ISSUE
1
September
2011

ENVIRONMENTAL NEWS BULLETIN

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A Professional Environmental Firm

this issue

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Mandatory Reporting of Greenhouse Gases:

PETROLEUM AND NATURAL GAS SYSTEMS
40 CFR Part 98 – Subpart W

Subpart W of the Greenhouse Gas Mandatory Reporting Rule (GHG MRR) was finalized on November 30, 2010. Facilities that contain petroleum and natural gas systems and emit 25,000 metric tons or more per year of Carbon Dioxide equivalent (CO_2e) emissions are applicable to this Subpart. Applicable facilities must annually report methane (CH_4) and carbon dioxide (CO_2) emissions from equipment leaks and venting (production tanks, dehydration units, pneumatic pumps and controllers, etc.), and emissions of CO_2, CH_4, and nitrous oxide (N_2O) from flaring and combustion. Upcoming deadlines and proposed rule changes associated with Subpart W are as follows:

The last day facilities will be permitted to use best available monitoring methods (BAMM) without submitting a request for extension to the Administrator, is September 30, 2011. EPA has proposed to extend this deadline through the end of 2011; however this proposal has not been approved at this time.

An extension that would delay reporting of 2011 data for Subpart W from March 31, 2012 to September 28, 2012 has been proposed by EPA and is pending

General Stationary Fuel Combustion Sources
40 CFR Part 98 – Subpart C

Facilities that emit 25,000 metric tons or more of CO_2e per year from stationary fuel combustion units (compressors, generators, burners, etc.) must annually report to EPA under Subpart C of the GHG MRR. Facilities applicable to Subpart C were required to gather data starting on January 1, 2010 with the first annual report originally due March 31, 2011. This reporting deadline was recently extended to September 30, 2011.

Please contact Jennifer LeBlanc with HLP Engineering if you have any questions regarding GHG emissions, regulations or reporting.

This bulletin is intended to highlight recent environmental developments that may impact the oil and gas industry. As a service, HLP Engineering will continue to keep abreast of various changes and attempt to convey these developments through publications such as these. Any comments, requests for further information or specific advice concerning these or other environmental topics are certainly welcome and can be relayed to the appropriate contacts listed.

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NESHAP – ZZZZ Revisions

The United States Environmental Protection Agency (USEPA) recently revised 40 CFR 63 Subpart ZZZZ to include existing internal combustion engines located at area sources of Hazardous Air Pollutants (HAPs). Under this subpart, "area" sources of HAPs are sources that emit less than 10 tons per year of a single HAP and less than 25 tons per year of a combination of HAPs. At an area source of HAPs, an engine is deemed "existing" if it was constructed at a facility prior to June 12, 2006. There are various notification, performance testing, monitoring, record keeping, maintenance, and control requirements established by the USEPA within this subpart.

Since the revisions to this subpart are forcing operators to meet requirements that previously had no such requirements, the USEPA is giving operators until May 3, 2013 and October 19, 2013 to meet the requirements for compression ignition and spark ignition engines; respectively. An applicability determination should be made for all engines potentially applicable to the subpart. All operators will be expected to have implemented procedures for complying with the requirements specified within the regulation by the dates specified

BOEMRE: Oil and Gas Production Requirements

30 CFR Part 250 - Subpart K

BACKGROUND:

Subpart K was completely rewritten (effective 5/19/10) to consolidate & clarify various requirements imposed on oil & gas operators. It ensures the appropriate development of natural resources and, as such, imposes various restrictions on production, venting, etc. This outline focuses on field documentation & limitations.

