TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

June 30, 2010

MR CARL E EDLUND PE
DIRECTOR MULTIMEDIA PLANNING AND PERMITTING DIVISION
US ENVIRONMENTAL PROTECTION AGENCY REGION 6
1445 ROSS AVE STE 1200
DALLAS TX 75202-5766

Re: Executive Director's Response to EPA Objection
Renewal
Permit Number: O2327
INEOS USA LLC
Chocolate Bayou Plant (Olefins Business Unit)
Alvin, Brazoria County
Regulated Entity Number: RN100238708
Customer Reference Number: CN602817884

Dear Mr. Edlund:

On December 4, 2009, the U.S. Environmental Protection Agency (EPA) Region 6 Office signed a letter identifying objections to the issuance of the proposed federal operating permit for the above-referenced site. In accordance with Title 30 Texas Administrative Code § 122.350 (30 TAC § 122.350), the Texas Commission on Environmental Quality (TCEQ) may not issue the permit until the objections are resolved. In addition, the letter identifies certain additional concerns. The TCEQ understands that the additional concerns are provided for information only, and do not need to be resolved in order to issue the permit.

The TCEQ has completed the technical review of your objections and offers the enclosed responses to facilitate resolution of the objections. In addition, the attached responses to the objections describe the changes, if applicable, that have been made to the revised proposed permit and supporting statement of basis (SOB). The revised proposed permit and SOB are attached for your review.

Consistent with Title 30 TAC §122.350, please provide an indication of your acceptance or assessment of the responses and resolutions to the objections as soon as possible. After receipt of your acceptance to the responses and resolutions to the objections, TCEQ will issue the proposed permit. Thank you for your cooperation in this matter. Please contact Ms. Lauren Pedroarena at (512) 239-5225 if you have any questions concerning this matter.

Sincerely,

Steve Hagle, P.E., Director
Air Permits Division
Office of Permitting and Registration
Texas Commission on Environmental Quality

SH/LP/bb

cc: Mr. Daniel Lutz, Senior Environmental Engineer, INEOS USA LLC, Alvin
Director, Environmental Health, Brazoria County Health Department, Angleton
Air Section Manager, Region 12 - Houston

Enclosures: TCEQ Executive Director's Response to EPA Objection
Proposed Permit
Statement of Basis

Project Number: 13684

EXECUTIVE DIRECTOR'S RESPONSE TO EPA OBJECTION

Permit Number O2327

The Texas Commission on Environmental Quality (TCEQ) Executive Director provides this Response to EPA's Objection to the renewal of the Federal Operating Permit (FOP) for INEOS USA LLC, Chocolate Bayou Plant, Permit No. O2327, Brazoria County, Texas.

BACKGROUND

Procedural Background

The Texas Operating Permit Program requires that owners and operators of sites subject to 30 Tex. Admin. Code (TAC) Chapter 122 obtain a FOP that contains all applicable requirements to facilitate compliance and improve enforcement. The FOP does not authorize construction or modifications to facilities, and it does not authorize emission increases. To construct or modify a facility, the responsible party must have the appropriate new source review authorization. If the site is subject to 30 TAC Chapter 122, the owner or operator must submit a timely FOP application for the site and ultimately must obtain the FOP to operate. INEOS USA LLC applied to the TCEQ for a renewal of the FOP for the Chocolate Bayou Plant located in Alvin, Brazoria County on April 29, 2009, and notice was published on October 12, 2009 date in *The Facts*. The public comment period ended on November 10, 2009. During the concurrent EPA review period, TCEQ received an objection to the permit from EPA on December 4, 2009.

In accordance with state and federal rules, the permit renewal may not be issued until TCEQ resolves EPA's objections.

Description of Site

INEOS USA LLC owns and operates the Chocolate Bayou Plant, an industrial inorganic chemicals facility. The facility is located 2 miles south of the intersection of FM 2917 and FM 2004 in Alvin, Brazoria County, Texas 77469.

The Chocolate Bayou Olefins area covered by this permit consists of two olefins units, as well as various storage and loading facilities, wastewater facilities, and a cogeneration facility.

Olefins production process consists of a feed preparation area in which various liquid feedstocks arrive via pipeline and are stored in large floating roof tanks. Ethane-rich and propane-rich gas feeds must be dried and vaporized prior to cracking and liquid feeds must be preheated. The No. 1 Olefins Unit has six cracking furnaces and the No. 2 Olefins Unit has ten. Periodically each furnace is taken offline for decoking and the decoke stream passes through a cyclone separator to remove particulate.

Hot effluent from the cracking furnaces is cooled in transfer line exchangers. The cracked hydrocarbon stream from liquid-cracking furnaces is then quenched with oil and fractionated to remove heavier constituents, and then combined with the effluent from gas-cracking furnaces. The combined stream is cooled with quench water and in the water wash tower. Lighter gases go overhead while water and heavier hydrocarbons are routed to an oil-water separator.

