

US EPA ARCHIVE DOCUMENT

From: [Neal Nygaard](#)
To: [Aimee.Wilson/R6/USEPA/US@EPA](#)
Cc: [Harris, Christina](#); [Shanon DiSorbo](#)
Subject: RE: KM Liquids Application Questions
Date: 11/30/2012 03:05 PM

Aimee,

See below for my responses to your questions. Let me know if you have any additional questions.

Neal

From: Wilson.Aimee@epamail.epa.gov [mailto:Wilson.Aimee@epamail.epa.gov]
Sent: Friday, November 30, 2012 11:52 AM
To: Neal Nygaard; Shanon DiSorbo
Cc: Harris, Christina
Subject: KM Liquids Application Questions

I am busying drafting the permit and statement of basis. I have run into a few items that I have questions about.

Can you please verify the geographic coordinates? When plugged into a map, they come up in the wrong location.

Latitude: 29.734898
Longitude: -95.218420

What is the maximum firing rate for the hot oil heaters? I see a short term maximum - Is this the maximum?

The maximum short-term firing rates are included on Table A-1 of the application. The short-term maximum rates are 247 MMBtu/hr per heater.

Did the GHG emissions include MSS for the heaters? Or were they included in the EPN - MSS emissions?

Yes, the heater GHG emission estimate on Table A-1 includes MSS scenarios.

What is the DRE of the flare for methane?

The flare DRE for methane is 99%.

What is the DRE for the Marine VCU for methane? Are these existing units SD4-VCU, VCU-1A, VCU-1B, VCU-2A, VCU-2B, and VCU-2C?

The marine VCU DRE is 99.8%. Yes, these are existing VCUs.

Can you provide a complete list of the sources of emissions sent to the VRU for MSS control?

The facility flare (EPN: FL-101) will be utilized to control MSS emissions associated with the process

equipment (i.e., towers, vessels, piping, etc.). The portable VCU will be utilized to control MSS emissions associated with storage tanks, process equipment not connected to the facility flare, air mover/vacuum trucks, and frac tanks.

Is the VCU for MSS different than the Marine VCU?

Yes, the MSS VCU is a portable unit while the Marine VCUs are permanent units.

What are the estimated methane emissions from fugitives?

Due to the insignificant level of methane emissions from fugitives, we conservatively estimate that the 7.76 tons of VOC is 100% methane.

Feel free to call me if you have any questions.

Thanks,
Aimee

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From: [Neal Nygaard](#)
To: [Aimee Wilson/R6/USEPA/US@EPA](#)
Cc: [Harris, Christina](#)
Subject: FW: KM Liquids Terminal Response to Completeness Determination
Date: 09/27/2012 10:34 AM
Attachments: [API_560_Annex_G.PDF](#)

Aimee,

Per our phone discussion on August 23, 2012, KMLT is providing the additional information listed below to aid in your review of the pending GHG permit application.

Additional Impact Analysis – 40 CFR 52.21(o)

PSD regulations require an Additional Impacts Analysis for projects that are subject to PSD review. In 40 CFR 52.21(o), it states that:

- The owner or operator shall provide an analysis of the impairment to visibility, soils and vegetation that would occur as a result of the source or modification and general commercial, residential, industrial and other growth associated with the source or modification. The owner or operator need not provide an analysis of the impact on vegetation having no significant commercial or recreational value.
- The owner or operator shall provide an analysis of the air quality impact projected for the area as a result of general commercial, residential, industrial and other growth associated with the source or modification.

The proposed project will not result in a significant increase in any air contaminant other than GHGs; therefore, the project is not subject to PSD review for any other pollutant. GHGs themselves are not known to have any direct impact on visibility, soils, and vegetation other than their possible impact associated with global warming, which EPA has ruled does not need to be evaluated for GHG PSD permits. However, emissions of other air pollutants from the project could potentially impact these resources. Because the project increases for all other pollutants are insignificant, it is concluded that their impact on visibility, soils, and vegetation is also insignificant.

The proposed project will not significantly affect residential, commercial, or industrial growth in the area. It is estimated that 15 new jobs will be created by the addition of the proposed facilities at the KMLT Galena Park Terminal. Even if these jobs were to be filled by individuals relocating to the area, it would result in a negligible impact on the existing infrastructure. Because these impacts will be negligible, the corresponding impact on air quality will also be negligible.

Heater Benchmarking and Efficiency

The proposed heaters are not selected “off the shelf”; rather, they are designed to satisfy their specific intended function while minimizing emissions of CO and NO_x which largely dictates the actual efficiency. Because the heaters are new, the design incorporates all feasible state-of-the-art efficiency features, including insulation to minimize heat loss and heat transfer components that

maximize heat recovery. Additional information addressing heater design and efficiency is included in the BACT analysis in the revised application.

KMLT proposes actual thermal efficiencies of 85% to be demonstrated on a 12-month rolling average basis for the two proposed heaters. The calculation will be based on fuel temperature, ambient temperature, stack exhaust temperature, and stack O₂ concentration, all of which will be monitored on an hourly basis. The proposed heaters (EPNs: F-101 & F-201) will be continuously monitored for exhaust temperature, fuel temperature, ambient temperature, and excess oxygen. Thermal efficiency for emission units will be calculated for each operating hour from these parameters using equation G-1 from American Petroleum Institute (API) methods 560 (4th ed.) Annex G.

Please let me know if you have any questions or require additional information.

