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

IN THE MATTER OF	§	PETITION FOR OBJECTION
	§	
Clean Air Act Title V Permit (Federal	§	
Operating Permit) No. O1513	§	
	§	Permit No. O1513
Issued to the BP Amoco Chemical Company	§	Periiit No. 01313
	§	
Issued by the Texas Commission on	§	
Environmental Quality	§	
- ·	§	

# PETITION REQUESTING THAT THE ADMINISTRATOR OBJECT TO THE ISSUANCE OF PROPOSED TITLE V OPERATING PERMIT NO. 01513 FOR BP AMOCO CHEMICAL COMPANY'S TEXAS CITY CHEMICAL PLANT

Pursuant to section 42 U.S.C. § 7661d(b)(2), Environmental Integrity Project and Sierra Club ("Petitioners") hereby petition the Administrator of the U.S. Environmental Protection Agency ("Administrator" or "EPA") to object to Federal Operating Permit No. O1513 ("Proposed Permit") issued by the Texas Commission on Environmental Quality ("TCEQ" or "Commission") for the Texas City Chemical Plant, operated by the BP Amoco Chemical Company ("BP") in Galveston County, Texas.

#### I. PETITIONERS

The Environmental Integrity Project is a non-profit, non-partisan watchdog organization that advocates for effective enforcement of environmental laws. EIP has three goals: (1) to illustrate through objective facts and figures how the failure to enforce and 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. The Environmental Integrity Project has offices and programs in Austin, Texas and Washington, D.C.

The Sierra Club is a national nonprofit organization with 67 chapters and over 635,000 members dedicated to exploring, enjoying, and protecting the wild places of earth; to practicing and promoting the responsible use of earth's ecosystems and resources; to educating and enlisting humanity to protect and restore the quality of the natural and human environment; and to using all lawful means to carry out these objectives. The Lone Star Chapter of the Sierra Club has members who live, work, and recreate in areas affected by air pollution from BP's Texas City Chemical Plant.

#### II. PROCEDURAL BACKGROUND

This Petition addresses the TCEQ's renewal of Title V Permit No. O1513. BP filed its application to renew the permit on November 14, 2013. The Executive Director completed his technical review of BP's renewal application on April 28, 2014. Notice of the Draft Renewal Permit was published on June 12, 2014 and the public comment period for the Draft Permit ended on July 14, 2014. Environmental Integrity Project, Air Alliance Houston, and Sierra Club timely-filed Public Comments on the Draft Permit on July 14, 2014. (Exhibit 1), Public Comments Regarding Draft Renewal Title V Permit No O1513 ("Public Comments"). On December 16, 2016, the TCEQ's Executive Director issued his response to public comments and provided notice of the Proposed Permit. (Exhibit 2), Notice of Proposed Permit and Executive Director's Response to Public Comment on Permit No. O1513 ("Response to Comments"); (Exhibit 3), Proposed Permit No. O1513; (Exhibit 4), Statement of Basis for Permit No. O1513. The Executive Director declined to make any changes to address the permit deficiencies addressed by Petitioners' public comments.<sup>1</sup>

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<sup>&</sup>lt;sup>1</sup> While the Executive Director's Response to Comments states that the Draft Permit was revised to include a special condition requiring BP to submit an amendment application to convert its State-only Flexible Permit No. 1176 into a permit issued under Texas's federally-approved State Implementation Plan ("SIP"), Response to Comments at 23, the Proposed Permit does not contain any such condition.

The Executive Director forwarded the Proposed Permit and his Response to Comments to EPA for review. EPA's 45-day review period ran from December 20, 2016 until February 3, 2017. EPA did not object to the Proposed Permit. Because EPA failed to object to the Proposed Permit during its review period, members of the public have 60-days from the end of EPA's review period to petition EPA to object to the Proposed Permit. This Petition is timely-filed and requests that the Administrator object to the Proposed Permit.

#### III. LEGAL REQUIREMENTS

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

The Title V permitting program was created to resolve this problem by requiring each major source to obtain an operating permit that lists each applicable federally-enforceable requirement, contains enough information for readers to understand how applicable requirements apply to units at the permitted source, and establishes monitoring requirements that are sufficient to assure compliance with all applicable requirements. *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."); In the Matter of Southwestern Electric Power Company ("Pirkey Order"), Order on Petition No. VI-2014-01 at 13 (February 3, 2016) ("[A] title V permit may not preclude any entity, including the EPA, citizens or the state, from using any credible evidence to enforce emissions standards, limitations, conditions, or any other provision of a title V permit").

Because federal courts are often unwilling to enforce otherwise applicable requirements that have been omitted from or displaced by conditions in a Title V permit, state-permitting agencies and EPA must ensure that Title V permits accurately and clearly explain what each major source must do to comply with the law. *See, e.g., 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)).

Where a state permitting authority issues a Title V operating permit, EPA must object to the permit if it fails to include and assure compliance with all applicable requirements. 40 C.F.R. § 70.8(c). If EPA does not object, "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. GROUNDS FOR OBJECTION

### A. The Proposed Permit Fails to Establish a Compliance Schedule for BP to Obtain a Federally-Approved Major Source Permit

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

The Proposed Permit is deficient because it fails to establish a compliance schedule for BP to apply for and obtain a federally-approved major source preconstruction permit for projects authorized by BP's State-only Flexible Permit No. 1176. At the time BP's flexible permit was issued, Texas's minor source flexible permit program rules were not part of Texas's federally-approved State Implementation Plan. The Executive Director acknowledges that BP's Flexible Permit is not a SIP-approved authorization and that BP must obtain SIP-approved authorizations for projects authorized by that permit. Response to Comment at 22-23 ("The ED agrees that BP should obtain SIP approved authorizations for flexible permit changes made to the Texas City Chemical Plant").

BP's failure to obtain a SIP-approved major source permit authorizing projects at the Texas City Chemical Plant is a violation of the Clean Air Act and the Texas SIP. Accordingly, the Proposed Permit must establish a schedule for BP to correct its noncompliance.

The Proposed Permit incorporates BP's State-only Flexible Permit by reference at Special Condition No. 20. The Flexible Permit is also listed as an applicable requirement in the Proposed Permit's New Source Review Authorization References table.

#### 2. Applicable Requirement or Part 70 Requirement Not Met

If a source has failed to comply with applicable requirements at the time its Title V permit is issued, its Title V permit must include a schedule for the source to correct its non-compliance. 42 U.S.C. §§ 7661b(b), 7661c(a); 40 C.F.R. §§ 70.5(c)(8)(iii)(C), 70.6(c)(3); 30 Tex. Admin. Code

§ 122.142(e). Applicable requirements 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[.]" 40 C.F.R. § 70.2. The preconstruction permitting requirements in the Texas SIP at the time BP's Flexible Permit was issued required BP to obtain preconstruction authorizations for projects at the Texas City Chemical Plant through the issuance, amendment, or alteration of a New Source Review permit issued under the TCEQ's 30 Texas Administrative Code, Chapter 116, Subchapter B rules. 30 Tex. Admin. Code §§ 116.110, 116.111, 116.116. These rules, unlike Texas's minor source flexible permit program rules, require BP to apply BACT to each new and modified facility and to obtain a preconstruction authorization before commencing any project that would increase actual emissions from any existing unit, even if the actual increases could be maintained below previously permitted allowables.

#### 3. Inadequacy of the Permit Term

The Executive Director concedes in his Response to Comments that BP failed to "obtain SIP approved authorizations for flexible permit changes made to the Texas City Chemical Plant." Response to Comments at 22-23. BP's Flexible Permit was issued before EPA approved Texas's *minor source* flexible permit program into the Texas SIP. Accordingly, the flexible permit does not fulfill BP's obligation to obtain SIP-approved authorizations for projects at the Texas Chemical Plant. 42 U.S.C. § 7410(i) (with certain inapplicable exceptions, "no order, suspension, plan revision, or other action modifying any requirement of an applicable implementation plan may be taken with respect to any stationary source by the State or by the Administrator"); *Revisions to the New Source Review State Implementation Plan; Flexible Permit Program*, 79 Fed. Reg. 40666, 40667-68 (July 14, 2014) ("[T]he commenters appear to be implying that this approval will

transform state-only flexible permits issued since 1994 into federally approved permits[.]... This is not the case and the EPA strongly rejects any suggestion to the contrary"); *see also, e.g., Objection to Federal Operating Permit No. O1227*, Goodyear Tire & Rubber Company, Houston Chemical Plant (January 8, 2010) ("[T]he terms and conditions of flexibile permits based upon the requirements of 30 TAC Chapter 116, Subchapter G must be identified as State-only terms and conditions, pursuant to 40 CFR § 70.6(b)(2)).

BP's failure to obtain SIP-approved authorizations for construction projects at the Texas City Chemical Plant is a violation of the Texas SIP and the Clean Air Act. *See*, 30 Tex. Admin. Code §§ 116.110, 116.111, 116.116, 116.150, and 116.160. To avoid an enforcement action arising from BP's failure to obtain a SIP-approved major source preconstruction permit for units at the Texas City Chemical Plant, BP agreed in 2010 to convert its State-only Flexible Permit into a federally-enforceable permit under Texas's federally-approved preconstruction permit rules at 30 Texas Administrative Code Chapter 116, Subchapter B. (Exhibit 5) Letter from Ollie Niederhofer, HSSE Manager, Texas City Chemicals to Dr. Al Armendariz, Regional Administrator, U.S EPA Region 6 (December 17, 2010) ("BP commits to use a SIP-approved permit amendment process to covert the Texas City Chemical Plant flexible permit into a permit issued under 30 *Tex. Admin. Code* Chapter 116, Subchapter B"). This commitment was formalized in BP's annual compliance certification in January 2011. *Id*.

