

US EPA ARCHIVE DOCUMENT

From: Karen Olson [kolson@zephyrenv.com]
Sent: Monday, March 31, 2014 11:47 AM
To: LeDoux, Erica
Cc: 'Tammy Lasater'; Eric Quiat; Mary Bachynsky/FPC Environmental Dept.
Subject: EPA Question RE: Formosa Olefin 3 flare as backup for Olefins 2

Erica,

We have discussed this issue with Formosa and the request for the OL3 flare to serve as a backup for the Olefins 2 flare will be withdrawn from the TCEQ permit application. Hopefully this resolves any questions you have concerning this issue.

Thank you,

Karen N. T. Olson, P.E.
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From: LeDoux, Erica [mailto:LeDoux.Erica@epa.gov]
Sent: Wednesday, March 26, 2014 3:28 PM
To: Tammy Lasater / FDDE; Karen Olson; Mary Bachynsky/FPC Environmental Dept.; Eric Quiat
Cc: Robinson, Jeffrey; Wilson, Aimee
Subject: Formosa olefin 3 flare question

Noticed on page IV-6 of Formosa's original application submitted to TCEQ that the olefins 3 elevated flare will serve as a backup for the olefins 2. During maintenance activities at the olefins 2 plant, a bypass line may route waste gas from the olefins 2 (old) to the olefins 3 (new) elevated flare. This wasn't mentioned in the revised GHG application. Will this still be an option? If so, please provide the same information requested below in question #2 for the olefins 2 waste stream.

Will the olefins 2 flare serve as a backup for olefins 3 elevated flare?

Thank you,

Erica Le Doux

From: LeDoux, Erica

Sent: Monday, March 17, 2014 3:47 PM
To: 'Tammy Lasater / FDDE'
Cc: Karen Olson; Mary Bachynsky/FPC Environmental Dept.; Eric Quiat;
Robinson, Jeffrey; Wilson, Aimee
Subject: RE: Lync Web meeting info for review of FPC TX expansion project
calculation workbooks

The work on the draft permit and statement of basis (SOB) is in progress. Presently filling in gaps, confirming information in these documents. FPC will get the opportunity to review the draft permit and SOB when it is placed in concurrence

Please provide the following:

- 1) The global warming potentials (GWP) have been revised. The final rule published on November 29, 2013 in the Federal Register will be effective for all permits issued on or after January 1, 2014. The methane value was increased from 21 to 25 (times more potent than CO₂), the N₂O value was decreased from 310 to 298, and the N₂O value was decreased from 23,900 to 22,800. Due to the prospective changes in the emissions for methane in the FPC application, please provide an updated emission tables using the new GWPs.
- 2) Please provide the supplemental emission data requested below:
 - * The speciated composition analysis for the pipeline natural gas to the RTOs (LDPE unit), olefin furnaces, four steam boilers, PDH reactors, flare pilots to the two-staged elevated flares and the low pressure flares.
 - * The anticipated speciated composition analysis for the blended fuel gas to the olefin furnaces, steam boilers, and to the PDH reactors
 - * The anticipated speciated composition analysis for the vent stream to the RTOs (LDPE)
 - * The anticipated speciated composition analysis of vent streams to the elevated flares and low pressure flares.
 - * The anticipated speciated composition analysis for the vent streams due to MSS activities routed to the above mentioned flares.
 - * The anticipated speciated composition analysis for the piping contents used to calculate the fugitive piping emissions for olefins and PDH units

This information will serve to supplement and support the emission data submitted in application. Please include the MW, concentration, HHV, flow rates, carbon content (lb C/lb constituent).

Please provide example calculations on how you went from the speciated data to your emission estimates. Applications for your reference with similar data provided includes: ExxonMobil, Occidental and Dow.