Neal Nygaard
Manager, Houston Environmental - RPS
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Fax: +1 281 448 6189
Direct: +1 832 239 8018
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Email: NygaardN@rpsgroup.com
www: www.rpsgroup.com

From: Aimee Wilson [<mailto:Wilson.Aimee@epamail.epa.gov>]
Sent: Friday, August 10, 2012 1:37 PM
To: Neal Nygaard
Cc: Christina.Harris@kindermorgan.com
Subject: KM Liquids Terminal Response to Completeness Determination

Neal,

I am reviewing the response you submitted to our completeness determination. Further information will still be needed and the application is still incomplete. One main item that will be needed in order for the application to be considered complete is the additional impacts analysis as required by 40 CFR 52.21(o). Also needed is the benchmarking data for the heaters and either an output based limit or efficiency measurement. There are a few other items that we need to discuss as well.

I think it may be best for us to set up a conference call to discuss how to proceed.

Thanks,
Aimee Wilson



Aimee Wilson
Air Permits Section (6PD-R)
U.S. Environmental Protection Agency
1445 Ross Avenue
Dallas, Texas 75202
214-665-7596

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From: [Neal Nygaard](#)
To: [Aimee Wilson/R6/USEPA/US@EPA](#)
Cc: [Harris, Christina](#)
Subject: RE: FW: KM Liquids Terminals LLC
Date: 10/15/2012 09:39 AM

Aimee,

In regard to the construction schedule, KMLT expects that the two Phases will be built as follows.

Phase I

Start Tank Construction	February 2013
Start Civil Construction	March 2013
Start Mechanical Construction	July 2013
Start Commissioning	March 2014
Start Up	April 2014

Phase II

Start Tank Construction	August 2013
Start Civil Construction	February 2014
Start Mechanical Construction	June 2014
Start Commissioning	February 2015
Start Up	March 2015

The civil work includes all earthwork, pilings and foundations and underground piping. The Mechanical Phase is the erection of the towers, pipe-racks, cable trays, heat exchangers, hot oil heater, pumps, sphere, truck rack, flare and all the piping, electrical and Instrumentation that goes with all of the above.

Let me know if you have any questions or require additional information.

Thanks!

Neal

From: Aimee Wilson [mailto:Wilson.Aimee@epamail.epa.gov]
Sent: Friday, October 05, 2012 12:39 PM
To: Neal Nygaard
Subject: RE: FW: KM Liquids Terminals LLC

I think that is all that is needed for now. Once we begin the permit writing process, we may be requesting additional information at that time.

From: Neal Nygaard <NygaardN@rpsgroup.com>
To: Aimee Wilson/R6/USEPA/US@EPA
Date: 10/05/2012 10:53 AM

Subject: RE: FW: KM Liquids Terminals LLC

I will get with the engineering folks and get more details on the construction schedule. So, did I answer all the other questions that you had this morning or do you need additional information on them as well?

From: Aimee Wilson [<mailto:Wilson.Aimee@epamail.epa.gov>]
Sent: Friday, October 05, 2012 10:48 AM
To: Neal Nygaard
Subject: Re: FW: KM Liquids Terminals LLC

Neal,

That is what the review was based on. We still need additional information. I thought you may have submitted something more recently.

It looks like the main item we still need to have is a better understanding of the phased construction. We need to know which emissions units are constructed in each phase and need a timeline for construction.

Thanks,
Aimee

From: Neal Nygaard <NygaardN@rpsgroup.com>
To: Aimee Wilson/R6/USEPA/US@EPA
Date: 10/05/2012 09:34 AM
Subject: FW: KM Liquids Terminasl LLC

From: Neal Nygaard
Sent: Thursday, July 26, 2012 11:16 AM
To: Alfred Dumauual
Cc: 'Harris, Christina'
Subject: KM Liquids Terminasl LLC

Mr. Dumauual,

On behalf of KM Liquids Terminals LLC (KMLT), RPS is hereby submitting the attached revised permit application along with this response to your completeness determination letter dated May 21, 2012.

The revised application incorporates a number of design changes and associated application updates, and addresses the questions raised and additional information requested in the referenced completeness determination letter.

Please let me know if you have any questions or require additional information.

Neal Nygaard

Manager, Houston Environmental - RPS

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Houston, Texas , 77060.
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From: [Neal Nygaard](#)
To: [Aimee Wilson/R6/USEPA/US@EPA](#)
Cc: [Harris, Christina](#)
Subject: RE: FW: KM Liquids Terminals LLC
Date: 10/15/2012 09:54 AM

See below. Note that piping (EPN: FUG) and MSS activities (EPN: MSS) are included in both Phase I and Phase II and for Federal NSR applicability they have been included in Phase I.

EPN	Included in Construction Phase
F-101	1
F-201	2
FL-101	1
FUG	1
MAR-VCU	2
MSS	1

From: Aimee Wilson [mailto:Wilson.Aimee@epamail.epa.gov]
Sent: Monday, October 15, 2012 9:41 AM
To: Neal Nygaard
Cc: Harris, Christina
Subject: RE: FW: KM Liquids Terminals LLC

Neal,

Could you please include the emission point numbers to identify exactly which pieces of equipment are included in each phase?

Thanks,
Aimee

From: Neal Nygaard <NygaardN@rpsgroup.com>
To: Aimee Wilson/R6/USEPA/US@EPA
Cc: "Harris, Christina" <Christina_Harris@kindermorgan.com>
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