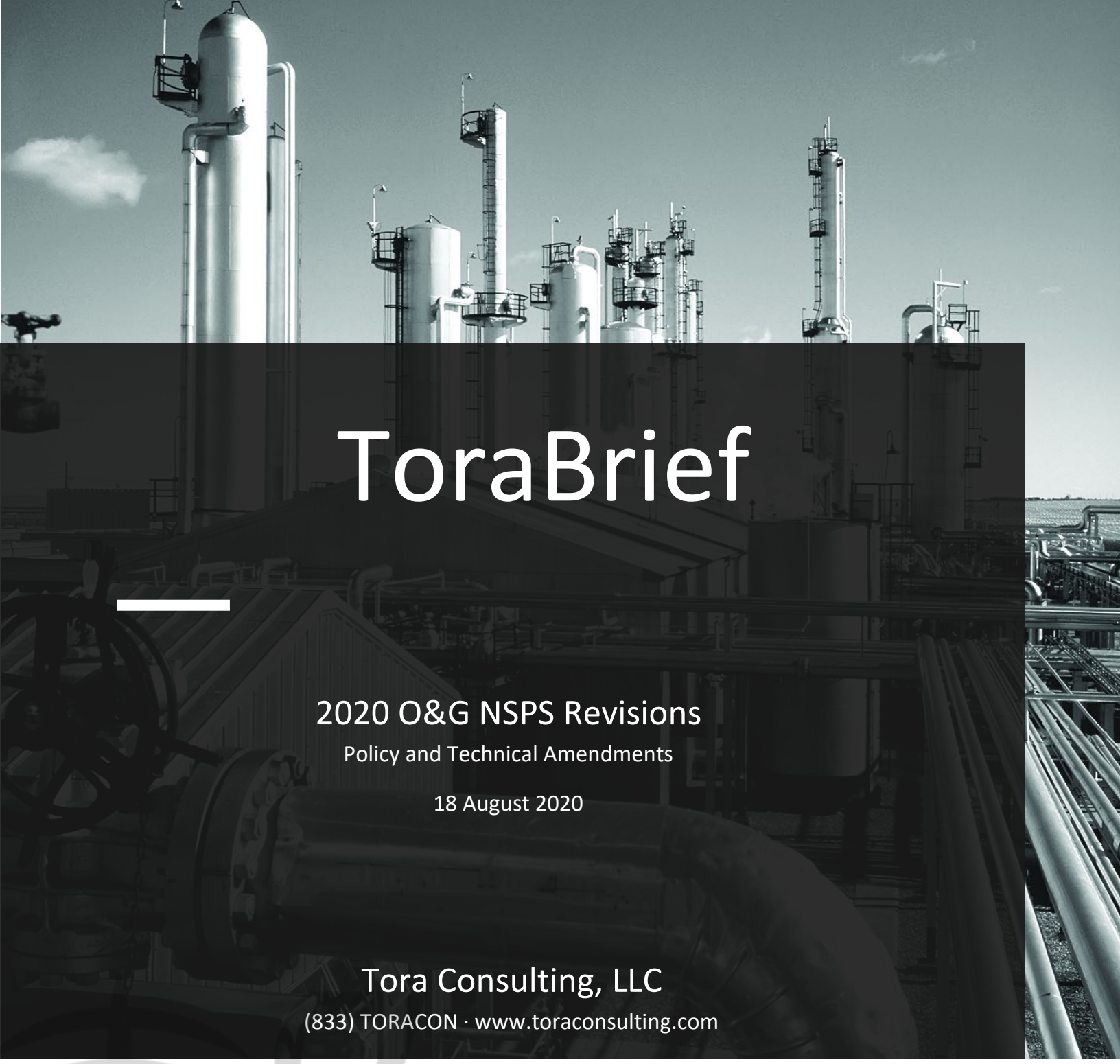

ToraBrief

2020 O&G NSPS Revisions

Policy and Technical Amendments

18 August 2020

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EXECUTIVE SUMMARY

Methane is no longer a regulated pollutant under 40 CFR Part 60, Subpart OOOOa (NSPS OOOOa) and the transmission and storage segment (T&S) is no longer part of the source category "Crude Oil and Natural Gas Production" regulated under Section 111 of the Clean Air Act (CAA). Those are just a few of the changes to the new source performance standards (NSPS) for the oil and natural gas (O&G) industry that EPA finalized on 13 August 2020.[1]

The O&G NSPS revisions were finalized via two rulemakings. First, EPA finalized technical amendments that were originally proposed in 2018 (Technical Rule).[2] Second, EPA finalized major policy changes that were proposed last year (Policy Rule).[3] A summary of changes made by the Technical Rule is provided in Appendix A. The Policy Rule is discussed below.

