Oil & Gas NSPS/NESHAP Proposed Rule
February 9, 2012

EPA has done an exceptional job trying to understand the industry and selecting controls. API has some concerns with the broad applicability of the proposed rule and "one-size-fits-all" approach to regulating an industry, akin to no other, that varies greatly in the type, size, and complexity of operations. We realize that the April 3, 2012 deadline is incredibly tight to finalize a rule that will substantially impact an industry so vital to the nation's economy, yet it is critically important to industry and the nation's energy supply that EPA get the final rule "right".

Critical Issues

1. **Without significant phase-in periods for the tank, pneumatic and reduced emissions completion (REC) requirements, the level of drilling on shale gas and tight sands resources could be cut in half in the near term and greatly reduced for several years because of equipment shortages. This will lead to reduced natural gas production, tens of thousands of job losses, and billions of dollars lost in royalty and severance tax payments.** [1]

   API recommends:
   - **2 year phase-in for REC requirements to allow sufficient time to manufacture the necessary equipment and train personnel to *safely* conduct this operation**
   - **3 year phase-in for tank requirements to allow sufficient time to design, manufacture and certify sufficient number of control devices**
   - **2 year phase-in for pneumatic requirements to allow sufficient time for manufacturers and industry to determine the status of current equipment, manufacturer equipment, and develop specifications or guarantees for compliance.**

2. **REC requirements should be less prescriptive and API recommends a management plan on how emissions will be reduced per reservoir or basin. The requirements should be limited to circumstances where it is cost-effective and technically feasible.**

3. **To be cost effective, the rule should only apply to streams that are "in VOC service" and 10% VOC by weight or greater (including REC). For sources with very low VOC content, the cost per ton greatly exceeds historically acceptable levels.**

4. **Storage vessel controls should only be required if VOC emissions are greater than 12 TPY and 90 days should be allowed to evaluate emissions and install controls**

Technical Issues[2]

Best System of Emission Reduction (BSER) must be currently available to industry. However, BSER is not available for several of the sources therefore a phase-in period is needed.

---

[1] API funded Advanced Resources International draft study covering drilling, production & royalty etc impacts and API modeling using IMPLAN for job impact estimates

[2] Includes references to API's November 30, 2011 Comments

- **Storage Tanks –Phase-in period of 3 years** is needed to design, manufacture, and certify enough control devices. (ES-8 and 10, Sec. 7.3).
  - If the tank requirements are finalized as proposed, an informal survey of commonly known manufacturers indicates they can produce an estimated 3,680 control devices (combustors) per year. Approximately 20,000 combustors will be needed each year.
- **Pneumatic controllers – Phase-in period of 2 years is needed** for manufacturers and industry to determine status of current equipment, manufacture equipment, and develop specifications or guarantees for equipment (Sec 17.10).
  - No manufacturers currently have design specifications or guarantees for pneumatic controllers below 6 scf/hr
  - Pneumatic controller manufacturers have not participated in the rulemaking process.
  - Definitions and applicability are extremely confusing.
- **Reduced Emissions Completions – Phase-in period of 2 years is practical only** if the applicability and the requirements are reduced in order to manufacture enough equipment and train personnel (ES-5, Sec. 7.4, 15.4).
  - Depending on the REC-Set Use Rate scenario assumed, the following impacts have been predicted in the first 4 years after the proposed requirements go into effect (by 2015):[3]
    - Overall well drilling for unconventional resources producing natural gas over 2012 - 2015 would be reduced by 31% to 52%, amounting to a reduction in drilling from 12,700 to 21,400 wells.
    - 5.8 to 7.0 quadrillion Btu (Quads) of otherwise economic unconventional natural gas would not be developed and produced by 2015, a 9% to 11% reduction.
    - 1.0 to 1.8 billion barrels of otherwise economic unconventional liquids would not be developed and produced by 2015, a 21% to 37% reduction.
    - Royalties of $7.0 to $8.5 billion that would otherwise be collected would not be paid in the first 4 years after the requirements go into effect.
    - State revenues from severance taxes amounting to $1.9 to $2.3 billion would be delayed beyond the first 4 years after the requirement go into effect.

The compliance assurance requirements are overly burdensome and impractical for remote, dispersed, and small unmanned sites.

- Notification, recordkeeping and reporting of Subpart A general provisions should not apply. Specific requirements should be developed in Subpart OOOO only for identified data needs (ES-4).
- Only periodic, accumulated notifications for RECs should be required (Sec 8.3 and 15.7). API requests that a monthly report be submitted of the completions projected to occur that month with a tentative schedule and contact information for updates on the schedule.
- Reporting should include new equipment notifications (Sec 8.3) and deviations (Sec 8.5.2), not equipment recordkeeping data.
- The proposed performance testing requirements for tank control devices are complex, unintelligible and technically infeasible. API suggested use of different existing EPA methods (Sec 8.6).
- For storage vessels, EPA should separate NSPS performance testing and compliance monitoring requirements from NESHAP Subparts HH (Sec 8.6 & 8.7).