3) Please confirm that the blended fuel gas for the olefins furnaces and the steam boilers will still be comprised of the following:

- * Off-gas from the dryer regeneration unit (deethanizer overhead)
- * Off-gas from the chilling train (demethanizer overhead)
- * Off-gas from pressure swing absorption unit

4) Please confirm that the blended fuel gas for the PDH reactors will still be comprised of the following :

- * Off-gas resulting from the regeneration of the absorbent used in the CO₂ removal unit
- * Gas phase from the expander in the cryogenic unit
- * Vent gases leaving the process condensate stripper

5) The LDPE plant is design to produce how many short tons/year of LDPE? Please confirm 1,750,000 short tons/yr for the olefins plant and 725,000 short tons/yr of polymer grade propylene for the PDH plant?

6) Was a vapor recovery unit (VPU) considered for the low pressure streams (i.e., API product tanks, spent caustic tanks, spent caustic oxidation unit and the wash oil chemical tanks)?

Please supplement the BACT analysis for the low pressure flares with an explanation why this option was eliminated.

Also, please let me know if I can start on Wednesday taking a look at the FPC emission calculation spreadsheets as was discussed using the Lync web meeting

Thank you,

Erica G. Le Doux, Environmental Engineer
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From: Tammy Lasater / FDDE [mailto:tammyl@fdde.fpcusa.com]
Sent: Thursday, March 13, 2014 3:48 PM
To: LeDoux, Erica
Cc: Karen Olson; Tammy Lasater / FDDE; Mary Bachynsky/FPC Environmental Dept.
Subject: FW: Lync Web meeting info for review of FPC TX expansion project calculation workbooks

Hello Erica,

We are wondering how things are progressing regarding our draft permits.

We had hopes that you would be able to use the Lync Web Meeting format to verify our calculations and move forward to finalize the draft permits.

We are in the process of developing the additional information for CCS and flare gas recovery that you recently requested.

When do you think you will have your first draft of permit conditions for our review and discussion?
We are anxious to get to public notice.

Please let us know the status and schedule.

Regards,

Tammy

From: LeDoux, Erica [mailto:LeDoux.Erica@epa.gov]
Sent: Tuesday, February 18, 2014 4:35 PM
To: Karen Olson
Cc: 'Tammy Lasater'; Austin O'Kelly; Eric Quiat
Subject: RE: Lync Webmeeting info for review of FPC TX expansion project calculation workbooks

Got it! I will get back to you all on this. Thank you,

Erica Le Doux

From: Karen Olson [mailto:kolson@zephyrenv.com]
Sent: Tuesday, February 18, 2014 1:49 PM

To: LeDoux, Erica
Cc: 'Tammy Lasater'; Austin O'Kelly; Eric Quiat
Subject: Lync Webmeeting info for review of FPC TX expansion project calculation workbooks

Erica - It was great to talk to you today. We were encouraged that you are working on draft permits for FPC's review/comment and that you are planning for the July 2014 permit issuance date (assuming the cross cutting issues do not cause unnecessary delays). As Tammy requested, if you have any technical issues that you need further explained while you are finalizing the first draft of permit conditions, please email Tammy, Eric Quiat and myself. One of use will be able to make sure you get what you need.

We are happy to help you expedite your final review of the emission calculations. We appreciate your willingness to consider our proposed web-meeting as an alternative to providing you a CD of the calculation workbook. I am providing information below that you can provide to your IT folks. We have used this Webmeeting system with TCEQ and they did not have any IT issues.

To join a Lync Webmeeting, you do not have to download any software to your computer.

All you have to do is:

1. Click on "Join online meeting" link that will come in the meeting invitation
2. Join as " Guest"
3. When you click to Join online meeting, the program may ask you how you would like to join the meeting.
There are three options.

A. The easiest and our recommended option is to choose "Lync Attendee".

B. You can also join using one of the following if it is already installed on your computer:

- "Lync" or
- "Silverlight" as required for Lync Web App (which requires admin privileges)

The details about each of these joining options is available if you click on "First online meeting?" (link below). It will give you probably more information than you or your IT folks could possibly want.

I am also including Zephyr's IT contact so if your IT folks want to talk "IT" language they can talk to Austin O'Kelly at 512-579-3838 or aokelly@zephyrenv.com .

Thanks again. Please let us know how and when you would like to set this up.

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Join online meeting
<https://meet.zephyrenv.com/kolson/TTYP7HM1>

First online meeting?
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