While BP did submit an application to convert its flexible permit into a SIP-approved Subchapter B major source permit, BP withdrew that application after the close of the public comment period on the Draft Permit and requested that the project to convert its State-only Flexible Permit into a SIP-approved major source permit be voided. (Exhibit 6) Technical Review Document for Project No. 167126, Permit No. 1176 ("On September 30, 2015 an[] email was

received from Mr. Neal Nygaard requesting that the amendment be voided as BP is no longer seeking conversion to a subchapter B permit").

After voiding its "de-flex" application, BP filed an application to renew its Flexible Permit under Texas's federally-approved minor source flexible permit program rules. (Exhibit 7), Flexible Permit Application Cover Letter (November 20, 2015) ("The purpose of this application is to renew and amend Permit 1176 under the SIP-approved Subchapter G [Flexible Permit Program] requirements"). This application cannot resolve BP's failure to obtain a federallyapproved major source permit, because, as the State of Texas expressly argued in briefing filed with the Fifth Circuit Court of Appeals, federally-approved flexible permits may only be issued to minor sources. Brief of Intervenor, State of Texas, In Support of Respondent Environmental Protection Agency, 2015 WL 1156712 at \*7 ("[M]inor new source review . . . pertains to the construction of new minor sources and to minor modifications of minor sources. A minor source is any source that is not a major source") and \*16 ("Texas's Flexible Permit Program is a state minor new source review program") (emphasis in original); Petition for Review, State of Texas v. EPA ("Flex I") (July 23, 2010) ("The FPP is a voluntary authorization mechanism for Minor NSR sources designed to enhance control of emissions while allowing for greater operational flexibility") (emphasis added).

Based on Texas's repeated representation that the flexible permit program may only be used to authorize projects at minor sources, the Fifth Circuit Court of Appeals upheld EPA's approval of the flexible permit program as a permitting mechanism that is limited to *minor sources*. *Environmental Integrity Project v. EPA* ("Flex II"), 610 Fed. Appx. 409, 410 (5th Cir. 2015) (unpublished) ("Under the [flexible permit] plan, an entity may obtain a flexible permit for emissions up to a specified aggregate limit *below the major source threshold*") (emphasis added).

Because BP has abandoned its commitment to obtain a federally-approved major-source permit authorizing units and emissions covered by its State-only Flexible Permit, the Proposed Permit must be revised to establish a schedule for BP to obtain a federally-approved major source permit for units covered by its State-only Flexible Permit.

#### 4. Issue Raised in Public Comments

This issue was raised on pages 24-25 of Petitioners' Public Comments. These comments, however, did not discuss EPA's approval of Texas's minor source flexible permit program or the judicial decision affirming EPA's of Texas's minor source flexible permit program, because EPA's program approval and the subsequent appeal of that approval did not occur until after the close of the public comment period. Likewise, Petitioners' comments did not discuss BP's decision to withdraw its application to convert its flexible permit into a federally-approved major source permit and the Company's subsequent filing of an application for a federally-approved minor source flexible permit, because those actions also occurred after the close of the public comment period. Petitioners may raise objections based on these events after the close of the public comment period, because "it was impracticable to raise such objections within such period" and "the grounds for such objection arose after such period." 42 U.S.C. § 7661d(b)(2).

#### 5. Analysis of State's Response

In his response to comments, the Executive Director agrees with Petitioners that BP must obtain a SIP-approved authorization for Flexible Permit projects at the Texas City Chemical Plant. Response to Comments at 22-23 ("The ED agrees that BP should obtain SIP approved authorizations for flexible permit changes made to the Texas City Chemical Plant"). He also agreed that the Draft Permit should be revised to require BP to obtain a federally-approved authorization and stated that the Draft Permit would be revised to include such a requirement. *Id.* The Executive Director, however, failed to carry through on his commitment to revise the Draft

Permit. The Proposed Permit does not contain the special condition identified in the Executive Director's response to comments, nor does it include any other language requiring BP to obtain a federally-approved major source permit authorizing flexible permit projects at the Texas City Chemical Plant.

### B. The Proposed Permit Fails to Assure Compliance with Emission Limits and Operating Requirements Established by BP's New Source Review Permits

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

The Proposed Permit is deficient because it fails to establish monitoring, reporting, and recordkeeping requirements that assure ongoing compliance with emission limits in New Source Review ("NSR") permits that it incorporates by reference and because the permit record does not contain a reasoned explanation supporting the Executive Director's determination that monitoring provisions in the Proposed Permit assure compliance with these requirements.

Proposed Permit, Special Condition No. 20 provides that NSR permits listed in the Proposed Permit's New Source Review Authorization References attachment are incorporated by reference into the Proposed Permit as applicable requirements.

Proposed Permit, New Source Review Authorization References table lists the following incorporated Chapter 116 NSR permits: Permit Nos. PSDTX782, 1176, 2244, 31936, 47273, and 96232. Proposed Permit at 224.

The Proposed Permit also incorporates by reference various permits by rule ("PBRs"). *Id.* at Special Condition Nos. 20-22 and page 224. Proposed Permit, Special Condition No. 22 establishes the following recordkeeping requirement:

The permit holder shall maintain records to demonstrate compliance with any emission limitation of standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative

of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily access and available as required by 30 TAC § 122.144.

The Statement of Basis for the Proposed Permit states that "[w]ith the exception of any emission units listed in the Periodic Monitoring or CAM Summaries in the FOP, the TCEQ Executive Director has determined that the permit contains sufficient monitoring, testing, recordkeeping, and reporting requirements that assure compliance with the applicable requirements." Statement of Basis at 56. None of the Periodic Monitoring or CAM Summaries address requirements in BP's NSR permits and PBRs, and the Statement of Basis does not provide a reasoned justification for the Executive Director's determination that existing provisions in BP's NSR permits and PBRs assure compliance with applicable permit limits and operating requirements.

#### 2. Applicable Requirement or Part 70 Requirement Not Met

Each Title V permit must contain monitoring, recordkeeping, and reporting conditions that assure compliance with all applicable requirements. 42 U.S.C. §§ 7661c(a) and (c); 40 C.F.R. § 70.6(a)(3) and (c)(1); *In the Matter of Wheelabrator Baltimore, L.P* ("Wheelabrator Order"), Permit No. 24-510-01886 at 10 (April 14, 2010). Emission limits in NSR permits and PBRs incorporated by reference into the Proposed Permit are "applicable requirements." 40 C.F.R. § 70.2. The rationale for the selected monitoring requirements must be clear and documented in the permit record. 40 C.F.R. § 70.7(a)(5); *In the Matter of United States Steel, Granite City Works* ("Granite City I Order"), Order on Petition No. V-2009-03 at 7-8 (January 31, 2011).

Texas's federally-approved minor source flexible permit rules require that monitoring systems for flexible permit sources "must accurately determine all emissions of the pollutants in terms of mass per unit of time" and that "[a]ny monitoring system authorized for use . . . must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation." 30 Tex. Admin. Code § 116.715(d).

As explained below, the Proposed Permit is deficient because (1) it fails to specify monitoring methods that assure compliance with emission limits in incorporated NSR permits, including BP's State-only Flexible Permit and PBRs and (2) the permit record does not contain a reasoned justification for the Executive Director's determination that monitoring methods included in the Proposed Permit assure compliance with applicable requirements in BP's preconstruction permits.

#### 3. Inadequacy of the Permit Term

#### a. Flexible Permit No. 1176

As explained in the previous section of this Petition, the Proposed Permit is objectionable because it fails to establish a schedule for BP to obtain proper major source authorizations for projects authorized by BP's state-only minor source Flexible Permit. The Proposed Permit is also deficient because the monitoring system required by BP's Flexible Permit does not accurately determine actual emissions from each covered unit in terms of mass per unit of time and it fails to assure compliance with emission caps in BP's Flexible Permit.

And while the Executive Director disagrees that the Proposed Permit's monitoring provisions are objectionable, the permit record in this case does not provide a reasoned justification for the Executive Director's determination that monitoring methods specified by BP's Flexible

Permit are consistent with requirements in the TCEQ's flexible permit program rules and assure ongoing compliance with flexible permit emission caps.

 $NO_x$  and CO

BP's Flexible Permit establishes the following hourly and annual emission caps for  $NO_x$  and CO that apply to nine combustion units at the Texas City Chemical Plant:

N	Ox	C	О
lbs/hr	TPY	lbs/hr	TPY
39	158.54	86.01	388.54

To determine compliance with these emission caps, the Proposed Permit gives BP a choice to calculate NO<sub>x</sub> and CO emissions from two of its mid-sized combustion units (HF-204 and HF-601) using stack test data, if available, vendor guarantee emission factors, or AP-42 emission factors. Flexible Permit No. 1176, Special Condition Nos. 7 and 9.<sup>2</sup> Because the Flexible Permit does not specify which method BP must use to calculate emissions from its two mid-sized combustion units, it appears that BP has discretion to choose amongst the three options. Thus, if any of the three options fails to assure compliance with applicable requirements, the Administrator must object to the Proposed Permit. In this case, all three of the potentially applicable monitoring methods are objectionable.

The Proposed Permit is deficient—regardless of which compliance method listed in the permit BP uses—because the listed compliance methods (1) do not require BP to use a monitoring system that reliably determines emissions from all units covered by the above-listed NO<sub>x</sub> and CO

<sup>&</sup>lt;sup>2</sup> While the permit requires some of BP's larger combustion units to directly monitor NOx and CO emissions using CEMS, it does not require CEMS for HF-204 and HF-601. *See*, id. at Special Condition No. 9(A) (listing combustion units at the Texas City Chemical Plant equipped with NO<sub>x</sub> and CO CEMS).

caps in terms of mass per unit of time under all authorized operating scenarios; 30 Tex. Admin. Code § 116.715(d); (2) do not account for variations in actual pollution control allowed by the permit;<sup>3</sup> and (3) do not assure ongoing compliance with the short-term and annual emission caps.

