg/m ³	ft		lb/hr	Tpy	lb/hr	tpy
Benzene	3	500	81	0.04	0.16	0.0325	0.1395
Ethylbenzene	434	500	81	5.36	5.00	0.0214	0.0939
Particulate Matter (PNOC)	3	500	81	0.04	0.16	0.0018	0.00793
VOC TOTAL EMISSIONS:						0.4564	1.9916

COMMUNICATION LOG			
Date	Time	Name/Company	Subject of Communication
06/17/2016	1608	To: Mr. James Barron JAMES.BARRON@EXXONMOBIL.COM	<p>Dear Mr. Barron,</p> <p>I am currently reviewing the subject line project. Please respond to all concerns in full by Friday, June 24, 2016. It is my recommendation that project no. 252859 is withdrawn due to the following:</p> <ol style="list-style-type: none"> 1. The sitewide of the 24 active PBRs under RN103774212 is 43.382 tpy of VOC, which exceeds the §106.4 limits. <i>30 TAC 106.4(a)(4) says the following:</i> <i>Unless at least one facility at an account has been subject to public notification and comment as required in Chapter 116, Subchapter B or Subchapter D of this title (relating to New Source Review Permits or Permit Renewals), total actual emissions from all facilities permitted by rule at an account shall not exceed 250 tpy of CO or NOX; or 25 tpy of VOC or SO2 or PM; or 15 tpy of PM10; or 10 tpy of PM2.5; or 25 tpy of any other air contaminant except carbon dioxide, water, nitrogen, methane, ethane, hydrogen, and oxygen.</i> <i>The 43+ tons of VOC emissions described under your first bullet are the total allowable emissions for the active registered PBRs under RN103774212. Per the requirements in 106.4(a)(4), total actual emissions shall not exceed 25 tpy of VOC. Actual VOC emissions for BTEC in 2015 were 21.63 tons and did not exceed the 106.4(a)(4) limits.</i> 2. The project includes the affected Standard Pollution Control Permit (PCP) No. 51963 under RN102574803; however, this RN does not match the current project. If the RN's did match, standard permit no 51963 does not require Public Notice. The standard permit would not allow PBR's under that RN to exceed the 25 tpy limitation of §106.4. <i>Standard Permit (SP) No. 51963 was originally issued on 8/12/2002 under RN102574803. SP 51963 authorizes a thermal oxidizer at BTEC. In 6/2003, ExxonMobil submitted a request for a new Regulated Entity Number for all BTEC facilities which resulted in new RN103774212 (See attached letter to TCEQ). SP 51963 should be listed under RN103774212. Actual VOC emissions for BTEC in 2015 were 21.63 tons and did not exceed the 106.4(a)(4) limits.</i>
06/24/2016	1843	From Mr. James Barron Cc: Mr. Kevin Brewer kevin.r.brewer@exxonmobil.com Ms. Amanda Wolsiefer amanda.i.wolsiefer@exxonmobil.com	<p>Ms. Coty-Butler,</p> <p>As I mentioned in our phone conversation today, PBR Registration No. 124215 was originally issued by TCEQ on 11/18/2004 for construction of a new Alkylation Skid at the ExxonMobil Baytown Technology and Engineering Complex (BTEC). BTEC is a research and development complex made up of several small research units authorized under PBR and associated control devices authorized under Standard Permit. The purpose of the recent PBR submittal that you are now reviewing (TCEQ Project 252859) was to update the representations for PBR Registration No. 124215 to reflect as-built conditions for the Alkylation Skid. I have provided responses to your comments below in bold blue text. Responses above in italics</p>

TECHNICAL REVIEW: AIR PERMIT BY RULE



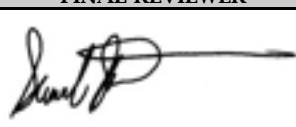
Permit No.:	124215	Company Name:	Exxon Mobil Corporation	APD Reviewer:	Sabrina Coty-Butler
Project No.:	252859	Unit Name:	Baytown Technology And Engineering Complex	PBR No(s):	106.261, 106.262

DEFICIENCY

COMMUNICATION LOG			
6/28/2016	1709	<p>To: Mr. James Barron JAMES.BARRON@EXXONMOBIL.COM Cc: Mr. Kevin Brewer kevin.r.brewer@exxonmobil.com Ms. Amanda Wolsiefer amanda.i.wolsiefer@exxonmobil.com</p>	<p>Dear Mr. Barron, I have reviewed your response to the interpretation of the §106.4(a)(4) rule; TCEQ guidance on PBR permitting limits are based on worst-case actuals. §106.6(a) also allows for a Site to certify and register emission rates to establish federally-enforceable rates below §106.4 limits. If the actual emissions under this site are 21.63 tons per year (tpy), why did the site certify to representations exceeding the 25-tpy limit of VOC? Please withdraw project no. 252859 revising PBR registration no 124215 and revise the PBR emissions remaining under RN103774212 to reflect worst-case actuals. Should you like to further discuss the interpretation of §106.4(a) (4), please contact the RR manger, Mr. Samuel Short, or my team lead, Mr. Joe Shine. In regards to Standard Pollution Control Permit (PCP) No. 51963 moving under RN103774212, the attached letter has been forwarded to the administrative team. When I receive notice that the requested change is made, I will contact you. Auto response received that Mr. Barron would be on vacation until 07/11/2016. Voicemail was left notifying Mr. Barron on 06/29/2016 that the requested change the PCP permit had been made.</p>
07/08/2016	0825	<p>To: Mr. James Barron JAMES.BARRON@EXXONMOBIL.COM Cc: Mr. Kevin Brewer kevin.r.brewer@exxonmobil.com Ms. Amanda Wolsiefer amanda.i.wolsiefer@exxonmobil.com</p>	<p>Dear Mr. Barron, A response and / or solution is needed before I am able to proceed with this review. If I do not receive a response by close of business 07/11/2016, I will issue a deficiency letter that will allow you 6 months to resubmit this project without an additional fee. Mr. Barron called on 07/12/2016 for extension to 07/15/2016 to speak with Mr. Short or Mr. Shine, which was granted.</p>
07/14/2016	--	Phone call from Mr. James Barron	Mr. Barron called and spoke with Team Leader (Joe Shine). Mr. Shine concurred with the issues addressed by the reviewer and stated the project could not be approved as submitted since the project would cause the site to be out of compliance with the limits of 106.4. Mr. Barron stated he would call to discuss project with Mr. Sam Short.
07/19/2016	1223	Phone Call to Mr. James Barron	Left voicemail with Mr. Barron confirming that since Mr. Barron has not contacted Mr. Short the project will be closed with a deficiency and the company has 6 months from the date of the letter to come back in without an additional fee.
07/21/2016	1224	<p>To: Mr. James Barron JAMES.BARRON@EXXONMOBIL.COM</p>	Dear Mr. Barron, Per my voicemail left on June 19, 2016, a deficiency letter will be issued for this project by COB 07/22/2016.
07/22/2016	1616	<p>Cc: Mr. Kevin Brewer kevin.r.brewer@exxonmobil.com Ms. Amanda Wolsiefer amanda.i.wolsiefer@exxonmobil.com</p>	Dear Mr. Barron, If I do not hear from you by COB, 07/25/2016, then I will assume that you agree with the deficiency letter and do not wish to elevate this issue further.

ESTIMATED EMISSIONS

EPN / Emission Source	VOC		NOx		CO		PM ₁₀		PM _{2.5}		SO ₂		Other	
	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy	lbs/hr	tpy
NO EMISSIONS AUTHORIZED.														
MAXIMUM OPERATING SCHEDULE:	Hours/Day		Days/Week		Weeks/Year		Hours/Year		8,760					

	TECHNICAL REVIEWER	PEER REVIEWER	FINAL REVIEWER
SIGNATURE:			
PRINTED NAME:	Ms. Sabrina Coty-Butler	Mr. Joe Shine	Mr. Samuel Short, Manager
DATE:	June 25, 2016	June 25, 2016	June 27, 2016

ATTACHMENT L:

Motiva Port Arthur Refinery PBR Summary

Registration No.		Associated		Unit(s)/Process(es) Authorized	Pollutants															
		Date Issued	Permits		VOC		Nox		CO		PM10		PM2.5		SO2		H2S			
					lbs/hr	TPY	lbs/hr	TPY	lbs/hr	TPY	lbs/hr	TPY	lbs/hr	TPY	lbs/hr	TPY	lbs/hr	TPY		
111502	10/16/2013	8404	SHTU5/HTU5 Heater	0.04	0.16	0.27	1.02	0.28	1.07	0.06	0.22	0.06	0.22	0.29	0.65					
			FHTU5/HTU5 Fugitives	<0.01	<.01															
			FHTU5/SRU/TGTU Incinerator	0.01	0.03	0.16	0.6	0.25	1.12	0.01	0.04	0.01	0.04	1.46	6.38					
112366	8/15/2013	8404 and 6056	Tank 38624	124.19	3.4															
113586	1/31/2014	8404	SWENG0002/South Weir Engine 1	0.34	0.73	1.06	2.32	0.25	0.54	0.05	0.1	0.05	0.1	1.01	2.2					
			SWENG9003/South Weir Engine 2	0.34	0.73	1.06	2.32	0.25	0.54	0.05	0.1	0.05	0.1	1.01	2.2					
			SWENG2001/South Weir Engine 3	0.34	0.73	1.06	2.32	0.25	0.54	0.05	0.1	0.05	0.1	1.01	2.2					
			SWENG9012/South Weir Engine 4	0.34	0.73	1.06	2.32	0.25	0.54	0.05	0.1	0.05	0.1	1.01	2.2					
			RESENG2005/RES 11 Engine 1	0.34	0.73	1.06	2.32	0.25	0.54	0.05	0.1	0.05	0.1	1.01	2.2					
			RESENG1008/RES 11 Engine 2	0.34	0.73	1.06	2.32	0.25	0.54	0.05	0.1	0.05	0.1	1.01	2.2					
113586	8/24/2015	6056	DCU2ENG3102	0.5	1.46	1.59	4.63	0.37	1.08	0.07	0.2	0.07	0.2	1.01	2.93					
			DCUENG3124	0.5	1.46	1.59	4.63	0.37	1.08	0.07	0.2	0.07	0.2	1.01	2.93					
118612	7/8/2014	8404	FVPS4/Fugitives	0.004	0.02															
		8404	FFCCU3/Fugitives	<0.01	<0.01															
		6056	FGP3/Fugitives	0.04	0.16															
		6056	CEP-FUG/Delayed Coker 2 Fugitives	0.05	0.202															
		6056	CEP-FUG/Hydrocracker 2 Fugitives	<0.01	<0.01															
		8404	FHTU2/Hydrotreater Fugitives	0.006	0.03															
		8404	FALK4/Alky Unit Fugitives	0.001	0.004															
		8404	FCRU4/Continuous Reformer 4 Fugitives	0.008	0.04															
		8404	FDCU1/Delayed Coker Unit 1 Fugitives	0.81	3.57															
		8404	FCDHCS1/Catalytic Hydrosulfurization Unit 1	<0.01	<0.01															
		8404	FCDHCS2/Catalytic Hydrosulfurization Unit 2	<0.01	0.01															
		8404	FHTU4/Hydrotreating Unit 4 Fugitives	<0.01	0.01															
		8404	FLCDU/Lube Catalytic Dewaxing Fugitives	0.04	0.18															
		8404	FLHCU/ Lube Hydrocrackers Fugitives	<0.01	<0.01															
		8404	FWSGP/West Side Gas Plant Fugitives	0.02	0.07															
		6056	CEP-FUG/Naptha Processing Plant Fugitives	<0.01	<0.01															
		8404	FHTU/Hydrotreating Unit 5 Fugitives	0.02	0.05															
		118612	7/8/2014	8404	LHCU1-5/Lube Hydrocracker Unit 1 (Prefactionator Heater)	0.25	0.9													
121606	8/27/2014	8404	Fugitives (DCU1)	0.374																
121860	7/25/2014	8404	FDCU1	<0.01	<0.01										<0.01	<0.01				
122343	9/30/2014	8404	TSTO1895 / Storage Tank 1895	2.08	5															
		8404	TSTO1913 / Storage Tank 1913	1.93	4.38															
122893	9/5/2014	8404	FFCCU3 / Fugitives	0.0526	0.2305										0.0004	0.0019				
122902	9/5/2014	8404	FFCCU3 / Fugitives	0.0516	0.2261										0.014	0.0063				
122909	9/5/2014	8404	FFCCU3 / Fugitives	0.0528	0.2313										0.001	0.0002				
122913	9/8/2014	8404	FFCCU3 / Fugitives	0.0528	0.2313										0.0002	0.0011				
122914	9/18/2014	8404	FFCCU3 / Fugitives	0.053	0.232										0.0001	0.0004				
122993	10/8/2014	8404	FFCCU3 / Fugitives	0.05	0.22										<0.01	0.01				
124651	11/26/2014	8404	FSWS1 / SBU No. 1 Fugitives	0.02	0.07											0.01	0.06			
			FTGTU1 / SBU No. 1 Fugitives	0.04	0.17										<0.01	0.01				
			FTGTU2 / SBU No. 1 Fugitives	0.04	0.17											<0.01	0.01			

131349	6/5/2015	8404	ALKY / FALKY4	0.0065	0.0286												
		8404	CRU4 / FCRU4	0.0053	0.0231												
		8404	DCU1 / FDCU1	0.0001	0.0004												
		8404	HTU3 / FHTU3	0.0241	0.1055												
		8404	HTU5 / FHTU5	0.0108	0.0474												
		8404	LHCU / FLHCU	0.0176	0.0771												
		8404	MPU3 / FMPU3	0.027	0.1182												
		6056	NPC / CEP-FUG	0.0015	0.0065												
		6056	PH27 / CEP-FUG	0.0329	0.144												
		6056	VPS5 / CEP-FUG	0.0038	0.0166												
132678	7/24/2015	8404	SCRU4-2			0.04	0.19				<0.01	0.02	0.03	0.14			
134792	9/11/2015	6056	CEP-FUG / Sour Water Fugitives												0.001	0.004	
134852	9/11/2015	8404	FHTU5 / Fugitives sour gas to WAGS												0.03	0.12	
		8404	FHTU5 / Fugitives Wash Water to Fin Fan													0.01	0.03
136013	11/30/2015	8404	FWAGS / WAGS H2S Fugitives													0.05	0.21
		8404	EVPS4 / VPS4 H2S Fugitives													0.04	0.17
		8404	EVPS2 / VPS2 H2S Fugitives													0.02	0.1
		8404	FNSGP / NSGP H2s Fugitives													0.07	0.29
		8404	FCRU4 / NHTU1 H2S Fugitives													0.06	0.27
		8404	FHTU4 / HTU4 H2S Futivies													0.14	0.63
		8404	FHCU1 / LHCU H2S Fugitives													0.07	0.31
		8404	FLCDU / LCDU H2S Fugitives													0.01	0.04
		8404	FHTU5 / HTU5 H2S Fugitives													0.06	0.25
		8404	FHTU3 / HTU3 H2S Fugitives													0.07	0.32
		8404	FHTU2 / HTU2 H2S Fugitives													0.03	0.13
		8404	FFCU3 / FCCU H2S Fugitives													0.08	0.33
		8404	FCDHDS1 / CDHDS1 H2S Fugitives													0.05	0.22
		8404	FCDHDS2 / CDHDS2 H2S Fugitives													0.1	0.45
139445	5/6/2016	8404	TK1913	0.87	0.08												
		8404	TK1415	1.92	0.09												
		6056	SPS4-6, Power Boiler 46	0.2	0.43	1.27	2.38	1.24	5.43	0.27	1.18	0.27	1.18	1.35	3.52		
139730	5/23/2016	8404	TST01475 / Tank 1475	0.72	3.4												
		8404	TST01894 / Tank 1894	3.75	4.55												
		8404	FALKY4 / Alky 4 Unit Fugitives	<0.01	<0.01												
		6056	CEP-FUG / Cat Feed Hydrotreater Fugitives (CFH)	<0.01	<0.01												
		8404	FCRU4 / Continuous Reforming Unit 4 Fugitives	0.08	0.33												
		8404	FDCU1 / Delayed Coker Unit 1 Fugitives	0.05	0.22												
		8404	FFCCU3 / Fluid Catalytic Cracking Unit	0.2	0.9												
		8404	FCDHDS1 / Catalytic Desulfurization Unit 1	0.11	0.5												
		8404	FCDHDS2 / Catalytic Desulfurization Unit 2	0.08	0.36												
		8404	FHTU2 / Hydrocracking Unit 2 Fugitives	0.05	0.2												
		8404	FHTU3 /Hydrocracking Unit 3 Fugitives	0.34	1.47												
		8404	FHTU4 / Hydrocracking Unit 4 Fugitives	<0.01	0.04												
		8404	FHTU5 / Hydrocracking Unit 5 Fugitives	0.02	0.07												