Lighter gases go through a compression stage and then sent to a caustic wash tower to remove H2S and CO2. The gases pass through dryers to remove any remaining water and then go through a depropanizer to separate C3 and lighter components from C4 and heavier components. The lighter components are fed to a fourth stage of the cracked gas compressor and routed to the acetylene reactor, while the heavier portion continues to a debutanizer which produces mixed butenes in the overhead and raw pyrolysis gasoline in the bottom. The acetylene reactor effluent is alternately chilled and flashed to separate a methane/hydrogen tail gas stream and a hydrogen stream. The demethanizer separates methane from C2s and C3s, which are then sent to the deethaneizer to split C2s and C3s. The plant uses ethylene and propylene as refrigerants throughout the process.

Several pressure vessels are used to store intermediates and products for the olefins units. Several internal and external floating roof tanks are also used to store feedstocks and products for the olefins units.

Rail loading facilities consist of ten identical loading stations, as well as necessary pressurized storage vessels, compressors, heat exchangers and piping. All vapors from loading operations are routed to a flare. Marine dock facilities are used to ship products by barge. Relief valves in the fill lines vent to a dock area flare and residual gases in the loading arms are purged to the flare.

Wastewater facilities include the process sewers, surge basins, and unit API separators and the plant API separator. This equipment collects rainwater and runoff and sends it to the plant waste treatment system. The Aromatics Waste Minimization unit reclaims benzene and other hydrocarbons. Both olefins units have identical stripping systems for treatment of benzene-containing wastewater streams. A separate sewer system collects in the butadiene surge basin which is pumped either to the butadiene recycle tank or the plant API separator. The plant API separator also receives benzene-free process sewer water from other areas of the plant. Surface hydrocarbons are skimmed off and the plant API effluent is discharged into the plant wastewater system for further treatment.

The following responses follow the references used in EPA's objection letter.

EPA OBJECTION: EPA objected to the incorporation of Flexible Permit No. 95 into the Title V permit. The *New Source Review (NSR) Authorization References* table in the draft permit Title V permit incorporates by reference Flexible Permit No. 95, most recently amended on June 30, 2009. Flexible permits are issued pursuant to 30 TAC Chapter 116, Subchapter G; however, those provisions have not been approved, pursuant to Section 110 of the federal Clean Air Act (CAA, 42 U.S.C. § 7410, as part of the applicable implementation plan for the State of Texas (Texas SIP). Therefore, pursuant to 40 CFR § 70.8(c)(1), EPA must object to the issuance of this Title V permit because the terms and conditions of the incorporated flexible permit cannot be determined to be in compliance with the applicable requirements of the Texas SIP. The failure to have submitted information necessary to make this determination constitutes an

additional basis for this objection, pursuant to 40 CFR § 70.8(c)(3)(ii). In order to respond to this objection, additional information must be provided by the applicant showing how the emissions authorized by the flexible permits meet the air permitting requirements of the federally-approved provisions of the Texas SIP. Furthermore, the Title V permit must include an additional condition specifically requiring the source to prepare and submit to TCEQ a written analysis of any future change/modification to ensure that minor and/or major new source review requirements under the federally-approved Texas SIP have not been triggered. Finally, the terms and conditions of flexible 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).

TCEQ RESPONSE: As a preliminary matter, the ED believes that resolution of EPA concerns regarding flexible permits is a common objective for both TCEQ and the EPA. The concerns discussed below regarding the use of the Title V permitting process to challenge independent flexible permits on a case-by-case basis does not diminish the importance of reaching an expeditious resolution to the NSR flexible permit issue. The ED recognizes the flexible permit rules, located in 30 TAC Chapter 116, Subchapter G, and submitted to EPA in 1994, have not been approved into the Texas SIP. However, the Texas federal operating permit (FOP) program is EPA-approved. TCEQ reviews applications and issues FOPs according to EPA-approved program rules found in 30 Texas Administrative Code (TAC), Chapter 122. The Texas Operating Permit Program was granted full approval on December 6, 2001 (66 FR 63318), and subsequent rule changes were approved on March 30, 2005 (70 FR 161634). The application procedures, found in 30 TAC § 122.132(a) require an applicant to provide any information required by the ED to determine applicability of, or to codify any "applicable requirement." In order for the ED to issue an FOP, the permit must contain all applicable requirements for each emission unit (30 TAC § 122.142). "Applicable requirement" is specifically defined in 30 TAC § 122.10(2)(h) to include all requirements of 30 TAC Chapter 116 and any term and condition of any preconstruction permit. As a Chapter 116 preconstruction authorization, flexible permits are applicable requirements, and shall be included in applications and Texas issued FOPs, in compliance with Texas's approved program. According to the EPA review procedures of Chapter 122, EPA may only object to issuance of any proposed permit which is not in compliance with the applicable requirements or requirements of this chapter. Therefore, this objection is not valid under the program EPA has approved in Texas because the applicant provided information as to the applicable Chapter 116 requirements, including flexible permits, and the ED has included these requirements in the draft FOP. EPA objections to individual permits issued under an EPA approved operating permit program are not appropriate for concerns that relate to programmatic elements.

