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## 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  
Minor Revision  
Permit Number: O2276  
Exxon Mobil Corporation  
Linear Low Density Polyethylene Plane  
Mont Belvieu, Chambers County  
Regulated Entity Number: RN102501020  
Customer Reference Number: CN600123939

Dear Mr. Edlund:

On January 15, 2010, the U.S. Environmental Protection Agency 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.

Mr. Carl E. Edlund, P.E.  
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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 Ms. Angie Eastman at (512) 239-5945 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/AE/pg

cc: Ms. Jennifer M. Chan, Plant Manager, Exxon Mobil Corporation, Mont Belvieu  
Mr. Sherman Hampton, Environmental Coordinator, Exxon Mobil Corporation,  
Mont Belvieu  
Air Section Manager, Region 12 - Houston

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

Project Number: 14180

## **EXECUTIVE DIRECTOR'S RESPONSE TO EPA OBJECTION**

### **Permit Number O2276**

The Texas Commission on Environmental Quality (TCEQ) Executive Director provides this Response to EPA's Objection to the minor permit revision of the Federal Operating Permit (FOP) for ExxonMobil Corporation, Mont Belvieu Plastics Plant, Linear Low Density Polyethylene Plant Permit Number O2276, Chambers County, Texas.

### **BACKGROUND**

#### Procedural Background

The Texas Operating Permit Program requires that owners and operators of sites subject to Title 30 Texas Administrative Code Chapter 122 (30 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. ExxonMobil Corporation applied to the TCEQ for a minor revision of the FOP for the Mont Belvieu Plastics Plant, located in Mont Belvieu, Chambers County on September 11, 2009. The public announcement period ended on December 31, 2009. TCEQ received an objection to the permit from EPA on January 15, 2010.

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

#### Description of Site

ExxonMobil operates the Linear Low Density Polyethylene Plant, located at 13330 Hatcherville Road, Mont Belvieu, Chambers County, Texas 77580. The Linear Low Density Polyethylene Plant, is part of the Mont Belvieu Plastics Plant, which has a total of two Title V permits. The principal manufacturing process at the Mont Belvieu Plastics Plant has both a linear low density polyethylene and high density polyethylene unit. The Linear Low Density Polyethylene Plant Title V Permit Number O2276, contains requirements for all of the production units sources associated with the manufacturing of linear low density polyethylene.

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

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**EPA OBJECTION 1:** The *Special Terms and Conditions* provision 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 Title 40 Code of Federal Regulations § 70.6(a)(1) [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. In addition, 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 § 70.8(c)(1) and 70.7(a)(5). In response to this objection, TCEQ must revise Condition 3 of the draft Title V permit to list 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 3.

**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.

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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). All other vents at the site are subject to 20% opacity, as noted in the revised Special Condition 3A, 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.

**EPA OBJECTION 2:** The "Applicable Requirements Summary" table included in the *Attachments* provision of the draft Title V permit, lists emission units GRPLPEVNTIF (L1BF24001, L1BF24002, L1BF24003, L1BF24010, L1BF24157, L1BF25034, L1BF25040, L1DR23117, L1DR24012, L1DR25010, L1VD01427, L1VD02427, L1YD01310, L1YF01328, L1YF02310D), HEXDDRYREGN, L1YF01310A, L1YF01310B, L1YF01310D, MR&RSVNT, PURGERVNT, REACTORVNT, and SC&RFVNT as being subject to 40 CFR Part 63 Subpart FFFF - National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing. The "Applicable Requirements Summary" table lists the units and shows that Subpart FFFF to be applicable to those units listed but it does not identify the specific compliance and associated monitoring sections that are applicable to each unit. Subpart FFFF gives options for compliance with emission limits and monitoring based on the process involved. As such, EPA objected to the way Subpart FFFF was represented in the draft Title V permit failing to meet the requirements of 40 CFR § 70.8(c)(1), since the compliance and associated monitoring option selected by ExxonMobil must be stated in the Title V permit and tied to the emission unit(s) to which it applies. EPA objects to the issuance of the Title V permit because the "Applicable Requirements Summary" fails to identify the specific emission limitations and standards, including those operational requirements that assure compliance with 40 CFR Part 63, Subpart FFFF, as required by 40 CFR § 70.8(a)(1). the draft Title V permit holder that will be used to ensure compliance with the emission limitations governing miscellaneous Organic Chemical Manufacturing regulated under 40 CFR Part 63, Subpart FFFF. Pursuant to 40 CFR § 70.8(c)(1), EPA objected to the issuance of the Title V permit since "Applicable Requirements Summary" table was not in compliance with the requirements of 40 CFR § 70.8(c)(1) and 70.7(a)(5).

**TCEQ RESPONSE:** The draft permit has been updated to include options chosen by ExxonMobil, as allowed by 40 CFR Part 63, Subpart FFFF. Additionally, the group listed as GRPLPEVNT1F, that was Subject to MACT FFFF in the permit was changed to group GRPLPG2CPV; the units were also moved to GRPLPEVNT1 for Chapter 115.

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The rearrangement of the emission units into different groups was necessary to make sure that the correct applicable requirements are assigned to the proper emission unit. L1YD01310, L1YF01310A, L1YF01310B, L1YF01310D was also added to GRPLPG2CPV. A new group, GRPLPG1BPV was also formed incorporating units HEXDDRYREGN, MR&RSVNT, PURGERVNT, REACTORVNT into it.