139779	6/13/2016	8404	FLHCU / Lube Hydrocracker 1 Fugitives	0.09	0.41												
		8404	FMPU3 / N-Ethyl Pyrrolidone Unit 3 Fugitives	0.08	0.37												
		8404	FMPU4 / N-Ethyl Pyrrolidone Unit 4 Fugitives	0.03	0.13												
		6056	CEP-FUG / Naptha Processing Complex	0.01	0.05												
		6056	CEP-FUG / Power Station 4 Fugitives (PS4)	<0.01	0.03												
		6056	FSBU1 / Sulfur Block Unit 1 Fugitives	0.14	0.63												
		8404	FVPS4 / Vacuum Pipe Still 4 Fugitives	0.09	0.4												
		6056	CEP-FUG / Vacuum Pipe Still 5 Fugitives	<0.01	<0.01												
		6056	FWSGP / West Side Gas Plant Fugitives	<0.01	0.02												
		6056	SHTUH-6 / HUT No. 6 Charge Heater Fugitives	0.08	0.2	0.53	1.6	0.51	2.2	0.11	0.5			0.56	1.5		
		8404	TST01601 / Tank 1601 Fugitives														
139801	6/20/2016	8404	TST01553 / Tank 1553 Fugitives	1.23	0.21												
		8404	TST1775 / Storage Tank	1.48	5.2												
		8404	TST1787 / Storage Tank	1.49	4.61												
141883	9/29/2019	8404	TST1920 / Storage Tank	2.09	6.78												
		8404	TST01885 / Tank 1885	1.73	5.56												
142369	9/19/2016	8404	FHCU1 / LHCU Wash Water Blowdown Lines	<.01	<0.01											<0.01	<0.01
142481	9/26/2016	8404	FHVU1 / LHCU Chemical Injection Skid	0.09	0.38												
145463	3/30/2017	6056	FARU1 / ARU1 Hot Lean Amine	0.16	0.18											<0.01	<0.01
		6056	FARU2 / ARU2 Hot Lean Amine/Stripper Reflux Water	0.16	0.18											<0.01	<0.01
		6056	FARU3 / ARU3 Hot Lean Amine/Stripper Reflux Water	0.16	0.18											<0.01	<0.01
		6056	FARU4 / ARU4 Hot Lean Amine/Stripper Water	0.16	0.18											<0.01	<0.01
		6056	FSWS1 / Sour Water Stripper Reflux Water													<0.01	<0.01
		6056	FTGTU1 / TGTU1 Quench/Stripper Reflux Water													<0.01	<0.01
		6056	FTGTU2 / TGTU2 Lean Amine/Stripper Reflux Water	0.16	0.18											<0.01	<0.01
146172	5/30/2017	6056	Blenders (27 PH) Fugitive Components	0.01	0.03												
		8404	Alky Fugitive Components	0.39	0.17												
		6056	HTU6 (CFH) Fugitive Components	0.01	0.04												
		8404	CRU4 Fugitive Components	<0.01	0.11												
		8404	FCCU3 Fugitive Components	0.01	0.03												
		6056	HCU2 Futivie Components	0.12	0.52												
		8404	HTU3 Fugitive Components	<0.01	<0.01												
		8404	HTU4 Fugitive Components	0.01	0.04												
		8404	LHCU Fugitive Components	0.01	0.03												
147378	7/13/2017	8404	MPU4 Fugitive Components	0.12	0.54												
		6056	VPS5 Fugitive Components	<0.01	0.01												
		8404	FHCU1 / Lubes Hydrocracking Unit	0.02	0.08											<0.01	<0.01

147680	7/26/2017	8404	FHTU5 / HTU5 Sample Station - Sour Water													<0.01	0.01
148251	10/30/2017	6056	DCU2QFUG / DCU2 Quench System Fugitives	0.03	0.15											0.01	0.06
148261	10/30/2017	8404	DCU1QFUG / DCU1 Quench System Fugitives	0.03	0.15											0.01	0.06
148670	10/19/2017	6056	FARU2 / Sulfur Recovery Unit 1	0.06	0.27											<0.01	0.02
		6056	CEP-FUG / Sulfur Recovery Unit 2	0.01	0.04											0.01	0.03
148672	10/31/2017	6056	NALCO / Additive Tank	1.59	0.01												
		6056	NALFUG / Fugitive Components	0.05	0.22												
150113	2/13/2018	8404	TOTE1000 / Emulsion Breaker Tank 1	0.06	<0.01												
		8404	TOTE2000 / Emulsion Breaker Tank 2	0.06	<0.01												
		8404	FUG / Fugitive Components	0.04	0.19												
150469	3/9/2018	6056	SEP FUG / Fugitives	0.06	0.27											<0.01	0.02
150817	3/29/2018	8404	FHTU2 / HTU No. 2 Fugitives	<0.01	<0.01												
151089	5/14/2018	8404	FASSTU / WW Collection Oil Recovery	0.01	0.06												
		8404	FCRU4 / CRU No. 4 Fugitive Emissions	<.01	<.01												
		8404	FDCU1 / DCU 1 Fugitive Emissions	0.01	0.05												
		8404	FHTU2 / HTU No. 2 Fugitives	0.01	0.06												
		8404	FHTU4 / HTU No. 4 Fugitives	<0.01	0.01												
		8404	FLCU / New Piping Fugitives	0.03	0.12												
		8404	FVPS4 / VPS No. 4 Fugitive Emissions	<0.01	<0.01												
		8404	TST01553 / Storage Tank 1553	0.01	0.02												
		8404	TST01601 / Storage Tank 1601	<0.01	0.02												
		8404	TML01254 / Storage Tank 1254	<0.01	0.01												
		6056	CEP-FUG / Fugitives Group	0.02	0.1												
		6056	FKCRU5 / #5 CRU Cooling Tower	0.01	0.04												
151089	5/14/2018	6056	TK2085 / Storage TK2085	0.04	0.17												
		8404	VPSFE / Fugitives	0.03	0.15												
153153	10/17/2018	8404	NALSOVPS5 / Tote	0.73	0.03												
153219	9/11/2018		L5BAGH / Baghouse						0.03	0.13	0.03	0.13					
			L5ENG1 / 532-hp Isuzu 6WG 1x Generator Engine 1	1.31	1.92	2.89	4.21	0.7	1.03	0.14	0.21	0.14	0.21	1.09	1.59		
			L5ENG2 / 49-HP Generator Engine 2	0.12	0.09	0.54	0.39	0.22	0.16	0.02	0.02	0.02	0.02	0.1	0.07		
155121	1/22/2019		RECBAGH Baghouse							0.03	0.13	0.03	0.13				
			RECENG1 (generator engine)	1.31	1.92	2.89	4.21	0.7	1.03	0.14	0.21	0.14	0.21	0.37	0.54		
			RECENG2 (air compressor)	0.12	0.09	0.39	0.28	0.22	0.16	0.02	0.02	0.02	0.02	<0.01	<0.01		
155122	1/22/2019		BP001BAGH / Baghouse							0.06	0.26	0.06	0.26				
			BP001ENG / Generator Engine	0.02	0.02	0.13	0.18	2.95	4.3	0.02	0.02	0.02	0.02	0.35	0.5		
155123	1/22/2019		BP002BAGH / Baghouse							0.06	0.26	0.6	0.26				
			BP002ENG / Generator Engine	0.02	0.02	0.13	0.18	2.95	4.3	0.02	0.02	0.02	0.02	0.35	0.5		
155599	3/22/2019	8404	FFCCU3 / FCCU No. 3 Fugitive Emissions	0.01	0.06											<0.01	<0.01
155985	3/28/2019		REC2BAGH / Baghouse							0.1	0.44	0.1	0.44				
			REC2ENG / Engine	2.01	4.4	12.83	18.73	7.02	10.25	0.4	0.59	0.4	0.59	1.94	2.83		
		6056	CEP-FUG / 27PH Fugitives	<.01	0.02												
		6056	CEP-FUG / CFH Fugitives	<0.01	0.02												
		6056	CEP-FUG / DCU2 Fugitives	0.01	0.05												
		6056	CEP-FUG / HCU2 Fugitives	0.09	0.38												
		6056	CEP-FUG / NPC Fugitives	0.02	0.07												
		6056	CEP-FUG / VPS5 Fugitives	<0.01	<0.01												
		6056	ESBU2 / SBU2 Flare Stack	<0.01	0.01	0.03	0.11	0.18	0.81					<0.01	<0.01		
		6056	EVPS5 / VPS 5 Flare Stack	0.01	0.06	0.13	0.58	0.96	4.19					<0.01	<0.01		
		6056	EHCU2 / HCU2, NPC, CFH Flare Stack	0.01	0.06	0.13	0.56	0.92	4.03					<0.01	<0.01		

156220	5/24/2019	6056	EDCU2 / DCU2 Flare Stack	<0.01	0.01	0.02	0.1	0.17	0.73					<0.01	<0.01		
		8404	FCRU4 / CRU4 Fugitives	0.09	0.38												
		8404	FHTU2 / HTU2 Fugitives	0.1	0.46												
		8404	FLCDU / LCDU Fugitives	0.06	0.28												
		8404	FLHCU / LHCU Fugitives	0.06	0.25												
		8404	FVPS2 / VPS2 Fugitives	<0.01	<0.01												
		8404	FVPS4 / VPS4 Fugitives	0.09	0.4												
		8404	EFCCU3 / FCCU3 Flare Stack	<0.01	0.02	0.03	0.15	0.25	1.1					<0.01	<0.01		
		8404	ECRU4 / CRU4, LCDU Flare System	<0.01	<0.01	0.01	0.02	0.04	0.17					<0.01	<0.01		
		8404	EFCCU1&2 / Alky4 Flare Stack	<0.01	0.02	0.03	0.15	0.25	1.1					<0.01	<0.01		
		8404	EDCU1 / DCU1 Flare System	0.01	0.03	0.07	0.3	0.5	2.17					<0.01	<0.01		
		8404	EHCU / HCU1, HTU1, HTU2, HTU3 Flare Stack	0.02	0.09	0.19	0.82	1.36	5.97					<0.01	<0.01		
		8404	EHTU / HTU4 Flare Stack	<0.01	0.01	0.02	0.09	0.15	0.64					<0.01	<0.01		
		8404	EVPS4 / VPS2, VPS4 Flare Stack	<0.01	<0.01	0.01	0.04	0.06	0.28					<0.01	<0.01		
		8404	SCRU4-2 / CRU4 Regen Vent			1.16			0.07		0.07		0.82				
158137	8/29/2019	6056	CEP-FUG / CFH Fugitives	<0.01	<0.01										<0.01	<0.01	
		6056	CEP-FUG / DHT Fugitives	<0.01	0.02										<0.01	<0.01	
		TOTAL (TPY)			88.14		60.07		57.64		5.25		4.77		37.28		4.17

ATTACHMENT M:

Technical Review Document for Permit No. 156220

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	156220	Company Name:	Motiva Enterprises LLC	APD Reviewer:	Dan Sims
Project No.:	299298	Unit Name:	2018 Annual Registration – Port Arthur Refinery	PBR No(s).:	106.261, 106.262

GENERAL INFORMATION			
Regulated Entity No.:	RN100209451	Project Type:	Permit by Rule Application
Customer Reference No.:	CN600124051	Date Received by TCEQ:	March 29, 2019
City/County:	Port Arthur, Jefferson County	Date Received by Reviewer:	April 3, 2019
Physical Location:	2555 Savannah Ave		

CONTACT INFORMATION			
Responsible Official/ Primary Contact Name and Title:	Mr. Greg Lucchesi VP and General Manager	Phone No.: (409) 989-7001 Fax No.:	Email: greg.lucchesi@motiva.com
Technical Contact/ Consultant Name and Title:	Ms. Laurie Carpenter Environmental Specialist - Air	Phone No.: (409) 989-7449 Fax No.:	Email: laurie.carpenter@motiva.com

GENERAL RULES CHECK	YES	NO	COMMENTS
Is confidential information included in the application?		X	
Has the PBR fee been paid?	X		Ref. No. 414169; Endorse. No. PI00443103
Is this registration certified?	X		STEERS COR; signed PI-7-CERT also included in submittal
Is this an APWL site?		X	
Are there any upstream or downstream affects associated with this registration?		X	There are no changes in throughput associated with these projects.
Is planned MSS included in the registration?		X	MSS emissions are authorized by NSR Permit 6056
Are there affected NSR or Title V authorizations for the project?	X		Effective NSR Permits – 6056 / PSDTX1062M2 / GHGPSDTX121 / PSDTX1534 & 8404 / PSDTX1062M1 / PSDTX1534 There are several pending NSR permit actions currently under review. Reviewer coordinated with NSR Reviewers to confirm that the registration will not affect pending NSR actions. Effective Title V SOPs – O1386 & O3387
Is each PBR > 25/250 tpy?		X	
Are PBR sitewide emissions > 25/250 tpy?		N/A	Site has been to public notice
Are there permit limits on using PBRs at the site?		X	NSR conditions do not limit PBR use
Is PSD or Nonattainment netting required?		X	PSD & NNSR thresholds not exceeded
Do NSPS, NESHAP, or MACT standards apply to this registration?	X		NSPS A, J, & GGG; NESHAP A & FF; MACT A, CC, & UU
Does NOx Cap and Trade apply to this registration?		X	Not in Houston / Galveston / Brazoria area
Is the facility in compliance with all other applicable rules and regulations?	X		

DESCRIBE OVERALL PROCESS AT THE SITE
The Port Arthur Refinery processes (refines) crude oil into finished products such as aviation jet fuels, various grades of motor gasoline, diesel fuels, and lubricating oil base stocks. The petroleum refinery consists of several operating units, including separation, conversion, and treatment operations, as well as other support operations.

DESCRIBE PROJECT AND INVOLVED PROCESS
<ul style="list-style-type: none"> Motiva Enterprises LLC has submitted an application to authorize several piping projects implemented in 2018 at the Port Arthur Refinery under § 106.261 for the following process units: NSR Permit 6056 – 27 Pumphouse (27PH), Hydrotreating Unit 6 (CFH), Delayed Coking Unit 2 (DCU2), Hydrocracking Unit 2 (HCU2), Naphtha Processing Complex (NPC), Vacuum Pipe Still 5 (VPS5); NSR Permit 8404 – Continuous Catalytic Reforming Unit 4 (CRU4), Hydrotreating Unit 2 (HTU2), Lube Catalytic Dewaxing Unit (LCDU), Lube 1-hydrocracking Unit (LHCU), Vacuum Pipe Still 2 (VPS2), Vacuum Pipe Still 4 (VPS4). Projects include: 12 projects for installation of new fugitive piping components – These projects were implemented to address dead leg issues, corrosion issues, or improve maintenance of equipment. All the new components will be tagged and added to the leak detection and repair (LDAR) program implemented at PAR, as required by NSR Permits 8404 and 6056. <p>For the following projects, the company is correcting emissions that were previously authorized:</p> <ul style="list-style-type: none"> 11 projects for natural gas sweep/purge to flare systems – These projects were implemented to determine historical purge/sweep gas flow rates in each flare system. The additional flow of purge/sweep gas resulted in increased NO_x, CO, SO₂, & VOC combustion emissions from flares. 1 project for increasing air-flow through regenerator – It was determined that the maximum air flowrate at the CRU4 Regenerator Vent was higher than previously represented in Permit 8404. To ensure compliance with the maximum hourly emission rate, increased NO_x, SO₂, and PM/PM₁₀/PM_{2.5}, emissions are being authorized. This project will only correct the hourly emissions based on adjusted maximum air flowrate. No changes to representations for annual emissions or permitted annual limits are requested. <p>For the projects above that are being retroactively corrected, company confirmed the following:</p> <ul style="list-style-type: none"> Project is certified Increases do not affect original BACT determination, including controls required by the impacts analysis. Increases do not result in a change to the impacts analysis & does not conflict with any permit conditions that limit emissions due to a previous impacts analysis.

TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	156220	Company Name:	Motiva Enterprises LLC	APD Reviewer:	Dan Sims
Project No.:	299298	Unit Name:	2018 Annual Registration – Port Arthur Refinery	PBR No(s).:	106.261, 106.262

DESCRIBE PROJECT AND INVOLVED PROCESS

- o No change in the public notice and would not require public notice if the project had been submitted under an amendment.
- o No PSD or NNSR applicability.
- o Does not result in the withdrawal of a violation of exceedance of a permit limit.
- o Does not authorize any increased frequency of already permitted planned MSS activities.

This registration will be incorporated into NSR Permits 6056 and 8404 at the next renewal or amendment.

TECHNICAL SUMMARY - DESCRIBE HOW THE PROJECT MEETS THE RULES

PBR 106.261/262 Compliance Demonstration

- The emission point(s) associated with the facilities or changes to facilities are located at least 100 ft from the nearest off-site receptor.
- The total new or increase emissions for each project will comply with the applicable hourly and annual emission limits as represented in the table below.
- There are no changes to or addition of any pollution abatement equipment.
- Visible emissions to the atmosphere, from any point or fugitive source, do not exceed 5.0 opacity in any six-minute period.
- This registration is not for authorization for construction or to change a facility authorized under another section of this chapter or under standard permit.

Calculation Methodology

Fugitives – Component counts, TCEQ refinery emission factors, 28MID (NSR Permit 6056) & 28CNTQ (NSR Permit 8404) LDAR program reductions
 Flare – AP-42 natural gas combustion factors (VOC); TCEQ factors (NO_x, CO), H₂S-SO₂ conversion (SO₂)
 CRU Regen Vent – corrected maximum flow rate (0.0449 MMSCF/hr) & existing contaminant concentrations (NO_x, SO₂, PM, Cl₂, HCl); 99% scrubber removal efficiency per NSR Permit 8404 (Cl₂, HCl)

PBR 106.261(2)							
Air Contaminant				Emission Limit		Actual Emissions	
				lb/hr	tpy	lb/hr	tpy
Refinery petroleum fractions (< 10% benzene)				6.00	10.00	0.53	2.32
VOC (products of combustion)				6.00	10.00	0.07	0.33
NO _x (products of combustion)				6.00	10.00	1.83	2.94
CO (products of combustion)				6.00	10.00	4.84	*See note
SO ₂ (products of combustion)				6.00	10.00	0.82	0.02
PBR 106.262							
Air Contaminant	L	D	K	Emission Limit		Actual Emissions	
	mg/m ³	ft		lb/hr	tpy	lb/hr	tpy**
HCl	1	4,403	8	0.13	0.55	0.004	--
Cl ₂	1.5			0.19	0.82	0.002	--
PBR 106.261(3)							
				Emission Limit		Actual Emissions	
Air Contaminant				lb/hr	tpy	lb/hr	tpy**
PM/PM10/PM2.5 (products of combustion)				1.00	4.38	0.07	--

*The compliance demonstration includes combined emissions for all 24 projects. The combined emission rates are below the applicable emission limits for an individual project for all emission rates except annual CO emissions. Annual CO emissions increases associated with sweep/purge gas for the 11 flare systems are each < 10 tpy, and are included separately in the emission summary below for each corresponding EPN.

**For these emissions, company is only correcting the lb/hr based on adjusted maximum flow rates; tpy remains unchanged, as it was authorized correctly in the permit.

COMMUNICATION LOG

Date	Time	Name/Company	Subject of Communication
05/06/2019	3:48pm	Ms. Laurie Carpenter / Motiva	Reviewer discussed the emissions increases for the 11 flare system & CRU regenerator vent to determine if the requested authorizations could be approvable. TC addressed all items, which are included in the Project Description
05/08/2019	4:08pm		Reviewer requested confirmation that representations in the registration application were consistent with pending NSR permit actions regarding fuel type associated flare sweep/purge gas and normal flare operations. TC stated that natural gas is used for flare sweep/purge gas and pilot, & that refinery fuel gas is burned in heaters & furnaces. Reviewer also asked about representations in pending NSR actions associated with CRU regenerator vent flow rate. TC stated that additional time would be needed to respond
05/14/2019	2:44pm		TC left voicemail stating that CRU regenerator vent emissions are not represented in pending application for NSR permit 8404, and would be updated at the next amendment.
05/16/2019	11:38am	Ms. Laurie Carpenter /	Reviewer requested that project emissions for HCl & chlorine be quantified to replace the included "0.00" rates included in the application, and add 106.262 to the authorization




TECHNICAL REVIEW: AIR PERMIT BY RULE

Permit No.:	156220	Company Name:	Motiva Enterprises LLC	APD Reviewer:	Dan Sims
Project No.:	299298	Unit Name:	2018 Annual Registration – Port Arthur Refinery	PBR No(s).:	106.261, 106.262

COMMUNICATION LOG			
Date	Time	Name/Company	Subject of Communication
05/16/2019	3:58pm	Motiva	TC provided updated emissions calculations for the CRU regenerator vent to quantify project emissions for HCl & chlorine. TC also provided a 106.262 compliance demonstration.

EMISSIONS ESTIMATES																				
NSR	EPN	Emission Source	VOC		NO _x		CO		PM		PM ₁₀		PM _{2.5}		SO ₂		HCl		Cl ₂	
			lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
6056	CEP-FUG	27PH Fugitives	<0.01	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
		CFH Fugitives	<0.01	0.02	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		DCU2 Fugitives	0.01	0.05	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		HCU2 Fugitives	0.09	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
		NPC Fugitives	0.02	0.07	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	VPS5 Fugitives	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	
	ESBU2	SBU2 Flare Stack	<0.01	0.01	0.03	0.11	0.18	0.81	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--
	EVPS5	VPS 5 Flare Slack	0.01	0.06	0.13	0.58	0.96	4.19	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--
8404	EHC2	HCU2, NPC, CFH Flare Stack	0.01	0.06	0.13	0.56	0.92	4.03	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--
	EDCU2	DCU2 Flare Stack	<0.01	0.01	0.02	0.10	0.17	0.73	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--
	FCRU4	CRU4 Fugitives	0.09	0.38	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	FHTU2	HTU2 Fugitives	0.10	0.46	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
8404	FLCDU	LCDU Fugitives	0.06	0.28	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	FLHCU	LHCU Fugitives	0.06	0.25	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	FVPS2	VPS2 Fugitives	<0.01	<0.01	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	FVPS4	VPS4 Fugitives	0.09	0.40	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	EFCCU3	FCCU3 Flare Stack	<0.01	0.02	0.03	0.15	0.25	1.10	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--
	ECRU4	CRU4, LCDU Flare System	<0.01	<0.01	0.01	0.02	0.04	0.17	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--
	EFCCU 1&2	ALKY4 Flare Stack	<0.01	0.02	0.03	0.15	0.25	1.10	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--
	EDCU1	DCU1 Flare System	0.01	0.03	0.07	0.30	0.50	2.17	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--
	EHC2	HCU1, HTU1, HTU2, HTU3 Flare Stack	0.02	0.09	0.19	0.82	1.36	5.97	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--
	EHTU	HTU4 Flare Stack	<0.01	0.01	0.02	0.09	0.15	0.64	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--
EVPS4	VPS2, VPS4 Flare Stack	<0.01	<0.01	0.01	0.04	0.06	0.28	--	--	--	--	--	--	<0.01	<0.01	--	--	--	--	
SCRU 4-2	CRU4 Regen Vent	--	--	1.16	--	--	--	0.07	--	0.07	--	0.07	--	0.82	--	<0.01	--	<0.01	--	
TOTAL EMISSIONS (TPY):				2.64		2.94		21.20	--		--		--		0.02		--		--	
MAXIMUM OPERATING SCHEDULE:			Hours/Day			Days/Week			Weeks/Year			Hours/Year			8,760					

NSR permit designations are included for reference based on representations in the registration application.

	TECHNICAL REVIEWER	PEER REVIEWER	FINAL REVIEWER
SIGNATURE:			
PRINTED NAME:	Mr. Dan Sims	Ms. Kristyn Campbell	Mark Meyer, Manager
DATE:	05/17/2019	05/23/2019	05/24/2019

(Attachment B)

Letter from Tonya Baer, TCEQ, Deputy
Director, Office of Air to David Garcia,
EPA Region 6, Director, Air and
Radiation Division, Re: Permits by Rule
Programmatic Changes, dated May 11,
2020

Jon Niermann, *Chairman*
Emily Lindley, *Commissioner*
Bobby Janecka, *Commissioner*
Toby Baker, *Executive Director*



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

May 11, 2020

Mr. David Garcia, P.E.
Director
Air and Radiation Division
U.S. Environmental Protection Agency Region 6
1201 Elm Street, Ste. 500
Dallas, Texas 75270

Re: Permits by Rule Programmatic Changes

Dear Mr. Garcia:

The Texas Commission on Environmental Quality (TCEQ) and the U.S. Environmental Protection Agency (EPA) have been discussing changes to Texas' Title V program since 2016. Recently, EPA has also filed objections and identified issues with Permit by Rule (PBR) authorizations included in specific Title V permits. EPA has requested that TCEQ implement Title V programmatic changes related to PBR requirements.

The TCEQ has identified programmatic changes to its Title V program that we believe addresses all the issues raised by the EPA regarding the inclusion of PBRs in Title V Permits. These programmatic changes are described in the attachment to this letter.

If acceptable to the EPA, TCEQ will implement these programmatic changes beginning August 1, 2020. As of this date, all Title V applicants for initial, renewal, or significant permit revisions which are filed more than two years before permit renewal will be required to submit the information identified in the attachment to this letter. TCEQ will continue to work with companies that have pending applications.

If you have any questions or comments, please feel free to contact me at (512) 239-1228.

Sincerely,

A handwritten signature in cursive script that reads "Tonya Baer".

Tonya Baer, Deputy Director
Office of Air

PBR Supplemental Table

FOP Number:
Project Number:
Submittal Date:

Registered Permits By Rule (30 TAC Chapter 106) for the Application Area			
ID No:	Registration No.:	PBR:	Registration Date:
ID No:	Registration No.:	PBR:	Registration Date:
ID No:	Registration No.:	PBR:	Registration Date:
Claimed (not registered) Permits By Rule (30 TAC Chapter 106) for the Application Area – From OP-REQ1 Section XII. I. – Permits By Rule			
ID No:	PBR:	Version No./Date:	
ID No:	PBR:	Version No./Date:	
ID No:	PBR:	Version No./Date:	
Claimed (not registered) Permits By Rule (30 TAC Chapter 106) for the Application Area – For PBRs not Found On OP-REQ1 Section XII. I. – Permits By Rule (Do not include units or PBRs that are listed in this section on the New Source Review Authorization References by Emission Unit table, because the PBRs (and the Emission Units they authorize) are considered insignificant Emission Units.)			
PBR:		Version No./Date:	
PBR:		Version No./Date:	
PBR:		Version No./Date:	

Monitoring Requirements for Claimed (not registered) Permits By Rule (30 TAC Chapter 106) for the Application Area – From OP-REQ1 Section XII. I. – Permits By Rule		
ID No:	PBR:	Version No./Date:
Monitoring Requirement:		
ID No:	PBR:	Version No./Date:
Monitoring Requirement:		
ID No:	PBR:	Version No./Date:
Monitoring Requirement:		
ID No:	PBR:	Version No./Date:
Monitoring Requirement:		

Title V PBR Programmatic Approach

Applicants of Title V permits will use the following approach to incorporate permit by rule (PBR) requirements into their Title V applications and permits.

- PBR Supplemental Table – The table will no longer be voluntary. Applicants will be required to provide the table with their Title V permit applications.
 - The existing table was modified to add an ID No. to link a registered or claimed PBR to a specific emission unit.
 - Claimed PBRs for insignificant activities (Those PBRs not listed on the OP-REQ1 form) will not be required to be linked to an emission unit.
- Statement of Basis:
 - The statement of basis will include a declaration that the application contains a list of PBRs that are not listed on the OP-REQ1 form that are also claimed for the permit area. This list is found on the table titled PBR Supplemental Table. In addition, the SOB will include a statement that explains how recordkeeping in §106.8 is sufficient to demonstrate compliance for these insignificant activities.
 - The PBRs for insignificant activities are enforceable through a permit condition that references the PBR Supplemental Table (condition referred to below).
- Title V Permit:
 - Include in the existing permit special term and condition for the new source review authorizations requirements that the permit holder shall comply with the new source review authorizations issued or claimed including the permits by rules (including the permit by rule identified in the PBR Supplemental Table in the application).
 - PBR registration numbers are then included in the permit in the New Source Review Authorization References by Emission Unit Table against the unit/group/process ID number.
- If necessary, to demonstrate compliance, monitoring will need to be added to either the Title V or NSR authorization, as discussed below:
 - Registered PBRs – Applicants will have the following option:
 - Update PBR application representations with monitoring that is sufficient to demonstrate compliance.
 - Claimed PBRs (Listed on the OP-REQ1 form) – Applicants will have the following options:
 - Register the PBR and include the monitoring that is sufficient to demonstrate compliance with the PBR application.
 - Added a column to the PBR Supplemental Table for monitoring and add language to the statement of basis and PBR condition to reference the table.

(Attachment C)

Letter from Ilan Levin, Associate
Director, Environmental Integrity
Project, to Lawrence Starfield, Acting
Assistant Director, EPA Office of
Enforcement and Compliance Assurance,
dated March 31, 2021



1206 San Antonio Street
Austin, Texas 78701
www.environmentalintegrity.org

March 31, 2021

United States Environmental Protection Agency
Office of Enforcement and Compliance Assurance
Lawrence Starfield, Acting Assistant Administrator
starfield.lawrence@epa.gov
Cheryl Seager, Region 6 Director
Seager.Cheryl@EPA.gov

Re: Moda Ingleside Energy Center, San Patricio County, Texas

Dear Administrator Starfield and Director Seager:

On behalf of the Indigenous People of the Coastal Bend, Melissa Zamora, and Love Sanchez, we write to urge EPA to initiate an enforcement action to remedy violations of the Clean Air Act, and protect the health of residents and visitors of the Texas Coastal Bend. Your swift response to this request will also demonstrate EPA's commitment to environmental and social justice by acknowledging the value and legitimate rights of Texas' indigenous people to bring this enforcement matter to your attention.

Melissa Zamora and Love Sanchez are members of Indigenous People of the Coastal Bend, an intertribal grassroots organization devoted to education, indigenous rights, justice, and uplifting of indigenous culture in the Texas coastal bend area. Love Sanchez is of Karankawa descent. The Moda Energy Center ("Terminal") is located on Karankawa land, in Ingleside on the Bay, just north of Corpus Christi, Texas. This area sustained indigenous people for centuries. Today, there are known campsites and artifacts at Ingleside on the Bay and within the Moda site's fence line demonstrating the historic claim that Indigenous People of the Coastal Bend have to Petition EPA to exercise its enforcement discretion.

The Moda Terminal is a for-hire crude and condensate storage and marine loading terminal. The Terminal is authorized to operate and to release air pollution by TCEQ Air Permit No.

122362/PSD-TX-1430M1, numerous Permits by Rule (PBRs), a Standard Permit for Pollution Control Project, and a Title V Operating Permit (SOP No. O-3906).

In January 2021, Moda filed an application with the TCEQ seeking several changes to its NSR authorization. Among the numerous changes requested, Moda seeks to:

- Increase the hydrogen sulfide (H₂S) content in crude and condensate to 50 parts per million by weight (ppm) – up from 10 ppm – to accommodate a broader variety of incoming crude oils; and
- Incorporate two so-called minor NSR permits (a PBR, and the standard permit for pollution control project).

Our review of the pending January 2021 Application raises serious concerns about the legality of Moda's operations and circumvention of the federal Clean Air Act.

