ILLINOIS ENVIRONMENTAL PROTECTION AGENCY

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ROD R. BLAGOJEVICH, GOVERNOR DOUGLAS P. SCOTT, DIRECTOR

May 4, 2009

Mr. Tim R. Nicol
Flint Hills Resources
P.O. Box 941
Joliet, IL 60434

IEPA 09 – 6

Re: Provisional Variance Application
Joliet Facility
Facility I.D. No. 197800ABZ

Dear Mr. Nicol;

On April 30, 2009, the Illinois Environmental Protection Agency ("Illinois EPA") received an application for a provisional variance from Flint Hills Resources ("FHR") (attached as Exhibit A) relating to a planned natural gas outage at its facility located in Joliet, Illinois. Per a request by the Illinois EPA, FHR supplemented the application on May 1, 2009 (attached as Exhibit B). In its submission, FHR requested a provisional variance from certain conditions contained in its CAAPP permit (permit no. 96010025, conditions 7.7.6(a) and 7.7.5(b)).

The Illinois EPA has reviewed the request pursuant to the Illinois Environmental Protection Act ("Act") and corresponding regulations at 35 Ill. Adm. Code Parts 104 and 180. Pursuant to Section 35(b) of the Act and 35 Ill. Adm. Code 104.302, the request is hereby approved for the reasons and under the conditions stated below for a period commencing on the date of this decision letter and ending on May 8, 2009. This provisional variance is granted subject to the following conditions:

1. That FHR take reasonable measures for the alternative propane fuel system (described in FHR's provisional variance request) to maintain a fuel supply to the pilot burner of the flare during the period when the natural gas supply to the flare is interrupted, provided, however, that this propane fuel system shall not be used if it is determined that it will threaten the safety of personnel, will pose a significant risk of damage to equipment, or cannot adequately maintain a pilot flame for the flare.

2. That within 15 days after expiration of the provisional variance term, FHR submits to the Illinois EPA, Bureau of Air, Compliance Section, a report regarding the success or failure of the propane fuel system for the flare. If the propane system was not successfully used to maintain a pilot flame for the flare, this report shall include a description of the outage of the flare, the reasons for the outage (e.g., an explanation of

the causes or likely causes of the failure of the propane system), the total duration of the outage (hours), and an estimate of the actual emissions of VOM and methane from anaerobic reactor ER-701 during the period of flare outage, with supporting calculations.

Provisional variances may be granted by the Illinois EPA when compliance on a short-term basis with any rule or regulation, requirement or order of the Illinois Pollution Control Board, or any permit requirement would impose an arbitrary or unreasonable hardship. 415 ILCS 5/35(b). FHR has requested a provisional variance from the following permit conditions:

CAAPP Permit No. 96010025

Condition 7.7.6(a): methane limit of 31.9 lb/hr and volatile organic materials ("VOM") limit of 0.1 lb/hr from the flare.

Condition 7.7.5(b): requires that flares be operated such that a minimum of 95% biogas sent to the flare is converted to carbon dioxide and water.

FHR's request is due to a planned natural gas outage to its entire Joliet facility. Nicor, FHR's natural gas supplier, will be replacing valving, piping, and the meter for the natural gas supply line coming into the plant. There is an area of active corrosion on Nicor's piping and an active leak which, while temporarily mitigated, needs to be addressed to avoid a potentially larger and more dangerous natural gas release in the future. As a result of the outage, the flare system used to control emissions of methane from anaerobic reactor ER-701, which is part of the facility's wastewater treatment system, will be nonoperational. This will result in exceedances of permitted methane and VOM limits for a period of 120 hours or less. FHR estimates that the maximum emissions from the reactor during that time period will be 167 lb/hr of methane and 1.8 lb/hr of VOM.

FHR has indicated that it will attempt to use propane as an alternative pilot gas for the flare during the natural gas outage; however, use of propane for this purpose is unproven and therefore may not work, or may result in unexpected complications with flare performance. FHR has also explained that discontinuing wastewater feed into the anaerobic reactor during the outage is not a viable option, as a discontinuance for more than 17 hours increases the risk of an adverse effect on the bacteria in the aerobic and anaerobic systems which could, in turn, result in other compliance issues. FHR has examined other alternative methods of compliance, such as the use of alternative flare ignition devices and continued flaring without a pilot flame, and has sufficiently demonstrated that such alternatives are not viable.

