

# New Air Quality Regulation “NSPS 0000”

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# NSPS 0000

- \* **New Source Performance Standard (“NSPS”) 0000 - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution**
- \* **Published August 16, 2012**
- \* **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](mailto:DEPOilandGasSector@wv.gov) and [r3wellcompletion@epa.gov](mailto:r3wellcompletion@epa.gov)
- \* Instructions and form available on DAQ's website [www.dep.wv.gov/daq](http://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)



07/30/2012

# Pneumatic Controllers

- \* Pneumatic controllers - installed after 8/23/2011 & 10/15/2013
- \* 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.



PNEUMATIC  
CONTROLLER



ANTIFREEZ





# 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
- \* New leak definition of **500 ppm** for all components

# Questions?

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