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

Mr. Kevin Struve
Manager
Natgasoline LLC
PO Box 1647
Nederland, Texas 77627

DEC 2 0 2013

RE: Application Completeness Determination for Natgasoline LLC
Greenhouse Gas Prevention of Significant Deterioration Permit
Beaumont Gas-to-Gasoline Project

Dear Mr. Struve:

The EPA has reviewed your initial Greenhouse Gas (GHG) Prevention of Significant Deterioration (PSD) initial permit application, including supporting documentation, for Natgasoline that was received by the EPA on February 19, 2013, and a revision that was submitted November 6, 2013, and determined that your application is incomplete at this time. A list of the information needed from you so that the EPA can continue its completeness review is enclosed (see Enclosure). Please notify us if a complete response is not possible by January 10, 2014.

The requested information is necessary for EPA to develop a Statement of Basis and Rationale for the terms and conditions for any proposed permit. As we develop our preliminary 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.

The EPA may not issue a final permit without determining that there will be no effects on threatened or endangered species or their designated critical habitat, or until it has completed consultation under Section 7(a)(2) of the Endangered Species Act (16 USC § 1536). In addition, the EPA must undergo consultation pursuant to Section 106 of the National Historic Preservation Act (NHPA) (16 USC § 470f). As a reminder, NHPA implementing regulations require that EPA provide information to the public with an opportunity for participation in the Section 106 process. 36 CFR § 800.2(d). If you have not already submitted the Biological Assessment and Cultural Resources Reports that you have agreed to prepare for EPA, we look forward to receiving these reports and continuing to work with you to comply with these statutes.

If you have any questions regarding the review of your permit application, please contact Melanie Magee of my staff at (214) 665-7161 or magee.melanie@epa.gov.

Sincerely yours,

Maria L. Martin for

Thomas H. Diggs
Associate Director
Air Programs Branch

Enclosure

ENCLOSURE
EPA Completeness Comments for Natgasoline LLC
Application for Greenhouse Gas Prevention of Significant Deterioration Permit
Beaumont Gas to Gasoline Plant Project

1. The process description does not appear to follow the process flow diagram that is provided, or identify all emission points with the associated emissions point number (EPN) that emit GHG emissions or have the potential to emit. Please update the process flow diagram to include a representation of the equipment that is used to pre-treat the chemical feedstock portion of the natural gas received by the facility. The process flow diagram currently shows this portion of the process as one block labeled "Natural Gas Feed Processing". Please include a description of the equipment that comprises the pretreatment process. Also, the process description states that the pretreated natural gas feedstock will be combined with steam and recycled process gases and then routed to the reforming section of the methanol unit. The process flow diagram shows that these streams are fed separately to the steam reformer. Please update the process flow diagram to closely follow the process description. Also, please revise the process flow diagram by identifying and labeling the emission source at the vent stack. Currently, it is unclear if the numbers on the equipment represents the EPN or the vessel number. If Natgasoline finds it beneficial or necessary, it is suggested that additional pages be created and provided to EPA. For clarity purposes, it may be beneficial that Natgasoline provide additional pages for each separate process that is identified in the original process flow diagram. (e.g., reforming section, synthesis section, distillation operation, methanol-to-gasoline (MtG) reaction section, catalyst regeneration, heavy gasoline treatment (HGT) section.)

2. In addition to the previously mentioned comment, please provide supplemental information to the process flow diagram and/or process description:

    A. Will the reformers utilize heat recovery? Will the flue gas from the reformers be used to preheat the feedstock to the reformer, to preheat the combustion air, or in the production of steam? Where will this steam be used? If so, please update process description to include a summary of all energy recovery that will be utilized with the proposed project and show on the process flow diagram. If heat recovery is not utilized with the reformers, please provide site-specific supplemental design information that makes heat recovery from the reformers prohibitive.
    B. Please provide benchmark data that compares the heat/fuel requirements (MMBTU) per ton of methanol produced for the reformer designs (nationally or internationally) that were evaluated for this project. Also, please provide calculations and comparisons of actual GHG emissions that will be avoided with the design choice for this project versus other methanol reformer designs. Please include the technical assessment that evaluates the design attributes of the proposed reformer to other methanol reformer designs. What is the basic internal design of the proposed reformers? Please provide supplemental information that details the proposed design and how the design attributes benefit the energy efficient operation of the reformers.
        i. On page 2-4 of the permit application, the methanol reactor catalyst is reduced from its oxidized form to its metallic form, which normally occurs every three years. During this activation period, a mixture of nitrogen (N2) and hydrogen (H2) will be circulated in the reactor system until the temperature is high enough to cause the release of carbon dioxide (CO2) from the catalyst into the circulated gas. The volume of CO2 in the circulated gas will be maintained at optimal levels for