FHR has met the application requirements of 35 Ill. Adm. Code 180.202. The Illinois EPA agrees that no adverse environmental impacts are likely to result from granting the requested relief, as the primary pollutant being released is methane, which is not a regulated pollutant. The Illinois EPA also agrees that inaction by Nicor could present serious safety issues related to future natural gas releases. Further, FHR will only require the requested relief if its attempt to use propane as an alternate pilot gas is unsuccessful. Therefore, considering the short duration of the potential exceedances, the Illinois EPA agrees that any impacts relating to the requested

provisional variance are outweighed by the arbitrary and unreasonable hardship FHR would suffer if it were denied such relief.

If you have any questions regarding this decision, please contact Dana Vetterhoffer at 217-782-5544.

Very truly yours,

John J. Kim
Managing Attorney
Air Regulatory Unit

JJK:dev

Enclosures

Cc: Kathy Hodge, HDZ
David Bloomberg, IEPA
Chris Romaine, IEPA
Rob Kaleel, IEPA
Dean Hayden, IEPA
Dana Vetterhoffer, IEPA
John Therriault, Assistant Clerk, IPCB

FLINT HILLS RESOURCES
Joliet Facility

P.O. Box 941
Joliet, IL 60434

April 29, 2009

VIA HAND DELIVERY

John J. Kim, Esq.
Program Development & Appeals
Illinois Environmental Protection Agency
1021 North Grand Avenue East
Post Office Box 19276 – Mail Code #21
Springfield, Illinois 62794

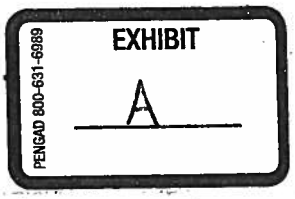
RE: Flint Hills Resources, LP – Joliet Facility
Facility I.D. No. 197800ABZ
Request for Provisional Variance

Dear Mr. Kim:

Flint Hills Resources, LP – Joliet ("FHR") hereby submits an application for a provisional variance pursuant to 35 Ill. Admin. Code Part 180. The requested provisional variance will address various permit conditions in the Clean Air Act Permit Program ("CAAPP") permit 96010025. Please refer to Attachment 1 for details in support of this provisional variance request, as required by 35 Ill. Admin. Code §180.202(b). FHR requests this provisional variance to allow an upcoming planned natural gas outage to its entire Joliet plant.

Nicor, FHR's natural gas supplier, will be replacing valving, piping and the meter for the natural gas supply line coming into the plant. There is an area of active corrosion on Nicor's piping and an active leak, which has been temporarily mitigated. Nicor will perform the work on the natural gas pipe at the metering station where FHR takes ownership of the gas. Therefore, the natural gas supply to the entire FHR plant will be out of service for de-commissioning, maintenance and re-commissioning activities.

The air emissions impact of the natural gas outage is outlined in (b)(4) in Attachment 1 and detailed within Attachment 2. FHR will exceed the hourly limit for methane (31.9 lb/hr) and possibly for VOM (0.1 lb/hr) set forth in Section 7.7.6(a) of the CAAPP permit, for no more than 120 hours. The estimated maximum methane and VOM emissions will be 167 lb/hr and 1.8 lb/hr, respectively, when there is wastewater feed into anaerobic reactor ER-701 without an operational flare. FHR does not expect any exceedance of the annual emissions limits. In addition, FHR is seeking relief from the requirements of Section 7.7.5(b) of the CAAPP permit. In order to minimize the emission resulting from the natural gas outage, FHR will undertake the actions discussed below.



FHR is examining the possibility of using propane as an alternate flare pilot fuel. The utilization of propane is dependent on the pilot burner working properly with propane. Although currently unproven, the successful use of propane in place of natural gas would give FHR a functional biogas flare for the duration of the natural gas outage. Since the use of propane for this purpose is unproven, some unexpected complications with flare performance may arise including difficulties at the time natural gas is once again introduced to the Joliet plant as a result of the need to air-free the incoming lines after completion of Nicor activities. However, FHR does not anticipate such complications.

