New Air Quality Regulation "NSPS OOOO" Oil and Natural Gas Industry Workshop February 6, 2013

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NSPS OOOO

- New Source Performance Standard ("NSPS") OOOO -Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution
- * Published August 16, 2012
- * Compliance Date October 15, 2012

- Applies to each hydraulically fractured/refractured well drilled (commenced construction, modification, or reconstruction) after August 23, 2011
- Hydraulically fractured/refractured includes wells fractured w/ Water, Nitrogen, and/or Carbon Dioxide

- * Each well drilled after 8/23/11 and before 1/1/2015
- Flowback Operations reduce VOC emissions with a completion combustion device (typically a flare) on or after October 15, 2012
- * Completion Combustion Devices must be equipped with a "reliable continuous ignition source"
- Sources have a general duty to safely maximize resource recovery and minimize releases to the atmosphere



Completion Combustion Devices (aka Flares)



- * Wells drilled on or after January 1, 2015
- * "Green Completions" route recovered liquids into storage vessels or re-inject the liquids into the well or another well and route recovered gas into a gas flow line, collection system, re-inject into the well or another well, or use as fuel, "with no direct release to the atmosphere"
- * Salable quality gas must be routed to the flow line

- * Two (2) day Notification prior to commencement of each well completion beginning October 15, 2012
- Electronically Notify DEP and EPA by using <u>DEPOilandGasSector@wv.gov</u> and <u>r3wellcompletion@epa.gov</u>
- Instructions and form available on DAQ's website www.dep.wv.gov/daq

- * Must maintain a **daily log** for each well completion operation
- Records of duration of flow into a line; duration of combustion; duration of venting
- Specific reasons for venting in lieu of capture or combustion
- * Digital photographs of all the equipment used during flowback with specific location

- Annual report for each well the report must provide any deviations where well completion operations were not performed in compliance
- * Must be certified by the responsible official

Storage Vessels

- Storage Vessels installed after 8/23/11 with VOC emissions of six (6) tons/year or greater (each vessel) and that are located at the well site more than 180 consecutive days
- Install air pollution control equipment to reduce VOC emissions by 95% and monitor this equipment by October 15, 2013
- DAQ's permitting threshold is 6 lbs VOC/hr (144 lbs/day) for the entire well site "Potential Emissions Not Actual Emissions"







Storage Vessel – Combustor Control Device "Thermal Vapor Incinerator"

(aka Enclosed Flare)

Pneumatic Controllers

- Pneumatic controllers installed after 8/23/2011 (extraction) & 10/15/2013 (wellhead to extraction)
- Reduce VOC emissions at wells (6 scf/hr or less bleed rate) and processing plants (zero bleed rate) by using a low bleed or no bleed design by October 15, 2013
- * **Exemption** based on functional needs, including but not limited to response time, safety and positive actuation



Compressor Engines after 8/23/2011

- Reciprocating compressors before extraction reduce emissions by the replacement of rod packing (every 26,000 hours of operation or 3 years) *well site engines are exempt
- Centrifugal compressors (Wet Seal) required to install air pollution control equipment to reduce emissions by 95% and to monitor this equipment



Other Big Changes

* MACT Subpart HH – Dehydration Unit Updates

*Annually update Wet Gas Analysis and GLYCalc determination; if the station's actual emissions are greater than 50% of major source thresholds (storage vessels included, not engines)

*Updated samples and GLYCalc determinations by October 12, 2012 or within one year prior

*Must use the **maximum** designed glycol pump recirculation rate when determining major source status

*Must include storage vessels in determining major source status of HAPs (excludes surge control vessels and knockout vessels)

Other Big Changes

- * NSPS KKK Replaced with NSPS OOOO
 - LDAR requirements at Extraction Plants that commenced construction, modification, or reconstruction after August 23, 2011
 - * Lowered some leak definitions

EPA Agrees To Reconsider Oil and Gas Rules

- * EPA intends to conduct administrative reconsideration process for NSPS just issued 1/16/2013
- Sign by March 29, 2013, a notice of proposed rulemaking addressing certain NSPS issues on an expedited basis;
- Take final action with respect to those issues by July 31, 2013;

MACT ZZZZ RICE Engines Rule Updated

- Compliance dates have changed
- New exemption for existing engines defined as "Remote" stationary RICE
- Remote RICE exempt from most emission testing requirements
- * Must evaluate the status of their "Remote" stationary RICE every 12 months

Questions?

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