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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: O1240
Occidental Chemical Corporation
Ingleside Plant
Gregory, San Patricio County
Regulated Entity Number: RN100211176
Customer Reference Number: CN600125256
Account Number: SD-0092-F

Dear Mr. Edlund:

On December 30, 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.

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. 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. Mark Evans, Environmental Superintendent, Occidental Chemical Corporation,
Ingleside
Air Section Manager, Region 14 - Corpus Christi

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

Project Number: 13341

EXECUTIVE DIRECTOR'S RESPONSE TO EPA OBJECTION

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The Texas Commission on Environmental Quality (TCEQ) Executive Director provides this Response to EPA's Objection to the minor revision of the Federal Operating Permit (FOP) for Occidental Chemical Company, Ingleside Plant, Permit No. O1240, San Patricio 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. Occidental Chemical Corporation applied to the TCEQ for a minor revision of the FOP for the Ingleside Plant located in Gregory, San Patricio County on February 20, 2009, and announcement began November 17, 2009. The public comment period ended on December 17, 2009. TCEQ received an objection to the permit from EPA on December 30, 2009.

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

Description of Site

Occidental Chemical Corporation, Ingleside Plant is an alkali and chlorine facility. The facility is located at 4133 State Highway 361 in Gregory, San Patricio County, Texas.

Chlorine and sodium hydroxide at the Ingleside Chemical Plant are made by the electrolysis of saturated sodium chloride brine in an electrolytic cell. The primary steps for chlorine production include: receipt and processing of raw brine, brine electrolysis, chlorine processing and purification, hydrogen processing and purification, caustic processing and purification.

The SOP also includes support services for the chlor-alkali plant, which includes: cell renewal operations, wastewater treatment, cooling tower, chlorine unloading, and emergency power.

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

EPA OBJECTION: EPA objected to incorporation by reference of New Source Review (NSR) permit numbers 19880 and PSD-TX-776 and 35335 and PSD-TX-880. The *New Source Review Authorization References* table in the draft Title V permit incorporates 19880 and PSD-TX-776, revised February 19, 1997, and 35335 and PSD-TX-880 revised February 25, 1998, by reference. EPA addressed incorporation by reference in *White Paper Number 2 for Improved Implementation of the Part 70 Operating Permits Program* dated March 5, 1996 (White

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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 that are 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 *Tesoro Order*, EPA's expectations of what requirements may be referenced and the necessary level of detail are guided by Sections 504(a) and (c) of the Act 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 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-2007-02 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 permits 19880 and PSD-TX-776 and 35335 and PSD-TX-880; 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. O1240 to include, in a new Appendix B of the permit, a copy of NSR Permit No. 35335 and PSDTX880 and its corresponding terms and conditions, and emission limitations. NSR Permit No. 19880 and PSD-TX-776 will not be included in Appendix B as the permit has been voided. NSR Permit No. 19880 and PSD-TX-776 was voided January 7, 2005 at the applicant's request due to unit inactivity and no air emissions being generated. 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

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§ 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

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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 No. O1240 to include, in a new Appendix B of the permit, a copy of NSR Permit No. 35335 and PSD-TX-880 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.

EPA OBJECTION: Pursuant to 40 CFR § 70.8(c)(1), EPA objected to the issuance of the Title V permit since recordkeeping requirements of NSR Permit Nos. 19880 and PSD-TX-776 and 35335 and PSD-TX-880 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 19 of NSR Permit No. 19880 and PSD-TX-776 (revised June 23, 1997), Special Condition #18 of NSR Permit No. 35335 and PSD-TX-880 (revised 10/12/09), and Special Condition #24 of NSR Permit No. 19169 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

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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

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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.

EPA OBJECTION: Pursuant to 40 CFR § 70.8(c)(1), EPA objected to the issuance of the Title V permit because Special Condition 1.F. fails to identify the specific test method option selected by the permit holder to monitor and fails to indicate whether the health based compliance alternative for total chlorine will be used under 40 CFR Part 63, Subpart EEE. The proposed Title V permit incorporates by reference 40 CFR Part 63, Subpart EEE - National Emission Standards for Hazardous Air Pollutants from Hazardous Waste Combustors. This subpart gives options for the test method used for the monitoring of dioxins and furans, and hydrogen chloride and chlorine gas. The subpart also allows for a health based compliance alternative for total chlorine. The failure to identify the test methods selected and the failure to indicate whether the compliance alternative for total chlorine will be used does not meet the requirements of 40 CFR § 70.6(a)(1).

TCEQ RESPONSE: The TCEQ requested the company to provide the applicable requirements for 40 CFR Part 63, Subpart EEE. The TCEQ provided the draft flowchart outlining the rule and rule requirements to the company. The company provided the applicable standards, monitoring and testing, recordkeeping, and reporting requirements, including test method options selected, for emission units subject to 40 CFR Part 63, Subpart EEE. TCEQ reviewed these requirements and included them in the Title V permit Unit Summary and Applicable Requirement Summary tables in the permit attachments.

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