I. EPA's Policy on Sham Permits

EPA has long held that it is not only improper but also in violation of the Clean Air Act to construct a source or major modification with a minor source permit when there is intent to operate as a major source or major modification. EPA stated in the June 28, 1989 Federal Register notice on the definition of federally enforceable 54 Fed. Reg. 27274 (June 28, 1989)(notice on the definition of "federally enforceable") (see also, EPA June 13, 1989 guidance on "Limiting potential to Emit in New Source Permitting"). Permits with conditions that do not reflect a source's planned mode of operation are sham permits, are void *ab initio*, and cannot shield a source from the requirement to undergo preconstruction review. 40 CFR §52.21(r) (4) requires application of NSR requirements to a source that asks for a relaxation of permit limits which would make the source major. EPA has stated that it will require application of §52.21(r) (4) even where a source legitimately changes a project after finding it cannot comply with the operating restrictions which were taken in good faith. Generally in "sham" permitting, a source attempts to expedite construction by securing minor source status through permits containing operational restrictions from which the source intends to free itself shortly after completion of construction and commencement of operation. Such attempts are treated as unlawful circumvention of the preconstruction review requirements. Similarly, attempts to expedite construction by securing

several minor source permits and avoiding major modification requirements should be treated as circumvention.

II. Indications of Moda's Circumvention

A. Did Moda Lower its Allowable Crude and Condensate H₂S Content to Avoid Federal Major New Source Review, With no Intention of Meeting That Limit?

Prior to December 2019, Moda's air permit prohibited crude or condensate with hydrogen sulfide content greater than 50 ppm. On June 17, 2019, Moda filed an Application to amend its permit by, among other things, increasing throughput and decreasing the allowable H₂S content of the crude and condensate from 50 ppm to 10 ppm H₂S. In December 2019, TCEQ approved that Application. *See*, TCEQ's Permit Amendment Source Analysis & Technical Review, December 2, 2019, attached.

Because combustion of hydrogen sulfide results in sulfur dioxide emissions, lowering their H₂S value from 50 to 10 ppm, also reduced expected sulfur dioxide emissions. The December 2019 Permit Amendment avoided the 40 ton threshold for triggering major New Source Review/PSD review for sulfur dioxide, but only by a razor thin margin. TCEQ's Technical review document shows that the changes resulted in an increase of 39.66 tons.

In January 2021, Moda filed an Application seeking to increase the hydrogen sulfide content of their crude and condensate back up to 50 ppm. These facts indicate that an enforcement investigation should be initiated, based on EPA's policy on "sham" permitting. In December 2019, Moda got approval for a minor modification based on a restriction (10 ppm H₂S) that it now, a year later, seeks to relax. EPA has long held that 40 CFR Section 52.21(r) (4) requires Moda to demonstrate the site meets BACT for sulfur dioxide, and also leaves open EPA's ability to pursue enforcement where there is evidence that the initial minor modification permit was a sham.

B. Did Moda Secure Several Minor Source Permits to Avoid Major Modification Requirements?

In their 2019 permit amendment application, Moda acknowledged that emissions at the site are authorized by its PSD permit and three separate Permits-by-Rule. TCEQ's December 2019 issuance of the amendment application incorporated by reference two of the three PBRs: PBR No.

154997 authorized five new storage tanks and also increased the throughput of marine loading; PBR 155902 authorized 2 new emergency tanks. Moda did not seek to incorporate PBR No. 117816.

On March 18, 2020, TCEQ approved Moda's registration of yet another PBR (No. 159913).

On October 14, 2020, TCEQ approved a "Standard Permit for a Pollution Control Project" (Registration No. 162551) which authorized the addition of an eighth marine loading vapor combustion unit in order to increase the site's operational flexibility and increase throughput.

As part of its January 2021 Amendment Application, Moda is seeking to incorporate both the recent March 2020 PBR and the recent October 2020 Standard Permit for "pollution control project" into their PSD permit. It does not appear that Moda has, or intends to, incorporate PBR No. 117816.

EPA has stated in its guidance that it is not always possible to set forth, in detail, the circumstances in which the Agency considers an owner or operator to have evaded preconstruction review through minor permits, and thus subject itself to enforcement sanctions under Clean Air Act §113. But, among the top criteria that should set off alarm bells is the filing of an application for a federal PSD permit at or near the same time as a state minor source permit. If a source files more than one minor source permit application simultaneously or within a short time period of each other, this may constitute strong evidence of an intent to circumvent the requirements of preconstruction review. EPA has previously cautioned state regulators to scrutinize applications that relate to the same process or units that the source files either before initial operation of the unit or after less than a year of operation. The September 18, 1989, EPA guidance on sham permits states that two or more related minor changes over a short time period should be studied for possible circumvention.

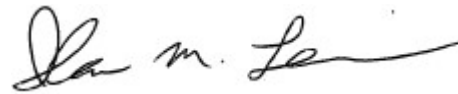
III. Request for Relief

For the reasons stated above, we urge U.S. EPA to initiate an enforcement action pursuant Clean Air Act Sections 113 and 114, 42 U.S.C. §§7413, 7413. If it is determined that the Moda Ingleside Energy Center has in fact circumvented Clean Air Act requirements, we urge

EPA to order the Terminal's operations be ceased, and impose injunctive relief, mitigation, and penalties sufficient to remedy the past and deter future noncompliance.

Respectfully Submitted,

Environmental Integrity Project

A handwritten signature in black ink, appearing to read "Ilan M. Levin", written in a cursive style.

Ilan Levin

1206 San Antonio Street

Austin, Texas 78701

Ph. 512-619-7287

ilevin@environmentalintegrity.org

cc: Director Craig Pritzlaff MC-172
TCEQ Office of Compliance
P.O. Box 13087
Austin, TX 78711-3087

(ATTACHMENT D)

**TCEQ Region 12 Sources with at
Least 25 PBR Registrations**

Source Name	RN	No. Active PBR Registrations (including Standard Exemptions)	Nearest City	ZIP	2021 VOC (Tons)	2021 NOx (Tons)
Dow Freeport Chemical Plant	RN100225945	519	Freeport	77541	780.9709	1508.581
Blue Cube Chemical Manufacturing Plant	RN108772245	208	Freeport	77541	80.6731	599.7296
Union Carbide Industrial Manufacturing Plant	RN100219351	172	Texas City	77590	93.8075	75.4132
ExxonMobil Baytown Chemical Plant	RN102574803	114	Baytown	77520	726.1994	252.291
Blanchard Refining Galveston Bay Refinery	RN102535077	90	Texas City	77590	1684.573	1526.645
Chevron Phillips Sweeny Old Ocean Chemical Plant	RN100825249	87	Sweeny	77480	476.2327	1130.307
Equistar Chemicals Channelview Complex	RN100542281	84	Channelview	77530	732.0717	1109.214
Covestro Industrial Park Baytown Plant	RN100209931	82	Baytown	77523	20.5366	45.4467
Rohm and Haas Texas Deer Park Plant	RN100223205	82	Deer Park	77536	219.2329	375.7821
BASF Freeport Site	RN100218049	80	Freeport	77541	186.7096	508.704

Albemarle					
Houston Plant	RN100218247 76	Pasadena	77503		
				110.1158	17.0462
Cotac USA					
Fleet Refueling	RN103052650 62	Pasadena	77507		
Chevron Phillips					
Cedar Bayou Plant	RN103919817 60	Baytown	77521		
				654.5756	566.3153
Lyondell Chemical Channelview Plant	RN100633650 58	Channelview	77530		
				240.678	204.6143
Celanese Clear Lake Plant	RN100227016 46	Pasadena	77507		
				82.4528	72.9885
Dixie Chemical Bayport Facility	RN100218486 46	Pasadena	77507		
				28.7303	15.6061
Phillips 66 Sweeny Refinery and Petrochemical Complex	RN101619179 45	Old Ocean	77463		
				359.8958	503.9168
Targa Mont Belvieu Complex	RN100222900 43	Mont Belvieu	77580		
				378.5006	85.45
Valero Houston Refinery	RN100219310 43	Houston	77012		
				123.8921	165.7558
Valero Texas City Refinery	RN100238385 40	Texas City	77590		
				589.1005	440.2745
Equistar Chocolate Bayou Plant	RN100238682 40	Alvin	77512		
				70.9367	274.2357
Arkema Clear Lake Facility	RN104150123 38	Pasadena	77507		
				19.8923	116.0595
ExxonMobil Baytown Refinery	RN102579307 38	Baytown	77520		
				2202.171	1930.252

LAST EI 12/31/2012

Chevron Phillips Pasadena Plastics Complex	RN102018322	37	Pasadena	77506	380.4048	51.1625	
Albemarle Bayport Plant	RN100211523	36	Pasadena	77507	9.1014	98.1548	
Huntsman Conroe Plant	RN100219740	36	Conroe	77301	21.6751	60.5832	
Eastman Chemical Texas City Plant	RN100212620	35	Texas City	77590	11.5637	22.5496	Below Major Source Threshold
Dow La Porte Chemical Manufacturing Plant	RN102414232	34	La Porte	77571	1.7735	4.3606	Below Major Source Threshold
ISP Technologies Texas City Plant	RN100825272	34	Texas City	77590	36.702	7.2027	
Lubrizol Deer Park Plant	RN100221589	34	Deer Park	77536	182.669	57.6742	
ExxonMobil Baytown Technology and Engineering Complex	RN103774212	33	Baytown	77520			NO EI
Flint Hills Resources Houston Chemical Plant	RN102576063	33	Houston	77017	42.8981	165.4281	
Enterprise Houston Terminal	RN100224740	32	Houston	77015	149.2953	21.447	
ExxonMobil Baytown Olefins Plant	RN102212925	31	Baytown	77520	377.5133	2258.199	

Advorio Texas City	RN100217231	31	Texas City	77590	66.5218	0.2182
TPC Houston Plant	RN100219526	31	Houston	77017	116.1915	394.1249
PRSI Pasadena Refinery	RN100716661	30	Pasadena	77506	275.5553	317.4117
Indorama Ventures Dayton Facility	RN100225721	30	Dayton	77535	LAST EI 12/31/2004	
Roger W Powell Plant	RN100210830	29	Pasadena	77507	7.6245	7.2216
Enterprise Mont Belvieu Complex Magellan Galena Park Terminal	RN102323268	27	Mont Belvieu	77580	732.3311	767.8535
	RN102180486	26	Galena Park	77547	195.2081	5.3952
Akzo Nobel Nouryon Functional Chemicals Battlegro und	RN102177391	26	Deer Park	77571	30.0661	7.0192
Lyondell Houston Refinery	RN100218130	26	Houston	77017	679.507	731.0479
BASF Grace Pasadena Catalyst Site	RN100223379	26	Pasadena	77507	27.6938	8.0512
Altivia Chemical Complex	RN102540754	25	La Porte	77571	Last EI Submission 12/31/2016	
Celanese Bay City Plant Ineos Chocolate Bayou Plant	RN100258060	25	Bay City	77414	44.7514	4.2909
	RN100238708	25	Alvin	77511	406.5621	991.0998

(Attachment E)

Petition to Object to Title V Permit No.
O3785 Issued by the Texas Commission
on Environmental Quality, filed on
August 30, 2022

**UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
BEFORE THE ADMINISTRATOR**

IN THE MATTER OF	§	PETITION FOR OBJECTION
	§	
Clean Air Act Title V Permit No. O3785	§	
	§	
Issued to Intercontinental Terminals	§	
Company LLC	§	Permit No. O3785
	§	
Issued by the Texas Commission on	§	
Environmental Quality	§	
	§	

**PETITION TO OBJECT TO TITLE V PERMIT NO. O3785 ISSUED BY THE TEXAS
COMMISSION ON ENVIRONMENTAL QUALITY**

Pursuant to section 42 U.S.C. § 7661d(b)(2), Air Alliance Houston, Sierra Club, Environment Texas, and Environmental Integrity Project (“Petitioners”) hereby petition the Administrator of the U.S. Environmental Protection Agency (“Administrator” or “EPA”) to object to Proposed Federal Operating Permit No. O3785 (“Proposed Permit”) issued by the Texas Commission on Environmental Quality (“TCEQ” or “Commission”) authorizing operations of Intercontinental Terminals Company LLC’s (“ITC”) Pasadena Terminal (“Terminal”), located in Harris County, Texas.

I. PETITIONERS

Air Alliance Houston is a Texas 501(c)(3) non-profit advocacy organization working to reduce public health impacts from air pollution and to advance environmental justice through applied research, education, and advocacy. Air Alliance Houston takes a strong stance against disproportionate exposure to air pollution by emphasizing an agenda centered on equity and environmental justice.

Sierra Club is the oldest and largest grassroots environmental group in the United States, with over 762,300 members nationally. Sierra Club’s members live, work, attend school, travel,

and recreate in and around areas affected by air pollution from ITC's Terminal. These members enjoy and are entitled to the benefits of natural resources, including air, water, and soil, parks, wilderness areas and other green spaces, and flora and fauna, all of which are harmed by air pollution emitted from ITC's Terminal.

Environment Texas is a nonprofit advocate for clean air, clean water, parks and wildlife, and a livable climate.

The Environmental Integrity Project is a nonpartisan, nonprofit watchdog organization that advocates for effective enforcement of environmental laws. Comprised of former EPA enforcement attorneys, public interest lawyers, analysts, investigators, and community organizers, EIP has three goals: (1) to illustrate through objective facts and figures how the failure to enforce or implement environmental laws increases pollution and harms public health; (2) to hold federal and state agencies, as well as individual corporations, accountable for failing to enforce or comply with environmental laws; and (3) to help local communities obtain the protections of environmental laws.

II. PROCEDURAL BACKGROUND

This petition addresses the TCEQ's renewal of Permit No. O3785 authorizing operation of ITC's Pasadena Terminal. ITC filed its renewal application on August 26, 2020. The Executive Director concluded his technical review of ITC's application on June 30, 2021. The Executive Director proposed to approve ITC's application and issued Draft Permit No. O3785 ("Draft Permit"), notice of which was published on November 3, 2021. Bilingual notice of the Draft Permit was published on October 31, 2021. Petitioners and others timely-filed comments with the TCEQ identifying deficiencies in the Draft Permit. (Exhibit A), Public Comments on Draft Permit No. O3758 ("Public Comments"). On September 4, 2021, State Senator Carol

Alvarado requested a public hearing on the Draft Permit. This request was granted and a virtual public hearing was held on December 9, 2021. Testimony presented during this public hearing may be accessed electronically at:

https://www14.tceq.texas.gov/epic/eCID/index.cfm?fuseaction=main.download&doc_id=825523522021344&doc_name=2021%2D12%2D09%2Dintercontinental%2Dterminals%2Dco%2Do3785%2Dnch%2Dformal%2Emp3&requesttimeout=5000.

On May 13, 2022, the TCEQ's Executive Director issued notice of the Proposed Permit along with his response to public comments on the Draft Permit. (Exhibit B), Notice of Proposed Permit and Executive Director's Response to Public Comment ("Response to Comments"); (Exhibit C), Proposed Permit. The Executive Director declined to make any changes to the Draft Permit, despite receiving public comments and voluminous testimony describing its deficiency. On June 30, 2022, EPA objected to the Proposed Permit on several grounds raised by members of the public during the comment period. (Exhibit D), Objection to Title V Permit No. O3785 for the Intercontinental Terminals Company LLC Pasadena Terminal ("ITC Objection"), dated June 30, 2022. EPA, however, did not object to the Proposed Permit's failure to include a schedule for ITC to comply with Nonattainment New Source Review ("NNSR") preconstruction permitting requirements triggered by construction of the Terminal. Accordingly, Petitioners raise that issue in this petition.

According to the TCEQ's Title V Permit Public Notice webpage, EPA's review period for the Proposed Permit ended on July 1, 2022 and the deadline for the filing of this petition is August 31, 2022.¹ This petition is timely filed.

¹ Available electronically at:
https://www.tceq.texas.gov/assets/public/permitting/air/Title_V/announcements/pnwebprt.htm

III. LEGAL REQUIREMENTS

Title V permits are the primary method for enforcing and assuring compliance with the Clean Air Act's pollution control requirements for major sources of air pollution. Operating Permit Program, 57 Fed. Reg. 32,250, 32,258 (July 21, 1992). Prior to enactment of the Title V permitting program, regulators, operators, and members of the public had difficulty determining which requirements applied to each major source and whether sources were complying with applicable requirements. This was a problem because applicable requirements for each major source were spread across many different rules and orders, some of which did not make it clear how general requirements applied to specific sources.

