

Air Quality Permit, Enforcement and Rule Updates

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Air Quality Permitting Updates

- * New General Permit (“G70-B”) for natural gas production (“well pads”) and support activities
- * Public comment ended August 26, 2015
- * Currently working on response to comments
- * Well Pads that do not qualify for G70-B can still obtain a Rule 13 Permit

G70-B Overview

- * Will provide for quicker and easier processing of well pad permit applications
- * All federal and state regulations/rules incorporated by reference (“IBR”) to address continually changing federal regulations
- * Provides greater flexibility for changes/modifications that need made at well pads

G70-B Continued

- * Regulates air emissions on a “Facility” wide basis caps
 - * Oxides of Nitrogen (NO_x) – 50 tons/year
 - * Carbon Monoxide (CO) – 80 tons/year
 - * Volatile Organic Compounds (VOCs) – 80 tons/year
 - * Particulate Matter 10/2.5 – 20 tons/year
 - * Sulfur Dioxide (SO₂) – 20 tons/year
 - * Hazardous Air Pollutants (HAPs) – 8 tons single HAP/year or 20 tons aggregated HAPs/year

G70-B Continued

- * Alternative operating scenarios allowed without obtaining a permit modification prior to implementing the change
 - * Add additional and/or change enclosed combustors/flammables
 - * Increased throughput in condensate/produced water
 - * Addition storage vessels/tanks, GPUs, line heaters
 - * Add additional and/or change Vapor Recovery Units (VRUs)
 - * Changing from a VRU to an enclosed combustor/flare (vice versa)
 - * Increased throughput to tanker truck loading racks
 - * Must provide DAQ with written notification of these changes

G70-B Continued

- * Annual Certification from the previous year for all modifications/changes to address Potential To Emit (“PTE”)
- * Annual Certification Fee - \$1,000 certification fee

Air Quality Permitting Site Prep Rules

- * Section 5.1 of Rule 13 (“45CSR13”) - Site Prep rules allowed prior to obtaining a permit
 - * 5.1.a. Clear land
 - * 5.1.b. Grub stumps, roots, vegetation
 - * 5.1.c. Excavate, grade and compact topsoil
 - * 5.1.d. Dig and construct foundations and/or caissons and grade beams
 - * 5.1.e. Demolish existing structures (must follow Asbestos and RCRA rules)
 - * 5.1.f. Upgrade the utility support facilities

Air Quality Site Prep Rules

- * Section 5.1 of Rule 13 (“45CSR13”)
 - * 5.1.g. Construct or modify structures which are strictly office buildings, warehouses, or buildings that could potentially be used for those purposes
 - * 5.1.h. Order equipment and procure supplies
 - * 5.1.i. Receive or store on-site or off-site any equipment or supplies
- *All these actives solely at the risk of the owner or operator**

Air Quality Site Prep Rules

- * Section 5.2 of Rule 13
- * **“Prior to obtaining a permit to construct and operate, a source may not cause the erection or installation of an emissions unit”**
- * Equipment can only be stored on-site and shall not be installed (“leave equipment in shrink wrap”)

Oil and Gas Rule Updates

- * EPA's proposed rule changes (9/18/2015) to NSPS OOOO will regulate Green House Gases (GHGs) “**methane** and VOC emissions” (comments by 11/17/15)
- * This is part of EPA's strategy to reduce methane from the oil and gas industry, including NSPS OOOO, proposed CTGs (“RACT”), and a proposed definition of aggregation