While periodically conducted stack tests representative of an emission unit's actual performance across all operating scenarios authorized by a permit may provide a reliable basis for determining actual emissions from some units authorized by a flexible permit, the stack test requirement in BP's Flexible Permit does not. BP's Flexible Permit does not require BP to conduct periodic stack testing on units HF-204 and HF-601. Instead, the Flexible Permit only required BP to conduct a single stack test prior to February 28, 2003 to determine NO<sub>x</sub> and CO emissions from units HF-204 and HF-601. Flexible Permit No. 1176 at Special Condition No. 15. It is well-established that a single stack-test is not sufficient to assure ongoing compliance with emission limits over the operational life of an emission unit. *See*, *e.g.*, *In the Matter of Luke Paper*, Permit No. 24-001-00011, at 5-6 (Oct. 18, 2010) ("EPA agrees that such an infrequent testing requirement is not adequate to assure compliance with an hourly limit").

The permit record does not contain information supporting the Executive Director's determination that vendor guarantees accurately determine NO<sub>x</sub> and CO emissions from BP's combustion units in terms of mass per unit of time and assure ongoing compliance with NO<sub>x</sub> and CO flexible permit emission caps. This is so for several reasons. First, the permit does not identify the specific the guaranteed emission rate. Where a Title V permit allows an operator to use an emission factor to determine compliance with an applicable limit, the relevant emission factor must

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<sup>&</sup>lt;sup>3</sup> Letter from Zak Covar, Executive Director, TCEQ to Ron Curry, Regional Administrator, U.S. EPA Region 6 (December 9, 2013) at 4 ("Control technology flexibility is available under the FPP for existing facilities to the extent that an applicant may over-control one facility, i.e. with technology or practices that are more stringent than BACT, on order to avoid adding additional controls at another facility, provided that the net sum of emissions is equivalent to (or better than) the emissions if BACT were applied to each facility. Operational flexibility is available under the flexible permit as long as control requirements are met and compliance with emission caps or individual emission limits are maintained").

be listed in the permit. In the Matter of United States Steel, Granite City Works ("Granite City II Order"), Order on Petition No. V-2011-2, at 9-12 (Dec. 3, 2012) (granting claim, because permit failed to specify which emission factors operator was required to use to demonstrate compliance with applicable requirements). Second, the permit record in this case does not provide any information about the operational ranges that BP must maintain for the guarantee to apply. Because the Proposed Permit does not directly require BP to operate its units consistent with conditions in applicable vendor guarantees, the permit record in this case does not demonstrate that vendor guarantees are a reliable indicator of unit emissions across all operating scenarios authorized by the permit. Granite City I Order at 13-14 ("IEPA has failed to provide an explanation why use of the emission factors is adequate to assure compliance. With a few exceptions, EPA does not recommend the use of emission factors to develop source-specific permit limits or to determine compliance with permit requirements . . . . IEPA either must justify in the record why these emission factors are representative of . . . operations . . . and provide sufficient evidence to demonstrate that the emissions will not vary by a degree that would cause an exceedance of the standards, or IEPA must determine and adequately support another mechanism to assure compliance with the applicable emission limits").

Finally, AP-42 emission factors are a disfavored method for determining compliance with permit limits, because they reflect average unit performance across an entire industry and are often based on outdated performance data. *See*, *e.g.*, U.S. Environmental Protection Agency, Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources (cautioning that emission factors should be used for site-specific purposes as a "last resort"). EPA has clearly stated that AP-42 emission factors should only be used as a last resort to determine compliance with emission limits. *Id.* And while it *may* be appropriate to use AP-42 emission

factors in certain limited circumstances to determine compliance with *unit-specific* requirements, AP-42 emission factors should not be used to calculate unit emissions in terms of mass per unit of time to demonstrate compliance with a multi-unit emission cap. The permit record in this case does not provide any support for the Executive Director's determination that AP-42 emission factors reliably predict actual emissions from BP's combustion units and the Proposed Permit does not identify operational limits or requirements that assure BP's units will be operated consistent with conditions presumed by the relevant emission factors.

The Proposed Permit is also deficient, because none of the NO<sub>x</sub> or CO monitoring options listed for units HF-204 and HF-601 require BP to monitor fuel temperature and pressure. As Petitioners explained in their public comments, BP determined that its indirect emission monitoring protocol that did not take account of fuel temperature and pressure under-predicted actual emissions from combustion units at its Toledo refinery by 20%. Public Comments at 5, n13. The permit record does not address this fact or explain why failure to monitor and control these parameters does not lead to the undercounting of emissions at the Texas City Chemical Plant.

#### **VOC** and Benzene

BP's Flexible Permit establishes the following VOC and benzene emission caps that apply to combustion units, flares, cooling towers, process fugitives, loading operations, and storage tanks:

VO	OC	Ben	zene
lbs/hr	TPY	lbs/hr	TPY
261.23	321.29	19.67	29.71

The monitoring requirements established for flares and storage tanks fail to assure compliance with the VOC and benzene emission caps. The permit record for this project does not contain a reasoned justification for the Executive Director's contrary determination.

#### **Flares**

The annual and hourly VOC caps in BP's Flexible Permit include emissions from three steam assisted flares (FL-201, FL-401, and FL-351). According to the permit, "[t]he VOC destruction efficiency of 98 percent shall be used to calculate VOC emissions" from BP's flares. Flexible Permit No. 1176, Special Condition No. 8. The permit, however, fails to establish requirements sufficient to assure that BP's flares will continuously operate at the presumed destruction efficiency.

Petitioners' comments identified studies showing that the presence of a pilot light is not enough to assure that BP's flares will continuously achieve the presumed level of performance and asked the Executive Director to establish additional monitoring requirements addressing problems, like over-steaming, excess aeration, high winds, and flame liftoff that are known to impair the performance of refinery and chemical plant flares. Public Comments at 8.

After the Draft Permit public comment period closed, EPA released additional information supporting Petitioners' contention that the Proposed Permit's flare monitoring requirements fail to assure compliance with applicable VOC and benzene emission caps.<sup>4</sup> Specifically, based on its extensive review of data provided by industry, EPA found that flares complying with monitoring requirements equivalent to those in the Proposed Permit only achieved an average destruction efficiency of 93 percent. *Petroleum Refinery Sector Rule: Flare Impact Estimates*, U.S. EPA,

<sup>&</sup>lt;sup>4</sup> This information is properly raised for the first time in this Petition, because it was not available during the public comment period. 42 U.S.C. § 7661d(b)(2).

EPA-HQ-OAR-2010-0682-0209 at 9 (January 16, 2014).<sup>5</sup> Because available information demonstrates that flares implementing monitoring methods equivalent to those in the Proposed Permit do not perform at the level that the permit presumes, the Proposed Permit's monitoring requirements do not reliably determine emissions from BP's flares in terms of mass per unit of time and fail to assure compliance with applicable VOC and benzene emission caps. Accordingly, the Administrator must object to the Proposed Permit.

#### Storage Tanks

The annual and hourly VOC emission caps in BP's Flexible Permit include emissions from 17 floating roof tanks at the Texas City Chemical Plant. The permit includes the following two special conditions that explain how tank emissions should be calculated to determine compliance with the VOC emission caps:

For purposes of assuring compliance with VOC emission limitations, the holder of this permit shall monitor monthly tank levels and monthly hours of pumping to establish throughputs for comparison with the total maximum throughput used in the emission cap calculations in the permit application. Maximum hourly pump rate shall be used to calculate short-term emissions in the absence of actual pump rate data. Air Emissions Inventory records including actual emissions for each tank and representative examples of calculation methodology shall be maintained for at least two years. These records shall be made available to representatives of the TCEQ upon request.

Flexible Permit No. 1176, Special Condition No. 6(F).

#### And

Rolling 12-month emissions for tanks and loading operations shall be calculated consistent with the methodology outlined in: (a) AP-42 "Compilation of Air Pollution Factors, Chapter 12—Storage of Organic Liquids" and (b) the TCEQ publication titled "Technical Guidance Package for Chemical Sources—Storage Tanks."

<sup>&</sup>lt;sup>5</sup> Available electronically at: <a href="https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OAR-2010-0682-0209&contentType=pdf">https://www.regulations.gov/contentStreamer?documentId=EPA-HQ-OAR-2010-0682-0209&contentType=pdf</a>

*Id.* at Special Condition No. 6(H).

These Special Conditions do not assure compliance with the Plant's hourly and annual VOC emission caps. While the first special condition is meant to ensure that tank throughput does not exceed the maximum throughput used to calculate tank contributions to BP's emission caps, the condition fails, because the permit does not establish maximum throughput limits. Because actual storage tank throughput may exceed maximum represented throughput, monitoring that relies on maximum represented throughputs as a constraint on emissions will under-represent actual emissions in cases where actual throughput exceeds the maximum represented throughput. See, e.g., In the Matter of Williams Four Corners, Sims Mesa Compressor Station, Order on Petition No. VI-2011-\_\_\_, at 13-16 (July 29, 2011) (While agency's RTC indicated that proper operation and maintenance of engines assured compliance, agency did not explain which permit terms ensured proper operation and maintenance of the engines).

The second condition, which tells BP how to calculate actual tank emissions to determine compliance with applicable VOC emission caps fails to assure compliance with the caps, because the AP-42 emission factors that the permit directs BP to use do not account for site-specific variables such as the age and condition the relevant tanks and operating conditions at the chemical plant. *See*, e.g., U.S. EPA, Compilation of Air Pollutant Emission Factors, Volume 1: Stationary Point and Area Sources (cautioning that AP-42 emission factors should only be used as a "last resort" for site-specific compliance purposes and nothing that "one should be aware of their limitations in accurately representing a particular facility"). Moreover, as Petitioners' public comments explain, recent studies demonstrate that AP-42 emission factors may significantly under-predict actual VOC emissions from storage tanks at chemical plants and petroleum refineries. Public Comments at n26. This is, in part, because leaks and other non-routine operating

scenarios like roof landings that regularly occur at large industrial sources with large numbers of storage tanks, that result in large VOC releases are not accounted for by the AP-42 emission factors.

