UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
REGION 6
1445 ROSS AVENUE, SUITE 1200
DALLAS, TX 75202-2733

JUN 27 2012

Mr. Mark Evans
Environmental Manager
Occidental Chemical Corporation
P.O. Box CC
Ingleside, TX 78362

RE: Completeness Determination for Occidental Chemical Corporation – Ingleside Chemical Plant Application for Greenhouse Gas Prevention of Significant Deterioration Permit for the Natural Gas Liquids Fractionation Facilities

Dear Mr. Evans:

This letter is in response to your application dated May 18, 2012, to the Environmental Protection Agency (EPA) for a Greenhouse Gas Prevention of Significant Deterioration permit. EPA received this application on May 21, 2012. After our initial review of your application and all supporting information, we have determined that this application is incomplete (40 CFR 124) and additional information is required to consider it complete. Enclosed is a list of additional information required.

Upon receipt of the additional information, we will review it for completeness. If complete, we will issue a completeness determination on the technical information of your application. The information requested is necessary for EPA to develop a Statement of Basis and rationale for the terms and conditions for a draft permits. As we develop our proposed determination, it may be necessary for EPA to request additional clarifying or supporting information. If the supporting information substantially changes the original scope of the permit application, an amendment or new application may be required.

While not required for the completeness determination, the EPA may not issue a final permit without determining that its action will have no effect on threatened or endangered species and their designated critical habitat or until it has completed consultation under Section 7 of the Endangered Species Act. In addition, the EPA must undergo consultation pursuant to Section 106 of the National Historic Preservation Act. To expedite these consultations, the EPA requests that permit applicants provide a biological assessment and a cultural resources report covering the project and action area. We request that you submit this information as early as possible, so that the EPA may issue a permit at the earliest possible time, and within the timeframes required by statute. At this time, Occidental Chemical Company (OxyChem) may request designation as a non-federal representative of the EPA to the U.S. Fish and Wildlife Service, and the National Marine Fisheries Service if necessary, for preparation of a biological assessment and for purposes of informal consultation under Section 7 of the Endangered Species Act.

If you have any questions concerning the review of your application, please contact Aimee Wilson of my staff at (214) 665-7596.

Sincerely yours,

Carl E. Edlund, P.E.
Director
Multimedia Planning and
Permitting Division

cc: Mr. Mike Wilson, P.E., Director
Air Permits Division
Texas Commission on Environmental Quality

ENCLOSURE

EPA Comments on Occidental Chemical Corporation
Greenhouse Gas Prevention of Significant Deterioration Permit Application
Dated May 12, 2012

General

1) On page 5, of the permit application, it states, "Most new pumps and compressors will have dual mechanical seals that route vapor losses to a control device or will be of equivalent non-leaker design. Due to this level of control, these pumps and compressors are not identified in the calculations found in Appendix C." Also on page 5, it states, "Similarly, relief valves that vent to control devices and relief valves that are equipped with rupture discs and pressure indicators are not identified in the calculations since their control is expected to be 100%." Please identify the control devices used by the pumps, compressors, and relief valves. Is the contribution from these sources included in the calculation of GHG emissions of the control device (i.e. thermal oxidizer or flare)?

2) The permit application does not propose any compliance monitoring for the new thermal oxidizers or the existing cogeneration units. EPA requests that OxyChem propose its preferred monitoring, recordkeeping, and reporting strategy to ensure enforceability of the BACT requirements pursuant to 40 CFR Section 52.21(n). For the two thermal oxidizers and the cogeneration units, we are currently assuming that Continuous Emission Monitoring System (CEMS) is the preferred method followed by parametric fuel monitoring with emission factors, etc.

BACT Analysis

3) On page 4 "Proposed Greenhouse Gas (GHG) Emissions", the application indicates that several storage tanks and vessels will be utilized. Are these tanks and vessels existing or new units? The GHG application indicates that emissions from the tanks are routed to the thermal oxidizers and there is no indication what parameters are being used in the emission calculations. Please identify the size of each tank, type of tank, and what will be stored in each of the tanks. If there are multiple types of products or wastes stored, then please list each of them for the individual tanks. Since tank vapors are controlled by thermal oxidizers, the combustion will generate GHG emissions. Therefore, since GHG emissions are created from the combustion of VOC tank vapors, a BACT analysis should be developed for the tanks if they are new or modified units. Please be sure to incorporate into the tank BACT analysis the factors that were considered when comparing internal floating roof (IFR), external floating roof (EFR), and fixed roof. Are there any fixed roof tanks and do they have submerged fill? Please provide any other additional information for the tanks such as, did the applicant choose to have the tanks painted white or another color of high refractive index to reduce vapor production?

4) What is the DRE of the flare? Is the flare air assisted, steam assisted, or unassisted? The BACT analysis for the emergency flare (EPN NGL-3), on pages 4 and 5 of appendix D, identifies the selection of a Thermal Oxidizer as BACT. This determination indicates that the flare will only be utilized as a last resort. Please provide comparative benchmark data you

may have used as part of your BACT analysis comparing the destruction removal efficiency of this equipment/process to other similar or equivalent equipment/processes. Please clarify and propose a BACT limit for the flare.

5) EPA requests a detailed list of all the waste gases that are sent to the thermal oxidizers. Also, please indicate which waste gases are continuous and which are intermittent. Will these waste gases have a gas composition analyzer? Please provide the anticipated composition of each waste stream, if known. Also, please provide the destruction and removal efficiency (DRE) of the thermal oxidizers. The BACT analysis for the Thermal Oxidizers indicates that waste heat recovery on the thermal oxidizers will reduce GHG emissions from the cogeneration units by reducing steam demand. Please provide comparative benchmark data you may have used as part of your BACT analysis comparing the destruction removal efficiency of this equipment/process to other similar or equivalent equipment/processes. Also, please provide an output based BACT limit for the thermal oxidizers.

6) For the NGL process fugitives BACT, on pages 8 and 9 of appendix D, it is stated that the applicant will implement 28MID for VOC. Will an enhanced 28MID program which would include monitoring for methane (CH_4) be utilized? Also, it does not appear that OxyChem considered the TCEQ 28LAER program with other possibilities of reducing fugitive emissions and leaks as part of its BACT analysis. Did the BACT analysis consider 28LAER as the highest available control option? If not, why? Please further refine the BACT analysis for fugitive emissions.

Emission Calculations

7) In Appendix C, the table titled "NGL Thermal Oxidizers," please provide an explanation of the calculations used to determine the annual GHG emissions. Why were equations W-39a, W-39b, and W-40 from 40 CFR Part 98 Subpart W not used? Are metered fuel flow measurements available for these units?

8) In Appendix C, the table titled "NGL Emergency Flare," please provide an explanation of the calculations used to determine the annual GHG emissions. Will emissions be calculated using 40 CFR Part 98 Subpart W §98.233(n), using equations W-19, W-20, W-21, and W-40?

9) In Appendix C, the table titled "Cogeneration Units - Proposed GHG Increased Emissions," please provide an explanation of the calculations used to determine the annual GHG emissions. Are metered fuel flow measurements available for these units? Do these units have CEMS?