If, at any time the Illinois EPA has concerns with this request, please contact us immediately so that we can address them as quickly as possible. Please contact Mike Hallgarth at 815-467-3307 with any question regarding this request and corresponding attachments.

Sincerely,

Tim R. Nicol
Plant Manager
Vice President, Manufacturing

cc: Gale Newton, Esq.
Katherine D. Hodge, Esq.
File

Attachment 1
Information Required per 35 Ill. Admin. Code § 180.202(b)

(b)(1) A statement identifying the regulations, Board Order, or permit requirements from which the variance is requested;

Flint Hills Resources, LP – Joliet ("FHR") is requesting a variance from the following regulations and permit requirements:

- Clean Air Act Permit Program ("CAAPP") permit 96010025, condition 7.7.6(a) limiting emissions of methane (31.9 lb/hr) and volatile organic material ("VOM") (0.1 lb/hr) from the flare; and
- CAAPP permit 96010025, condition 7.7.5(b) which requires flares to be operated such that a minimum of 95% biogas sent to the flare is converted to carbon dioxide and water.

(b)(2) A description of the business or activity for which the variance is requested, including pertinent data on location, size, and the population and geographic area affected by the applicant's operations;

Nicor, FHR's natural gas supplier, will be replacing valving, piping and the meter for the natural gas supply line coming into the plant. There is an area of active corrosion on Nicor's piping and an active leak, which has been temporarily mitigated. Nicor will perform the work on the natural gas pipe at the metering station where FHR takes ownership of the gas. Therefore, the natural gas supply to the entire FHR plant will be out of service for de-commissioning, maintenance and re-commissioning activities.

The EM705 flare system is used to control emissions of methane from anaerobic reactor ER-701, which is part of the facility's wastewater treatment system. Please be advised that feed to anaerobic reactor ER-701 cannot be discontinued for the entire duration of the Nicor natural gas outage. Anaerobic reactor ER-701 uses bacteria to remove organic load pursuant to applicable HON requirements. The bacteria require food to survive. Organic material serves as food for the bacteria and is normally provided by the streams that lead to anaerobic reactor ER-701. Although the bacteria in anaerobic reactor ER-701 can remain viable in a dormant state for a period of time, historical data shows that discontinuing wastewater feed for greater than 17 hours results in increased risk of an adverse effect on the bacteria in the aerobic and anaerobic systems which could, in turn, result in noncompliance with mass removal and NPDES permit requirements.

The air emissions impact of the natural gas outage is outlined in (b)(4) and detailed within Attachment 2. FHR will exceed the hourly limit for methane (31.9 lb/hr) and possibly VOM (0.1 lb/hr) set forth in Section 7.7.6(a) of the CAAPP permit, for no more than 120 hours. The estimated maximum methane and VOM emissions will be 167 lb/hr and 1.8 lb/hr, respectively, when there is wastewater feed into anaerobic reactor ER-701 without an operational flare. If efforts to use propane as an alternative pilot gas for the flare (*see* discussion in the cover letter

and in (b)(8) below) are unsuccessful, FHR expects that the methane and VOM emission limits for the flare will be exceeded for no more than 120 hours. FHR does not expect any exceedance of the annual emissions limits.

FHR's Joliet Plant is located in Channahon Township within Will County. Neighbors in the immediate vicinity of the plant are industrial and commercial. Those neighbors include Adrian Carriers and GVA Real Estate to the north; Meyers Quarry and Exxon Mobil to the south; Stephan Chemical to the east; and Guardian Pipeline to the west. The City of Channahon, with an estimated population of 13,821, is located 2 miles west-southwest of the plant. FHR does not expect the resulting emissions from this variance to impact either its immediate neighbors or the City of Channahon.

(b)(3) The quantity and types of materials used in the process or activity for which the variance is requested, as appropriate;

Not Applicable. FHR is not proposing to use any materials which are specifically prohibited by the current Title V permit or applicable regulations.