The Administrator should object to the Proposed Permit because its monitoring and compliance demonstration methods do not accurately determine VOC and benzene emissions from BP's flares and storage tanks in terms of mass per unit of time, because the permit methods will likely underestimate actual emissions from units at the Texas City Chemical Plant, and because the permit methods do not assure ongoing compliance with applicable emission caps.

#### Particulate Matter

BP's Flexible Permit establishes the following annual and hourly particulate matter emission caps that apply to combustion units and cooling towers at the Texas City Chemical Plant:

$\mathrm{PM}_{10}$			
lbs/hr	TPY		
9.06	39.68		

The PM monitoring methods established by the Flexible Permit do not accurately determine emissions from covered units at the Texas City Chemical Plant in terms of mass per unit of time and do not assure compliance with the hourly and annual emission caps in BP's Flexible Permit.

#### Cooling Towers

While the hourly and annual  $PM_{10}$  emission caps in BP's Flexible Permit include emissions from BP's two cooling towers (CT-351 and CT-451), the permit fails to specify any monitoring or testing requirements to determine  $PM_{10}$  emissions from these units. Because the Proposed Permit

fails altogether to identify *any* monitoring or testing requirements, it also fails to require monitoring that accurately determines PM<sub>10</sub> emissions from BP's cooling towers in terms of mass per unit of time and does not assure compliance with the applicable PM<sub>10</sub> emission caps. *Wheelabrator Order* at 10.

#### b. Permits by Rule

According to the Proposed Permit's New Source Review Authorization References by Emission Unit table, more than 126 units and unit groups at the Texas City Chemical Plant are subject to requirements in Texas's Chapter 106 Permits by Rule. Proposed Permit at 225-236. Neither the Proposed Permit nor the PBR rules listed in the Proposed Permit's New Source Review Authorization References table specify monitoring methods that assure compliance with applicable PBR requirements for any of these units or unit groups. For example, BP claims the PBR at 106.472 (9/4/2000) to authorize emissions from 79 tanks and loading facilities. This PBR contains nothing more than a list of chemicals that may be stored in units under the rule. While the Proposed Permit does identify the TCEQ's PBR general requirements at 30 Tex. Admin. Code Chapter 106, Subchapter A as applicable requirements and includes Special Condition Nos. 21 and 22, which are related to PBR recordkeeping, these provisions do not specify which monitoring methods—if any—are necessary to assure compliance with applicable PBR requirements. Rather, these provisions provide a non-exhaustive menu of options that BP may pick and choose from at its discretion to demonstrate compliance. This broad, non-exhaustive list does not assure compliance with PBR requirements. In fact, the laundry list of options for monitoring compliance with PBR requirements is so vague that it is virtually meaningless:

The permit holder shall maintain records to demonstrate compliance with any emission limitation or standard that is specified in a permit by rule (PBR) or Standard Permit listed in the New Source Review Authorizations attachment. The records shall yield reliable data from the relevant time period that are representative

of the emission unit's compliance with the PBR or Standard Permit. These records may include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. These records shall be made readily accessible and available as required by 30 TAC § 122.144.

Proposed Permit, Special Condition No. 22.

This provision allows BP to determine which records and monitoring provide sufficiently "reliable data" effectively outsourcing the Executive Director's obligation to specify the monitoring method(s) that will assure compliance with each emission limit or standard established by PBRs incorporated by reference into the Proposed Permit. This vagueness also prevents EPA and the public from effectively evaluating whether the monitoring methods BP actually uses to determine compliance with PBR requirements are consistent with Title V. For example, Petitioners would likely review and/or challenge monitoring relying upon undefined "engineering calculations" to determine compliance, unless the permit record contained information showing that such calculations assure compliance with applicable emission limits.

Neither the Proposed Permit, nor the accompanying Statement of Basis provide support for the Executive Director's determination that the Proposed Permit specifies monitoring methods that assure compliance with PBR requirements. Because this is so, the Proposed Permit is deficient. Wheelabrator Order at 10.

#### 4. Issues Raised in Public Comments

Petitioners identified these issues on pages 1-15 of their Public Comments.

#### 5. Analysis of State's Response

### a. The Executive Director's Characterization of the Flexible Permit Program is Misleading

The Executive Director "disagrees that a flexible permit holder must necessarily comply with more detailed, facility-specific monitoring requirements than other permit holders." Response to Comments at 11. The Executive Director makes two claims in support of this position, each of which attempts to minimize the significance of operational flexibility, which is a key component of the program. First, the Executive Director explains that operational flexibility does not apply to *new* units constructed under a flexible permit, which must comply with BACT requirements on a unit-by-unit basis. Response to Comments at 10-11. Second, the Executive Director contends operational flexibility for existing units modified under a flexible permit—which allows units covered by an emission cap to be under-controlled, so long as all units covered by the cap comply with an emission cap that reflects BACT averaged across all units covered by the cap—does not complicate compliance monitoring, because each such unit must still comply with unit-specific provisions in the source's customized control plan. *Id*.

The Executive Director's response does not rebut Petitioners' demonstration that the permit record in this case is incomplete and that the Proposed Permit fails to assure compliance with requirements in Texas's flexible permit rules and emission caps in BP's Flexible Permit. First, there is no evidence in the permit record establishing that the combustion units (HF-204 and HF-601), the flares (FL-201, FL-401, and FL-351), the various storage tanks, and the cooling towers (CT-351 and CT-451) covered by BP's Flexible Permit were constructed as new units under the flexible permit that are therefore subject to unit-specific BACT requirements in addition to the multi-unit emission caps established by the Flexible Permit. The flexible permit doesn't seem to establish any unit-specific BACT-based limits for these units. Therefore, to the extent that the

Executive Director relies on his presumption that compliance with unit-specific BACT requirements established for new units authorized by BP's Flexible Permit assures compliance with the permit's multi-unit emission caps, the Proposed Permit is deficient because it does not establish enforceable unit-specific BACT limits for the units identified in Petitioners' public comments.

Second, to the extent that the Executive Director presumes that compliance with representations in BP's customized control plan for existing units at the Texas City Chemical Plant assures compliance with applicable emission caps, the Proposed Permit is deficient because it does not identify the applicable customized control plan as an applicable requirement or describe the requirements in that plan. Unspecified requirements in BP's customized control plan that are not incorporated into the Proposed Permit are not practicably enforceable and do not assure ongoing compliance with applicable flexible permit emission caps.

Finally, the Executive Director's conclusion that flexible permits need not include unitspecific monitoring requirements different from those found in other kinds of permits conflicts
with the Commission's flexible permit rules. Flexible permits, unlike traditional permits, must
require monitoring systems that accurately determine emissions from each unit. 30 Tex. Admin.
Code § 116.715(d). Each Flexible permit must also specify methods for calculating short-term
and annual emissions from each type of unit it authorizes. *Id.* at § 116.715(c)(5)(B). There are no
analogous requirements in the Commission's traditional NSR permit rule at 30 Tex. Admin. Code
§ 116.115. These heightened monitoring requirements reflect the TCEQ's judgment that
monitoring rules that assure compliance with traditional NSR permits are not sufficient to assure
compliance with flexible permit requirements.

Because the permit record, including the Executive Director's response to public comments, does not support the Executive Director's determination that monitoring requirements in BP's Flexible Permit comply with unique monitoring requirements in the Commission's flexible permit rules and that monitoring requirements in BP's Flexible Permit assure ongoing compliance with multi-unit emission caps establish by the permit, the Administrator must object to the Proposed Permit.

b. The Executive Director's Response to Comments Fails to Rebut Petitioners' Demonstration that Monitoring Provisions in BP's Flexible Permit Do Not Assure Compliance with Applicable NO<sub>x</sub> and CO Emission Caps

In response to Petitioners' argument that the permit record fails to establish that monitoring requirements in BP's Flexible Permit for units HF-204 and HF-601 assure compliance with applicable emission caps for NO<sub>x</sub> and CO, the Executive Director states:

The ED disagrees that these conditions do not provide an adequate assurance of compliance with emission limits from these sources. CEM, stack testing, or emission calculations are accepted protocols for determining compliance with emission limits. The ED disagrees that annual stack testing should be required of BP to establish source specific emission factors. AP-42 emission factors are conservative in nature and often overestimate emissions. The rationale for the emission factors and emission calculations is included in the application representations that were made during the NSR permit action that authorized these terms and conditions.

#### Response to Comments at 11.

The Executive Director's unsupported contention that stack testing or emission calculations are accepted protocols, apparently in every circumstance, for determining compliance with emission limits does not rebut Petitioners' demonstration that the monitoring provisions in BP's Flexible Permit fail to assure ongoing compliance with applicable emission caps.

Petitioners do not disagree that stack testing and emission calculations are often components of a well-designed monitoring protocol. Petitioners, however, disagree that a single stack test by itself or vendor guarantee or AP-42 emission factors without additional parametric monitoring are sufficient to assure compliance with applicable emission caps. The Executive Director's mere say-so does not answer this objection.

Likewise, the Executive Director's statement that information supporting the applicable monitoring protocol is available in BP's Flexible Permit applications is not helpful. BP's flexible permit has been amended and revised many times since it was issued. (Exhibit 8), TCEQ IMS Permit Tracking Database, List of Projects for Flexible Permit 1176. It is not reasonable to expect Petitioners to obtain copies of every application BP has submitted related to its Flexible Permit, read them all, and then determine which representation related to source monitoring are still relevant and support the sufficiency of the monitoring methods listed in BP's Flexible Permit. Instead, the permit record for this project must provide a reasoned justification for the Executive Director's determination that monitoring methods in the Proposed Permit assure compliance with all applicable requirements. Because the record does not contain this information, the Proposed Permit is deficient and the Administrator must object to it.