catalyst reduction, and the N2/H2/CO2 mixture will be routed to the flare for a short duration until the reduction process has been completed. Please include supplemental information that provides details pertaining to the activation/reduction process of the reactor catalyst and the potential GHG emission production. How was the optimal volume of CO2 determined for the catalyst reduction of the proposed reformer? Please provide the basis for the rationale used in this determination. How will the optimal volume of CO2 be monitored during the reduction process? What is the preferred compliance monitoring strategy proposed for catalyst activation? Please define how long is the "short duration" of time that the N2/H2/CO2 mixture will be routed to the flare. Will the activation and/or reduction of the reactor catalyst allow the same catalyst to be used? Is makeup catalyst added during the activation/reduction process? Will it be necessary to perform a total replacement of catalyst in the reactor at some point in the life of the equipment? Please ensure that all scenarios for the vent stream to the flare for the reactor catalyst activation, reduction, and replacement have been accounted for in the emission calculations and also include the rationale used to derive the emission calculations.

C. On page 2-1 of the application, it is stated that the syngas from the reforming section will be sent to the methanol synthesis section of the methanol unit, which contains a series of reactors that will convert the syngas into crude methanol. How many reactors will be used in series to convert the syngas into crude methanol? Please update the process flow diagram to show these reactors and the process streams involved. Also, it is stated that the crude methanol liquid from the reaction section will include water, liquid impurities, and dissolved gases that will be removed in downstream distillation operations. How many columns will be used in this operation? Currently the methanol distillation section is shown as one block. Please update the process flow diagram to show the number of distillation columns and the connecting process streams. Please include heat recovery, refrigeration, compressors, separators, knock pots, waste water streams, and recycle streams that are re-used or re-processed through the distillation section. Also, please include supplemental information that briefly explains how this distillation section is operated and the target product separation. What is the purpose of each column? What product fractions will be obtained from each column?

D. Beginning on page 2-1 of the permit application, it states that during startup of the entire methanol unit, syngas that is normally fed to the methanol synthesis process will be routed to the process flare for a limited duration. In addition, during startup of the methanol unit, a waste gas stream known as "expansion gas" will be routed from the methanol distillation process to the process flare for a limited duration. Please quantify "limited duration". Is this occurrence limited to only the startup of the methanol unit or is it associated with maintenance and shutdown occurrences as well? Also, this "expansion gas" does not appear to be shown on the process flow diagram? Is it the process line that is currently labeled as "fuel gas during startup"? If so, please update the process flow diagram to reflect the process description.

E. On page 2-2 of the permit application, it states that the effluent stream from the methanol distillation section will be the refined methanol product which will either be sent to product storage for further processing in the methanol-to-gasoline (MtG) unit or for product loading via shared methanol/gasoline barge, railcar, and truck loading facilities or off-site for third party storage and loading. How many on-site storage tanks are proposed for this project? Please update the process flow diagram to show the number of storage tanks. The process flow diagram indicates that vents from the storage tank area

and from product loading will both be directed to dedicated water scrubbers. Also, the process flow diagram has the vents from both water scrubbers labeled as "VOC/MeOH to Atm".