(b)(4) The quantity, types and nature of materials or emissions to be discharged, deposited or emitted under the variance, and the identification of the receiving waterway or land, or the closest receiving Class A and Class B land use, as appropriate;

During the requested variance period, FHR estimates the maximum hourly air emissions from anaerobic reactor ER-701 to be as follows (*see* calculations in Attachment 2):

Pollutant	Emission Rate (lb/hr)
Methane	167
VOM	1.8

Methane and possibly VOM are emitted as constituents in the biogas produced by the anaerobic reactor. The maximum hourly air emissions are calculated assuming there is feed to the anaerobic reactor and attempts to utilize propane as an alternate flare pilot fuel are unsuccessful. In other words, the flare is not combusting the anaerobic reactor waste gas.

(b)(5) The quantity and types of materials in drinking water exceeding the allowable content, or other pertinent facts concerning variances from the Board's public water supply regulations;

Not applicable as this variance request does not affect a public water supply.

(b)(6) An assessment of any adverse environmental impacts which the variance may produce;

FHR does not anticipate any adverse environmental impacts as a result of this variance. The primary pollutant being released is methane, which is not a regulated pollutant.

(b)(7) A statement explaining why compliance with the Act, regulations or Board Order imposes arbitrary and unreasonable hardship;

See the response under (b)(1) and (b)(9).

(b)(8) A description of the proposed methods to achieve compliance with the Act, regulations or Board Order, and a timetable for achieving such compliance;

Nicor will shut down FHR's natural gas supply at approximately 12:00 midnight on May 3, 2009.

FHR is investigating the use of propane as an alternative fuel source for the flare pilot flame. The utilization of propane is dependent on the pilot burner working properly with propane.

The natural gas supply outage to the flare is expected to last no longer than 72 hours. However, since the resumption of the natural gas supply is dependent on the activities of a third party, FHR can not provide an exact estimate of the duration of the natural gas outage. Therefore, FHR is requesting a maximum provisional variance window of 120 hours. FHR will be in compliance with applicable regulations once the natural gas supply is restored and the flare is relit.

(b)(9) A discussion of alternate methods of compliance and of the factors influencing the choice of applying for a provisional variance;

FHR looked into the possibility of an alternate method of compliance, the use of propane in the flare, before applying for a provisional variance. However the following factors preclude FHR from relying on propane as an alternative and have led to FHR's application for a provisional variance:

1. The use of propane as an alternative pilot fuel to the flare is unproven and may not work.

2. Nicor is the only natural gas supplier for the site. Nicor will be replacing valving, piping and the meter for the natural gas coming into the plant. There is an area of active corrosion on Nicor's piping and an active leak which has been mitigated. Although a temporary mitigation is in place, FHR believes that proactively addressing the affected piping is advisable in order to avoid a potentially larger and more dangerous natural gas release in the future. The shut down of FHR's natural gas supply will cause the compliance issues described above. As indicated above, FHR will attempt to minimize excess emissions by investigating and utilizing, if possible, propane as a temporary alternate pilot flame fuel at the site.

3. FHR could minimize and potentially comply with the flare methane and VOM emission limits by eliminating the feed to anaerobic reactor ER-701 for the entire duration of the natural gas outage. However, based on past experience, removal of the feed from anaerobic reactor ER-701 for longer than 17 hours would likely adversely affect the health of the bacteria in the wastewater treatment system and lead to other issues of non-compliance.

(b)(10) A statement of the period, not to exceed 45 days, for which the variance is requested;

FHR is requesting the variance for the time period from 12:00 midnight on May 3, 2009 to 12:00 midnight on May 8, 2009. This timeframe will provide an adequate buffer for any contingencies that may arise during the planned maintenance work.

(b)(11) A statement of whether the applicant has been granted any provisional variances within the calendar year, and the terms and duration of such variances;

FHR has not been granted any provisional variances within the previous calendar year.

(b)(12) A statement regarding the applicant's current permit status as related to the subject matter of the variance request;

FHR is currently in compliance with the applicable CAAPP permit 96010025 permit conditions for which this variance is requested.