The Executive Director provides the following information that incorrectly purports to address Petitioners' concerns based on BP's experience using emission factors at its Toledo Refinery:

The ED wishes to draw commenters' attention to several useful resources that members of the public may use to gain access about site-specific compliance information. TCEQ's Central Registry web page contains detailed information about unit capacities, emission rates, and emission determination methods for all facilities at sites subject to emission inventory reporting requirements under 30 TAC § 101.10 (<a href="http://www15.tceq.gov/crpub/">http://www15.tceq.gov/crpub/</a>). In addition to emissions inventory information, Central Registry also contains a listing of recent compliance

investigations for a site as well as reported emission events. Additionally, members of the public may review compliance history scores through TCEQ's compliance history database ( <a href="http://www2.tceq.texas.gov/oce/ch/">http://www2.tceq.texas.gov/oce/ch/</a>).

#### Response to Comments at 11.

The Executive Director's non-response suggests that he failed entirely to consider BP's assertion that monitoring that did not take into account fuel temperature and fuel pressure led the Company to underestimate actual emissions from its combustion units by 20% had any bearing on his determination that monitoring methods in the Flexible Permit—which do not require BP to monitor fuel temperature and pressure—assure compliance with applicable emission caps and the flexible permit program's requirement that monitoring systems accurately determine actual emission in terms of mass per unit of time. Accordingly, the Executive Director failed to respond to significant comments submitted by Petitioners and the Administrator must object to the Proposed Permit. Wheelabrator Order at 4-8 (objecting to Proposed Permit because MDE failed to address significant comments).

c. The Executive Director's Response to Comments Fails to Rebut Petitioners' Demonstration that the Proposed Permit Does Not Assure Compliance with Applicable VOC and Benzene Emission Caps

#### Flares

In response to Petitioners' comments concerning the Draft Permit's flare monitoring provisions, the Executive Director explained that: (1) flares like the ones at the Texas City Chemical Plant have a low probability of visible emissions when operated correctly, (2) visible emissions are subject to Method 22 opacity monitoring requirements, (3) there is no currently-available, EPA-approved mechanism for testing or monitoring emissions from an operating flare; and (4) the visible emission monitoring, pilot flame monitoring, composition flow meter, and

composition analyzer requirements in BP's flexible permit are consistent with the revised refinery sector rule, 40 C.F.R. Part 63, Subpart CC. Response to Comments at 12-13.

The Executive Director's first two arguments related to visible emissions requirements are not responsive to Petitioners' comments because Petitioners did not comment about visible emissions from BP's flares. Instead, Petitioners demonstrated that the Proposed Permit fails to assure compliance with VOC emission caps and limits. The Executive Director's focus on visible emissions is surprising, because studies cited in Petitioners' comments explain that assist steam used to minimize visible emissions may interfere with the proper combustion of VOC.

The Executive Director's third contention, that there is no currently-available EPA-approved mechanism for testing or monitoring emissions from an operating flare, is incorrect. EPA has approved monitoring requirements that ensure that flares meet 98-percent destruction efficiency at all times. *Petroleum Refinery Sector Risk and Technology Review and New Source Performance Standards*, 80 Fed. Reg. 75175, 75211 (December 1, 2015). These requirements are found at 40 C.F.R. § 63.670. While these monitoring requirements had not been approved at the time Petitioners filed their public comments, they were approved well before the Executive Director issued his Response to Comments. Indeed, the Executive Director's fourth point directly refers to EPA's refinery rule without acknowledging that the rule establishes monitoring requirements sufficient to assure ongoing compliance with the 98% destruction efficiency presumed by BP's Flexible Permit.

The Executive Director's fourth point, that monitoring requirements in BP's Flexible Permit are consistent with portions of EPA's revised refinery flare rule, is not sufficient to show that the Proposed Permit's BP's flares will comply with combustion zone operating limits the petroleum refinery rule establishes to assure ongoing compliance with 98% destruction efficiency

requirements for flares or that BP is required to meet these—or other appropriate—operating limits to demonstrate compliance with applicable flexible permit requirements. Instead, the permit provides that "[t]he VOC destruction efficiency of 98 percent shall be used to calculate VOC emissions." Flexible Permit No. 1176, Special Condition No. 8; *see also*, Response to Comments at 12 ("If a flare meets the requirements of § 60.18 or § 63.11, the destruction efficiency is assumed to be 98-99%"). As EPA explained in its refinery rulemaking and as Petitioners explained in their Public Comments, monitoring requirements like those contained in BP's Flexible Permit fail to assure that BP's flares will achieve the presumed level of control on an ongoing basis. Accordingly, the Administrator must object to the Proposed Permit.

#### Storage Tanks

The Executive Director offers the following response to Petitioners' comments concerning storage tank monitoring requirements in BP's flexible permit:

The ED disputes the claim that AP-42 factors are inappropriate for calculating emissions from storage tanks. AP-42 is an accepted methodology for calculating emissions based on industry accepted emission factors. AP-42 emission factors are conservative in nature and often overestimate emissions.

#### Response to Comments at 13.

The Executive Director's unsupported contention that AP-42 emission factors are appropriate for determining emissions from storage tanks fails to establish that monitoring requirements in BP's Flexible Permit assure compliance with applicable emission caps and the flexible permit program requirement that monitoring systems accurately determine actual emissions from covered units in terms of mass per unit of time. In fact, the Executive Director's contention that AP-42 emission factors often over-estimate actual emissions supports Petitioners' contention that monitoring provisions in the permit do not accurately determine storage tank emissions in terms of mass per unit of time. Moreover, the Executive Director's cursory assertion

is contrary to well-established conclusions about the utility of AP-42 emission factors in the compliance context. *See*, *e.g.*, *Granite City I Order* at 13-14 ("IEPA has failed to provide an explanations why use of emission factors is adequate to assure compliance. With a few exceptions, EPA does not recommend the use of emission factors to . . . determine compliance with permit requirements." and "IEPA either must justify in the record why these emission factors are representative of . . . operations . . . and provide sufficient evidence to demonstrate that emissions will not vary by a degree that would cause an exceedance of standards, or IEPA must determine and adequately support another mechanism to assure compliance with applicable emission limits").

Because the Executive Director's conclusory response to Petitioners' public comments fails to show that AP-42 emission factors assure compliance with BP's Flexible Permit emission caps and accurately determine actual VOC and benzene emissions from BP's storage tanks in terms of mass per unit of time, the Administrator must object to the Proposed Permit. The Administrator should also object because the permit record does not contain a reasoned justification for the Executive Director's determination that AP-42 emission factors and throughput monitoring required by BP's Flexible Permit assure compliance with applicable emission caps and accurately determine actual emissions from BP's storage tanks in terms of mass per unit of time.

d. The Executive Director's Response to Comments Fails to Rebut Petitioners' Demonstration that the Proposed Permit Fails to Assure Compliance with Flexible Permit PM Emission Caps

#### Cooling Towers

The Executive Director offers the following response to Petitioners' contention that the Proposed Permit is deficient because it fails to require any monitoring to determine PM emissions from BP's cooling towers:

The ED disagrees that a protocol for PM<sub>10</sub> monitoring is not included for BP's cooling towers CT-351 and C-451 in NSR permit 1176/PSDTX782. SC 5 states, "The holder of this permit shall keep records maintained on-site to demonstrate compliance with the annual TPY emission limits specified by the flexible permit for the following compounds: NO<sub>x</sub>, CO, PM, SO<sub>2</sub>, and VOC.["] The application representation representations for the cooling towers were made during the NSR permit action.

The applicant has submitted a renewal application for NSR permit 1176 (project 176209). During review of project 176209, the ED has preliminarily determined that for cooling towers, additional monitoring to demonstrate compliance with particulate matter emission limits for the cooling towers is beneficial. When a minor NSR permit lacks sufficient monitoring for an existing facility, the ED's current practice is to insert additional monitoring requirements into the NSR permit at the time the permit is renewed. In this situation the ED believes a similar approach is appropriate.

#### Response to Comments at 13-14.

This response confirms rather than rebuts Petitioners' demonstration that the Proposed Permit is deficient because it fails to assure compliance with particulate matter emission caps in BP's Flexible Permit. While the Executive Director contends that BP's Flexible Permit establishes a "protocol" for monitoring PM<sub>10</sub> emissions from BP's cooling towers, he fails to say what the protocol is and he does not identify information in the permit record that establishes a monitoring protocol. The requirement to maintain records demonstrating compliance with TPY PM<sub>10</sub> emission limits is not itself a monitoring protocol and only assures compliance if the information in BP's compliance records is based upon reliable monitoring information. *Granite City I Order* at 7-8 (state agency failed to explain how recordkeeping and pollution control inspection requirements, in the absence of any actual monitoring requirements, would assure compliance with applicable PM limits and yield reliable data representative of compliance with the permit). Moreover, this recordkeeping provision does not even require BP to demonstrate compliance with applicable lb/hr PM<sub>10</sub> emission limits.

The only specific information in the permit record about the monitoring protocol the Executive Director believes BP must use to determine emissions from its cooling towers is that the protocol fails to assure compliance with applicable limits and will likely be changed when BP's Flexible Permit is renewed. Response to Comments at 13-14. While Petitioners appreciate that the Executive Director realizes that BP's Flexible Permit's monitoring provisions must be improved, this realization does not excuse the Executive Director from his obligation to assure that the Proposed Permit includes conditions necessary to assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a) and (c).

e. The Executive Director's Response to Comments Does not Rebut Petitioners' Demonstration that the Proposed Permit Fails to Specify Monitoring Methods that Assure Compliance with PBR Requirements

The Executive Director offers the following response to Petitioners' straight-forward claim that the Proposed Permit fails to specify monitoring requirements that assure with PBRs that BP has claimed for units at the Texas City Chemical Plant:

The ED disagrees that specific monitoring has to be included for every PBR held at the site. This is because all emission limitations and standards, including those operational requirements, monitoring, and record keeping that assure compliance with all applicable requirements at the time of permit issuance are specified in the PBR incorporated by reference. When these requirements are not specified in the referenced PBR, then they are specified in 30 TAC § 106.4(a)(1). Also, as stated in Special Terms and Condition 22 of the draft permit, BP is required to keep records that include, but are not limited to, production capacity and throughput, hours of operation, material safety data sheets (MSDS), chemical composition of raw materials, speciation of air contaminant data, engineering calculations, maintenance records, fugitive data, performance tests, capture/control device efficiencies, direct pollutant monitoring (CEMS, COMS, or PEMS), or control device parametric monitoring. BP is required to keep these records for demonstrating compliance in the annual permit compliance certification report for the Title V permit. Therefore, the draft permit contains sufficient monitoring requirements for PBRs and assures that BP must comply with its PBR limits. These requirements assure compliance and enforceability of PBRs. In addition, the permit holder must submit permit compliance certification (PCC) and deviation reports periodically to assure compliance with the requirements of O1513 and all PBRs listed in the Draft Permit.