NSPS 0000

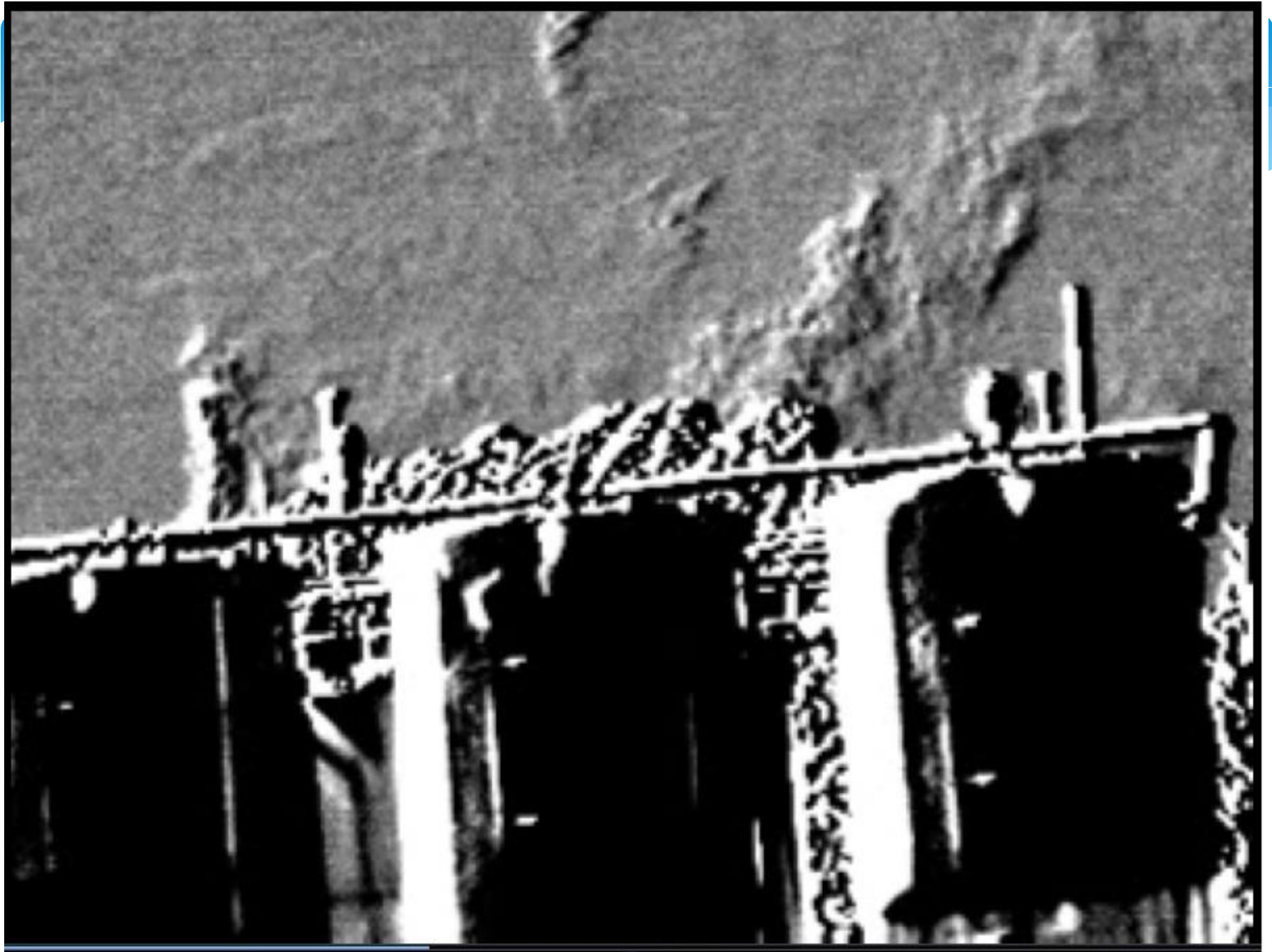
- * New Source Performance Standard (“NSPS”) 0000 - Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution
- * Compliance Date – 8/23/2011
- * Compliance Date – Green Completions January 1, 2015
- * Last updated August of 2015

