Bryan W. Shaw, Ph.D., *Chairman*
Buddy Garcia, *Commissioner*
Carlos Rubinstein, *Commissioner*
Mark R. Vickery, P.G., *Executive Director*

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

Protecting Texas by Reducing and Preventing Pollution

December 15, 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: O1439
Ineos Polyethylene North America
Ineos Polyethylene North America La Porte Plant
Deer Park, Harris County
Regulated Entity Number: RN100229905
Customer Reference Number: CN603069907

Dear Mr. Edlund:

On September 24, 2010, 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.

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 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 Mr. Christopher Crider at (512) 239-1290 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/CC/dw

cc: Ms. Lori F. Gualandri, HSE Manager, Ineos Polyethylene North America, La Porte
Director, Environmental Public Health Division, Harris County Public Health and Environmental Services, Pasadena
Air Section Manager, Region 12 - Houston

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

Project Number: 13623

EXECUTIVE DIRECTOR'S RESPONSE TO EPA OBJECTION

Permit Number O1439

The Texas Commission on Environmental Quality (TCEQ) Executive Director (ED) provides this Response to EPA's Objection to the renewal of the Federal Operating Permit (FOP) for Ineos Polyethylene North America, Ineos Polyethylene North America La Porte Plant, Permit No. O1439, Harris 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 an 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 Polyethylene North America applied to the TCEQ for a renewal of the FOP for the Ineos Polyethylene North America La Porte Plant located in La Porte, Harris County on April 16, 2009, and notice was published on July 28, 2010 in *The Bayshore Sun*. The public comment period ended on August 28, 2010. During the concurrent EPA review period, TCEQ received an objection to the permit from EPA on September 24, 2010.

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

Description of Site

Ineos Polyethylene North America owns and operates Ineos Polyethylene North America La Porte Plant, located at 1230 Independence Pkwy S. in La Porte, Harris County, Texas 77571.

The Ineos facility produces high-density polyethylene in the form of flake or plastic pellets. There are two types of reaction processes and 12 reaction lines at the Ineos site.

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

EPA OBJECTION: *Objection to the Incorporation of Flexible Permit into the Title V permit.* The *New Source Review (NSR) Authorization References* table in the draft Title V permit incorporates by reference Flexible Permit No. 2193, issued on January 3, 2008. Flexible permits are issued pursuant to 30 TAC Chapter 116, Subchapter G; however, those provisions were disapproved by EPA on June 30, 2010, pursuant to Section 110 of the Federal Clean Air Act (CAA), 42 U.S.C. § 7410, *See* 75 Fed. Reg. 41312 (July 15, 2010), and are not 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). To resolve this objection, 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. Also, 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: To preface, the mention of Flexible Permit No. 2193, issued on January 3, 2008, is inaccurate. NSR Permit No. 2193 is not incorporated into this draft Title V permit. NSR Permit No. 2193 is issued to KM Liquids Terminals LLC (RN100237452). However, Flexible Permit No. 49823, issued on April 9, 2002, is incorporated into this draft Title V permit and was correctly identified in the draft permit that went to Public Notice and EPA Review. In addition, 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 been disapproved by EPA effective August 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 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 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. 49823 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. 49823 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 Polyethylene North America 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 agrees to such a process, the TCEQ will work with Ineos 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: *Objection to Special Condition 3.* Under the Special Terms and Conditions provisions of the draft Title V permit, Condition 3 requires stationary vents with certain flow rates comply with identified provisions of 30 TAC Chapter 111 of the Texas SIP. However, the draft Title V permit does not identify the specific stationary vents that are subject to those requirements. As such, this condition fails to meet the requirement of 40 CFR

§ 70.6(a)(1), in that the condition lacks the specificity to ensure the compliance with the applicable requirements associated with those unidentified emission units. In addition, 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 objects to the issuance of the Title V permit since Special Condition 3 is not in compliance with the requirements of 40 CFR §70.6(a)(1) and 70.7(a)(5). To resolve this objection, TCEQ must revise Special Condition 3 of the draft Title V permit to list (or otherwise specifically identify) the specific stationary vents that are subject to the specified requirements of 30 TAC Chapter 111 and provide an explanation in the Statement of Basis for the legal and factual basis for Condition.

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 <u>only</u> 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. After further review, Ineos determined that the vents constructed prior to January 31, 1972 have since been modified, therefore, no vents are subject to the 30% opacity requirement of 30 TAC § 111.111(a)(1)(A). All vents at the site are subject to 20% opacity, as noted in the revised Special Condition 3.A, 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.A was added to the Statement of Basis document for the draft Title V permit and is enclosed.