i. Will the vents from both water scrubbers have a potential to contain GHG emissions?
ii. If the product storage scrubber vents have the potential to contain GHG emissions, a BACT analysis should be developed for the tanks to be installed for the project. Please be sure to incorporate into the tank BACT analysis the factors that were considered when comparing internal (IFR) or external (EFR) floating roof, and fixed roof. Please provide any other additional information for the tanks, including whether the applicant chose to have the tanks painted white or another color of high refractive index to reduce vapor production.
iii. If the product loading scrubber vents have the potential to contain GHG emissions, a BACT analysis should be developed for the product loading operation (truck, railcar and barge) to be installed for the project.
iv. Typically CO_2 emissions are associated with combustion pollutants and CH_4 is associated with VOC pollutants, therefore if Natgasoline feels the scrubber vents emission sources do not have the potential to have GHG pollutants emitted as a result of this project, please provide an explanation.
v. The water scrubbers do not show a source of water or a wastewater outlet. Please update the process flow diagram to show these inlet and outlet streams as well as where and how these streams tie-in with the utilities that is shown on the current process flow diagram.
vi. The off-site third party storage and loading operation will support the proposed Natgasoline project, therefore additional information regarding any associated GHG emission increases and/or decreases are required as part of this application. Is the off-site third party storage and loading an existing permitted facility? Will this facility be modified to accommodate the proposed Natgasoline project? How are the emissions from the storage and loading controlled? Is a water scrubber and/or flare utilized? Will there be a potential increase in GHG emissions generated from the combustion of vents from barge the loading flare due to the loading of product from the proposed project? If so, please provide supplemental information and emission data and calculations pertaining to the GHG emission increases/decreases from the storage tanks and the loading operation. If this is a new third party facility, a BACT analysis should be developed as outlined above for Natgasoline on-site storage and loading facility and included in the scope of the application.

F. On page 2-2 of the application, in the methanol-to-gasoline (MtG) section, it states that the methanol feedstock through a series of reactors, which convert the methanol into a raw gasoline and liquefied petroleum gas (LPG) mixture. There will be six gas-fired process heaters associated with the MtG reaction unit: five reactor heaters associated with each MtG reactor that will supply heat to the reactor heaters associated with each MtG reactor (EPN: H-RXH1-5) that supply heat to the reaction, and the regeneration heater (EPN: H-REGEN), which will periodically combust a carbonaceous (i.e. coke) deposit that will build up on the reactor catalyst during operation. The emissions from the catalyst will be routed to the atmosphere during these events.

i. Please update the process flow diagram to show the reactors in series that will be used to convert methanol to gasoline. Please show on the process flow diagram the process streams that connect the process and regeneration heaters to the reactors.

ii. Was a technical assessment performed to evaluate the energy efficiency and/or GHG emission production of the process and regeneration heaters proposed for this project to other similar or existing sources? Please provide the supplemental data that includes this comparison analysis of data. Please provide the manufacturer's data for the chosen process and regeneration heaters design.

G. On page 2-2 of the permit application, it is stated that after the MtG reaction portion, the combined raw gasoline and LPG mixture will be sent to separation where it will be separated into three streams: 1) an LPG stream which will be sent to LPG storage, 2) a "light" gasoline stream that will be sent to gasoline blending and storage, and 3) a "heavy" gasoline stream that will be routed to the heavy gasoline treatment (HGT) for further processing.

i. The process flow diagram shows that raw gasoline is fed to a block labeled "MtG distillation." The process description does not appear to include an explanation pertaining to this part of the process. How many distillation columns are involved in the distillation section of the MtG process? Please update the process flow diagram to show an accurate depiction of the distillation column(s) that are a part of the "MtG distillation". Please include inlet and outlet process streams.

ii. How many LPG product storage tanks are proposed for this project? Please update the process flow diagram to show the LPG product storage tanks. Where will the tank vapors be directed for the product storage tanks? Please indicate on the process flow diagram. Will the tank vapors have the potential to contain GHG emissions? Will the tank vapors be directed to the process flare? If the tank vapors have the potential to contain GHG emissions or if the tank vapors have the potential of creating GHG emissions due to combustion at the flare, a BACT analysis should be developed for the tanks to be installed for the project. Please be sure to incorporate into the tank BACT analysis the factors that were considered when comparing IFR or external EFR floating roof, and fixed roof. Please provide any other additional information for the tanks, including whether the applicant chose to have the tanks painted white or another color of high refractive index to reduce vapor production.