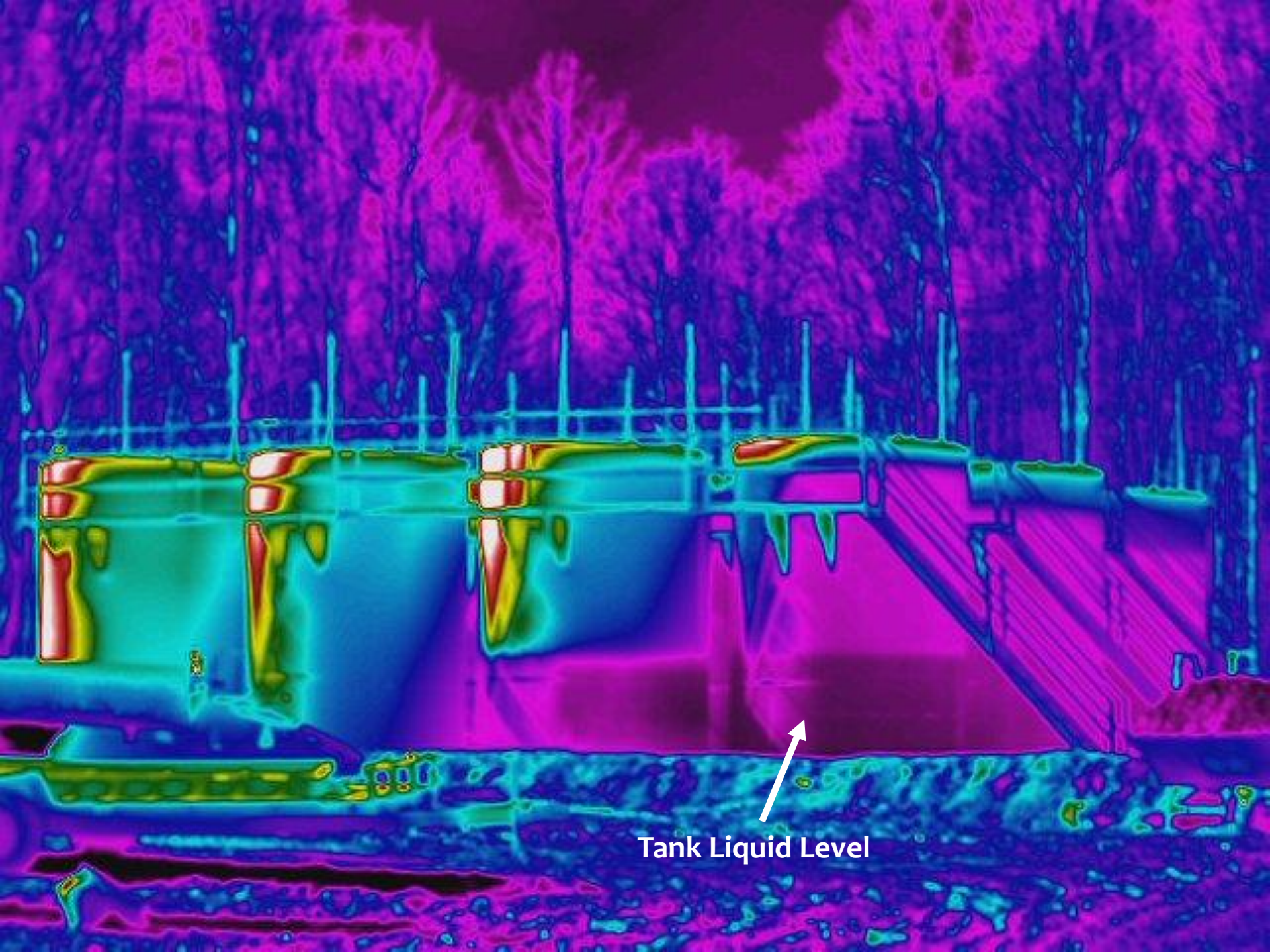
NSPS 0000 Updates

- * 6 tpy VOC storage vessel/tank trigger EPA reversed definition back to each tank and “not” parallel tanks considered one tank
- * Return to Service defined in 8/12/2015 update
- * Low Pressure Gas Well definition updated “means a well with reservoir pressure and vertical well depth such that $0.445 \times \text{reservoir pressure (in psia)} - 0.038 \times \text{the true vertical well depth (in feet)} - 67.578 \text{ psia}$ is less than the flow line pressure at the sales meter”

Optical Gas Imaging Infrared Camera

- * WV DAQ has been conducting inspections using an Optical Gas Imaging Infrared Camera (FLIR camera)
- * Inspections on closed vent systems going to an enclosed combustor (flare) or VRU
- * Leaks found primarily on thief hatches and enardo valves
- * High percentage of well pads leaking gas/vapors

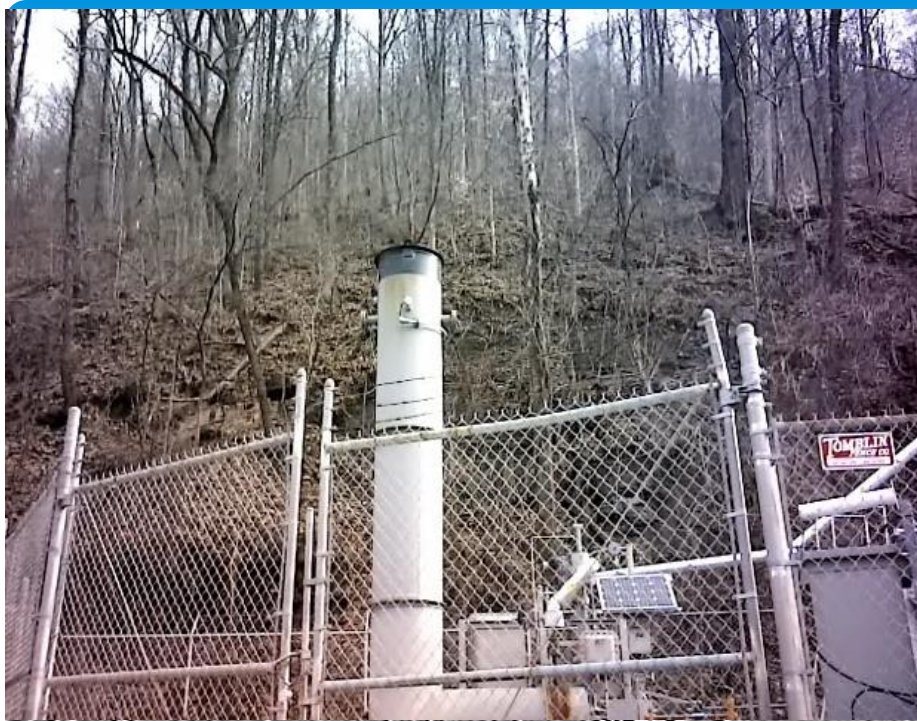




Tank Liquid Level



Condensate Tank Thief Hatch Vapor Leaks



USEPA Compliance Alert



- * EPA Observes Air Emissions from Controlled Storage Vessels At Natural Gas Production Sites (“Well Pads”) alert was issued September of 2015
- * <http://www2.epa.gov/sites/production/files/2015-09/documents/oilgascompliancealert.pdf>



Questions?

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