The Title V permitting program was created to improve compliance with and to facilitate enforcement of Clean Air Act requirements by requiring each major source to obtain an operating permit that (1) lists all applicable federally-enforceable requirements, (2) contains enough information for readers to determine how applicable requirements apply to units at the permitted source, and (3) establishes monitoring requirements that assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c); 40 C.F.R. § 70.6(a) and (c); *Virginia v. Browner*, 80 F.3d 869, 873 (4th Cir. 1996) ("The permit is crucial to implementation of the Act: it contains, in a single, comprehensive set of documents, all CAA requirements relevant to the particular source."); *Sierra Club v. EPA*, 536 F.3d 673, 674-75 (D.C. Cir. 2008) ("But Title V did more than require the compilation in a single document of existing applicable emission limits It also mandated that each permit . . . shall set forth monitoring requirements to assure compliance with the permit terms and conditions").

The Title V permitting program provides a process for stakeholders to resolve disputes about which requirements should apply to each major source of air pollution outside of the

enforcement context. 57 Fed. Reg. 32,266 (“Under the [Title V] permit system, these disputes will no longer arise because any differences among the State, EPA, the permittee, and interested members of the public as to which of the Act’s requirements apply to the particular source will be resolved during the permit issuance and subsequent review process.”). Accordingly, federal courts do not generally second-guess Title V permitting decisions made by state permitting agencies and will not enforce otherwise-applicable requirements that have been omitted from or displaced by conditions in a Title V permit. *See*, 42 U.S.C. § 7607(b)(2); *Sierra Club v. Otter Tail*, 615 F.3d 1008 (8th Cir. 2008) (holding that enforcement of New Source Performance Standard omitted from a source’s Title V permit was barred by 42 U.S.C. § 7607(b)(2)). Because courts rely on Title V permits to determine which requirements may be enforced and which requirements may not be enforced against each major source, state-permitting agencies and EPA must exercise care to ensure that each Title V permit includes a clear, complete, and accurate account of the requirements that apply to the permitted source.

The Act requires the Administrator to object to a state-issued Title V permit if he determines that it fails to include and assure compliance with all applicable requirements. 42 U.S.C. § 7661d(b)(1); 40 C.F.R. § 70.8(c). If the Administrator does not object to a Title V permit, “any person may petition the Administrator within 60 days after the expiration of the Administrator’s 45-day review period to make such objection.” 42 U.S.C. § 7661d(b)(2); 40 C.F.R. § 70.8(d); 30 Tex. Admin. Code § 122.360. The Administrator “shall issue an objection . . . if the petitioner demonstrates to the Administrator that the permit is not in compliance with the requirements of the . . . [Clean Air Act].” 42 U.S.C. § 7661d(b)(2); *see also*, 40 C.F.R. § 70.8(c)(1). The Administrator must grant or deny a petition to object within 60 days of its filing. 42 U.S.C. § 7661d(b)(2).

IV. ENVIRONMENTAL JUSTICE AND AFFECTED COMMUNITY CONCERNS

A. Environmental Justice Communities in Pasadena are Overburdened by Pollution.

ITC's Pasadena Terminal is located less than one mile from residences in the city of Pasadena and less than two miles from residences in the city of Deer Park. EPA Region 6 has recognized that each of these predominantly minority cities face disproportionately high health risks created by exposure to industrial pollution. EPA Region 6, Texas Environmental Justice Collaborative Action Plan at 4 (August 3, 2016).²

There are 239 residences located within one mile of the ITC Pasadena Terminal, and 4,346 within two miles. According to the EPA's EJ Screen ACS Summary Report of the community within two miles of the Terminal, 30% of residents are children under the age of 18, and 10% are seniors aged 65 and older.³ Additionally, 28% of residents have no high school diploma. Per capita income is \$24,168 with many residents falling below the poverty line. Also, 30% of the population lacks access to health insurance. Residents of color comprise 76% of Pasadena's population with 71% alone being Hispanic/Latino. Forty-six percent (46%) of residents speak a language other than English at home, with an overwhelming percentage being Spanish.

The industrial burden in the city of Pasadena is significant. Pasadena is surrounded by seventeen Hazardous Waste Treatment, Storage, and Disposal Facilities such as water dischargers, toxic waste releasing facilities, Superfund sites, and various sources of air pollution (including the freeway). Over 20 of the largest industrial sources of pollution in Harris County are located in East Houston near the Terminal. *A Closer Look at Air Pollution in Houston: Identifying Priority Health Risks, A Summary of the Report of the Mayor's Task Force on the Health Effects of Air*

² Available electronically at: https://www.epa.gov/sites/production/files/2016-12/documents/texas_ej_plan_8-3-16_final.pdf.

³ Available electronically at: <https://ejscreen.epa.gov/mapper/>

Pollution at 8.⁴ The Port of Houston, and the Ship Channel that feeds it, pass through this area generating a variety of hazardous pollutants, adding to those emitted from the nearby industrial sources. *Id.* The community of Pasadena has been overburdened by pollution for decades.

The TCEQ's renewal of ITC's Title V permit raises significant Environmental Justice concerns:

On multiple occasions, TCEQ has stated that air permits evaluated by the agency are reviewed without reference to the socioeconomic or racial status of the surrounding community. Under Title VI of the Civil Rights Act, the TCEQ must determine whether the adverse effect of the policy or practice disproportionately affects members of a group identified by race, color, or national origin. Here, there is an abundance of data showing that communities of color disproportionately bear the burden of pollution. In Pasadena, the residents are largely Hispanic or Black. The TCEQ has a legal obligation to prevent disparate impacts whether they are intentional or not.

The TCEQ must approach this permit renewal with an equity-centered lens. The Pasadena community and those north of the Pasadena facility such as Cloverleaf, Galena Park, and Jacinto City are burdened by multiple sources of pollution from facilities that diminish the quality of life and health of Texas communities. TCEQ must consider the disproportionate pollution burdens already occurring in these communities from multiple industrial sources and incorporate enhanced mitigative actions in the permitting process which address the cumulative impacts to these communities and provide greater protective measures for public health and safety.

Response to Comments at 3-4 (summarizing public comments).

But the TCEQ incorrectly contends that it lacks the authority or the obligation to consider whether its permitting practices are disproportionately harming communities of color and other marginalized populations. *Id.* at 4 ("The statutes governing TCEQ's review of air permits do not allow the agency to consider where a facility is located—only the effect of the proposed emissions on human health and the environment."). The TCEQ's obligation to ensure that industrial development is protective of the health and property of the public authorize the Commission to consider cumulative impacts and disproportionate environmental harms to communities of color.

⁴Available electronically at: <https://www3.epa.gov/ttnchie1/conference/ei16/session6/bethel.pdf>

30 Tex. Admin. Code § 116.111(a)(2). Likewise, Texas Clean Air Act § 382.002 requires the commission to vigorously safeguard air quality by protecting public health and welfare, and § 382.011 gives the commission general powers to administer the Texas Clean Air Act through all practical and economically feasible methods. In the past, the TCEQ has cited these statutes as the basis for its authority to resolve Environmental Justice issues and to consider cumulative risks and impacts. *See, e.g. Interoffice Memorandum Re: Permit by Rule and Standard Permit Incorporation Into Permits at 1*, dated December 9, 2005.⁵

Finally, the federal Clean Air Act requires applicants for permits authorizing the construction of a major source or a major modification to an existing major source in a nonattainment area to demonstrate that the benefits of the proposed project significantly outweigh its social and environmental costs. 42 U.S.C. § 7503(a)(5). This requirement obligates the TCEQ to consider core Environmental Justice issues. As we explain below, the TCEQ's failure to require ITC to comply with applicable major New Source Review preconstruction permitting requirements has allowed ITC (and the TCEQ) to avoid their obligations to consider Environmental Justice issues arising from the operation of ITC's Terminal.

Texas resolutely refuses the possibility that it can and should rectify its policies and practices that have disproportionately harmed Environmental Justice communities. People living near the Terminal are already overburdened by pollution, vulnerable to health concerns due to age, isolated due to language barriers, and facing more serious barriers to upward mobility than most people living in Texas. Given the State's unfounded denialism and evidence that people living near the Terminal are already overburdened by industrial pollution, EPA must carefully weigh the

⁵ Available electronically at: https://www.tceq.texas.gov/assets/public/permitting/air/memos/pbr_rollin_12_05.pdf While this guidance document was not cited in any public comment, Petitioners include it here for the sole purpose of rebutting the Executive Director's response to comments.

concerns voiced by the public during the comment period and object to the Proposed Permit if the agency determines that the permit fails to adequately protect public health and safety.

B. Unique Issues of Community Concern

Residents living near the Terminal are not only concerned about air pollution released during its routine operation. They are also justifiably concerned about fallout from disasters, like the fire that occurred at ITC's nearby Deer Park terminal. As described in detail in an investigation by the U.S. Chemical Safety and Hazard Investigation Board, the ITC Deer Park facility had a series of chemical fires at multiple tanks that lasted for five days in March 2019. U.S. Chemical Safety and Hazard Investigation Board, Storage Tank Fire at Intercontinental Terminals Company, LLC (ITC) Terminal Deer Park, Texas, *Incident Date: March 17, 2019*, No. 2019-01-I-TX, Factual Update dated October 30, 2019.⁶ This disaster shook those living in communities near ITC's terminals and continues to diminish their sense of security to this day. The fire prompted shelter-in-place orders, multi-school district closures, freeway closures, multiple park and waterfront closures, water contamination, and an inter-agency response by several local municipalities. Damaging amounts of Volatile Organic Compounds ("VOCs"), including benzene, were released into surrounding communities throughout the fire's duration and its aftermath.

ITC has yet to share details about this incident, about similar risks at the Pasadena Terminal, or the steps it has taken or plans to take to prevent similar incidents any of its Texas facilities. The TCEQ was fully aware of these continuing problems when it approved the ITC Pasadena Title V permit renewal. Those living in communities on the fenceline of the Pasadena Terminal have a right to feel safe and it is the TCEQ's job to protect communities from industrial

⁶ Available electronically at: https://www.csb.gov/assets/1/20/itc_factual_update_2019-10-30.pdf?16522

sources of pollution, like the Pasadena Terminal. EPA should object to the Proposed Permit and require ITC to address community concerns regarding their safety and their health.

V. ADDITIONAL GROUNDS FOR OBJECTION

1. Specific Grounds for Objection, Including Citation to Permit Term

A. Relevant Permit Terms

The Proposed Permit incorporates Permit No. 95754. Proposed Permit at Special Condition No. 19 and page 134. Special Condition No. 2 of Permit No. 95754 establishes the following three synthetic minor emission limits for various units and activities at the Terminal:

In addition to the emission limitations of Special Condition No. 1, the permit holder shall limit emissions of Volatile Organic Compound (VOC) from each of the following Group ID A, B and C facilities and emission points to the totals respectively specified for each Group. Compliance shall be determined consistent with the monitoring and recordkeeping requirements of Special Condition No. 46

Group ID	FIN	EPN	VOC (tpy)
A	P100-001, P100-002, P100-003, P100-004, P100-005, P100-006, P100-007, P100-008, P100-009, P100-010, P12-001, P12-002, P12-003, P80-001, EFWPTK-1, EFWPTK-2, EFWPTK-3, DOCK1, DOCK-2, DOCK-3, DOCK-4, RACK-1, RACK-3, RACK-5, HOSEVENT-A, HOSEDRAIN-A, FUG-A, EFWP-1, EFWP-2, EFWP-3, EGEN-1, EGEN-2, EGEN-3, MSS-CONT-A, MSS-ATM-A, WWT TKS-101, - 201, -301 & -401, LOAD- UNC-A	P100-001, P100-002, P100-003, P100-004, P100-005, P100-006, P100-007, P100-008, P100-009, P100-010, P12-001, P12-002, P12-003, P80-001, EFWPTK-1, EFWPTK-2, EFWPTK-3, DOCK-1, DOCK-2, DOCK-3, DOCK-4, RACK1, RACK-3, RACK-5, TK-LAND-A, HOSEVENT-A, HOSEDRAIN-A, MSS-CONT-A, MSSATM-A, EFWP-1, EFWP-2, EFWP-3, EGEN-1, EGEN-2, EGEN-3, WWT TKS- 101,-201, -301 & -401, [VC-001, VC-002, VC- 003, FL-001], LOADUNC-A	24.9 tpy (total for all sources)

B	P100-12, P100-13, P165-001, P165-002, P165-003, P165-004, P165-005, P165-006, P110-001, P110-002, P110-003, P110-004, P120-001, P120-002, P120-003, P120-004, DOCK-1, DOCK-2, DOCK-3, DOCK-4, RACK-1, RACK-3, RACK-5, FUG-B, HOSEVENT-B, HOSEDRAIN-B, EGEN-4, EGEN-5, EGEN-6, MSS-CONT- B, & MSS-ATM-B, LOAD-UNC-B	P100-12, P100-13, P165-001, P165-002, P165-003, P165-004, P165-005, P165-006, P110-001, P110-002, P110-003, P110-004, P120-001, P120-002, P120-003, P120-004, DOCK-1, DOCK-2, DOCK3, DOCK-4, RACK-1, RACK-3, RACK-5, TKLAND-B, HOSEVENT-B, HOSEDRAIN-B, EGEN-4, EGEN-5, EGEN-6, MSS-CONT- B, MSS-ATM-B, [VC- 001, VCU-002, VC003, FL-001], LOAD-UNC- B	24.9 tpy (total for all sources)
C	P060-001, P060-002, P100-014, P100-015, P100-016, P100-017, P100-018, P100-019, P120-005, P120-006, P120-007, P120-008, P120-009, P120-010, P120-011, P120-012, P120-013, P120-014, P120-015, P120-016, P120-017, P120-018, P120-019, P120-020, P120-021, P120-022, P120-023, P120-024, P120-025, P120-026, P120-027, P120-028, P120-029, P120-030, P165-007, P165-008, P165-009, P165-010, P165-011, P165-012, DOCK-1, DOCK-2, DOCK-3, DOCK-4, RACK-1, RACK-3, RACK-5, FUG-C, HOSEVENT-C, HOSEDRAIN-C, EGEN-7, EGEN-8, EGEN-9, EGEN-10, MSS-CONT-C, MSSATM-C, LOAD-	P060-001, P060-002, P100-014, P100-015, P100-016, P100-017, P100-018, P100-019, P120-005, P120-006, P120-007, P120-008, P120-009, P120-010, P120-011, P120-012, P120-013, P120-014, P120-015, P120-016, P120-017, P120-018, P120-019, P120-020, P120-021, P120-022, P120-023, P120-024, P120-025, P120-026, P120-027, P120-028, P120-029, P120-030, P165-007, P165-008, P165-009, P165-010, P165-011, P165-012, DOCK-1, DOCK-2, DOCK3, DOCK-4, RACK-1, RACK-3, RACK-5, TKLAND-C, FUG-C, HOSEVENT- C, HOSEDRAIN-C, EGEN-7, EGEN-8, EGEN-9, EGEN-10, MSS-CONT-C, MSS- ATMC, [VC-001, VCU-002, VC-003,	97.71 tpy (total for all sources)

	CONT-C, LOADUNC-C	FL001], LOAD-UNC-C	
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Permit No. 95754, Special Condition No. 3 states:

At such time Special Condition No. 2, Group ID A or Group ID B defined projects becomes a major stationary source or major modification (30 TAC §§ 116.12(19)-(20)) solely by virtue of a relaxation in any enforceable limitation established in this permit, on the capacity of the source or modification otherwise to emit VOC, such as a restriction on hours of operation, the Nonattainment New Source Review requirements shall apply to the source or modification as though construction had not yet commenced on the source or modification.