#### Response to Comments at 14-15.

There are several problems with this response. First, the Executive Director's claim that PBR rules cited in the Proposed Permit's New Source Review Authorizations table include all applicable limits and conditions necessary to assure compliance with those limits is untrue. In fact, the Executive Director abandons this claim in his response to comments objecting to the Proposed Permit's incomplete incorporation by reference of PBR requirements and admits that key information about applicable PBR requirements must be obtained from the TCEQ's permitting files. Response to Comments at 17-18. Second, the Executive Director fails to provide any citation to any provision in the PBRs listed in the Proposed Permit's New Source Review Authorizations table that describes monitoring requirements that assure compliance with applicable limits. As Petitioners explain above, citing 106.472 as an example, PBRs claimed by BP to authorize units at the Texas City Chemical Plant do not actually specify monitoring methods that assure compliance with PBR limits.

While Proposed Permit, Special Condition No. 22 provides a laundry list of records that BP *might* use to determine compliance with applicable limits, the Proposed Permit does not require BP to conduct any particular monitoring or to use records related to any particular monitoring method(s), listed or unlisted, to assure compliance with applicable PBR emission limits. For example, nothing in the permit records suggests that BP must use CEMS to directly monitor emissions or to conduct stack testing to determine emissions from any unit to assure compliance with PBR requirements incorporated by reference into the Proposed Permit. Instead, the Proposed Permit leaves it entirely to BP's discretion to decide how it will determine compliance with PBR

requirements. As Petitioners have already explained with respect to BP's cooling towers, recordkeeping requirements do not assure compliance with applicable limits, unless the information contained in the compliance records reflects information generated by a reliable monitoring system. Accordingly, the Administrator must object to the Proposed Permit because it fails to specify minimum monitoring requirements necessary to assure compliance with PBR limits at the Texas City Chemical Plant. *Wheelabrator Order* at 10 ("EPA agrees that MDE does not have the discretion to issue a permit without specifying the monitoring methodology needed to assure compliance with applicable requirements in the title V permit"); *Granite City I Order* at 7-8.

### C. The Proposed Permit's Defective Method of Incorporating Permit by Rule Requirements by Reference Fails to Assure Compliance with Applicable Requirements

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

Emissions from more than 126 units and unit groups at the Texas City Chemical Plant are regulated under Texas's PBR program. Texas's PBR rules include provisions that establish generic emission limits and operating requirements for certain kinds of facilities that are authorized by the rules, so long as they are constructed and operated consistent with applicable requirements in the rules. *See*, 30 Tex. Admin. Code, Chapter 106, Subchapters B through X; *id.* at § 106.4. Texas's PBR rules also allow—and sometimes require—operators to register and certify source-specific PBR limits that are lower than the generic limits specified in Texas's PBR rules. *See*, *e.g.*, 30 Tex. Admin. Code § 106.6; *see also*, Response to Comments at 19 ("Certifications are required for sites subject to NO<sub>x</sub> cap and trade programs under 30 TAC Chapter 101 and for ensuring that any PBR claims do not exceed permitted flexible caps for facilities permitted under 30 TAC Chapter 116, Subchapter G").

The Proposed Permit is deficient because its incorporation of PBR requirements is incomplete and fails to provide enough information for readers to determine how much and what kind(s) of pollution each unit at the Texas City Chemical Plant may emit under claimed PBRs. Generic emission limits established by claimed PBRs and source-specific emission limits contained in BP's certified PBR registrations are not practicably enforceable because (1) the Proposed Permit fails to provide enough information for readers to determine how the generic limits apply to specific units or unit groups at the Texas City Chemical Plant; (2) the Proposed Permit fails to identify which units authorized by PBR are subject to source-specific certified PBR registration limits; and (3) the Proposed Permit fails to incorporate source-specific limits established under 30 Tex. Admin. Code § 106.6.

Proposed Permit, Special Condition No. 20 provides that requirements in PBRs claimed by BP are applicable requirements that are incorporated by reference into the Proposed Permit. Proposed Permit, Special Condition No. 21 requires that "[t]he permit holder shall comply with the general requirements of 30 TAC Chapter 106, Subchapter A or the general requirements, if any, in effect at the time of the claim of any PBR."

The Proposed Permit's New Source Review Authorization References table lists PBRs that BP has claimed. Proposed Permit at 224. The Proposed Permit's New Source Review Authorization References by Emissions Unit table lists some, but not all, emissions units at the Texas City Chemical Plant subject to PBR requirements. *Id.* at 225-236.

#### 2. Applicable Requirement or Part 70 Requirement Not Met

Each Title V permit must include "[e]missions limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance." 40 C.F.R. § 70.6(a)(1). The terms and conditions of PBRs

authorizing emissions from units at the Texas City Chemical Plant, including source-specific PBR certified registrations, are "applicable requirements." *Id.* at § 70.2; 30 Tex. Admin. Code § 122.10(2)(H).

As explained below, the Proposed Permit fails to incorporate source-specific PBR requirements and does not include enough information to allow readers to determine how much and what kind(s) of pollution each unit at the Texas City Chemical Plant is authorized to emit under claimed PBRs. Because this is so, the Proposed Permit fails to include and assure compliance with all applicable requirements.

#### 3. Inadequacy of the Permit Term

The Proposed Permit is deficient because it fails to incorporate source-specific PBR requirements and it does not include information necessary for readers to answer the following basic questions about how emission limits and operating requirements contained in PBRs claimed by BP apply to units at the Texas City Chemical Plant:

- How much pollution is BP authorized to emit from each unit under claimed PBRs?
- Which pollutants may BP emit from each unit under claimed PBRs?
- Which emission units at the Texas City Chemical Plant are subject to limits in the claimed PBRs?

Until the TCEQ revises the Proposed Permit to incorporate source-specific PBR requirements and include information necessary to answer these basic questions, applicable requirements in PBRs claimed by BP will remain unenforceable.

## a. The Proposed Permit and Permit Record Fails to Provide Enough Information to Determine How Much Each Unit Authorized by PBR May Emit

Before any actual work is begun on a new or modified facility, an operator must obtain a permit or permit amendment authorizing the project. 30 Tex. Admin. Code § 116.110(a). To

authorize construction of new or modified facilities, an operator may apply for a new or amended Chapter 116 case-by-case permit. Id. at §§ 116.110 and 116.111. In lieu of applying for a new or amended case-by-case permit under § 116.111, an operator may instead claim a PBR (or PBRs) to authorize construction of modification of a facility, so long as the proposed construction project complies with PBR requirements. See, e.g., 30 Tex. Admin. Code §§ 106.4 (stating that construction may be authorized by PBR) and 116.116(d) (stating that a PBR may be used in lieu of a permit amendment to authorize construction). While each Chapter 116 NSR permit is assigned a unique permit number and includes source-specific emission limits and special conditions based on the Executive Director's review of the operator's application, PBRs establish generic emission limits and operating requirements that apply to all new and modified facilities authorized by PBR (unless the operator registers PBR emissions at lower rates—see, id. at § 106.6). These generic requirements are found in Texas's PBR rules. When construction of a new or modified emission unit is authorized by PBR, the PBR or PBRs claimed by the operator—i.e., the rule itself—is the permit authorizing the project. See, e.g., id. at § 106.261 ("[F]acilities, or physical or operational changes to a facility, are permitted by rule provided that all of the following conditions of this section are satisfied.").

Thus, while the Proposed Permit identifies incorporated Chapter 116 NSR permits by listing their unique permit numbers and the dates on which they were issued, the Proposed Permit identifies applicable PBRs by *rule* number and the date that each rule was promulgated (not the date(s) the PBR was claimed to authorize construction at the Texas City Chemical Plant). Proposed Permit at 225-236. This way of listing applicable requirements is misleading, because it suggests that each claimed PBR, like the Chapter 116 NSR permits identified in the Proposed Permit, is a single authorization. This suggestion is misleading because BP has claimed some

PBRs multiple times to authorize multiple projects involving one or more emission units at the Texas City Chemical Plant.

Each PBR submission may involve one or more claimed PBRs that establish limits that apply to a single emission unit or to multiple emission units. Additionally, BP may claim the same PBR in different submissions to authorize multiple modifications to different emission units. Unless the Proposed Permit provides information identifying each emission unit covered by each claimed PBR *for each submission*, it is impossible to tell how much each emission unit is authorized to emit under PBRs claimed by BP.