iii. The current process flow diagram indicates two product streams from the MtG distillation section. The product streams are labeled as "LPG" and "gasoline". The permit application states that one of the product stream obtained from MtG distillation is a "light gasoline stream" that will be sent to gasoline blending and storage. It is not clear if the product stream previously mentioned as the "light gasoline stream" is the same product stream that is shown on the current process flow diagram labeled as "gasoline"? Please clarify and ensure that all process inlet and outlet streams are identified, labeled and referenced consistently throughout the permit application. Also, please include the equipment that comprises the "gasoline blending" section on the process flow diagram. Will additives be used in the gasoline blending section? If so, will there be on-site storage tanks for the additives to be used and is this equipment a potential GHG emission source? Will the "light gasoline stream" be stored in the same product storage tanks as the LPG stream as is shown on the process flow diagram? If not, please show on the process flow diagram the additional product storage to be used for the "light gasoline stream". How many product storage tanks are proposed for this product for the "light gasoline stream"? Please update the process flow diagram to show the product storage tanks for the "light gasoline stream." Where will the tank vapors be directed for the product storage tanks? Please indicate on the process flow diagram. Will the tank vapors have the potential to contain GHG emissions? Will the tank vapors be

directed to the process flare? If the tank vapors have the potential to contain GHG emissions or if the tank vapors have the potential of creating GHG emissions due to combustion at the flare, a BACT analysis should be developed for the tanks to be installed for the project. Please be sure to incorporate into the tank BACT analysis the factors that were considered when comparing IFR or EFR floating roof, and fixed roof. Please provide any other additional information for the tanks, including whether the applicant chose to have the tanks painted white or another color of high refractive index to reduce vapor production.

H. The HGT unit will process heavy gasoline fraction from the MtG distillation section of the process. The HGT feed stream will be heated using the HGT treater heater, and will then pass through a series of reactors that will convert selected components into more valuable hydrocarbon components. The HGT reaction section will produce a LPG stream that will be routed to the LPG product storage and a heavy gasoline stream that will be blended with the "light gasoline product stream" from MtG distillation.
   i. The current process flow diagram only shows one product stream from the HGT that connects to the "Gasoline" product stream. Please update the process flow diagram to show the two product streams from the HGT: 1) LPG and 2) "heavy gasoline stream" that is blended with the "light gasoline product stream". Please update the process flow diagram to show the blending of heavy gasoline stream with the "light gasoline stream." Also, please show on the process flow diagram both of these product streams directed to the appropriate product storage tanks.
   ii. How many reactors are proposed for the HGT treater section? Please update the process flow to show the series of reactors and how the process streams are directed to and from the reactors and the heater. Also, please include recycle process streams. Please provide supplemental information that explains how the reactors are operated and the product fractions to be obtained from each reactor. Also, please update the process flow diagram to show how the process streams connect to the LPG and "light gasoline product streams" and are directed to the product storage tanks of each product line.
   iii. Please provide manufacturers data for the HGT heater. If possible, please provide supplemental data comparing the energy efficiency and production of GHG emissions of the chosen HGT heater to similar or existing sources. Were other heaters evaluated for this project? Please provide the technical assessment conducted to compare the performance of the heaters considered for this project.

I. The permit application states that the methanol and gasoline product loading operation is conducted via shared facilities for barge, railcar, and truck loading facilities. The process flow diagram for the methanol process indicates that the vapors from methanol product loading are directed to a water scrubber. The process flow diagram for the MtG process indicates that the vapors from gasoline product loading are directed to a vapor combustion unit.
   i. Please provide supplemental information that describes the operation of the water scrubber and/or vapor combustion unit during product loading. How are the vents from either loading operation directed to the proper pollution control device? Is it automatic or manual control?
   ii. Please explain the product loading capabilities. Will more than one vessel (barge, railcar, and/or truck) be loaded at the same time? Will more than one product (methanol, and/or gasoline) be loaded at the same time?
   iii. Please provide manufacturer design information on the vapor combustion unit. What is the designed destruction removal efficiency of the unit? The process flow

diagram does not indicate fuel input into the vapor combustion unit. Please explain this omission.

iv. What is the proposed compliance strategy for this combustion unit? What will be monitored and recorded?

3. On page 4-9 and 4-12 of the permit application, the BACT analysis indicates that Natgasoline will utilize an efficient burner design for the reformers, process heaters and auxiliary boiler. If possible, please provide benchmark data that compares similar industries with existing or similar burners that utilize the same technology. Please let us know whether you are proposing to install continuous emission monitors (CEMs) due to other non-GHG monitoring requirements and whether that would include continuous CO_2 monitoring.