Permit No. 95754, Special Condition No. 45 limits ITC's ability to claim PBRs for projects at the Terminal:

The following facilities and activities shall not be authorized under Permit by Rule, 30 TAC Chap. 106, or Standard Permit, 30 TAC Chap. 116, Subchapter F, included in Special Condition No. 2, Group A or B, except with written approval of the TCEQ Executive Director:

- A. Construction of storage tanks planned for storage of products with vapor pressures in excess of 0.5 psia at 95°F.
 - B. Change of service for storage tanks to products with vapor pressures in excess of 0.5 psia at 95°F.
 - C. Additional ship or barge loading facilities, or vapor collection and control systems supporting ship or barge loading activities.
 - D. Additional loading throughput for any tank.
 - E. Transfers of products from Special Condition No. 2, Group A or Group B tanks to tanks not belonging to Group A or Group B.
- B. The Proposed Permit is Deficient Because it Fails to Establish a Schedule for ITC to Comply with NNSR Preconstruction Permitting Requirements.**

The Clean Air Act's most stringent preconstruction permitting program, Nonattainment NSR, applies to major sources and major modifications constructed in areas where air quality fails to meet health and welfare-based National Ambient Air Quality Standards ("NAAQS"). Sources subject to NNSR preconstruction permitting requirements must demonstrate compliance with strict

Lowest Available Emission Rate (“LAER”) requirements and offset pollution increases with decreases in pollution from existing sources in the nonattainment area at a ratio of greater than 1:1. 30 Tex. Admin. Code § 116.150(d)(1) and (3). Additionally, an applicant for an NNSR preconstruction permit must show that the benefits of the proposed project significantly outweigh its social and environmental costs. *Id.* at § 116.150(d)(2), (4). This last requirement clearly encompasses concerns about cumulative impacts and Environmental Justice issues the TCEQ incorrectly claims it lacks jurisdiction to consider.

The Terminal is a major source of VOC, which contributes to the formation of ozone, located in the Houston, Brazoria, Galveston serious ozone nonattainment area. Minor NSR permits incorporated by reference into the Proposed Permit authorize ITC to emit at least 147.51 tons per year of VOC from its Terminal. The currently applicable major source threshold for VOC in Harris County is 50 tons per year. The Proposed Permit is deficient because it fails to establish a schedule for ITC to comply with NNSR preconstruction permitting requirements triggered by the Company’s construction of equipment with the potential to emit air pollution in quantities that exceed the applicable major source threshold for VOC. The TCEQ’s failure to require ITC to comply with NNSR preconstruction permitting requirements has allowed ITC to avoid its obligation to comply with strict LAER pollution requirements, to offset new VOC pollution from its Terminal, and to demonstrate that the Terminal’s benefits significantly outweigh its social and environmental costs.

There are at least three bases for determining that construction of ITC’s Terminal has triggered NNSR preconstruction permitting requirements:

First, the Proposed Permit fails to make the three synthetic minor VOC emission caps established by Permit No. 95754, Special Condition No. 2 practicably enforceable. These emission

caps were established to artificially constrain operation of the Terminal such that emissions from equipment covered by each cap would remain just below the applicable major source thresholds for VOC. However, these synthetic minor emission caps are not practicably enforceable and therefore do not effectively limit the Terminal's potential to emit. Accordingly, equipment and activities covered by each of the synthetic minor emission caps have the potential to emit VOC at rates that exceed the applicable major source thresholds and trigger NNSR preconstruction permitting requirements.

Second, Permit No. 95754 is a sham permit. A sham permit is a minor source NSR permit obtained by an operator who never intended to operate the permitted source as a minor source for the purpose of circumventing major NSR preconstruction permitting requirements. As EPA has explained, sham permits should be considered void and do not shield a source from major NSR preconstruction permitting requirements.

Third, ITC triggered NNSR preconstruction permitting requirements by using a Permit by Rule ("PBR") registration to relax operational limits and to increase actual emissions from units covered by synthetic minor emission caps in Permit No. 95754, Special Condition No. 2. VOC increases authorized by this PBR registration are sufficient to make projects subject to these synthetic minor emission caps subject to NNSR preconstruction permitting review under Permit No. 95754, Special Condition No. 3.

- i. *ITC's Pasadena Terminal is a major source of VOC because synthetic minor emission caps in Permit No. 95754 are not practicably enforceable.*

An emission limit "can be relied upon to restrict a source's PTE only if it is legally and practicably enforceable." *In the Matter of Cash Creek Generation*, Order on Petition No. IV-2010-4, dated June 22, 2012 at 15; *see also* EPA, *New Source Review Workshop Manual* ("Workshop Manual"), draft October 1990 at A.5 ("For any limit or condition to be a legitimate restriction on

potential to emit, that limit or condition must be federally-enforceable, which in turn requires practical enforceability.”). To be practicably enforceable, synthetic minor emission limits must be technically accurate, *i.e.* limits based on the most representative data available, and subject to reliable methods for accurately determining compliance with those limits. Workshop Manual at A.5.

As Petitioners explained in their Comments and as EPA determined in its objection to the Proposed Permit, the Proposed Permit fails to specify monitoring, testing, and recordkeeping requirements sufficient to make the synthetic minor emission caps established by Permit No. 95754, Special Condition No. 2 practicably enforceable. Comments at 16-20; ITC Objection at 3-5. Accordingly, the synthetic minor emission caps do not constrain the Terminal’s potential to emit and ITC is subject to NNSR preconstruction permitting requirements.

Petitioners demonstrated that provisions for determining compliance with the synthetic minor emission caps established by Permit No. 95754, Special Condition No. 2 are deficient in the following respects:

- a. The loading loss equation Permit No. 95754 directs ITC to use to determine compliance with synthetic minor emission caps has a built-in 30% margin of error.*

Each of the synthetic minor VOC emission caps established by Special Condition No. 2 includes uncontrolled emissions from marine loading losses (EPNs: DOCK-1, DOCK-2, DOCK-3, and DOCK-4) and controlled emissions from marine loading losses (EPNs: VCU-001, VCU-002, VC-003, and FL-001). Application for Amendment to Permit No. 95754, filed December 18, 2018 at 5-4.⁷ Emissions from the uncontrolled marine loading EPNs, along with uncontrolled loading losses from truck and railcar loading at EPNs Rack-1, Rack-3, Rack-5 are combined to

⁷ Available electronically at:
https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=6188231&Recondition=Web

calculate a total annual VOC emission rate from uncontrolled loading losses of 23.81 tons per year. *Id.* at Table 1(a). Controlled loading losses from marine loading and truck and railcar loading are combined in the application with controlled emissions for hose venting, wastewater system, and routine storage tank landing to calculate a total annual VOC emission rate from the devices used to control these emissions of 10.45 tons per year. *Id.*

According to Permit No. 95754, Special Condition No. 46.A.2, ITC is to calculate emissions from loading activities at the Pasadena Terminal using “the uncontrolled loading loss factor, L_L ... defined by AP-42, Sec. 5.2, Eqn. 1 (July 2008).” The same process is used to calculate VOC emissions from hose disconnects at the Pasadena Terminal. Response to Comments, Permit No. 95754 at Response 21 (explaining that L_L equation 1 from AP-42, Sec. 5.2 is used to determine uncontrolled emissions from hose disconnects).⁸ Loading losses calculated using this factor are then multiplied by applicable capture efficiencies listed at Special Condition No. 46.A.5 to determine how much VOC is emitted directly to the atmosphere and how much is routed to pollution controls at the Pasadena Terminal. Controlled VOC emissions from captured loading losses are then determined by multiplying the amount of captured VOC routed to controls by the control efficiencies listed by Special Condition No. 46.A.5. In this way, controlled and uncontrolled emissions are calculated using the L_L factor defined by AP-42, Sec. 5.2, Eqn. 1.

This method of calculating VOC emissions from controlled and uncaptured marine loading losses at the Pasadena Terminal fails to assure compliance with synthetic minor emission caps established by Permit No. 95754, because the equation for determining L_L used to demonstrate compliance with the emission caps has a built-in rate of “probable error of ± 30

⁸ Available electronically at:

https://www14.tceq.texas.gov/epic/eCID/index.cfm?fuseaction=main.download&doc_id=779609642021098&doc_name=RTC%5F95754%2Epdf&requesttimeout=5000

percent.” AP-42, Sec. 5.2 at 5.2-4 (July 2008).⁹ Increases within this large margin of error would be sufficient to cause undetected violations of the synthetic emissions caps, which are set at 99.9% of the applicable major source threshold for Groups A and B and 97.71% of the applicable major source threshold for Group C.¹⁰ Accordingly, this method of determining compliance with synthetic minor emission caps established by Permit No. 95754, Special Condition No. 2 is unreliable and renders those emission caps not-practicably-enforceable.

- b. Permit No. 95754 fails to explain how ITC should calculate controlled loading loss emissions and MSS emissions if ITC fails to comply with criteria specified by the permit.*

Permit No. 95754, Special Condition No. 46.A.5 provides that use of capture and control efficiencies listed by that condition to calculate emissions from loading activities “is contingent upon satisfactory compliance demonstration and monitoring requirements at Special Conditions Nos. 1, 16-20, 29-31, [and] 44 of this permit.” Similarly, Special Condition No. 46.C provides that “MSS emissions shall be calculated and summed as required by Special Condition No. 34” and that “control of MSS emissions by the use of an authorized control device is contingent upon satisfactory compliance with the compliance demonstration and monitoring requirements at Special Condition No. 40.A-C.”

Special Condition No. 1 provides that the permit only authorizes emissions from points listed by the permit and that emissions from these points are only authorized at emission rates listed by the permit and that are subject to operating requirements specified in the permit’s special

⁹ Available electronically at: <https://www3.epa.gov/ttn/chief/ap42/ch05/final/c05s02.pdf>

¹⁰ Emission caps for Groups A and B were established when Harris County was designated a severe ozone nonattainment area and the major source threshold for VOC was 25 tons per year. When the emission cap for Group C was established, Harris County was designated as a moderate nonattainment area for ozone and the major source threshold was 100 tons per year. Harris County is currently designated as a serious ozone nonattainment area and the major source threshold for VOC is 50 tons per year. EPA has proposed to redesignate Harris County as a severe ozone nonattainment area. 87 Fed. Reg. 21825 (April 13, 2022). If this proposal is finalized, the major source threshold for VOC in Harris County will become 25 tons per year.

conditions. Thus, according to the plain meaning of the permit, the operation of any unit covered by Permit No. 95754 in a way that is inconsistent with the permit's requirements renders the capture and control efficiencies listed by Special Condition No. 46.A.5 inapplicable. Special Condition Nos. 16-20 establish various requirements related to the marine loading process, Special Condition Nos. 29-31 establish requirements for the operation of control equipment, Special Condition No. 40 establishes various requirements for portable control devices associated with routine and planned MSS activities, and Special Condition No. 44 establishes testing requirements for ITC's VCUs. Any violations of the applicable requirements established by these special conditions render the capture and control efficiencies listed by Special Condition No.46.A.5 and presumed control efficiency of portable control devices used to demonstrate compliance with the synthetic minor VOC emission caps established by Special Condition No. 2 inapplicable.¹¹

The Proposed Permit is deficient because it fails to establish conditions for calculating loading loss VOC emissions for purposes of demonstrating compliance with the synthetic minor VOC emission caps established by Permit No. 95754, Special Condition No. 2 in situations where ITC's failure to comply with permit requirements renders compliance methods established by the permit inapplicable. The Proposed Permit also fails to provide that ITC's failure to operate the Pasadena Terminal consistent with the preconditions for relying on the collection and control efficiency requirements establishes a violation of the permit's synthetic minor emission caps.

Because the Proposed Permit provides that compliance determination methods for the VOC synthetic minor emission caps established by Permit No. 95754, Special Condition No. 2 are inapplicable under certain conditions, because it fails to specify how compliance with the emission

¹¹ ITC has violated these conditions at least once. On August 28, 2019, the TCEQ issued a Notice of Violation to ITC for failing to calibrate the temperature monitor for VCU-001 and VUC-002 annually, as required by Permit No. 95754, Special Condition No. 29. This information is available electronically at: https://www15.tceq.texas.gov/crpub/index.cfm?fuseaction=iwr.novdetail&addn_id=227542822016068&re_id=5293

caps should be determined under those conditions, and because such conditions have been documented as occurring at the Pasadena Terminal, the synthetic emission caps incorporated by reference into the Proposed Permit are not practically enforceable and they do not effectively limit the Terminal's potential to emit below applicable major source thresholds.

c. Permit No. 95754, Special Condition No. 3 improperly limits circumstances under which exceedances of its synthetic minor emissions caps trigger Nonattainment NSR preconstruction permitting requirements.

According to Permit No. 95754, Special Condition No. 3:

At such time Special Condition No. 2, Group ID A or Group ID B defined projects becomes a major stationary source or modification (30 TAC §§ 116.12(19)-(20)) solely by virtue of relaxation in any enforceable emission limitation established in this permit, on the capacity of the source or modification otherwise to emit VOC, such as a restriction on hours of operation, then Nonattainment New Source Review requirements shall apply to the source or modification as though construction had not yet commenced on the source of modification.

This is the only condition in Permit No. 95754 explaining how projects authorized by that permit and subject to synthetic minor emission caps established by Special Condition No. 2 may become subject to NNSR preconstruction permitting requirements. But it is not enough to tie nonattainment NSR applicability to ITC's decision to request changes to its current permit conditions. Instead, the Proposed Permit must clarify whether and when ITC's failure to comply with emissions limits, restrictions on hours of operations, and other requirements established to artificially limit the Pasadena Terminal's potential to emit below applicable major source thresholds triggers ITC's obligation to obtain a permit that assures compliance with applicable NNSR preconstruction permitting requirements. So long as violations of requirements established by Permit No. 95754, including enforceable representations in ITC's various applications related to the permit, *see* 30 Tex. Admin. Code § 116.116(a)(1), taken to artificially limit its potential to emit below major source thresholds do not trigger ITC's obligation to obtain an NNSR permit;

those requirements fail to effectively limit the Pasadena Terminal's potential to emit. This is so because the permit is ambiguous as to whether and which violations of its special conditions trigger NNSR preconstruction permitting requirements.

d. EPA's ITC Objection order identifies additional monitoring, testing, recordkeeping, and reporting deficiencies.

EPA's objection to the Proposed Permit noted additional deficiencies establishing that the synthetic minor emission caps established by Permit No. 95754, Special Condition No. 2 are not practicably enforceable and do not limit the Terminal's potential to emit. First, certain pieces of equipment, including ITC's three vapor combustors, are included in all three of ITC's synthetic minor emission caps, but the Proposed Permit fails to explain how emissions from this common equipment should be divided to demonstrate compliance with the synthetic minor emission caps. ITC Objection at 3. Second, rather than limiting product throughputs, Permit No. 95754 provides ITC "operational flexibility to respond to market changes and customer demands" and allowing ITC "to manage the facilities ...such that the permitted emission limits are not exceeded." Application, PI-1 Dated December 21, 2018 (incorporated by reference at Permit No. 95754, Special Condition No. 11). The Proposed Permit, however, fails to specify *how* ITC is to manage its facilities to meet the emission caps and fails to include sufficient detail about applicable monitoring and recordkeeping requirements to assure compliance with the synthetic minor emission caps. ITC Objection at 3-4. Third, Permit No. 95754, Special Condition No. 20 provides that ship collection efficiency tests conducted between November 13, 2015 and April 7, 2016 satisfy ship collection efficiency representations and that additional ship collection efficiency testing is not required. Three tests conducted on different ships over six years ago are not a reliable basis for determining compliance with loading capture efficiency representations used to determine compliance with Permit No. 95754's synthetic minor emission caps. *Id.* at 4. Fourth,

Permit No. 95754, Special Condition Nos. 46.A.3 and 4 reference equations for calculating emissions associated with the transfer of a product but fail to actually specify the relevant equations or identify the EPNs the conditions apply to. *Id.* Fifth, Permit No. 95754, Special Condition No. 46.G fails to identify monitoring for waste gas flow to the flare and does not specify how monitoring data should be used to calculate flare emissions to determine compliance with the synthetic minor emission caps.

Given that EPA has already determined that the Proposed Permit fails to assure compliance with synthetic minor emission caps established by Permit No. 95754, Special Condition No. 2, and given EPA's position that synthetic minor emission limits that are not-practicably enforceable do not effectively constrain a source's potential to emit, EPA should object to the Proposed Permit's failure to establish a schedule for ITC to comply with NNSR preconstruction permitting requirements.