The ED disagrees with the allegation that the failure of the applicant to have submitted information necessary to make a determination of whether they were in compliance with the SIP constitutes an additional basis for this objection, pursuant to 40 CFR §70.8(c)(3)(ii). Section 70.8(c)(3)(ii) is premised on the *permitting authority* not "submitting any information necessary [for EPA] to review adequately the proposed permit." The ED has provided all

information requested by EPA, when asked, including NSR permits and other supporting information. The flexible permit applications, technical reviews, and flexible permits clearly do not allow sources to utilize the flexible permit authorization mechanism to circumvent major NSR permitting requirements. Specifically, 30 TAC Chapter 116 requires that all new major sources or major modifications be authorized through nonattainment or PSD permitting under Subchapter B, Divisions 5 and 6.

The ED also disagrees that additional information must be provided by the applicant showing how the emissions authorized by the flexible permit meet the air permitting requirements of the federally-approved provisions of the Texas SIP. The flexible permit application, technical review, and flexible permit documentation demonstrates that the emissions authorized by the flexible permits meet the air permitting requirements of the federally approved provisions of the SIP regarding requirements for impacts review, emission measurement, BACT, NSPS, NESHAP, MACT, performance demonstration, modeling or ambient monitoring if required, MECT applicability, and nonattainment or PSD permitting if applicable. Texas submitted the initial flexible permit rule for EPA review and action in 1994. EPA's delay in acting on the flexible permit rules, the approval of the state's federal operating permit program and confusion regarding whether the approved federal operating permit program provided federal enforceability for flexible permits, resulted in a very long period of detrimental reliance on this permit mechanism by regulated entities and TCEQ.

Notwithstanding the pending final disapproval of the flexible permit rules in 30 TAC Chapter 116, Subchapter G, the flexible permit review requirements are parallel to the SIP-approved 30 TAC Chapter 116, Subchapter B permit review and no substantive differences in significant permit elements exist. Indeed, the technical review of the flexible permit No. 95 application provides information regarding how Subchapter B requirements in § 116.111 are met, including: compliance with the SIP approved Subchapter B rules and review requirements, unit-specific limits based on BACT review at the time of the permit issuance, demonstrations that each emission unit and the facility covered by Permit No. 95 meets all applicable NSPS, NESHAP requirements, and air dispersion modeling conducted by applicant. The flexible permit and technical review are enclosed with this response. INEOS USA LLC may separately submit to EPA additional information showing compliance with the Subchapter B requirements. Additionally, the ED does not agree that it is appropriate, necessary or legally required under either 40 CFR Part 70 or the EPA approved federal operating permit program in Texas to require a condition in the operating permit to require a source to prepare and submit a written analysis of any future change/modification to ensure that minor and/or major NSR requirements under the SIP have not been triggered. The federally approved SIP already requires this analysis as part of any future NSR review. See 30 TAC Chapter 116, Subchapter B, Divisions 5 and 6. Minor NSR applicability requirements are adequately specified in the permit and commission rules governing NSR permits; thus, the applicant is currently subject to the requirements to demonstrate, upon any future change, when minor or major NSR requirements will apply.

However, the ED recognizes that some companies are in negotiations with EPA to include a special term and condition in the draft FOP requiring that they submit an application to reissue a permit, through the SIP-approved amendment, alteration, or renewal process, with a deadline for application submittal, and specific information to EPA and TCEQ for review prior to public notice. If INEOS USA LLC agrees to such a process, the TCEQ will work with INEOS USA LLC to change the draft permit appropriately.

Finally, the flexible permit terms and conditions are not appropriate to be identified as state-only in the FOP. The EPA approved definition of a "state-only requirement" in 30 TAC § 122.10(28) is "any requirement governing the emission of air pollutants from stationary sources that may be codified in the permit at the discretion of the ED. State-only requirements shall not include any requirement required under the Federal Clean Air Act or under any applicable requirement." Therefore, the EPA approved program provides the ED with discretion to determine which requirements must be identified as "state-only" and explicitly prohibits anything defined as an "applicable requirement" from being "state-only." Since flexible permits issued in 30 TAC Chapter 116 are "applicable requirements," they may not be included as "state-only" requirements. Instead, they are applicable requirements which are subject to public notice, affected state review, notice and comment hearings, EPA review, public petition, recordkeeping requirements, compliance demonstration and certification requirements, and appropriate periodic or compliance assurance monitoring requirements. "State-only" requirements are specifically not required to meet requirements that are specific to 40 CFR Part 70. See 122.143(18). As stated previously, the flexible permit terms and conditions comply with SIP approved permit rules and assure compliance with future applicable NSR requirements. Again, with regard to flexible permits, the TCEQ will continue its dialogue with EPA to achieve the mutual goal of NSR permits issued under SIP approved rules.