(b)(13) Any Board orders in effect regarding the applicant's activities and any matters currently before the Board in which the applicant is a party.

There are currently no board orders in effect regarding applicant's activities. However, FHR is currently in the final stages of negotiating a Final Consent Order with the Illinois Attorney General's Office in a civil action filed in Will County Circuit Court regarding environmental issues previously disclosed by FHR to the Illinois Environmental Protection Agency.

Attachment 2 - Anaerobic Reactor Emissions of Methane and VOM

DATE & TIME	HOURS	SCF BIOGAS	Lb/hr METHANE	Lb/hr VOM
5/3/09 12:00 AM	0 to 1	7200	167	1.8
5/3/09 1:00 AM	1 to 2	7200	167	1.8
5/3/09 2:00 AM	2 to 3	7200	167	1.8
5/3/09 3:00 AM	3 to 4	7200	167	1.8
5/3/09 4:00 AM	4 to 5	7200	167	1.8
5/3/09 5:00 AM	5 to 6	7200	167	1.8
5/3/09 6:00 AM	6 to 7	7200	167	1.8
5/3/09 7:00 AM	7 to 8	7200	167	1.8
5/3/09 8:00 AM	8 to 9	7200	167	1.8
5/3/09 9:00 AM	9 to 10	7200	167	1.8
5/3/09 10:00 AM	10 to 11	7200	167	1.8
5/3/09 11:00 AM	11 to 12	7200	167	1.8
5/3/09 12:00 PM	12 to 13	7200	167	1.8
5/3/09 1:00 PM	13 to 14	7200	167	1.8
5/3/09 2:00 PM	14 to 15	7200	167	1.8
5/3/09 3:00 PM	15 to 16	7200	167	1.8
5/3/09 4:00 PM	16 to 17	7200	167	1.8
5/3/09 5:00 PM	17 to 18	7200	167	1.8
5/3/09 6:00 PM	18 to 19	7200	167	1.8
5/3/09 7:00 PM	19 to 20	7200	167	1.8
5/3/09 8:00 PM	20 to 21	7200	167	1.8
5/3/09 9:00 PM	21 to 22	7200	167	1.8
5/3/09 10:00 PM	22 to 23	7200	167	1.8
5/3/09 11:00 PM	23 to 24	7200	167	1.8
5/4/09 12:00 AM	24 to 25	7200	167	1.8
5/4/09 1:00 AM	25 to 26	7200	167	1.8
5/4/09 2:00 AM	26 to 27	7200	167	1.8
5/4/09 3:00 AM	27 to 28	7200	167	1.8
5/4/09 4:00 AM	28 to 29	7200	167	1.8
5/4/09 5:00 AM	29 to 30	7200	167	1.8
5/4/09 6:00 AM	30 to 31	7200	167	1.8
5/4/09 7:00 AM	31 to 32	7200	167	1.8
5/4/09 8:00 AM	32 to 33	7200	167	1.8
5/4/09 9:00 AM	33 to 34	7200	167	1.8
5/4/09 10:00 AM	34 to 35	7200	167	1.8
5/4/09 11:00 AM	35 to 36	7200	167	1.8
5/4/09 12:00 PM	36 to 37	7200	167	1.8
5/4/09 1:00 PM	37 to 38	7200	167	1.8
5/4/09 2:00 PM	38 to 39	7200	167	1.8
5/4/09 3:00 PM	39 to 40	7200	167	1.8
5/4/09 4:00 PM	40 to 41	7200	167	1.8
5/4/09 5:00 PM	41 to 42	7200	167	1.8
5/4/09 6:00 PM	42 to 43	7200	167	1.8
5/4/09 7:00 PM	43 to 44	7200	167	1.8
5/4/09 8:00 PM	44 to 45	7200	167	1.8
5/4/09 9:00 PM	45 to 46	7200	167	1.8
5/4/09 10:00 PM	46 to 47	7200	167	1.8
5/4/09 11:00 PM	47 to 48	7200	167	1.8
5/5/09 12:00 AM	48 to 49	7200	167	1.8
5/5/09 1:00 AM	49 to 50	7200	167	1.8
5/5/09 2:00 AM	50 to 51	7200	167	1.8
5/5/09 3:00 AM	51 to 52	7200	167	1.8
5/5/09 4:00 AM	52 to 53	7200	167	1.8
5/5/09 5:00 AM	53 to 54	7200	167	1.8
5/5/09 6:00 AM	54 to 55	7200	167	1.8
5/5/09 7:00 AM	55 to 56	7200	167	1.8
5/5/09 8:00 AM	56 to 57	7200	167	1.8
5/5/09 9:00 AM	57 to 58	7200	167	1.8
5/5/09 10:00 AM	58 to 59	7200	167	1.8
5/5/09 11:00 AM	59 to 60	7200	167	1.8
5/5/09 12:00 PM	60 to 61	7200	167	1.8
5/5/09 1:00 PM	61 to 62	7200	167	1.8
5/5/09 2:00 PM	62 to 63	7200	167	1.8