- ii. *Permit No. 95754 is a sham permit that does not limit the Terminal's potential to emit below major source thresholds.*

EPA has long been concerned that major sources of pollution would attempt to circumvent the Clean Air Act's requirements for major sources because they are so stringent and because the process for determining whether a project should be subject to major NSR preconstruction permitting requirements is complicated, technical, and subject to manipulation by applicants. Thus, EPA's most important NSR guidance document alerts state permitting authorities to the risks of sham permitting:

A sham permit is a federally enforceable permit with operating restrictions limiting a source's potential to emit such that potential emissions do not exceed the major or de minimis levels for the purpose of allowing construction to commence prior to applying for a major source permit. Permit with conditions that do not reflect a source's planned mode of operation may be considered void and cannot shield the source from the requirement to undergo major source preconstruction review. In other words, if a source accepts operational limits to obtain a minor source

construction permit but intends to operate the source in excess of those limitations once the unit is built, the permit is considered a sham. Additionally, a permit may be considered a sham permit if it is issued for a number of pollution-emitting modules that keep the source minor, but within a short period of time, an application is submitted for additional modules which will make the total source major.

Workshop Manual at c.6.

This definition of a sham permit aptly describes Permit No. 95754. Permit No. 95754 was issued as a “federally enforceable permit with operating restrictions limiting a source’s potential to emit such that potential emissions do not exceed the major or de minimis levels for the purpose of allowing construction to commence prior to applying for a major source permit.” We know that this permit did “not reflect a source’s planned mode of operation,” because the TCEQ’s permit engineer said so in his technical review document for the initial issuance of Permit No. 95754: “[a]lthough the site will ultimately be major, this initial construction will be limited to VOC emissions less than 25 tpy so the site is minor.” Technical Review Document, Permit No. 95754, Project No. 164990 (emphasis added).¹² Thus, it was clear to the TCEQ at the time Permit No. 95754 was issued that ITC was “accept[ing] operational limits to obtain a minor source construction permit but intend[ed] to operate the source in excess of those limitations once the unit [was] build.” A permit issued under these circumstances “is considered a sham.” Workshop Manual at c.6.

Unlike the scenario described in the Workshop Manual, ITC did not just intend to obtain a minor NSR permit to allow construction to commence prior to applying for a major source permit. ITC’s plan was to parse construction of its major source into a series of minor projects, none of which involved an emission increase sufficient to trigger NNSR preconstruction permitting

¹² Available electronically at: https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=5412420&Recondition=Web

requirements, but which cumulatively resulted in construction of a major source. Accordingly, ITC's current permits—Permit No. 95754 and Certified PBR Registration No. 166799—have only been subject to minor NSR preconstruction requirements, even though the Terminal is now authorized to emit at least 147.51 tons per year of VOC, nearly three-times the currently-applicable major source threshold of 50 tons per year and nearly six times the applicable major source threshold at the time Permit No. 95754 was first issued.¹³

Not only did the TCEQ anticipate that the Terminal would eventually be operated as a major source, the TCEQ also anticipated that ITC would attempt to authorize subsequent phases of the Terminal's construction in bits and pieces to circumvent NNSR preconstruction permitting requirements. But instead of denying ITC's sham minor NSR permit applications, the agency included language in the permit to make circumvention of major NSR preconstruction permitting requirements slightly more difficult. Specifically, Special Condition No. 26 of Permit No. 95754 (2012) provided that:

If additional facilities (beyond those authorized by this permit) are to be authorized at this site or any facilities authorized by this permit are modified within 18 months of the issuance of this permit, the following requirements apply.

A. If the proposed construction/modification will increase the site VOC potential to emit to greater than 25.0 tpy, they must be authorized through an amendment to this permit. That construction/modification shall be subject to nonattainment NSR for VOC. The facilities currently authorized by this permit shall also be subject to a retrospective nonattainment review with that amendment application. This requirement does not preclude any potential compliance action related to the circumvention of federal NSR.

B. If not subject to part A of this condition, the construction/modification shall be authorized through an amendment to this permit or a permit by rule (PBR) (30 TAC Chapter 106). If authorized through PBR, the PBR must be registered and this

¹³ This is the amount of pollution authorized by the three synthetic minor VOC emission caps established by Permit No. 95754, Special Condition No. 2. Certified PBR Registration No. 166799 authorizes 4.35 additional VOC emissions from equipment subject to these synthetic minor VOC emission caps and additional equipment that is not authorized by the caps.

permit altered to reflect the construction/modification. The permit alteration must be approved prior to the start of construction.

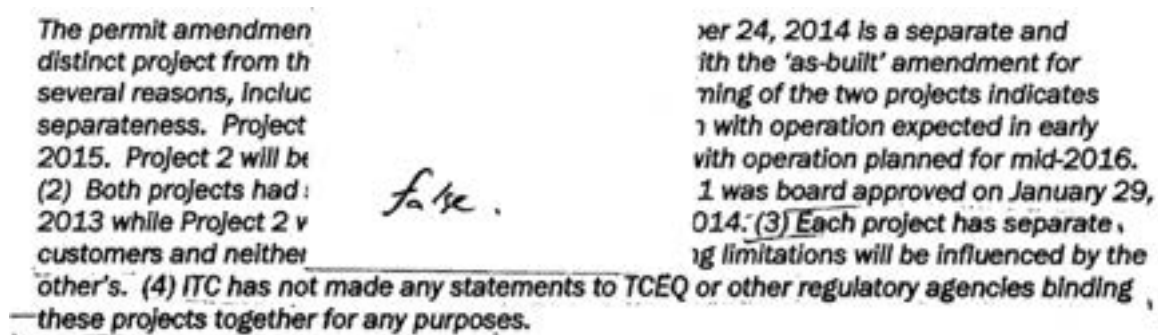
Any PBRs used to authorize construction of new or modification of existing facilities at this site after 18 months but within 60 months of the issuance of this permit must be registered with the TCEQ. All permit applications and PBR registrations submitted shall identify the facilities and emissions authorized in this permit and explain why the proposed project should not be aggregated with the facilities authorized in this permit when determining whether the VOC emissions from these facilities are subject to nonattainment review.

Unfortunately, the 18-month window established by this special condition was not sufficient to prevent ITC from circumventing NNSR preconstruction permitting requirements. This is so because construction of the first group of facilities authorized by Permit No. 95754 was still under construction when the 18-month mandatory aggregation period ended. On May 30, 2014, just three months after the 18-month period had run and while construction activities for equipment authorized by Permit No. 95754 were still ongoing, ITC submitted an application to authorize additional storage tanks, loading activities, and associated equipment. ITC asked that emissions from this equipment not be aggregated with the project authorized by the existing version of Permit No. 95754 and that a second synthetic minor VOC emission cap of 24.9 tons per year be added to the permit. With this second synthetic minor cap, ITC was authorized to emit 49.8 tons per year of VOC—nearly twice the 25 ton per year major source threshold—without complying with stringent pollution control requirements and pollution offset requirements that apply to major sources of pollution in nonattainment areas.¹⁴

¹⁴ Neither the application nor the final permit issued for this project (Project No. 211610) are available through the TCEQ's Records Online system. A draft copy of the permit engineer's technical review document is available electronically at: https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=5334735&Rendition=Web Additionally, a memorandum listing the TCEQ's concerns about potential NNSR circumvention, but not information submitted by ITC supporting non-aggregation of its projects is available electronically at: https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=5343031&Rendition=Web

Then, on July 3, 2014, while the TCEQ was still reviewing ITC's application to authorize construction of facilities and activities subject to the second synthetic minor VOC emissions cap in Permit No. 95754, ITC submitted an application to remove that permit's restriction on the use of PBRs to authorize additional construction and emissions at the Terminal. Technical Review Document for Permit No. 95754, Project No. 213724.¹⁵ Four days later, on July 7, 2014, ITC filed an application for a certified PBR registration that would have authorized the construction of 19 new storage tanks, fugitive components, as well as increased throughput at existing loading docks, loading racks, and vapor control devices.¹⁶ If approved, the certified PBR registration would have authorized VOC emissions from new, modified, and affected units totaling 23.47 tons per year. However, ITC withdrew its application after the TCEQ rejected justification for non-aggregation of this project with other equipment authorized by Permit No. 95754 as "false." ITC also withdrew its application to remove restrictions on the use of PBRs from Permit No. 95754.

Figure 1: TCEQ Permit Engineer's Note Concerning ITC's Non-Aggregation Case for Certification PBR Registration No. 121761¹⁷



¹⁵ Available electronically at:

https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=5348152&Rendition=Web

¹⁶ TPC's application for Certified PBR Registration No. 121761 is available electronically at:

https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=1302226&Rendition=Web

¹⁷ Excerpt from project file for Permit No. 95754, Project No. 219916, available electronically

at: https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=572534&Rendition=Web

On August 18, 2015, after the TCEQ amended Permit No. 95754 to authorize construction of equipment authorized by the second synthetic minor VOC emission cap of 25 tons per year, Texas submitted to EPA a redesignation substitute report for the Houston-Galveston-Brazoria Area 1997 eight-hour ozone National Ambient Air Quality Standard.¹⁸ This report asked EPA to lift Harris County's designation as a severe ozone nonattainment area. After Texas requested the change to Harris County's designation as a severe ozone nonattainment area, ITC filed an application for a NNSR preconstruction permit, which would authorize construction of new equipment and activities that could emit up to 79.15 tons per year of VOC (in addition to the 49.8 tons per year previously authorized by Permit No. 95754). Technical Review Document for Permit No. 95754, Project No. 243313.¹⁹ In response to Texas's report, while ITC's application was still under review, EPA published notice of a redesignation substitute for the 1997-8-hour ozone standard with an effective date of December 8, 2016. Following the effective date, Harris County was considered to be a moderate ozone nonattainment area under the 2008 8-hour ozone NAAQS and the applicable major source threshold in Harris County became 100 tons per year of VOC. ITC subsequently submitted an application for an as-built amendment to this permit, which authorized 97.71 tons per year of pollution, just under the new major source threshold for VOC of 100 tons per year. Because this project was still under review when Harris County's nonattainment designation changed, ITC did not need to demonstrate compliance with NNSR preconstruction permitting requirements, its application for a major source NNSR permit was canceled, and the 97.71 tons per year VOC emissions increase was authorized as a minor modification. *Id.*

¹⁸ Available electronically at: <https://downloads.regulations.gov/EPA-R06-OAR-2015-0609-0003/content.pdf>

¹⁹ Available electronically at: https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=5275063&Recondition=Web

The timing of ITC's request for approval of a project resulting in a VOC emissions increase well-above the 25 tons per year threshold *shortly after* Texas asked EPA to revise Harris County's nonattainment status and *shortly after* ITC had authorized two projects in quick succession right below the 25 tons per year major source threshold suggests that ITC has improperly broken a single construction project into separate phases based on the applicable or anticipated major source threshold in Harris County. This evidence confirms the TCEQ's determination in 2012, that ITC always intended to operate the Terminal as a major source of pollution, as well as the TCEQ's concern that ITC would attempt to circumvent NNSR preconstruction permitting requirements by artificially parsing construction of its major source into separate projects that did not trigger NNSR preconstruction permitting requirements.

The Pasadena Terminal is a bulk for-hire terminal. It is a collection of storage tanks, docks, and loading equipment for moving various chemicals onto and off trucks, railcars, and boats. All three of the "projects" authorized by Permit No. 95754 utilize the same docks and racks for marine, railcar, and truck loading and unloading. All three projects utilize the same wastewater treatment equipment. All three projects utilize the same vapor combustors. And all three projects utilize many of the same pipes and transport systems. Any one of the projects authorized by Permit No. 95754 considered in isolation makes little economic or technical sense. For example, the loading capacity of the multiple railcar and truck racks and docks far exceeds that of the dozen main tanks in project one, or the 16 tanks in project 2. Considered together, however, that loading capacity is justified for the 64 total tanks authorized by the three separate projects authorized by Permit No. 95754. Permit No. 95754 is a sham and the Terminal is a major source of air pollution subject to NNSR preconstruction permitting requirements.

- iii. *Emissions increases authorized by PBR Registration No. 166799 trigger NNSR preconstruction permitting requirements.*

The TCEQ realized when it issued Permit No. 95754 that ITC intended to operate the Terminal as a major source of pollution and that ITC would likely attempt to circumvent NNSR preconstruction permitting requirements by obtaining piecemeal amendments to that permit. The TCEQ also recognized that ITC might circumvent NNSR preconstruction permitting requirements by using a Permit by Rule to authorize additional equipment and activities at the Terminal or to relax emission limits and enforceable representations about the Terminal's utilization included in ITC's air permit applications for Permit No. 95754. Yet, instead of denying ITC's application for a sham minor NSR preconstruction permit, the TCEQ included special conditions in Permit No. 95754 intended to make this kind of circumvention slightly more difficult. *See* Permit No. 95754, Special Condition Nos. 3 and 45.²⁰ Special Condition No. 3 provided that relaxation of constraints on ITC's potential to emit could trigger NNSR preconstruction permitting requirements. Special Condition No. 45 prohibited ITC from using PBRs to authorizes certain kinds of changes to the Terminal without the Executive Director's permission.

These special conditions did not prevent ITC from using a PBR to circumvent NNSR preconstruction permitting requirements, because ITC simply ignored them. ITC applied for a PBR to authorize just exactly the kinds of facilities and activities prohibited by Special Condition No. 45 and falsely represented that ITC was not subject to permit terms prohibiting or restricting the use of PBRs to authorize emissions at the Terminal.²¹

²⁰ *See* pages 11-12 above.

²¹ ITC's PBR application is available electronically at:
https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=6400319&Rendition=Web

Figure 2, Excerpt from ITC’s Application for Certified PBR Registration No. 166799

5. 30 TAC § 106.4(a)(7): PBR Prohibition Check	
• Are there any air permits at the site containing conditions which prohibit or restrict the use of PBRs?	<input type="checkbox"/> YES <input checked="" type="checkbox"/> NO

This false representation appears to be intentional. ITC had filed several applications asking the TCEQ to remove terms limiting the use of PBRs at the Pasadena Terminal from Permit No. 95754, including Special Condition No. 45. Most recently, ITC’s 2018 application to amend Permit No. 95754 asked the TCEQ to revise that specific special condition. Application for Amendment to Permit No. 95754, filed December 18, 2018 at 1-4.²² ITC explained to the permit engineer for this project that “ITC maintains that the requirements of 30 TAC 106.4(a)(2) sufficiently address Federal NSR applicability and adding SCs which are duplicative in nature are not warranted.” Email from Neal Nygaard to Kevin Tang, dated February 20, 2020, Re: Permit No. 95754 ITC Conference Call Follow Up.²³ The permit engineer, however, disagreed and explained that “these restrictions on the use of PBRs/Standard Permits were added to prevent increases in VOC which could cause the site to become subject to nonattainment review” and the “restrictions are imposed consistent with the [provisions] of 30 TAC § 116.115(c)(2),” and could not be removed. Email from Kevin Tang to Neal Nygaard, dated February 18, 2020, Re: Permit No. 95754 ITC Conference Call Follow Up.²⁴

²² This application refers to Special Condition No. 47, which has been renumbered as Special Condition No. 45 in the most recently-issued version of Permit No. 95754. This application and other material related to the project is available electronically at:
https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=6188231&Rendition=Web

²³ This email and additional correspondence related to Permit No. 95754, Project No. 294773 is available electronically at:
https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=6165263&Rendition=Web

²⁴ This email is accessible using the link provided in the previous footnote.

Nonetheless, ITC's application for Certified PBR Registration No. 166799 filed the following year ignores the TCEQ's decision to retain the PBR prohibition in Permit No. 95754 and falsely indicates that no such prohibition exists. This is so, even though the same consulting firm prepared all of ITC's applications to have the PBR prohibition removed from Permit No. 95754 as well as the application for Certified PBR Registration No. 166799.

Based on ITC's misrepresentation, the TCEQ approved ITC's application for Certified PBR Registration No. 166799 on November 29, 2021. The Proposed Permit must include a schedule for ITC to correct this misrepresentation and to re-apply for a permit authorizing emissions improperly authorized by Certified PBR Registration No. 166799. Additionally, the facilities, activities, and emissions authorized by the certified PBR registration should be aggregated with the projects authorized by Permit No. 95754 and ITC should be required to obtain a NNSR permit authorizing equipment and activities at the Pasadena Terminal, as required by Permit No. 95754, Special Condition No. 3.