**EPA OBJECTION 3: Objection to Special Condition 14 for Failing to Meet Compliance Certification Requirements.** The *Special Terms and Conditions* provision of the draft Title V permit, Condition 14, requiring the permit holder to certify compliance with all terms and conditions. The compliance certification requirements for Title V permits are stated in 40 CFR § 70.6(c)(5). As such, EPA objected to this condition as failing to meet the requirement of 40 CFR § 70.6(a)(1), since the condition lacks including the identification of the methods or other means for determining the compliance status with each term and condition of the permit. Pursuant to 40 CFR § 70.8(c)(1), EPA objected to the issuance of the Title V permit since Condition 14 does not meet the regulatory requirements of 40 CFR § 70.8(c)(1) and § 70.6(c)(5).

**TCEQ RESPONSE:** The ED does not agree that Special Condition 14 of the draft permit needs to be revised. Special Condition 14 of the draft permit is in compliance with the specific requirements of the EPA approved Federal Operating Permit program, as found in 30 TAC Chapter 122. Specifically, § 122.146(5), requires the annual compliance certification to include or reference the specified elements, including: the identification of each term or condition of the permit for which the permit holder is certifying compliance, the method used for determining the compliance status of each emission unit, and whether such method provides continuous or intermittent data; for emission units addressed in the permit for which no deviations have occurred over the certification period, a statement that the emission units were in continuous compliance over the certification period; for any emission unit addressed in the permit for which one or more deviations occurred over the certification period, specific information indicating the potentially intermittent compliance status of the emission unit; and the identification of all other terms and conditions of the permit for which compliance was not achieved. All permit holders are required to comply with the requirements of 30 TAC § 122.146, as well as all other rules and requirements of the commission.

In addition, in 2006, EPA's Title V Task Force endorsed the 'short-form' approach used by TCEQ, as an option for compliance certification. (See Title V Task Force, Final Report to the Clean Air Act Advisory Committee, page 108 (April 2006)).

However, in order to help clarify any confusion, the term has been revised to read as follows:

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The permit holder shall certify compliance in accordance with 30 TAC § 122.146. The permit holder shall comply with 30 TAC § 122.146 using at a minimum, but not limited to, the continuous or intermittent compliance method data from monitoring, recordkeeping, reporting, or testing required by the permit and any other credible evidence or information. The certification period may not exceed 12 months and the certification must be submitted within 30 days after the end of the period being certified.

**EPA OBJECTION 4: Objection to the Permit Shield.** The draft Title V permit includes a "Permit Shield" attachment that covers some "grandfathered" facilities, and TCEQ's statement of basis (SOB) includes statements that a specific facility was constructed before a certain date. EPA has previously objected to negative applicability determinations based on conclusory statements on "grandfathered" units claiming that no modifications have occurred that triggered PSD, NSR or a modification subject to NSPS applicability (*See, e.g.,* letter from Kerrigan G. Clough, Assistant Regional Administrator, EPA, Region 8 to the Colorado Department of Public Health and Environment, Re: EPA Review of Proposed Title V Operating Permit for TriGen-Colorado Energy Corporation, dated September 13, 2000 ("TriGen Objection"). Similar conclusory statements such as those contained in the draft Title V permit and the accompanying SOB do not meet the permit shield requirements of 40 CFR § 70.6(f). Pursuant to 40 CFR § 70.8(c)(1), EPA objects to the issuance of the Title V permit because the permit shield provisions of the draft title V permit are not supported by an adequate determination that meets the requirements of 40 CFR § 70.6(f), as further explained in the TriGen Objection referenced above. In response to this objection, TCEQ must provide an adequate demonstration consistent with the requirements described above or delete the permit shield requirements in the Title V permit.

**TCEQ RESPONSE:** The ED disagrees that the permit shield does not meet the requirements of 40 CFR § 70.6(f). Special Condition 22 was drafted in compliance with the requirements of the EPA approved federal operating permit program for the State of Texas, 30 TAC Chapter 122. Section 122.142(f), Permit Content Requirements, clearly allows the ED discretion to grant a permit shield for specific emission units at the request of an applicant. Additionally, § 122.148, Permit Shield, provides the requirements for the exercise of discretion by the ED, including that specific information be submitted by the applicant, in addition to other requirements. The ED determined that the application information submitted by ExxonMobil and certified by a responsible official was sufficient to grant the permit shield.

Furthermore, the permit shield as listed in FOP O2276 provides a "concise summary" of the negative applicability determination for each regulation that may potentially apply to emission units listed in the Permit Shield table as required by 40 CFR § 70.6(f)(1)(ii). This concise summary contains both the determination and the relevant facts upon which

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the determination was based, as supported by a certification by the responsible official as to the truth, accuracy and completeness of the facts for which the responsible official is liable both civilly and criminally. The SOB notes that a permit shield was requested and granted, and contains the complete table of permit shields from the permit. The ED has thus exercised his discretion, as allowed under the EPA approved operating permit program for the State of Texas, and the permit shield thus is not an unsupported or unenforceable "blanket statement". The ED is aware of no provision in 40 CFR Part 70 stating that a permit shield cannot be granted based on certified representations regarding construction, modification, or reconstruction date information.

EPA's reliance on the TriGen-Colorado Energy Corporation objection to support an objection to the permit shield for ExxonMobil's boilers is misplaced. In the TriGen objection, EPA Region 8 stated the state permitting authority must remove the permit shields for PSD and NSPS nonapplicability based on a statement of no modification subsequent to initial construction. However, EPA also concluded the permit authority "may retain the permit shield for original NSPS applicability based on the date of construction of the boilers." The NSPS Db and Dc negative applicability reasons at issue here for the boilers listed in the Permit Shield table of FOP O2276 are based on construction date, with no significant modification or reconstruction triggering a NSPS regulation. There is also an NSPS DDD negative applicability reason for fugitive emission units listed in the Permit Shield table of FOP O2276 based on construction date.

**ADDITIONAL CONCERNS:** TCEQ acknowledges the additional concerns EPA has with the Mont Belvieu Plastics Plant FOP and will address these issues as appropriate.