From: Eric Quiat [equiat@zephyrenv.com]
Sent: Monday, April 28, 2014 5:01 PM
To: LeDoux, Erica
Cc: Karen Olson; Tammy Lasater
Subject: Basis of MSS CO2e Totals
Attachments: Revised OL3 GHG calcs summary (Table A-1).pdf; rev OL3 MSS GHG
Summary (Table A-10).pdf; rev PDH MSS GHG Summary (Table A-11).pdf;
rev LDPE MSS GHG Summary (Table A-8).pdf; LDPE GHG emission summary
(Table A-1).pdf

Erica,

In response to your request from our phone discussions last Thursday, please find a
speciated breakout of the MSS CO2e annual emission rates for the Olefins 3 Elevated
flare below. Attached are updated GHG MSS emission summary tables the reflect the
use of the updated Global Warming Potential values. Revised GHG Emission
Summary Tables (Table A-1) for the LDPE and Olefins Expansion applications are also
attached to reflect the updated MSS emissions.

Formosa would like to note that the speciated emissions below are provided for
informational purposes only and are not intended to be enforceable representations or
established as permit limitations for MSS activities. As explained previously, the MSS
GHG emission rates were estimated based on equipment volumes, activity frequency,
process conditions and estimated activity frequency. As such, the nature of MSS
activities is highly variable; thus Formosa proposed a total annual CO2e emission limit
for GHG MSS emissions. We understand that this information was requested in order
to complete the Statement of Basis (SOB) and that no individual GHG pollutant species
mass emission limit will be established in the permit or SOB.

Olefins Expansion:
1. Olefins 3 MSS emissions to elevated flare = 33,111 tpy CO2e (from Table A-10,
attached). Based on the following estimated GHG mass emission rates:
a. 29,495 metric ton/yr CO2
b. 11 metric ton/yr CH4
c. 0.9 metric ton/yr N2O
d. Total CO2e = 30,038 metric ton/yr
i. = approximately 33,111 short ton/yr

2. PDH Plant MSS emissions to elevated flare = 31,743 tpy CO2e (from Table A-11,

attached). Based on the following estimated GHG mass emission rates:
a. 21,955 metric ton/yr CO2
b. 263 metric ton/yr CH4
c. 0.9 metric ton/yr N2O
d. Total CO2e = 28,797 metric ton/yr
i. = approximately 31,743 short ton/yr

LDPE Plant:

1. LDPE Plant MSS emissions to elevated flare = 18,896 tpy CO2e (from Table A-8,
attached). Based on the following estimated GHG mass emission rates:
a. 17,037 metric ton/yr CO2
b. 1 metric ton/yr CH4
c. 0.26 metric ton/yr N2O
d. Total CO2e = 17,142 metric ton/yr
i. = approximately 18,896 short ton/yr

Regards,

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