EPA OBJECTION: *Objection for Failure to include all Applicable Requirements.* The draft Title V permit does not meet the requirements of 40 CFR 70.6(a)(1), since it fails to include "emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance." Permits by Rule (PBRs) are included in the definition of "applicable requirement," found at 30 TAC § 122.10(2) of the federally-approved Texas Title V program. The draft title V permit lists the following PBRs as applicable requirements: 106.122, 106.183, 106.261, 106.263, 106.373, 106.393, 106.394, 106.454, 106.472, 106.476, 106.478, 106.511, and standard exemption numbers 5, 7, 14, 51, 57, 61, 75, 86, 106, 107, and 118. However, as described below, the draft Title V permit fails to clearly identify all applicable requirements for emission units covered by the permit.

The *New Source Review Authorization References* table lists PBR 106.263, 106.373, 106.393, 106.394, 106.476, and standard exemption number 118 as applicable authorizations, but the *New Source Review Authorization References by Emissions Unit* table does not list any emissions unit subject to those PBRs.

Additional inconsistencies in the identification of applicable requirements in the draft Title V permit are associated with PBR 106.263 for which registration is required. No registrations are shown for PBR 106.263 in the TCEQ New Source Review Air Permits database for emission units covered by this draft Title V permit (regulated entity number RN100229905) and there are no emission units listed in the *New Source Review Authorization References by Emissions Unit* table as begin subject to PBR 106.263. A search of the TCEQ New Source Review Air Permits database does reveal two registrations for PBR 106.263. Both of which refer to "La Porte Plant", both have a different regulated entity number.

Pursuant to 40 CFR §70.8(c)(1), EPA objects to the issuance of the Title V permit since it is not in compliance with the requirements of 40 CFR §70.6(a)(1). To resolve this objection, TCEQ must revise the draft Title V permit to identify each emission unit covered by the Title V permit and reference the specific emission limitation, applicable monitoring and testing, recordkeeping, and reporting requirements for each such unit, including the relevant and appropriate PBRs associated with each emission unit.

TCEQ RESPONSE: Texas' general PBR rules are approved as part of the SIP. In addition, Chapter 106, Subchapter A is a defined applicable requirement under Chapter 122 and the

EPA-approved Texas operating permit program.[1] Subchapter A includes applicability, requirements for permitting by rule, registration of emissions, recordkeeping and references to standard exemptions and exemptions from permitting. Additionally, PBR authorizations can apply to distinct, insignificant sources of emissions (i.e. engine, production process, etc.) at a Title V site. As such PBRs do not violate the SIP, EPA policy or prior SIP decisions. The New Source Review (NSR) Authorization References table in the draft Title V permit incorporates the requirements of NSR Permits, including Permits by Rule (PBR), 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 permit by rule from the facility are specified in § 106.4(a)(1). Additional requirements for PBRs are found in the Special Terms and Conditions under New Source Review Authorization Requirements. In the Ineos draft Title V permit, these requirements are found in Special Terms and Conditions 11 through 13, relating to PBRs. The ED does not agree that the emissions limitations and standards for PBRs should be listed on the face of the Title V permit, as the EPA has supported the practice of incorporation by reference for the purpose of streamlining the content of the Part 70 permit. See *White Paper for Streamlined Development of Part 70 Permit Applications*, July 10, 1995 and *White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program*

The EPA has also supported the practice of not listing insignificant emission units for which "generic" requirements apply. *See White Paper 2 for Improved Implementation of the Part 70 Operating Permits Program.* The New Source Review Authorization (NSR) References table identifies preconstruction authorizations at the site that are required to be listed in the draft permit. The NSR Authorizations are applicable requirements and incorporated by reference.

Permit by Rule 106.263, is listed in the NSR Authorization Reference table, and, as noted in the objection, has not been registered with the TCEQ. However, EPA's statement that this PBR claim must be registered is incorrect. This PBR only requires registration when specific conditions apply as specified in the rule text for the PBR. PBR 106.263 requires registration only if the PBR authorizes temporary maintenance and more than 180 consecutive days is required to complete the project.

The EPA is correct in stating that two registrations for PBR 106.263 do appear in the TCEQ New Source Review Air Permits database (registrations 83687 and 82975) for "La Porte Plant", however, they are both for a completely separate Ineos site (Ineos USA LLC/La Porte Plant,

---

1 Texas Health & Safety Code (THSC) § 382.05196 and implementing rules in 30 TAC chapter 106, relating to PBRs, prohibit an owner or operator of a facility from using a PBR to authorize a major stationary source or major modification. This does not preclude the use of a PBR for non-major changes at a major stationary source, as that term is defined in federal law.

RN102142221). Ineos Polyethylene North America La Porte Plant (RN100229905), which is the owner/operator for FOP O1439, is claiming PBR 106.263 for one emission unit: MAINT.

The *New Source Review Authorization References* and the *New Source Review Authorization References by Emissions Unit* tables have both been updated in the draft Title V permit to accurately identify the relevant and appropriate PBRs, registrations, and/or standard exemptions associated with each emission unit.