Methane and VOM Emissions are based on modeling of the anaerobic reactor utilizing conservative assumptions of inflow composition.

Attachment 2 - Anaerobic Reactor Emissions of Methane and VOM

DATE & TIME	HOURS	SCF BIOGAS	Lb/hr METHANE	Lb/hr VOM
5/5/09 3:00 PM	63 to 64	7200	167	1.8
5/5/09 4:00 PM	64 to 65	7200	167	1.8
5/5/09 5:00 PM	65 to 66	7200	167	1.8
5/5/09 6:00 PM	66 to 67	7200	167	1.8
5/5/09 7:00 PM	67 to 68	7200	167	1.8
5/5/09 8:00 PM	68 to 69	7200	167	1.8
5/5/09 9:00 PM	69 to 70	7200	167	1.8
5/5/09 10:00 PM	70 to 71	7200	167	1.8
5/5/09 11:00 PM	71 to 72	7200	167	1.8
5/6/09 12:00 AM	72 to 73	7200	167	1.8
5/6/09 1:00 AM	73 to 74	7200	167	1.8
5/6/09 2:00 AM	74 to 75	7200	167	1.8
5/6/09 3:00 AM	75 to 76	7200	167	1.8
5/6/09 4:00 AM	76 to 77	7200	167	1.8
5/6/09 5:00 AM	77 to 78	7200	167	1.8
5/6/09 6:00 AM	78 to 79	7200	167	1.8
5/6/09 7:00 AM	79 to 80	7200	167	1.8
5/6/09 8:00 AM	80 to 81	7200	167	1.8
5/6/09 9:00 AM	81 to 82	7200	167	1.8
5/6/09 10:00 AM	82 to 83	7200	167	1.8
5/6/09 11:00 AM	83 to 84	7200	167	1.8
5/6/09 12:00 PM	84 to 85	7200	167	1.8
5/6/09 1:00 PM	85 to 86	7200	167	1.8
5/6/09 2:00 PM	86 to 87	7200	167	1.8
5/6/09 3:00 PM	87 to 88	7200	167	1.8
5/6/09 4:00 PM	88 to 89	7200	167	1.8
5/6/09 5:00 PM	89 to 90	7200	167	1.8
5/6/09 6:00 PM	90 to 91	7200	167	1.8
5/6/09 7:00 PM	91 to 92	7200	167	1.8
5/6/09 8:00 PM	92 to 93	7200	167	1.8
5/6/09 9:00 PM	93 to 94	7200	167	1.8
5/6/09 10:00 PM	94 to 95	7200	167	1.8
5/6/09 11:00 PM	95 to 96	7200	167	1.8
5/7/09 12:00 AM	96 to 97	7200	167	1.8
5/7/09 1:00 AM	97 to 98	7200	167	1.8
5/7/09 2:00 AM	98 to 99	7200	167	1.8
5/7/09 3:00 AM	99 to 100	7200	167	1.8
5/7/09 4:00 AM	100 to 101	7200	167	1.8
5/7/09 5:00 AM	101 to 102	7200	167	1.8
5/7/09 6:00 AM	102 to 103	7200	167	1.8
5/7/09 7:00 AM	103 to 104	7200	167	1.8
5/7/09 8:00 AM	104 to 105	7200	167	1.8
5/7/09 9:00 AM	105 to 106	7200	167	1.8
5/7/09 10:00 AM	106 to 107	7200	167	1.8
5/7/09 11:00 AM	107 to 108	7200	167	1.8
5/7/09 12:00 PM	108 to 109	7200	167	1.8
5/7/09 1:00 PM	109 to 110	7200	167	1.8
5/7/09 2:00 PM	110 to 111	7200	167	1.8
5/7/09 3:00 PM	111 to 112	7200	167	1.8
5/7/09 4:00 PM	112 to 113	7200	167	1.8
5/7/09 5:00 PM	113 to 114	7200	167	1.8
5/7/09 6:00 PM	114 to 115	7200	167	1.8
5/7/09 7:00 PM	115 to 116	7200	167	1.8
5/7/09 8:00 PM	116 to 117	7200	167	1.8
5/7/09 9:00 PM	117 to 118	7200	167	1.8
5/7/09 10:00 PM	118 to 119	7200	167	1.8
5/7/09 11:00 PM	119 to 120	7200	167	1.8
FLARE START UP W/ NATURAL GAS				
		SUM (LB)	20,039	216
			METHANE	VOM