REMOVAL OF THE T&S SEGMENT

Before a source category can be regulated under the NSPS program, EPA must find that emissions from sources within the category significantly contribute to air pollution that poses a danger to public health or welfare.[4] This finding is often referred to as a "significant contribution finding" (SCF). Once a source category is "listed" pursuant to an SCF, EPA must propose and promulgate standards of performance for new, modified, and reconstructed affected facilities[5] within the source category.[6]

The "Crude Oil and Natural Gas Production" source category was added to the CAA §111(b)(1)(A) list in 1979.[7] In its 1984 proposal for 40 CFR Part 60, Subpart KKK (NSPS KKK), the source category was described as:

The crude oil and natural gas production industry encompasses the operations of exploring for crude oil and natural gas products, drilling for these products, removing them from beneath the earth's surface, and processing these products from oil and natural gas fields for distribution to petroleum refineries and gas pipelines.[8]

Clearly, the originally listed source category was never intended to encompass anything downstream of the processing plant. EPA echoes this sentiment in the Policy Rule, concluding that:

(1) the source category listed pursuant to CAA §111(b)(1)(A) was never sufficiently broad to encompass the T&S segment; and,

(2) EPA has never made an SCF specific to the T&S segment, a prerequisite for regulation under the NSPS program.

For these reasons, EPA has removed regulations for sources within the T&S segment from both 40 CFR Part 60, Subpart OOOO (NSPS OOOO) and NSPS OOOOa.

REMOVAL OF METHANE

EPA has removed methane as a regulated pollutant under NSPS OOOOa on the grounds that inclusion of methane is duplicative, as elucidated previously in the proposal of the Policy Rule published in 2019. Reductions in methane are achieved through the VOC standards of NSPS OOOOa, regardless of whether methane is specifically regulated. As a result, removal of methane as a regulated pollutant has no impact on emissions reduction achieved under NSPS OOOOa.

At the core of removing methane as a regulated pollutant appears to be the goal of preempting any future obligation for EPA to regulate methane emissions from existing sources under CAA §111(d). Once new sources from a listed source category are regulated pursuant to CAA §111(b), CAA §111(d)(1) requires EPA to develop standards of performance for existing sources within the listed source category for any pollutant not listed pursuant to CAA §108(a), the section of the CAA that outlines the establishment of primary and secondary national ambient air quality standards (NAAQS).

Historically, regulation of the crude oil and natural gas production source category focused on volatile organic compounds (VOCs)[9] and sulfur dioxide (SO_2)[10]. Since NAAQS have been established for these pollutants, the EPA was never required to develop existing source performance standards for the source category under CAA §111(d)(1).[11] In 2016, EPA promulgated NSPS OOOOa and added methane as a regulated pollutant, thus triggering EPA's obligation to develop methane-specific performance standards for existing sources within the source category. But now that methane has been removed as a regulated pollutant under NSPS OOOOa, existing source performance standards for the O&G industry are off the table, at least for now.

CONTACT US

If you have any questions regarding the proposed rule, we would love to hear from you. Contact one of our professionals at (833) TORACON. You can visit our website at www.toraconsulting.com.

[1] The pre-publication versions of the final rules are available on EPA's website.
[2] 83 FR 52056, 15 October 2018.
[3] 84 FR 50244, 24 September 2019.
[4] CAA §111(b)(1)(A).
[5] As defined in 40 CFR §60.2.
[6] CAA §111(b)(1)(B).
[7] 44 FR 49222, August 21, 1979.
[8] 49 FR 2637.
[9] NSPS KKK.
[10] 40 CFR Part 60, Subpart LLL (NSPS LLL).
[11] EPA's interpretation is that the exclusion in CAA §111(d)(1) is satisfied by the ozone NAAQS and the fact that VOCs are a precursor to ozone.