The 4.35 tons per year VOC emissions increase authorized by PBR Registration No. 166799 more than accounts for the margin between the applicable major source threshold and the three synthetic minor VOC emissions caps established by Permit No. 95754, Special Condition No. 2. Moreover, the PBR authorization affects units and activities covered by each of those caps. For example, the PBR authorizes 2 tons per year VOC from existing tanks, 2 more tons per year VOC from existing docks, and construction of a new barge dock that will presumably be used to load chemicals stored in ITC's existing tanks. Technical Review Document for Certified PBR Registration No. 166799, Project No. 334414.²⁵ The authorization of these additional emissions

²⁵ Available electronically at:
https://records.tceq.texas.gov/cs/idcplg?IdcService=TCEQ_EXTERNAL_SEARCH_GET_FILE&dID=6399967&Rendition=Web

from units covered by Group ID A and B through a permitting mechanism specifically prohibited by Permit No. 95754 is “a relaxation of any enforceable limitation established by this permit” sufficient to cause the Terminal to become a major stationary source.

2. Applicable Requirement or Part 70 Requirement Not Met

Each Title V permit must include the following elements:

Emissions limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance. Such requirements and limitations may include ARMs identified by the source in its part 70 permit application as approved by the permitting authority, provided that no ARM shall contravene any terms needed to comply with any otherwise applicable requirement or requirement of this part or circumvent any applicable requirement that would apply as a result of implementing the ARM.

40 C.F.R. § 70.6(a)(1)

If a source has failed to comply with an applicable requirement, the source’s Title V permit must include a schedule for the operator to come into compliance. *Id.* at § 70.6(c)(3); *see also id.* at § 70.5(c)(8).

NNSR preconstruction permitting requirements are applicable requirements for purposes of Title V. *Id.* at § 70.2 (defining term “applicable requirement” to include “[a]ny standard or other requirement provided for in the applicable implementation plan approved or promulgated by EPA through rulemaking under title I of the Act that implements the relevant requirements of the Act, including any revisions to that plan promulgated in part 52 of this chapter” and “[any] term or condition of any preconstruction permits issued pursuant to regulations approved or promulgated through rulemaking under title I, including parts C or D, of the Act.”); 30 Tex. Admin. Code § 116.150(b) (providing that construction of a new major source or major modification of an existing major source of NOx and/or VOC pollution is subject to NNSR preconstruction permitting requirements at

§ 116.150(d)(1)-(4)); 40 C.F.R. § 51.2270(c) (incorporating 30 Tex. Admin. Code § 116.150 into the Texas SIP).

3. Inadequacy of the Permit Term

The Proposed Permit is deficient, because it fails to establish a schedule for ITC to comply with NNSR preconstruction permitting requirements triggered by its construction of a major source of air pollution and to correct misrepresentations made in its application for PBR Registration No. 1699799.

4. Issues Raised in Public Comments

These issues were raised on pages 7-13 and 15-20 of the Public Comments.

5. Analysis of State's Response

The Executive Director's Response to Public Comments offers three arguments that fail to rebut Petitioners' demonstration that the Proposed Permit must include a schedule for ITC to comply with NNSR preconstruction permitting requirements.

A. The Establishment of a Compliance Schedule is not beyond the Scope of a Title V Review.

First the Executive Director relies on Texas's implementation of separate NSR and Title V permitting programs to argue that this issue is beyond the scope of ITC's Title V permit renewal:

The ED notes under the two-permit system in Texas, only new source review (NSR) permits authorize air emissions under 30 TAC Chapter 116. The Proposed Permit issued under 30 TAC Chapter 122 (or Title V program) does not authorize any emission limits or changes to emission limits for various emission sources. The establishment of authorized air emissions limit for each pollutant, determination of non-attainment status, evaluation of best available control technology (BACT) and health impact analysis of air emissions occurs during an NSR permit project review and not during a Title V permit review.

Response to Comments at 8.

This response fails to address Petitioners' demonstrations for several reasons. First, we do not claim that the Proposed Permit must be revised through the Title V process to establish new

emission limits or that an NNSR preconstruction permitting review should be undertaken as part of this Title V permitting project. Instead, Petitioners contend that the Proposed Permit must include a compliance schedule for ITC to comply with NSR preconstruction permitting requirements through the preconstruction permitting process. Clearly, such a compliance schedule may be established as part of the Title V permitting process. *See*, 40 C.F.R. §§ 70.5(c)(8)(iii)(C); 70.6(c)(3) (requiring Title V permits to include a “schedule of compliance for sources that are not in compliance with all applicable requirements at the time of permit issuance.”).

Second, the question of whether monitoring, testing, recordkeeping, and reporting requirements established by Permit No. 95754 and incorporated by reference into the Proposed Permit are sufficient to make the three synthetic minor emission caps established by that permit practicably enforceable is squarely a Title V issue. *See, e.g.*, ITC Objection at 5 (“*The EPA does view monitoring, recordkeeping, and reporting adequacy to be part of the title V permitting process and will therefore continue to review whether a title V permit contains adequate monitoring, recordkeeping, and reporting provisions sufficient to assure compliance with the terms and conditions established in the preconstruction permit.*”) (emphasis in original). There is no dispute that equipment and activities subject to the synthetic minor emission caps in Permit No. 95754 have the physical potential to emit VOC at a rate that triggers NNSR preconstruction permitting requirements. Accordingly, the question of whether potential emissions from equipment and activities authorized by Permit No. 95754 and subject to the synthetic minor emission caps established by that permit trigger NNSR preconstruction permitting requirements may be resolved on the basis of the sufficiency of monitoring, testing, recordkeeping, and reporting requirements established to make artificial limits on ITC’s potential to emit practicably enforceable. As EPA has already determined and as we further demonstrate in this petition, the

synthetic minor emission caps established by Permit No. 95754, Special Condition No. 2 are not practicably enforceable. ITC Objection at 3-5. Therefore, the synthetic minor emission caps do not constrain the Terminal's potential to emit and the Proposed Permit must establish a schedule for ITC to comply with NNSR preconstruction permitting requirements.

Third, the Executive Director fails to identify any regulation or guidance suggesting that the question of whether emissions authorized by PBR Registration No. 166799 triggered NNSR preconstruction permitting requirements per Special Condition No. 3 or Permit No. 95754 is beyond the scope of this Title V project. It is true that EPA has issued Title V petition orders indicating that state permitting authorities need not re-evaluate their preconstruction permitting decisions as part of the Title V review process, *so long as those decisions were subject to public notice and comment procedures*.²⁶ *In the Matter of Big River Steel*, Order Responding to Petition No. VI-2013-10, dated October 31, 2017 at n20 ("This interpretation applies ... where a permitting authority issued a source-specific title I preconstruction permit subject to public notice and comment and for which judicial review was available. The EPA is not considering at this time whether other circumstances may warrant a different approach.").²⁷ Neither ITC's PBR registration application, which falsely indicated that the TCEQ had not established any prohibitions on the use of PBRs to authorize equipment and activities at the Terminal, nor the TCEQ's decision to grant this application were subject to public notice and comment requirements. Thus, the Executive Director has failed to show that the question of whether ITC's PBR Registration triggered NNSR preconstruction permitting requirements is beyond the scope of this Title V renewal project.

²⁶ The ITC Objection at 3-5 also makes clear these orders do not suggest that states may decline to consider the sufficiency of monitoring requirements established by preconstruction permits as part of a Title V review.

²⁷ Available electronically at: https://www.epa.gov/sites/default/files/2017-10/documents/big_river_steel_response2013.pdf

Fourth, while EPA's Big River Steel order indicates that EPA will not second-guess NSR permitting decisions for projects that have been subject to notice and comment requirements, that policy is not clearly applicable in cases like this one, where an operator's conduct across multiple permitting projects triggers NNSR preconstruction permitting requirements.²⁸ Moreover, the TCEQ did not rely upon this policy in its Response to Comments. While members of the public may have received public notice and an opportunity to comment on the issuance of Permit No. 95754 and its subsequent amendments, none of these projects provided a clear opportunity for members of the public to challenge ITC's artificial division of the construction of its Terminal into separate minor NSR permitting projects. Rather, the question considered by the TCEQ in each of these cases is whether ITC's application complied with the requirements at 30 Tex. Admin. Code § 116.111, and none of the requirements at § 116.111 clearly require the TCEQ to determine whether an applicant has requested a sham permit. The Title V permitting process is better designed to address this kind of question, because Title V renewal reviews are intended to comprehensively evaluate a source's compliance with applicable requirements during the Title V permit's term and are not limited in scope to an applicant's representations concerning a particular NSR permitting project. As in this case, an operator's attempts to modify permit terms, the operator's conduct in light of changes to nonattainment designations, as well as the permitting authority's remarks about its review of particular projects cohere to provide more comprehensive evidence of an operator's efforts to circumvent applicable requirements than would be available to those challenging a specific allegedly-discrete NSR permitting project.

²⁸ Additionally, EPA should abandon the policy articulated by the Big River Steel Order for the reasons discussed in Petition for Objection, *In the Matter of Clean Air Act Title V Permit No. 04169* at 6-10. Available electronically at: https://www.epa.gov/sites/production/files/2021-02/documents/gulf_coast_growth_ventures_petition_2-24-21.pdf

B. The Executive Director's Response to Comments for the Recent Amendment of Permit No. 95754 do not Rebut Petitioners' Demonstration that the Terminal Must Comply with NNSR Preconstruction Permitting Requirements.

In addition to his argument that NSR-related issues are not ripe for review as part of the Title V process, the Executive Director claims that his response to comments issued on April 5, 2021 concerning an amendment to Permit No. 95754 rebuts Petitioners' allegation that construction at the Terminal has triggered NNSR preconstruction permitting requirements. Response to Comments at 8.

This April 5, 2021 document provides the following explanation of the Executive Director's decision not to aggregate projects covered by synthetic minor emission caps A and B from Permit No. 95754, Special Condition No. 2:

A project aggregation review was conducted for Projects 211610 and 219916 (issued January 2015) for possible nonattainment circumvention due to requested authorization of Group Facility ID B as a distinct project from Group Facility ID A. In the review, a 2009 EPA action of Project Aggregation was used as a source in combination with information supplied by the Applicant—specifically, construction of Group A Facilities had commenced during the time Group B Facilities were proposed, the nature of customer contracts for for-hire bulk marine terminals, the overall project scope, and it was concluded that project aggregation was unwarranted.

As noted by the EPA – “When activities are undertaken three or more years apart, there is less of a basis that they have a substantial technical or economic relationship because the activities are typically part of entirely different planning and capital funding cycles. The fact that the earlier activities were constructed and operated independently for such a long period of time tends to support a determination that the latter activities are technically and economically unrelated and independent from the other earlier constructed activities. Even if activities are related, once three years have passed, it is difficult to argue that they are substantially related and constitute a single project. We note that the selection of a 3-year timeframe is long enough to ensure a reasonable likelihood that the presumption of independence will be valid but is short enough to maintain a useful separation between relevant construction cycles, consistent with industry practice.”

Permit No. 95754 Response to Comments at 15-16.²⁹

This response does not rebut Petitioners' demonstrations. While EPA may have determined that a three-year period was an appropriate timeframe to support non-aggregation in its 2009 review, the TCEQ did not reach this same conclusion when it first issued Permit No. 95754. Instead, Permit No. 95754, Special Condition No. 26 included language establishing a five-year (or 60 month) window for heightened review requirements to prevent circumvention of NNSR preconstruction permitting requirements:

Any PBRs used to authorize construction of new or modification of existing facilities at this site after 18 months but within 60 months of the issuance of this permit must be registered with the TCEQ. All permit applications and PBR registrations submitted shall identify the facilities and emissions authorized in this permit and explain why the proposed project should not be aggregated with the facilities authorized in this permit when determining whether the VOC emissions from these facilities are subject to nonattainment review.

This language must also be considered in conjunction with the permit reviewer's determination that the Terminal would eventually be operated as a major source of VOC. The permit engineer's 2012 statement that the Terminal would be operated as a major source was unequivocal.

The facts of EPA's 2009 review also differed materially from those addressed by the Executive Director. Specifically, EPA found it material that "earlier activities" it considered "were constructed and operated independently for ... a long period of time." In this case, equipment authorized by the initial issuance of Permit No. 95754 was still being built when ITC applied for an amendment to establish a second synthetic minor emission cap. Permit No. 95754 Response to Comments at 16 ("specifically, construction of Group A Facilities had commenced during the time

²⁹ Available electronically at:

https://www14.tceq.texas.gov/epic/eCID/index.cfm?fuseaction=main.download&doc_id=779609642021098&doc_name=RTC%5F95754%2Epdf&requesttimeout=5000 Petitioners note that the WCC content ID 5596361 the Executive Director provided to help the public find this April 5, 2021 document, Response to Comments at 7, is incorrect.

Group B Facilities were proposed[.]”). Thus, the timeline of projects for Group A and Group B facilities does not establish that ITC ever intended to operate the Group A facilities alone.

The 95754 Response to Comments provides the following explanation regarding the non-aggregation of emissions authorized by Permit 95754, Special Condition No. 2 for Group C:

A Project Aggregation review was conducted for Project 243313 (Issued July 11, 2017) due to possible nonattainment circumvention in regard to project increases of VOC emissions from the proposed amendment. In Project 243313, the Applicant proposed to authorize an expansion of storage capacity, including new storage tanks and associated piping and fugitive emissions (Known as Group Facility C).

A case-by-case aggregation review was conducted due to possible nonattainment circumvention concerns. The TCEQ permit reviewers used information provided by the Applicant to determine technical and economical relatedness of the projects.

The permit reviewers reviewed contemporaneous documentation provided by ITC on the two projects (Group Facility B and C), which was generated during the 2013-2016 time period, including: agreements with terminal customers, engineering firms and insurance underwriters; transactions of ITC’s board of directors; construction progress and start-up notifications provided to the TCEQ; and ITC’s prior statements to TCEQ concerning its plans for operations. Considering the overall timespan of a construction project (from initial “open season” discussions with customers through start of operations of new facilities), there was no indication that ITC had improperly avoided major NSR review through non-aggregation. All Group B facilities having been authorized in January 2015 will have started operation before any actual construction work began on the Group C facilities.

Permit No. 95754 Response to Comments at 16-17.

While this response suggests that the Executive Director reviewed a lot of information as part of his aggregation review, the Executive Director does not explain the relevance of this information or provide any characterization of the relevant facts established during his review. Despite the wealth of information the Executive Director had at his disposal, the only thing that seems to have mattered was “the overall timespan of a construction project[.]” And the Executive Director even fails to explain what this timespan was or how it supports his non-aggregation determination. Thus, the Executive Director’s description of his non-aggregation determination with respect to Group C does not provide support for that determination and it does not rebut

Petitioners' demonstrations in this matter. In particular, this response fails to address the TCEQ's previous determination that ITC intended to operate the Terminal as a major source, the division of permit amendments for the Terminal divided into projects with increases just below the major NSR trigger, and evidence that none of these projects was economically viable of its own.

C. The Proposed Permit Must Include a Schedule for ITC to Comply with NNSR Preconstruction Permit Requirements Even if it does not Incorporate PBR Registration No. 166799.

Finally, the Executive Director contends that he needn't consider whether PBR Registration No. 166799 triggered NNSR preconstruction permitting requirements because that PBR registration has not been incorporated into the Proposed Permit. Response to Comments at 9. This response is incorrect. Title V permits must include a schedule addressing non-compliance with applicable requirements at the time a permit is issued. 40 C.F.R. §§ 70.5(c)(8), 70.6(c)(3). PBR Registration No. 166799 was issued before the Proposed Permit was issued. Accordingly, the fact that PBR Registration No. 166799 is not incorporated into the Proposed Permit is irrelevant, so long as non-compliance resulting from ITC's application for the registration and the registration's issuance occurred before the Proposed Permit was issued.

VI. CONCLUSION

For the foregoing reasons, and explained in timely-filed Public Comments, the Proposed Permit is deficient. The Executive Director's Response to Comments failed to address commenters' significant concerns. Accordingly, the Clean Air Act requires the Administrator to object to the Proposed Permit.

Sincerely,

/s/ Gabriel Clark-Leach

Gabriel Clark-Leach

Environmental Integrity Project

1206 San Antonio Street

Austin, Texas 78701

(425) 381-0673 (phone)

gclark-leach@environmentalintegrity.org