Overview of Program:

A) ALLOWABLE ACTIVITIES (without preapproval from Regional Supervisor):

1) flaring/venting of lease-use gas, but can't exceed amount necessary for its intended purpose (as such, operators should assure that all controllers, regulators, etc. are functioning properly to prevent excess gas consumption for instrumentation, pumps, blanket, etc.),
2) flaring/venting of gas during a restart of facility shut-in due to weather conditions (i.e., hurricanes), but can't exceed 48 cumulative hours,
3) flaring/venting of gas during blow down of transportation pipelines downstream of royalty meter, but must report location, time, volume and reason to BOEMRE,
4) flaring/venting (and necessary blowdown) of gas during or associated with unloading or cleaning of a well, drill-stem testing, production testing, other well-evaluation testing, but can't exceed 48 cumulative hours per completion,
5) flaring/venting of 'flash' gas that cannot be economically recovered but can't exceed average of 50-MSCFD during calendar month,
6) flaring/venting of gas during a temporary upset condition when equipment IS working properly (i.e., Hydrate or paraffin plugs), but can't exceed 48 continuous hours from any oil well or flash from gas well, or 2 continuous hours from primary gas from gas well or 144 cumulative hours during calendar month,
7) flaring/venting of gas during a temporary upset condition when equipment is NOT working properly (i.e., Compressor Malfunction), but can't exceed 48 continuous hours from any oil well or flash from gas well or 2 continuous hours from primary gas from gas well or 144 cumulative hours during calendar month.

B) RECORD KEEPING / REPORTING/OPERATIONAL RESTRICTIONS (facilities which process more than 2000 BBLs of Oil Per Day):

1) notify Regional Supervisor upon commencement of processing over 2000-BOPD
2) install meters for life of facility (by Nov. 2010 if over 2000-BOPD in May 2010 or within 4-months after rate exceeds 2000-BOPD)
3) calibrate meters at least once per year
4) record start times, end times and volumes of all flaring/venting

C) RECORD KEEPING / REPORTING/OPERATIONAL RESTRICTIONS:

1) report (on OGOR) all hydrocarbons produced from completion - include gas flared/vented and all liquid hydrocarbons burned; MUST include lease-use gas, releases from upsets, waste gas/flash gas from process, etc.),
2) MAY classify lease use gas (i.e., blanket gas, instrumentation, engine fuel) separately,
3) report separately for facilities requiring meters,
4) MAY report together if from single lease/unit,
5) log records on site detailing gas flaring/venting and liquid hydrocarbons burned to include: daily volumes, daily & monthly cumulative hours, list of wells contributing w/gas-oil ratio data, reasons, approval documentation,
6) maintain records for 6-years (including meter recordings-if applicable); maintain records and have available ON-SITE for 2-years (including meter recordings, meter calibration & maintenance),
7) submit summary of location, dates, number of hours and volumes if approval is necessary.

Summary:

- 'accounting' of all produced gas should balance with GOR & produced oil rate
- 'flash' term does not address flash from produced water, but appears necessary under intent of program
- documentation (i.e., engineering calculations, test data, etc.) should be available to support volumes logged
- intent of flare/vent meters was to CONFIRM flash gas emissions; however, metered values in and of themselves would NOT always accomplish this since it is common to aggregate vent lines from equipment using blanket gas with vent lines handling flash gas. HLP has discussed this with BOEMRE, who acknowledged the quandary - operator has no option other than use best available data to quantify lease use portion of metered streams.

TCEQ: Rule Changes & Enforcement Activity

TCEQ recently adopted a new rule to impose complex and stringent new permitting requirements for all oil & gas production sites in the Barnett Shale area with plans to include the entire state in 2012. This rule is based on computer modeling of worst-case scenarios of emissions. However, Senate Bill 1134 was recently passed and prohibits TCEQ from using worst-case emission scenarios to justify regulation and requires TCEQ to use "credible air quality monitoring data" to reflect average conditions to which the public would be exposed. The passage of this bill will establish a realistic foundation for permitting oil & gas sites. Therefore, before TCEQ can issue the new rule outside of the Barnett Shale, they must review the effects of implementation of the rule inside the Barnett shale for 18 months and then conduct a regulatory impacts analysis to:

- Consider monitoring data and adopt modeling protocols that are consistent with this data and,
- Make a determination whether changes to the existing permit by rule (PBR) are necessary to protect public health and safety.

It is no coincidence that with the new rulemaking, and the associated behind the scenes work, comes an increased amount of agency activity in the field. TCEQ is taking a much closer look at sites trying to obtain authorization and whether or not emission representations are accurate. In particular, they are stressing the importance of using precise, site-specific data and steering away from using generic or typical data when calculating emissions. In addition, TCEQ is visiting unauthorized sites and asking operators for a determination on whether or not those sites need authorization. An increased number of issued penalties have been seen recently due to sites operating without agency authorization. Penalties have been seen in the range of $20,000 to $300,000 per site.