EPA OBJECTION: EPA objected to incorporation by reference of New Source Review (NSR) permit numbers 95 and PSD-TX-854M2. The *New Source Review Authorization References* table in the draft Title V permit incorporates PSD-TX-854M2, amended on June 30, 2009, by reference. EPA has discussed the issue of incorporation by reference in *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program* (March 5, 1996) (White Paper 2). As EPA explained in White Paper 2, incorporation by reference may be useful in many instances, though it is important to exercise care to balance the use of incorporation by reference with the obligation to issue permits are that clear and meaningful to all affected parties, including those who must comply with or enforce their conditions. *Id.* at 34-38. See also *In the Matter of Tesoro Refining and Marketing*, Petition No. XI-2004-6 at 8 (March 15, 2005)(*Tesoro Order*). As EPA noted in the *Tesoro Order*, EPA's expectations of what requirements may be referenced and for the necessary level of detail are guided by Sections 504(a) and (c) of the CAA and corresponding provisions at 40 CFR §§ 70.6(a)(1) and (3). *Id.* Generally, EPA expects that Title V permits will explicitly state all emission limitations and operational requirements for all applicable emission units at a facility. *Id.* EPA notes that TCEQ's use of incorporation by reference for emission limitations from minor NSR permits and Permits by Rule is currently acceptable. *See* 66 Fed. Reg. 63318, 63324 (Dec. 6, 2001); *see also, Public Citizen v. EPA*,

343 F.3d 449, at 460-61 (5th Cir. 2003) (upholding EPA's approval of TCEQ's use of incorporation by reference for emissions limitations from minor NSR permits and Permits by Rule). In approving Texas' limited use of incorporation by reference of emissions limitations from minor NSR permits and Permits by Rule, EPA balanced the streamlining benefits of incorporation by reference against the value of a more detailed Title V permit and found Texas' approach for minor NSR permits and Permits by Rule acceptable. *See Public Citizen*, 343 F.3d at 460-61. EPA's decision approving this use of incorporation by reference in Texas' program was limited to, and specific to, minor NSR permits and Permits by Rule in Texas. EPA noted the unique challenge faced in integrating requirements from these permits into Title V permits. See 66 Fed. Reg. at 63,326; 60 Fed. Reg. at 30.039; 59 Fed. Reg. 44572, 44574. EPA has not approved TCEQ's use of incorporation by reference of emissions limitations for other requirements. See *In the Matter of Premcor Refining Group, Inc.*, Petition No. VI-2007-02 at 5 and *In the Matter of CITGO Refining and Chemicals Co.*, Petition No. VI-2007-01 at 11. Pursuant to 40 CFR § 70.8(c)(1), EPA objected to the issuance of the Title V permit, because it: 1) incorporates by reference the major New Source Review permit PSD-TX-854M2; and 2) fails to include emission limitations and standards as necessary to assure compliance with all applicable requirements. *See* 40 CFR § 70.6(a)(1).

TCEQ RESPONSE: In response to EPA's objection, the ED has revised FOP No. 2327 to include, in a new Appendix B of the permit, a copy of NSR Permit No. 95 and PSDTX854M2 and its corresponding terms and conditions, and emission limitations. With regard to IBR of major NSR, the ED respectfully disagrees with EPA's interpretation of its approval of Texas's operating permit program on this issue. The ED recognizes that respective agency staff are actively involved in continuing, extensive discussions on how to resolve this issue; namely, how much detail of the underlying major NSR authorization should be reiterated in the face of the Title V permit. The federally approved operating permit program for Texas has allowed for applicable requirements to be incorporated by reference into the FOP since 1996. *See* Final Interim Approval, 61 Fed. Reg. 32693, June 25, 1996; Final Full Approval, 66 Fed. Reg. 63318, December 6, 2001; and Final Approval of Resolution of Deficiency, 70 Fed. Reg. 16134, March 30, 2005. Title 30 TAC §122.142 states that the operating permit shall contain the specific regulatory citations in each applicable requirement identifying the emission limitations and standards. Additionally, EPA discussed the use of incorporation by reference in the preamble to the final Part 70 rule, discussing the requirements of § 70.6, Permit Content, stating:

> Section 70.6(a)(1)(i) requires that the permit reference the authority for each term and condition of the permit. Including in the permit legal citations to provisions of the Act is critical in defining the scope of the permit shield, since the permit shield, if granted, extends to the provisions of the Act included in the permit. Including the legal citations in the permit will also ensure that the permittee, the permitting authority, EPA, and the public all have a common understanding of the applicable requirements included in the permit. *This requirement is satisfied by citation to*

> *the State regulations or statutes which make up the SIP or implement a delegated program. See* 57 Fed. Reg. 32250, 32275 July 21, 1992, emphasis added.