For example, the Proposed Permit's New Source Review Authorization References by Emission Unit table indicates that BP has claimed the PBR at § 106.472 (9/4/2000) to authorize emissions from 79 tanks and loading facilities. Proposed Permit at 225-236. This PBR does not establish any emission limits for federally regulated pollutants, so the emission limits at 30 Tex. Admin. Code § 106.4(a)(1) apply. However, one cannot tell, based on information contained in the Proposed Permit and the incorporated PBR, whether changes to or construction of each of the 79 emission units were authorized as part of the same submission or as different projects. This matters, because if construction or modification of each unit was separately authorized—i.e., meaning the PBR has been claimed 79 times—each unit may emit up to the 30 Tex. Admin. Code § 106.4(a)(1) limits, while the units' combined emissions must remain below those same limits if construction of or modifications to all of those units was authorized as part of the same submission/project. The difference between these two scenarios is huge: If emissions from BP's 79 tanks and loading facilities were all authorized as part of the same submission, then combined VOC emissions from these units must remain below 25 tons per year. 30 Tex. Admin. Code § 106.4(a)(1)(A). If each unit was individually authorized, then the combined VOC emissions from

the units allowed under § 106.4 would be *1,975* tons per year (25 tons per year \* 79 emission units). *Id.* Because the Proposed Permit is ambiguous as to whether units at the Texas City Chemical Plant covered by PBR § 106.472 (9/4/2000) are authorized to emit 25 tons per year of VOC, 1,975 tons per year of VOC, or some other amount, it fails to specify and assure compliance with applicable emission limits. The Proposed Permit is deficient for the same reason with respect to each pollutant each emission unit is authorized to emit under § 106.472 (9/4/2000) PBR. This same problem also applies to the following PBRs incorporated by reference into the Proposed Permit to authorize multiple emission units:

PBR	Date PBR	Emission Units or Unit Groups
	Promulgated	
106.261	11/1/2003	MX2AV1, MX2AV2, MX2AV3, MX2AV4, MX2AV5, MX2AV6,
		MX2AV7, MX2-H101, MX2-H602, PX1AV1, PX1AV2,
		PX1AV3, PX1AV4, PX1AV5, PX2AV10, PX2AV1, PX2AV2,
		PX2AV3, PX2AV4, PX2AV5, PX2AV6, PX2AV7, PX2AV8,
		PX2AV9, PX3AV1, PX3AV2, PX3AV3, PX3AV4, PX3AV5
106.262	11/1/2003	MX2AV1, MX2AV2, MX2AV3, MX2AV4, MX2AV5, MX2AV6,
		MX2AV7, PX1AV1, PX1AV2, PX1AV3, PX1AV4, PX1AV5,
		PX1AV1, PX1AV2, PX1AV3, PX1AV4, PX1AV5, PX2AV10,
		PX2AV1, PX2AV2, PX2AV3, PX2AV4, PX2AV5, PX2AV6,
		PX2AV7, PX2AV8, PX2AV9, PX3AV1, PX3AV2, PX3AV3,
		PX3AV4, PX3AV5
106.472	9/4/2000	#10096, #10101, #125-4, #32, #40, 19F1101, 23F1501,
		CPTNT007, CPTNT082, CPTNT083, CPTNT084, CPTNT087,
		CPTNT088, CPTNT089, CPTNT090, CPTNT091, D-108, D1105,
		D1132, D1246, D1268, D1346, D1505, D1506, D2209, D2210,
		D2211, D2302, D2303, D2316, D603, DOCK-TK301, F1101, F-
		122, F1301, F2301, F-301, F-4001, M1204A, M1204B, M1204C,
		M1205A, M1205B, M1205C, M1206A, M1206B, M1206C,
		M1208A, M1208B, M1208C, M1213A, M1213B, M1214, M204A,
		M204B, M204C, M205A, M205B, M207A, M207B, M207C,
		M207D, M208A, M208B, M208C, M-209, M210A, M210B,
		M214, M2204, M2208A, M2208B, M2208C, M2211A, M2211B,
10.5.711	0 /4 /2 0 0 0	VESSEL10, VESSEL12, VESSEL5
106.511	9/4/2000	EMERGENADO, EMERGENCC, EMERGENPCU,
		EMERGENPX1, EMERGENPX2, EMERGENPX3,
10 6 522	2/14/1005	ERGENM102, FWPUMP1302, P-216A, P-216B
106.532	3/14/1997	MX2-APISEP, MX2-SEP
61	7/20/1992	MX1-SEP, PX3-SEP

Proposed Permit at 225-236.

This problem is even more complicated that it seems, because Texas's PBR rules give BP the option of certifying emission limits for PBR units that are lower than the generic limits established by § 106.4. 30 Tex. Admin. Code § 106.6; see also, Response to Comments at 18 (stating that registration of lower source-specific limits may be required to assure compliance with cap and trade and flexible permit program requirements). Because emission limits in § 106.4 are high enough that they might trigger major NSR preconstruction permitting requirements or contribute to significant net increases that are subject to major NSR preconstruction permitting requirements, Texas's PBR rules allow major source operators, like BP, to certify source-specific limits lower than the generic limits listed in the TCEQ's Chapter 106 rules to avoid major NSR requirements. Because one cannot tell by looking at information in the Proposed Permit and the Statement of Basis whether each project authorized by PBR is subject to generic limits specified in Texas's Chapter 106 rules or source-specific certified PBR registration limits, the Proposed Permit fails to clearly explain how claimed PBRs apply to units at the Texas City Chemical Plant. Because the Proposed Permit fails to clarify which limits apply to units at the Texas City Chemical Plant, it also fails to assure compliance with those limits.

b. The Proposed Permit Fails and Permit Record Fails to Provide Enough Information For a Reader to Determine which Pollutants BP is Authorized to Emit Under Claimed PBRs

Texas's General PBR requirements rule at § 106.4 indicates that a PBR may be used to authorize emission of *any* contaminant other than water, nitrogen, ethane, hydrogen, oxygen, and greenhouse gases. 30 Tex. Admin. Code § 106.4(a)(1)(E).<sup>6</sup> However, claiming a PBR for a project cannot automatically authorize the emission of *all* pollutants up to the limits identified in § 106.4,

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 $<sup>^6</sup>$  The term "contaminant," as defined by the Texas Clean Air Act encompasses all federally-regulated NSR pollutants. Tex. Health & Safety Code  $\S$  382.003(2).

i.e., 250 TPY NO<sub>x</sub> + 250 TPY CO + 25 TPY VOC + 25 TPY SO<sub>2</sub> + 25 TPY PM + 25 TPY Lead + 25 TPY H<sub>2</sub>SO<sub>4</sub>, without violating Prevention of Significant Deterioration ("PSD") and/or Nonattainment New Source Review ("NNSR") preconstruction permitting requirements. If PBRs worked that way, *each* claimed PBR would authorize allowable emission increases exceeding applicable major source and major modification thresholds, in most cases, without any prior authorization or public participation. It would completely undermine the integrity of Texas's PSD and NNSR programs. Such a program would also improperly allow BP to construct emission units with the potential to emit NSR pollutants at levels that could significantly deteriorate existing air quality and contribute to violations of health-based ambient air quality standards without prior approval by the TCEQ. 42 U.S.C. § 7410(a)(2)(D) (providing that State Implementation Plans must contain provisions to prohibit construction of sources that will cause or contribute to the violation of ambient air quality standards or PSD requirements).

Fortunately, Texas does not read its rules to provide that each project authorized by PBR is authorized to emit all contaminants up to the thresholds contained in § 106.4(a)(1). Instead, (1) only emissions related to the particular construction project for which a PBR is claimed are authorized, *see*, *e.g.*, 30 Tex. Admin. Code § 106.4(a) (stating that emissions from a facility authorized by PBR must remain below the § 106.4(a)(1) limits, "as applicable") (emphasis added) and (2) cumulative authorized emissions for each PBR project must remain below major modification thresholds. (Exhibit 9), TCEQ PBR Checklist, Section 1. The Proposed Permit, however, undermines the enforceability of these necessary restrictions because it does not contain any information about the projects and emissions authorized by PBR for any emission unit at the Texas City Chemical Plant. Instead, the Proposed Permit only lists claimed PBRs by rule number and identifies emissions units subject to requirements in some, but not all, of the claimed PBRs.

Because the incorporated rules do not identify which of the many different pollutants each claimed PBR *may* be used to authorize each unit at the Texas City Chemical Plant is *actually authorized to emit*, the Proposed Permit must provide this information: It must explain how the incorporated PBRs apply to emission units at the Texas City Chemical Plant. Because the Proposed Permit omits this information, it is incomplete and fails to assure compliance with applicable requirements. *Granite City I Order* at 42-43.

As the Proposed Permit is currently written, the only limits that clearly apply to emission units authorized by PBR are those listed at 30 Tex. Admin. Code § 106.4 and the claimed Chapter 106 PBR rules. These limits are not stringent enough to assure compliance with PSD and NNSR requirements and to prevent construction of projects that violate applicable air quality standards. Because the Proposed Permit incorrectly suggests that all pollutants that *may* be authorized by a PBR are in fact authorized by each PBR BP has claimed, it fails to assure compliance with applicable requirements.

## c. The Proposed Permit Fails to Identify any Emission Units Authorized by Ten PBRs Claimed by BP

While the Proposed Permit incorporates the following PBRs, it does not identify *any* emission unit or group of units subject to requirements in the claimed rules: 106.227 (9/4/2000), 106.231 (9/4/2000), 106.263 (11/1/2001), 106.373 (3/14/1997), 106.412 (9/4/2000), 106.433 (9/4/2000), 106.452 (9/4/2000), 106.453 (9/4/2000), 106.454 (11/1/2001), and 106.492 (9/4/2000). Proposed Permit 224-236. Because the Proposed Permit fails to identify the emission units authorized by and subject to the requirements in these claimed rules, it is completely opaque as to how the PBRs apply to emission units at the Texas City Chemical Plant and thereby undermines the enforceability of PBR requirements. *Objection to Title V Permit No. O2164, Chevron Phillips Chemical Company, Philtex Plant* at ¶ 7 (August 6, 2010) (draft permit fails to meet 40 C.F.R. §

70.6(a)(1) and (3) because it does not list any emission units authorized under specified PBRs); *In the Matter of Shell Chemical LP and Shell Oil Co* ("Deer Park Order"), Order on Petition Nos. VI-2014-04 and VI-2014-05, at 11-15 (Sep. 24, 2015). Moreover, even if an interested party is able to determine which emission units *should* be subject to one or more of these PBRs, a court is unlikely to enforce these requirements, because the Proposed Permit fails to identify them as applicable for any specific emission unit or units at the Texas City Chemical Plant. *See, United States v. EME Homer City Generation*, 727 F.3d 274, 300 (3d Cir. 2013) (explaining that court lacks jurisdiction to enforce requirements improperly omitted from a Title V permit). Because this is so, the Proposed Permit fails to identify and assure compliance with all applicable requirements. 42 U.S.C. § 7661c(a).