REPORTING REMINDERS

- 3RD QUARTER DISCHARGE MONITORING REPORTS DUE TO LDEQ BY OCTOBER 28, 2011
- LOUISIANA TITLE V SEMI-ANNUAL MONITORING REPORTS DUE TO LDEQ BY SEPTEMBER 30, 2011
- LOUISIANA SEMIANNUAL DEVIATION / EXCESS EMISSION REPORT DUE TO LDEQ BY SEPTEMBER 30, 2011

LDEQ: Stack Testing Applicability

The Louisiana Department of Environmental Quality (LDEQ) requires emission testing on engines and turbines that meet the following requirements, and are not subject to Federal Standards:

- maximum rated horsepower of five hundred (500) or greater
- operate more than seven hundred and twenty (720) hours in a semi-annual period.

Emission testing can be broken down into 2 categories: Initial, and period testing.

Initial tests are required on engines and turbines to demonstrate compliance with permit limits and to re-establish permit limits if necessary. Initial tests are also required on engines after a major engine overhaul. LDEQ requires a 30 day advanced notice for all initial compliance tests. A copy of the testing protocol should be submitted with the notification for approval by LDEQ. Following completion of initial testing, test reports are required to be submitted within 60 days.

Periodic tests are required to demonstrate that emissions are maintained in the same range as during the initial stack test and those emissions are below permitted limits. Periodic tests are either performed annually or semi-annually depending on the type of controls installed on the engine. Semi-annual testing is required for all engines not equipped with catalytic converters. Those units with catalytic converters are required to perform testing annually.

HLP is an accredited laboratory, and can help you with any of your testing needs.

HLP Engineering Environmental Management Database

For information on, accessing HLP Engineering's Environmental Management Database, please visit www.hlpengineering.com or contact HLP Engineering to request log on information. An HLP representative will be happy to assist you with navigating the system and getting the most out of this management tool.

LDEQ Air Permit Changes

GHG & Minor Source Permits

The Louisiana Department of Environmental Quality (LDEQ) has recently made changes in regards to air permitting. First, LDEQ has begun regulating emissions of greenhouse gases, specifically Carbon Dioxide Equivalent (CO_2e) and Particulate Matter less than 2.5 microns ($PM_{2.5}$). Under LDEQ's rule, any facility with CO_2e emissions in excess of 100,000 TPY would be considered a major source and would require authorization under a Title V operating permit. Furthermore facilities with $PM_{2.5}$ emissions exceeding 100 TPY will now also be considered a major source and require authorization under a Title V operating permit.

In addition to the newly regulated pollutants, LDEQ has developed a new minor source permit. The Minor Source Air General Operating (MSOG) Permit was developed to replace the previous Standard Oil & Gas Air (SOGA) Permit. Since the issuance of the MSOG Permit, LDEQ is no longer issuing new SOGA Permits.

Unlike the SOGA Permit, a facility applicable to NSPS or NESHAP requirements is still eligible for coverage under the MSOG Permit. Facilities eligible for coverage under the MSOG Permit will not be required to undergo public notice. Under the MSOG Permit, operators are allowed to construct and/or operate a facility fourteen (14) days after the date the permit application is either post marked or hand delivered to LDEQ, provided that facility-wide "potential" emissions are below the thresholds established within the MSOG Permit. The MSOG Permit also allows operators to make modifications to an existing permitted facility without prior approval from LDEQ, provided that the LDEQ is notified within 10 days of the modifications and that the potential emissions remain below the thresholds established within permit.

The MSOG permit also allows for "replacement in kind" and the addition of line heaters, heater treaters (excluding flash emissions), pneumatic pumps, pneumatic valves, pneumatic controllers, and fugitive emissions without submitting a modification to LDEQ, provided that these changes and/or additions are addressed within the next required permit modification submitted to LDEQ. LDEQ's goal with the MSOG permit is to reduce unnecessary operational delays, while assuring compliance with all federal and State air quality standards and programs.

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