In comments on the proposed final interim approval of the operating permit program, in 1995, the commission (then-TNRCC) proposed to include a standardized permit provision that incorporated by reference all preconstruction authorizations, both major and minor, to resolve the EPA identified deficiency of Texas' failure to include minor NSR as an applicable requirement. In the June 25, 1996 Final Interim Approval, EPA directed, "the State must be quite clear in any standardized permit provision that all of its *major 'preconstruction authorizations* including permits, standard permits, flexible permit, special permits, or special exemptions' are incorporated by reference into the operating permit *as if fully set forth therein* and therefore enforceable under regulation XII (the Texas Operating Permit Regulation) as well as regulation VI (the Texas preconstruction permit regulation)." (61 Fed. Reg. at 32695, emphasis added.) Given this explicit direction in EPA's 1996 final interim approval of the Texas program, TCEQ understood that the standardized permit provision for preconstruction authorizations incorporated all NSR authorizations by reference, including major NSR

As a result of Texas' initial exclusion of minor NSR as an applicable requirement of the Texas Operating Permit program, and EPA's final interim approval of a program that provided for a phase-in of minor NSR requirements using incorporation by reference, EPA was sued by various environmental groups. *See Public Citizen, Inc. v. U.S. E.P.A.*, 343 F.3d 449 (5th Cir. 2003). The petitioner's brief raised several issues, including the use of incorporation by reference of minor NSR, because the exclusion of minor NSR as an applicable requirement was a program deficiency identified by EPA. The petitioner's brief acknowledges that Texas' Operating Permit program incorporates all preconstruction authorizations by reference, through use of a table entitled "Preconstruction Authorization References". The Petitioner's brief includes an example of this table, which clearly contains sections for Prevention of Significant Deterioration (PSD), nonattainment (NA), 30 TAC Chapter 116 Permits, Special Permits and Other Authorizations, and Permits by Rule under 30 TAC Chapter 106. See Brief of Petitioners, p. 30. The brief goes on to discuss the sample permit, Permit No. O-00108, which documents "six different minor NSR authorizations and one PSD permit" requiring one to look at each of the underlying permits in addition to the Title V permit. The Department of Justice (DOJ), in its reply brief for EPA, responded to this allegation of improper use of IBR in the context of the specific allegation - whether "EPA reasonably determined that Texas corrected the interim deficiency related to minor new source review", answering unequivocally "yes". "Nothing in the statute or regulations prohibits incorporation of applicable requirements by reference. The Title V and Part 70 provisions addressing the content of Title V permits specify what Title V permits 'shall include,' but do not speak to how the enumerated items must be included." See, Brief of Respondents, pp. 25-26. The Court did not distinguish between minor and major NSR when concluding that IBR is permissible under both the CAA and Part 70.

Thus, it is the ED's position that incorporation by reference of both major and minor NSR permits is acceptable and was fully approved by EPA. However, given EPA's differing opinion, as reflected in the Premcor and CITGO orders, this objection, and the June 10, 2010 letter from EPA Region VI regarding this issue, the ED has revised FOP Permit No. 2327 to include, in a new Appendix B of the permit, a copy of NSR Permit No. 95 and PSDTX854M2 and its corresponding terms and conditions, and emission limitations, which was initially suggested by EPA as adequate to resolve this objection. Inclusion of the major NSR permits as an appendix should address EPA's objection and ensure that the Title V permit is clear and meaningful to all affected parties. The ED will continue efforts with EPA on how to resolve IBR of major NSR on a broader, programmatic basis.

Moreover, the ED recognizes that INEOS USA LLC is in a dialogue with EPA to address specific concerns with incorporation by reference of NSR Permit No. 95 and PSDTX854M2 in its Title V permit as part of the process of reissuance through the SIP-approved amendment, alteration, or renewal process. If INEOS USA LLC agrees to such a process, the TCEQ will work with INEOS USA LLC to change the permit accordingly.

EPA OBJECTION: The *New Source Review (NSR Authorization References* table in the draft Title V permit incorporates by reference Permit Number 95 and PSD-TX-854M2. Available information indicates that on January 18, 2005, INEOS forwarded a Form PI-E to TCEQ (Notification of Changes to Qualified Facilities). Based upon TCEQ's review of the information, TCEQ had no objection to the proposed change. This change affects Permit Number 95 and PSD-TX-854M2 under the Texas Qualified Facilities Program. This program authorizes facilities to become "qualified" to net out of NSR State Implementation Plan (SIP) permitting requirements un Section 116.118 of Title 30 Texas Administrative Code (30 TAC § 116.118)(pre-change qualification). To date EPA has not approved the Texas Qualified Facilities Program revisions into the Texas SIP, pursuant to Section 110 of the federal CAA, 42 U.S.C. § 7410. Therefore, pursuant to 40 CFR § 70.8(c)(1), EPA must object to the issuance of this Title V permit because physical or operational changes made under the Texas Qualified Facilities Program cannot be determined to be in compliance with the applicable requirements of the Texas SIP. The failure to have submitted information necessary to make this determination constitutes an additional basis for this objection, pursuant to 40 CFR § 70.8(c)(3)(ii). In response to this objection, TCEQ must revise the draft permit to include a condition that specifically requires the source to prepare and submit to TCEQ a written analysis of any future change/modification to ensure that minor and/or major NSR requirements under the federally-approved Texas SIP have not been triggered. The source must comply with *both* the requirements of the approved SIP *and* with any requirements of the State.