[3] API funded Advanced Resources International draft study covering drilling, production & royalty etc impacts and API modeling using IMPLAN for job impact estimates

Reduced Emissions Completions (Sec. 15)

- Applicability should be limited to:
  - Flow back immediately following hydraulic fracture stimulation
  - Onshore, natural gas wells
  - "In VOC Service" with 10% VOC content by weight of the natural gas because of cost effectiveness.
  - When the gas can physically be controlled or recovered (Sec. 15.3):
    - Natural gas gathering line and production equipment is available.
    - There is adequate pressure to overcome pipeline pressure
    - Have the ability to flare in certain circumstances
  - When the gas cannot be physically controlled or recovered, we must maintain the ability to vent (e.g., hydrate formation, gas is not burnable or saleable due to inert gases, etc).
- EPA should not prescribe the equipment required. (Sec. 15.2)
  - For example, the operational and safety constraints of REC should not be prescriptive. (Sec. 15.3)
- EPA should only require a management plan of how a company will minimize VOC emissions.
- Only require a monthly notification of the completions planned for the coming month with the tentative date of completions with a contact number for latest schedule. (Sec. 15.7)

Storage Tanks (Sec. 16)

- Applicability should be limited to:
  - Tanks with emission rates greater than 12 TPY VOC. As proposed, the rule will require installation of "protective control" on all tanks until a stabilized throughput potential is known and result in control costs exceeding $100,000 per ton of VOC reduced for tanks receiving condensate/oil with low pressure drop, low vapor pressure, and/or low associated (solution) gas.
  - Storage vessels in the oil and gas production sector prior to custody transfer
  - On-site for more than 180 days.
- EPA should allow 90 days after the first date of production to:
  - Determine the production rate, composition, and pressure for determining the emissions based on the first 30 days production times a decline factor,
  - Calculate the emissions, and
  - Install the controls for storage vessels in areas where the emissions could be close to the threshold EPA sets for requiring controls.
  - This is similar to NSPS WWW for landfills.
- EPA should not reference the NESHAP HH requirement for NSPS OOOO because they are not suitable for production field operations.
- EPA should allow for controls to be removed once the emission rate declines below 8 TPY VOC due to production decline.

Pneumatic Controllers (Sec. 17)

- EPA must clarify the definitions for pneumatic controllers to be consistent with industry.
- Applicability should be limited to:
  - "Continuous bleed" pneumatic controllers and not "intermittent vent"
  - A process unit versus an individual controller or do not include modified or reconstructed existing pneumatic controllers.
  - The weak stream and not the gas vented at the valve used for actuation.

- EPA should not require a manufacture guarantee, only specifications.
- EPA should allow a phase-in period for controllers based on manufacture date similar to Subpart AAA for woodstoves
- EPA should allow for using other options than instrument air at gas plants.

Glycol Dehydrators (Sec. 20)

- Removal of the 0.9 Mg/yr benzene threshold is based on a flawed analysis and must be corrected.
- EPA should not remove the 0.9 Mg/yr benzene threshold.
- EPA identified small dehydrators as unregulated despite the fact they are subject to HH.
- EPA should eliminate the proposed requirements for small dehydrators.

Equipment Leaks (Sec. 19)

- EPA should continue to require only AVO monitoring at gas plants for connectors due to the high cost. (Sec. 19.1.2 and 19.1.6)
- EPA should leave the valve leak definition at 10,000 ppm with quarterly monitoring (no skip period allowed) and identification of chronic leakers for refurbishing or replacement. (Sec. 19.1.1 and 19.1.6)
- Additional time for compliance is needed to develop an LDAR program and upgrade existing equipment to meet the lower leak definition. (Sec. 19.6, 19.7 and 19.13)
- A 2000 ppm or even a 5000 ppm leak definition for reciprocating pumps is very difficult to meet if not impossible. As done for reciprocating compressors in NSPS VVa, EPA should exempt existing reciprocating pumps if the owner/operator can demonstrate that recasting the distance piece or replacing the pump is the only options to bring the pump into compliance. (Sec. 19.1.5)

Compressors (Sec. 18)

- Relocation of a compressor should not trigger NSPS to be consistent with the engine NSPS.
- Reciprocating compressors in transmission and storage should be excluded due to VOC content.
- Centrifugal compressors in gathering and boosting should be excluded due to VOC content and the omission of a cost-benefit analysis in the Technical Support Document.
- Wet seals with controls should be allowed.
- Packing replacement should be every 5 years to be consistent with the typical maintenance schedule and because additional down time was not accounted for in the cost analysis.

Other

- The economic analysis was unrealistic using "average model facilities" that do not represent the great variation seen across the US and not including all cost of the rule such as all the monitoring equipment, installation, vapor capture equipment, etc. (ES-2, Sec 4-5).
- Clarification of definitions is needed throughout the proposed NSPS rule to make them consistent with industry activities (ES-12 and Section 6).
- S5M Standard Exceedence should be a work practice, thus out of compliance only if affirmative defense criteria are not met (Sec 10.4).