4. On page 3-1 of the permit application, it is stated that process gas analyzers will be utilized and will emit low quantities of GHG pollutants and these analyzer emissions have been included in the reformer emissions. How many analyzers are proposed for this project? Since the analyzer vents contain GHG pollutants, a BACT analysis should be performed for the analyzers. Please include the different designs and factors that were considered, the reasons for elimination, and the design elements that were implemented to reduce or minimize GHG emissions.

5. On page 3-1 of the permit application, it is stated that the compressor seal vent gas is primarily comprised of nitrogen with some concentration of hydrocarbon contamination. There will also be some supplemental natural gas combined with this stream in order to raise the heating value of the waste gas to an acceptable level per § 60.18. Please update the process flow diagram to show this addition of the supplemental natural gas to the compressor seal vent gas. Please provide the different compressor designs that were evaluated for this project. Was the possibility of re-capturing this seal vent gas and directing it back into the system evaluated? If possible, include in the BACT analysis the comparison data of the different designs and associated attributes. If applicable, please include how the different designs affect the quantity of seal gas that is vented to the flare. Also, please include any work or operating practices that will be implemented.

6. On page 3-2 of the permit application, it is stated that "waste gas flaring will occur during periods of methanol unit startups." Specifically, synthesis gas and expansion gas process vents will be routed to the flare (EPN: S-10001[MSS]) during limited portions of the methanol unit startup operation. EPA understands that these gases will vent to the flare not only during startup, but for maintenance and shutdown events as well. Please confirm. The process flow diagram currently doesn't have a process vent line directed to the flare that is identified as EPN: S-10001[MSS]. However, the process flow diagram does show the above mentioned process vents (i.e., synthesis and expansion) connecting to a process line labeled "waste gas routed to flare (S-10001)". In addition, there is a process line labeled "MSS equipment clearing from MeOH and MtG" that is shown routed to the flare. What is the purpose of this process line? What equipment is cleared and routed through this process line to the flare? Currently the process flow diagram does not clearly identify which equipment vent streams will be directed to the flare and whether these vent streams are intermittent (non-continuous), continuous (routine), and/or during MSS. Please update the process flow diagram to depict which equipment vent streams are directed to the flare, and the frequency. If applicable, it is suggested that a separate process flow diagram be constructed to depict the flare header and identify vent streams that tie-in. Also, please ensure that the emission data and calculations submitted for the flare include the vent analysis results (constituent composition, carbon content, heat value) and account for operating scenarios for the flare presented in the application. The process flow diagram also shows a "compressor seal vent

gas" outlet stream from a block labeled "compression", and a "waste gas routed to flare" from the steam reformer. These streams are directed to the process flare. Please indicate on the process flow diagram if these streams are continuous (routine), intermittent or only during MSS? On page 2-4 of the application, Natgasoline has provided an outline of the methanol unit startup that includes the process gases routed to the flare. It would be helpful if this portion of the process description was expanded to include all the process equipment vents routed to the flare during routine, shutdown and maintenance events for the methanol and MtG plants. Please make sure it matches the process flow diagram. This information can be presented in a table as well. Also, on page 2-4 of the permit application it is stated that a startup event for the methanol plant lasts approximately 22 hours. Was a flare recovery system evaluated for startup? What is the estimated time for shutting down the methanol plant? What is the estimated time to startup and shutdown the MtG plant?

7. Is the proposed flare ground or elevated? Will the flare be enclosed? Please provide supplemental information pertaining to the design and operation of the flare, i.e., percent emission reduction, proposed monitoring and recordkeeping strategy, maintenance schedule, etc. How will the 99% destruction efficiency be assured? Will it be computer controlled? If so, will there be manual overrides? Please provide benchmark comparison data of this new flare system to similar or existing flares in the methanol industry.