TCEQ RESPONSE: As a preliminary matter, the resolution of EPA concerns regarding qualified facility changes is a common objective for both TCEQ and the EPA. The EPA concerns discussed below regarding the use of the Title V permitting process to challenge qualified facility changes on a case-by-case basis does not diminish the importance of reaching an expeditious resolution to this NSR issue. The ED recognizes that the Qualified Facility rules,

located in 30 TAC Chapter 116, §§ 116.116(e), 116.117 and 116,118 and submitted to EPA initially in 1996 and after re-adoption in 1998, have not been approved into the Texas SIP, and were specifically disapproved by EPA effective May 14, 2010. *See* 75 Fed. Reg. 19468 (April 14, 2010).[1] The commission proposed rule changes to address concerns noted by EPA regarding the approvability of the Qualified Facilities program. See 35 Tex. Reg. 2978 (April 16, 2010). However, the Texas federal operating permit (FOP) program is EPA-approved. TCEQ reviews applications and issues FOPs according to EPA-approved program rules found in 30 Texas Administrative Code (TAC), Chapter 122. The Texas Operating Permit Program was granted full approval on December 6, 2001 (66 FR 63318), and subsequent rule changes were approved on March 30, 2005 (70 FR 161634). The application procedures, found in 30 TAC § 122.132(a) require an applicant to provide any information required by the ED to determine applicability of, or to codify any "applicable requirement." In order for the ED to issue an FOP, the permit must contain all applicable requirements for each emission unit (30 TAC § 122.142). "Applicable requirement" is specifically defined in 30 TAC § 122.10(2)(h) to include all requirements of 30 TAC Chapter 116 and any term and condition of any preconstruction permit. As a Chapter 116 authorization mechanism, Qualified Facility changes are applicable requirements, and shall be included in applications and Texas issued FOPs, in compliance with Texas' approved program. According to the EPA review procedures in 30 TAC § 122.350(c), EPA may only object to issuance of any proposed permit which is not in compliance with the applicable requirements or requirements of Chapter 122. Therefore, this objection is not valid under the program EPA has approved in Texas because the applicant provided information as to the applicable Chapter 116 requirements, including Qualified Facility changes, and the ED has included these requirements in the draft FOP. EPA objections to individual permits issued under an EPA approved operating permit program are not appropriate for concerns that relate to approved program elements.

EPA's objection notes that the Qualified Facility rules allow facilities to become "qualified" to net out of NSR SIP Permitting requirements under 30 TAC § 116.118 (pre-change qualification). However, any change made at a qualified facility must comply with PSD and nonattainment NSR, (§ 116.117(a)(4)), must be reported annually to the commission, (§ 116.117(b)), and may be incorporated into the minor NSR permit at amendment or renewal (§ 116.117(c)). The Qualified Facilities rules in Chapter 116 provide that changes may be made to existing facilities without triggering the statutory definition of modification of existing facility found in Texas Clean Air Act (TCAA), Texas Health and Safety Code (THSC), §382.003(9) if either of the following conditions are met: the facility has received a preconstruction permit or permit amendment no earlier than 120 months before the change will occur, or regardless of whether the

1 The TCEQ has filed a Petition for Review of EPA's final action with the U.S. Court of Appeals for the 5th Circuit. As noted in the TCEQ's April 16, 2010 proposed rulemaking, "[t]he commission has always administered the qualified facility program as a minor NSR program and has not allowed its applicability for changes requiring major NSR. This is consistent with the requirements of the enabling statute in THSC, § 382.0512 which states that 'nothing in this section shall be construed to limit the application of otherwise enforceable state or federal requirements, nor shall this section be construed to limit the commission's powers of enforcement under this chapter.' The program does not, and has not, superseded or negated federal requirements." *See* 35 Tex. Reg. 2979, April 16, 2010.