Methane and VOM Emissions are based on modeling of the anaerobic reactor utilizing conservative assumptions of inflow composition.

Vetterhoffer, Dana

From: Katherine Hodge [khodge@hdzlaw.com]
Sent: Friday, May 01, 2009 4:28 PM
To: Kim, John J.; Vetterhoffer, Dana; Romaine, Chris; Schnepp, Jason; Desai, Kaushal
Cc: Newton, Gale; Nicol, Tim; Hallgarth, Michael; Bose, Gokul; Matthew Read
Subject: Flint Hills Resources -- Provisional Variance Supplemental Information

To All:

Thank you for holding a conference call this afternoon to discuss with us our request for a provisional variance, dated April 29, 2009. During the call, you requested that we supplement our written request with an email addressing certain issues identified during the call. The issues identified and our responses are as follow:

Timing of the Request –
FHR realizes and apologizes for the 'last minute' timing of the request. However, although FHR was aware that the natural gas to the facility may be shut down and had taken steps to eliminate emission exceedances from its production emission units, FHR did not identify the potential WWTP flare methane and VOM emissions exceedances until very recently. As you are aware, methane limits in air permits are very rare. In fact, as you pointed out during the conference call, the methane limit in FHR's underlying construction permit (as carried over to the CAAPP permit) was removed in the November 17, 2005 construction permit (#05040017) issued for modifications to the facility's wastewater treatment plant. FHR will attempt to remove the methane limit from the CAAPP permit during the renewal process.

Alternative Flare Ignition Devices/Gases –
FHR intends to use propane as a flare pilot fuel gas during this event. FHR has been informed that the use of propane will likely work for this purpose. However, the use of propane is untried and FHR is not certain that propane will work to keep a pilot flame at the flare. The provisional variance is being sought in the event that FHR is not successful in its intended use of propane. As discussed during the call, the use of an electronic ignition device, while possible, is not practical given the height of the flare. In addition, while a portable flare may present another alternative, the imminence of the upcoming natural gas shutdown would not provide enough time to obtain such a portable device or to obtain the necessary permit for the device. Finally, burning the biogas in another of the facility's units and/or in the boiler will not be possible during this event because all of the Facility's production units and the boiler will be shut down due to the natural gas outage.

Continued Flaring without a Pilot Flame –
As discussed during the call, the methane content of the gases that feed to the flare are variable. During certain intervals, the methane content of the gases could fall to a point where the flame in the flare would not be sustainable without a pilot flame.

H2S/Odor Issues –
As discussed during the call, the emission limits in the permit are very conservative. FHR has calculated probable H2S emissions during this event (assuming the alternate use of propane as a flare pilot fuel is not successful) and it would expect the maximum amount of H2S emissions to be approximately 0.22 lbs/hr, or approximately 26 pounds for the duration of the event (assuming 120 hours).

Again, we thank you for your timely response on this issue. Please let us know if you have any additional questions and/or need additional information.

Kathy

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