FLINT HILLS resources®
Corpus Christi Refineries

CERTIFIED MAIL
RETURN RECEIPT REQUEST
7012 3050 0000 9879 4744

P.O. Box 2608
Corpus Christi, Texas 78403-2608

March 17, 2014

Ms. Kathleen Aisling
U.S. Environmental Protection Agency, Region 6
Air Permits Section (6PD-R)
1445 Ross Avenue, Suite 1200
Dallas, Texas 75202-2733

Re: Flint Hills Resources Corpus Christi, LLC - West Refinery
PSD Greenhouse Gas Permit Application
Domestic Crude Project
Response to March 12, 2014 Information Request

Dear Ms. Aisling:

On behalf of Flint Hills Resources Corpus Christi, LLC (FHR), I am submitting responses to your March 12, 2014 information request (sent via email) regarding the greenhouse gas (GHG) prevention of significant deterioration (PSD) permit application FHR submitted to EPA Region 6 on December 12, 2012. The permit application seeks to authorize a project at FHR's West Refinery to allow the refinery to process a larger percentage of domestic crude oil (the Domestic Crude Project). Responses to your information request are provided on the following pages.

In the event you have additional questions or would like to discuss further, please contact Daren Knowles at (361) 242-8301.

Sincerely,

Valerie Pompa
Vice President and Manufacturing Manager

VP/DK/syw
Air 14-105; W 3 N 22

Enclosure

cc: Air Section Manager, TCEQ, Region 14, Corpus Christi, w/enclosure
Mr. Kris L. Kirchner, P.E., Waid Environmental, Austin, w/enclosure
Mr. Jeff Robinson, EPA Region 6, w/enclosure (via email)
Ms. Melanie Magee, EPA Region 6, w/enclosure (via email)

RESPONSES TO MARCH 12, 2014 INFORMATION REQUEST

1. **On page 73 of the Revised March 2014 permit application, there is a value of 178,700 tons per year of CO2 emitted for the 150# boiler. On page 72 of the same document, there is a cost estimate table stating that the new 150# Steam Boiler would have an amine capture skid, which implies that the carbon would be captured from this unit and not emitted. Please clarify whether or not the CO2 emission value in the table takes into account the capture of the CO2.**

   FHR's Response

   The CO2 emissions listed for the 150# boiler in the revised BACT analysis are the amounts that would be emitted without the capture and permanent sequestration of the CO2. The basis for the CCS cost and energy consumption estimates was 90% capture, so, if CCS could be applied to the boiler, the post collection on-site emissions would be approximately 10% of the amount we listed in the application (or 17,870 tons per year). This, of course, assumes that CCS for the boiler is both available and technically feasible. However, for the same reasons that CCS is neither available nor technically feasible for the project heaters, it also is neither available nor technically feasible for the boiler.

2. **On page 79 of the Revised March 2014 permit application, the table states that enhanced LDAR includes installation of components with "low leak" and/or "leakless" technologies in certain applications, while Step 3, #1, states that enhanced LDAR includes installation of "low leak" and/or "leakless" technologies (designed to be less than 100 ppmv per Method 21). Please clarify the proposed BACT in regard to which components, under what circumstances, will be installed with low leak or leakless technologies, and the backing document for this enhanced LDAR proposal (TCEQ permit, CD, internal company policy, or other.)**

   FHR's Response

   As noted on page 80 of the Revised March 2014 BACT analysis, "Specifically, in accordance with the Consent Decree, FHR will implement 'low leaking' technology for all new non-specialized globe and gate valves. These valves are required to meet <100 ppm leakage as purchased." A copy of the Consent Decree is available at the following website: http://www2.epa.gov/sites/production/files/documents/kochcaacd.pdf (see paragraph 84).