facility has received a preconstruction permit or permit amendment, uses control technology that is at least as effective as the BACT that the commission required or would have required for a facility of the same class or type as a condition of issuing a permit or permit amendment 120 months before the change will occur. Facilities that meet these requirements are designated as "qualified facilities." The rules do not allow construction of a new facility, nor can the change result in a net increase in allowable emissions of any air contaminant, or allow the emissions of an air contaminant category that did not previously exist at the facility undergoing the change. The use of the terminology in the phrase "net increase in allowable emissions of any air contaminant" in §116.116(e), Changes to Qualified Facilities, should not be confused with federal terminology, where "net increase" has specific meaning as it relates to federal (major) NSR applicability involving comparison of actual emissions. The qualified facility program compares allowable emissions at one facility to allowable emissions of the same type at another facility at a single site. Prior to making this comparison, the owner or operator must determine if a project requires federal nonattainment (NA) or prevention of significant deterioration (PSD) review. This is accomplished by comparing a facility's baseline actual emission rate to the planned emission rate resulting from the change using either proposed actual emissions or the facility's potential to emit (PTE), to a significance level for the pollutant involved. If the projected emissions increase equals or exceeds the significance level, the facility owner or operator must compute the result of all emissions increases and decreases at the facility according to the definition of contemporaneous period as defined in §116.12, Nonattainment and Prevention of Significant Deterioration Review Definitions, to determine the net emission increase. If this net increase equals or exceeds a major modification threshold, then federal major NSR is triggered, and the proposed change cannot be authorized using a qualified facility claim. The federal major NSR permitting program contemplates increases in both actual and allowable emissions through the approval of new permits. The qualified facilities program explicitly excludes the inclusion of new facilities or any increases in allowable emissions. Such changes must be accomplished through the use of another approved permitting program. The qualified facilities program is designed to allow minor changes at individual facilities within a single site by trading allowable emissions between facilities. A qualified facilities change results in no change to total allowable emissions that are authorized at a single site. Additionally, any change that moves emissions closer to a site boundary is carefully evaluated to ensure no adverse effects.

The ED disagrees with the allegation that the failure of the applicant to have submitted information necessary to make a determination of whether they were in compliance with the SIP constitutes an additional basis for this objection, pursuant to 40 CFR §70.8(c)(3)(ii). Section 70.8(c)(3)(ii) is premised on the *permitting authority* not "submitting any information necessary [for EPA] to review adequately the proposed permit." The ED has provided all information requested by EPA, when asked, including NSR permits and other supporting information. Additionally, the Qualified Facility rules, and subsequent authorizations, which may be incorporated into SIP approved minor NSR permits at amendment or renewal, pursuant to 30 TAC § 116.117(c) clearly do not allow sources to utilize the Qualified Facility authorization mechanism to circumvent major NSR permitting requirements. Specifically,

30 TAC Chapter 116 requires that all new major sources or major modifications be authorized through nonattainment or PSD permitting under Subchapter B, Divisions 5 and 6, and reiterates that documentation must be kept for changes at Qualified Facilities that demonstrates that the change meets the requirements of Subchapter B, Divisions 5 and 6. The commission has made this position clear since proposing and adopting rules to implement the legislative changes resulting in the flexibility available to qualified facilities. *See* the adoption of the qualified facility rules, 21 Tex Reg. 1569, February 27, 1996; TNRCC Guidance Document "Modification of Existing Facilities Under Senate Bill 1126" dated April 1996, RG-223; and comments submitted by the TCEQ regarding EPA's proposed disapproval of the qualified facility rules, Docket ID No. EPA-R06-OAR-2005-TX-0025. EPA's delay in acting on the Qualified Facility rules, the approval of the state's federal operating permit program and confusion regarding whether the approved federal operating permit program provided federal enforceability for Qualified Facility changes, resulted in a very long period of detrimental reliance on this permit mechanism by regulated entities and TCEQ.

It is not appropriate, necessary or legally required under either 40 CFR Part 70 or the EPA approved federal operating permit program in Texas to require a condition in the operating permit to require a source to prepare and submit a written analysis of any future change / modification to ensure that minor and/or major NSR requirements under the SIP have not been triggered. The federally approved SIP already requires this analysis as part of any future NSR review. See 30 TAC Chapter 116, Subchapter B, Divisions 5 and 6. Minor NSR applicability requirements are adequately specified in the permit and commission rules governing NSR permits; thus, the applicant is currently subject to the requirements to demonstrate, upon any future change, when minor or major NSR requirements will apply. Again, with regard to qualified facilities, the TCEQ will continue its dialogue with EPA to achieve the goal of a SIP-approved minor NSR program that includes the flexibility provided for qualified facilities by the Texas Legislature.

EPA OBJECTION: Pursuant to 40 CFR § 70.8(c)(1), EPA objected to the issuance of the Title V permit since recordkeeping requirements of PSD-TX-854M2 were not in compliance with the requirements of 40 CFR § 70.6(a)(3)(ii)(B). Under the *General Terms and Conditions* provision of the draft Title V permit, reference is made to 30 TAC § 122.144 of the Texas FOP program which requires records to be kept for 5 years; however, Special Condition 45 and 48 of Flexible Permit No. 95 and PSD-TX-854M2 only requires records to be kept for two years. EPA states these conditions are inconsistent with the 5 year recordkeeping requirements of 40 CFR § 70.6(a)(3)(ii)(B) and cannot be carried forward into the Title V permit.