8. In the initial permit application submitted on February 19, 2013, Natgasoline proposed to install a process condensate stripper and process condensate degasser. This equipment was to be used to remove contaminants from process condensate water received from various processes. The revised application received on November 6, 2013 does not include the process condensate stripper and degasser. Please explain the omission and the changes to the process that has eliminated the need for this equipment. If this was an unintended omission please address the following questions:

   Please provide supplemental information that details the various process areas from where wastewater will be routed to the process condensate stripper. It is also stated that the vents from the condensate stripper will contain small amounts of CO_2 and CH_4. Since these vents have the potential to contain GHG emissions, a BACT analysis should be developed for the condensate stripper. Please incorporate into the analysis the different designs and technologies that were considered. If possible, please include any benchmark data that compares the proposed condensate stripper to similar or existing sources. Please provide any technical resources used in the technical assessment of different designs to support the design choice. Are there operating or maintenance standards that will minimize the amount of CO_2 and CH_4 in the exit vents? Please provide supplemental information that outlines the standards that will be implemented. The application states that the condensate degasser vents will not contain CH_4 emissions. Will this vent contain CO_2 emissions? If so, a BACT analysis should be developed for the condensate degasser vents following the same protocol as outlined above for the condensate stripper.

9. On page 3-3 of the permit application, it is stated that the catalyst in the MtG reactors will be regenerated on a frequent basis to remove the coke that accumulates on the catalyst. Please provide supplemental information detailing the catalyst regeneration process. Is a decoking drum used to allow coke fines to disengage from the reactors effluent? Is it possible to recover thermal energy from the reactor effluent during regeneration? Please provide supplemental information that discusses the heat recovery that will be implemented or the infeasibility of any type of heat recovery on this vent stream. It is also stated in the application that there will be three different

burns during the catalyst regeneration process: a main burn, a transition burn, and a clean-up burn. Please provide supplemental information that outlines the purpose for the three different burns and what how does the different burns affect GHG emission formation or reduction. What is being accomplished? How long is each burn? It is stated that the three burns will use oxygen at varying flow rates and temperatures to remove any coke from the catalyst. Beginning on page 4-19 the proposed BACT is proper operating techniques to minimize coke formation in the MtG reactors and is considered BACT for this application. Please provide supplemental data to the BACT analysis that details the work practices and operational standards that Natgasoline proposes to put into place for the MtG reactors. Please provide supplemental data that details Natgasoline's proposed monitoring methodology for the maintenance and operational standards to be used to minimize coke formation. The process flow diagram does not show air being fed to the regeneration heater. Please explain the omission and update the process flow diagram if applicable. Will an air compressor be used and if so, what will drive the air compressor? Please update the process flow diagram to show the additional equipment if applicable.

10. On page 4-8 of the permit application, Table 4-8 presents approximate costs for construction and operation of a carbon capture and sequestration (CCS) system at Natgasoline. The estimated cost to install, operate and maintain CCS is $96,000,000 per year at the Natgasoline facility at $111 per ton of CO_2 controlled. The supporting calculations that were used to derive this estimate were not included in the application. Please provide the site-specific parameters that were used to evaluate and eliminate CCS from consideration as an add-on control for BACT. This material should contain detailed information on the quantity and concentration of CO_2 that is in the waste stream and the specific equipment to be used. This site-specific cost calculations should include, but are not limited to, size and distance of pipeline to be installed, pumps, compressors, if applicable the amine solution to be used and the equipment necessary to employ the chosen technology. Please provide separately the capital cost of construction, operation and maintenance, cost per ton of CO_2 removed by the technologies evaluated and include the feasibility and cost analysis for storage or transportation for these options. Please discuss in detail any site specific safety or environmental impacts associated with such a removal system. Also, please provide any additional technical or economic details for this project and its potential for installing a CCS system for recovering CO_2 for enhanced oil recovery (EOR) and non-EOR geologic sequestration.

11. Please provide a proposed numerical-based BACT limit (i.e., output-based, or a combination of an output – and input –based, or efficiency based limit) for the auxiliary boiler, process heaters, regeneration heater and heavy gasoline treater heater. Please provide an analysis that substantiates any reasons for infeasibility of a numerical emission limitation or an efficiency-based limit for individual emission units.

12. 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 Natgasoline application, please provide an updated emission tables using the new GWPs so that EPA can cross-check its own calculations.

13. Please provide a detailed discussion pertaining to the fuel gas recovery system. What process gas streams are routed to the fuel gas system? What process equipment is fed by the fuel gas system? What are the constituents and the concentrations in the fuel gas system?