New Air Quality Regulation
“NSPS OOOO”
Oil and Natural Gas Industry Workshop
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New Source Performance Standard ("NSPS") - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution

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Compliance Date October 15, 2012
Well Completions

* 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
Well Completions

* 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)
Well Completions

* 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
Well Completions

* **Two (2) day Notification** - prior to commencement of each well completion beginning **October 15, 2012**

* Electronically Notify DEP and EPA by using DEPOilandGasSector@wv.gov and r3wellcompletion@epa.gov

* Instructions and form available on DAQ’s website www.dep.wv.gov/daq
Well Completions

- 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
Well Completions

- **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)* “Potential Emissions Not Actual Emissions”
Storage Vessel – Combustor Control Device “Thermal Vapor Incinerator”
(aka Enclosed Flare)
Pneumatic Controllers


- 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.
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

* New leak definition of **500 ppm** for all components