TCEQ RESPONSE: The TCEQ requires five year recordkeeping for all FOPs. Pursuant to 30 TAC §122.144(1), all records of required monitoring data and other permit support information must be kept for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. This is consistent with the recordkeeping requirements of 40 CFR §70.6(a)(3)(ii)(B). The requirements of 30 TAC § 122.144(1) have been and will continue to be

incorporated for all FOPs through the general terms and conditions of the FOP, which specifically require "The permit holder shall comply with all terms and conditions contained in 30 TAC § 122.143 (General Terms and Conditions), 30 TAC § 122.144 (Recordkeeping Terms and Conditions), and 30 TAC § 122.146(Compliance Certification Terms and Conditions)." These requirements were and will continue to be reiterated on the cover page of the FOP.

As all terms and conditions of preconstruction authorizations issued under 30 TAC Chapter 106, Permits by Rule (PBR) and 30 TAC Chapter 116, New Source Review (NSR) are applicable requirements and enforceable under the FOP, the five year record retention requirement of 30 TAC § 122.144(1) supersedes any less stringent data retention schedule that may be specified in a particular PBR or NSR permit. To further clarify the five year recordkeeping retention schedule for the FOP, the following text will be added to the General Terms and Conditions of the FOP:

> "In accordance with 30 TAC § 122.144(1), records of required monitoring data and support information required by this permit, or any applicable requirement codified in this permit, are required to be maintained for a period of five years from the date of the monitoring report, sample, or application unless a longer data retention period is specified in an applicable requirement. The five year record retention period supersedes any less stringent retention requirement that may be specified in a condition of a permit identified in the New Source Review Authorization attachment."

EPA OBJECTION: EPA objected to the *Special Terms and Conditions* provisions of the draft Title V permit, Condition 3 requiring stationary vents with certain flow rates to comply with identified provisions of 30 TAC Chapter 111 (EPA-approved rules in Texas' SIP) without identification of the specific stationary vents that are subject to those requirements. As such, EPA objected to this condition as failing to meet the requirement of 40 CFR § 70.6(a)(1), since the condition lacks the specificity to ensure the compliance with the applicable requirements associated with those unidentified emission units. EPA noted that the Statement of Basis document for the draft Title V permit does not provide the legal and factual basis for Condition 3, as required by 40 CFR § 70.7(a)(5). Pursuant to 40 CFR § 70.8(c)(1), EPA objected to the issuance of the Title V permit since Condition 3 was not in compliance with the requirements of 40 CFR § 70.6(a)(1) and 70.7(a)(5).

TCEQ RESPONSE: The EPA has supported the practice of not listing emission units in the permit that only have site-wide or "generic" requirements. See *White Paper for Streamlined Development of Part 70 Permit Applications*, July 10, 1995. The ED documented in the draft FOP that the Chapter 111 visible emission requirements for stationary vents were site-wide requirements - applying uniformly to the units or activities at the site. Because the applicant indicated in its application that only the Chapter 111 site-wide requirements apply to these stationary vents and other sources, the applicant is not required to list these smaller units individually in the unit summary, and therefore, these emission units did not appear in the applicable requirements summary table in the draft FOP.

With regard to stationary vents, there are three basic opacity requirements in 30 TAC § 111.111 that may apply, depending upon specific applicability criteria. Stationary vents constructed on or before January 31, 1972 must meet the requirements of 30 TAC § 111.111(a)(1)(A), which states that opacity shall not exceed 30% averaged over a six-minute period. Stationary vents constructed after January 31, 1972 must meet the requirements of 30 TAC § 111.111(a)(1)(B), which states that opacity shall not exceed 20% averaged over a six-minute period. Lastly, stationary vents where a total flow rate is greater than or equal to 100,000 actual cubic feet per minute (acfm) may not exceed 15% opacity averaged over a six minute period, unless that source has an installed optical instrument capable of measuring opacity that meets specified requirements, specified in 30 TAC § 111.111(a)(1)(C). Subsection 111.111(b) merely states that any of the emission units subject to section 111.111 (for this permit area, this would include all stationary vents and gas flares) shall not include contributions from uncombined water in determining compliance with this section.

However, the ED does agree that the FOP could be revised to more clearly group stationary vents according to which opacity limit applies. The site does not have any vents constructed prior to January 31, 1972, therefore, no vents are subject to the 30% opacity requirement of 30 TAC § 111.111(a)(1)(A). Vents with a flow rate greater than or equal to 100,000 acfm are subject to 15% opacity and are identified in the Applicable Requirements Summary. All other vents at the site are subject to 20% opacity, as noted in the revised Special Condition 3, which is a site-wide term and condition, as allowed in the *White Paper for Streamlined Development of Part 70 Permit Applications*, July 10, 1995.

A determination of the legal and factual basis for Condition 3 was added to the Statement of Basis document for the draft Title V permit and is enclosed.

ADDITIONAL CONCERNS: TCEQ acknowledges the additional concerns EPA has with the Chocolate Bayou Plant FOP and will address these issues as appropriate.