## 4. Issues Raised in Public Comments

Petitioners raised this issue in their Public Comments on pages 15-18.

## 5. Analysis of State's Response

Petitioners have challenged the TCEQ's method of incorporating PBR requirements into Texas. Title V permits for many different major sources in Texas. EPA recently granted Petitioners' request to object to two Title V permits issued by the TCEQ for Shell's Deer Park Chemical Plant and Refinery, because the Administrator determined that those Title V permits—like the Proposed Permit in this case—failed to assure compliance with PBR requirements. *Deer Park Order* at 11-16. Other Petitions filed by Petitioners addressing similar PBR problems in other Texas Title V permits remain pending before the Administrator.

Pending Title V Petitions Challenging the TCEQ's Method of Incorporating PBR Requirements by Reference

Source	Petition	RTC	Link to Petition
	Pages	Pages	
Motiva Port	30-43	13-14	https://www.epa.gov/sites/production/files/2017-
Arthur Refinery			01/documents/motiva_petition2016.pdf

Flint Hills Resources- Corpus Christi	9-18	5-6	https://www.epa.gov/sites/production/files/2016- 12/documents/flint hills east refinery petition2016.pdf
Pasadena Refinery	14-23	10, 14, 17, and 23	https://www.epa.gov/sites/production/files/2016- 12/documents/pasadena_refinery_petition2016.pdf

In each of the cited petitions, Petitioners pointed out that a Proposed Permit issued by the TCEQ did not include information necessary for readers to determine how much pollution units authorized by PBR were allowed to emit, which pollutants authorized by PBR were allowed to emit, and which units were authorized by certain PBRs listed in the Proposed Permit. In each of the previous cases, the TCEQ has defended its method of incorporating PBRs by reference into Proposed Permits with the following claim:

The site contains emission units that are permitted by rule under the requirements of 30 TAC Chapter 106, Permits by Rule. The NSR Authorizations References table in the draft Title V permit incorporates the requirements of NSR Permits, including PBRs by reference. All "emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance" are specified in the PBR incorporated by reference or cited in the draft Title V permit. When the emission limitation or standard is not specified in the referenced PBR, then the emissions authorized under the permit by rule from the facility are specified in 30 TAC § 106.4(a)(1).

All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site: <a href="https://www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/old106list/index">www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/old106list/index</a> 106.html .

Executive Director's Response to Comments, Permit No. O1386 (Motiva Port Arthur Refinery) at 13.

As Petitioners explain at length above and in comments on other Title V permits issued by the TCEQ, this response by the Executive Director is simply not true. Many applicable PBR requirements for BP's Texas City Chemical Plant and other major sources in Texas are not listed in the TCEQ's rules. Instead, anyone seeking to understand how much pollution, which pollutants, and which units are authorized by PBRs cited in a Title V permit needs project specific information in additional to information about which PBRs have been claimed to determine how PBRs apply to units at the major source. This is so for all the reasons Petitioners list above:

- Where a PBR has been claimed multiple times to authorize modifications to multiple
  units, one cannot determine—based on the text of Texas's rules—how much pollution
  each covered unit is authorized to emit;
- Because BP has established source-specific PBR requirements through Texas's
  certified registration process, one cannot determine how much pollution each unit at
  the Texas City Chemical Plant is authorized to emit by looking at the text of Texas's
  PBR rules;
- Because each PBR may potentially authorize emissions of almost any regulated pollutant, one cannot determine from the text of applicable rules which pollutant(s)
   each PBR project at a particular source is authorized to emit; and
- Because the Proposed Permit fails to list any units that are subject to certain PBRs listed
  in the New Source Authorization by References table, it is impossible for readers of
  the permit to determine which units at the Texas City Chemical Plant are subject to
  requirements of the claimed PBRs.

In his response to Petitioners' comments on the Draft Permit, the Executive Director finally abandons the obviously incorrect position that Texas's method of incorporating PBR requirements into Texas Title V permits by citing the applicable rules provides readers with all the information necessary to understand how claimed PBRs apply to units at a major source. In his response to

comments on the Draft Permit, the Executive Director now claims that the Proposed Permit's incorporation by reference of claimed PBRs is sufficient, because source-specific information necessary to understand how PBRs apply to emission units at the Texas City Chemical Plant is publicly available outside the Title V docket:

It is not necessary to include details regarding each PBR in the draft permit because all requested information, including how many projects are authorized under each PBR, how many emissions are authorized under said projects, the pollutants authorized by each PBR, and which emissions units are covered by each PBR is available at the website below to cross-reference. The site contains emission units that are permitted by rule under requirements of 30 TAC Chapter 106, Permits by Rule. The New Source Review Authorization References table in the draft permit specifies the permits by rule that apply to the site. All current permits by rule are contained in Chapter 106. Outdated 30 TAC Chapter 106 permits by rule may be viewed at the following Web site:

 $\underline{www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/old106list/index}\\106.html$ 

Outdated Standard Exemption lists may be viewed at the following Web site: <a href="https://www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/oldselist/se\_index.html">www.tceq.texas.gov/permitting/air/permitbyrule/historical\_rules/oldselist/se\_index.html</a>

In addition, for registered and certified PBRs, project related information, described above, is available through the APD remote document server (RDS), which can be accessed from the link below:

https://webmail.tceq.state.tx.us/gw/webpub

The RDS provides access to final versions of various project related documents. The ED also maintains project file information in the TCEQ Central File Room. The Central File Room recently began posting documents electronically. See the "Central File Room Online" section at the following webpage, however, keep in mind that all file room documents are not yet available electronically:

http://www.tceq.texas.gov/agency/data

Response to Comments at 16-17.

The fact that information about how PBRs apply to units at the Texas City Refinery is available in the TCEQ's files is not sufficient to assure compliance with applicable requirements,

because the Proposed Permit (1) fails to even suggest that such information exists, (2) does not identify the files that contain relevant information; and (3) fails to explain how the State's PBR program works such that source-specific project information might be necessary to determine how PBR requirements apply to units at the Texas City Chemical Plant. Instead, as Petitioners explain above, the only requirements that clearly apply to units at the Texas City Chemical Plant under the Proposed Permit are those listed in Texas's cited PBR rules. Moreover, the way these rules are listed in the Proposed Permit incorrectly suggests that each unit authorized by a PBR may emit all contaminants potentially covered by the PBR up to limits specified in the claimed PBR or the general limits at 30 Tex. Admin. Code § 106.4.

To properly incorporate PBR requirements by reference, the Proposed Permit must be revised to provide a coherent and correct account of how the TCEQ's PBR program works, such that readers understand that source-specific project information is necessary to determine how PBR requirements apply to units at the Texas City Chemical Plant. The Proposed Permit must also identify incorporated documents that contain information about how PBR requirements apply to units at the Texas City Chemical Plant with sufficient specificity to allow members of the public to look for them and find them. Until these steps are taken, the Executive Director cannot reasonably rely on information about PBR projects maintained in the TCEQ's permitting files to support his practice of incorporating PBR requirements by reference into Texas Title V permits. *Granite City I Order* at 43 ("In order for incorporation by reference to be used in a way that fosters public participation and results in a title V permit that assures compliance with the Act, it is important that: (1) referenced documents be specifically identified; (2) descriptive information such as the title or number of the document and the date of the document be included so that there is no ambiguity as to which version of a document is being referenced; and (3) citations, cross

references, and incorporations by reference are detailed enough that the manner in which any referenced material applies to a facility is clear and is not reasonably subject to misinterpretation").

The Proposed Permit's failure to identify source-specific PBR requirements in its New Source Review Authorizations attachment also puts those requirements outside the scope of Special Condition No. 22, which the Executive Director claims assures compliance with applicable PBR requirements. Special Condition No. 22 requires BP to maintain records that demonstrate compliance with emission limitations or standards that are specified in PBRs listed in the Proposed Permit's "New Source Review Authorizations attachment." Source-specific PBR limits and representations established through the PBR registration process are not listed in the Proposed Permit's New Source Review Authorizations attachment. There is no other requirement in the Proposed Permit that establishes monitoring or recordkeeping requirements that assure compliance with source-specific PBR registration limits and representations. Accordingly, the fact that public information about source-specific requirements may be available through various web-based resources cross-referenced by the Executive Director's response to comments (but not the Proposed Permit or the Statement of Basis) does not assure compliance with applicable source-specific requirements as Title V requires. 42 U.S.C. § 7661c(a).

Finally, the Executive Director's claim that "all requested information, including how many projects are authorized under each PBR, how many emissions are authorized under said projects, the pollutants authorized by each PBR, and which emissions units are covered by each PBR is available at the website below to cross-reference" is untrue. While it may be the TCEQ's practice to maintain information about source-specific PBR registrations on its website, "[s]ome PBRs do not require registration and can simply be claimed." Response to Comments at 19. The Executive Director frankly admits that information about "[t]hese PBRs will not appear in the

TCEQ's NSR database." *Id.* Thus, for an unspecified number of unregistered PBRs claimed by BP, there is no way for members of the public to obtain information about whether and how generic emission limits in the TCEQ's rules are distributed across multiple emission units or which of the many different contaminant each claimed but unregistered PBR may be used to authorize actually authorizes. Thus, the Executive Director's response wholly fails to address the Proposed Permit's failure to explain how unregistered PBRs apply to emission units at the Texas City Chemical Plant.

## V. CONCLUSION

For the foregoing reasons, and as explained in Petitioners' timely-filed public comments, the Proposed Permit is deficient. The Executive Director's Response to Comments also failed to address Petitioners' significant comments. Accordingly, the Clean Air Act and EPA's 40 C.F.R. Part 70 rules require that the Administrator object to the Proposed Permit.

Sincerely,

/s/ Gabriel Clark-Leach

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