Appendix A: Summary of Technical Amendments to NSPS OOOO and NSPS OOOOa

Collection of Fugitive Emission Components at a Well Site

Requirement Category	Previous Requirement	New Requirement	Page Number[12]
Modification Definition	A modification to a well site occurs when a new well is drilled at an existing well site, a well at an existing well site is hydraulically fractured, or a well at an existing well site is hydraulically refractured.	The EPA added a definition of "modification" for existing separate tank battery surface sites. A modification occurs to an existing separate tank battery surface site if a well at the site is modified, a well that sends production to the site is modified, or production equipment at a well site is removed such that it becomes a "wellhead only" site and sends production to an existing separate tank battery surface site.	Pgs. 30/151 of 235
Monitoring Frequency	• Semi-annual monitoring for the collection of fugitive emission components at a well site not located on the Alaskan North Slope.	• Semi-annual monitoring for non-low production well sites (≥ 15 barrels of oil equivalent (boe) per day averaged over the first 30 days of production) and well sites not located on the Alaskan North Slope. • No monitoring for low-production well sites (< 15 boe per day averaged over the first 30 days of production). Recordkeeping, reporting, and other compliance requirements apply.	Pgs. 28/158, 162 of 235
Initial Monitoring Deadline	The initial monitoring survey must be performed within 60 days of the first day of production, except for wells located on the Alaskan North Slope.	The initial monitoring survey must be performed within 90 days of the first day of production, except for wells located on the Alaskan North Slope.	Pgs. 30/161 of 235
Repair Deadline	Leaking components must be repaired within 30 days of leak identification and resurveyed within 30 days after being repaired to ensure there are no fugitive emissions.	• First repair attempt within 30 days of leak identification, final repair within 60 days of first attempt. • Definition of "first attempt at repair" added. • Definition of "repaired" updated to state that a component is not considered repaired until it has been resurveyed to verify there are no fugitive emissions.	Pgs. 31/163, 230, 233 of 235
Discontinuation of Requirements	NA – The current version of the rule does not include provisions for the discontinuation of requirements.	Discontinuation of fugitive emissions monitoring is allowed after the removal of all major production and processing equipment such that the well becomes a "wellhead only" site.	Pgs. 30/163 of 235
Definition of "Well Site"	The custody meter is currently considered part of the well site, which has caused confusion over who is responsible for compliance.	The definition of "well site" has been updated to exclude the flange immediately upstream of the custody meter assembly and all downstream equipment.	Pgs. 33/234 of 235
Monitoring Plan	The monitoring plan must include a site plan and a defined observation path.	The monitoring plan must include procedures to ensure that all fugitive emission components are monitored during each survey. A site plan and defined observation path may be used for this purpose, but are no longer specifically required.	Pgs. 63/160 of 235

[12] Page numbers are from the pre-publication version of the final rule, that are available on EPA's website.

Alternative Means of Emission Limit	The current rule contains provisions for requesting an alternative means of emission limit, but none are specified in the rule.	Facilities that are subject to, and comply with, certain state leak detection and repair programs may comply with those state programs in lieu of NSPS OOOOa. States included in the final rule include: CA, CO, OH, PA, TX, and UT.	Pgs. 35/165 of 235

Collection of Fugitive Emission Components at a Compressor Station (Non-Transmission/Storage)

Requirement Category	Previous Requirement	New Requirement	Page Number[13]
Monitoring Frequency	Monitoring must be performed quarterly.	• Monitoring at a compressor station not located on the Alaskan North Slope must be conducted semiannually. • Monitoring at a compressor station located on the Alaskan North Slope must be conducted annually.	Pgs. 28/162 of 235
Initial Monitoring Deadline	The initial monitoring survey must be performed within 60 days of startup/modification.	• The initial monitoring survey must be performed within 90 days after startup/modification for compressor stations not located on the Alaskan North Slope. • The initial monitoring survey must be performed within 6 months of startup/modification for compressor stations located on the Alaskan North Slope, or by the next June 30, whichever is latest.	Pgs. 30/158, 162 of 235
Repair Deadline	Leaking components must be repaired within 30 days of leak identification and resurveyed within 30 days after being repaired to ensure there are no fugitive emissions.	• First repair attempt within 30 days of leak identification, final repair within 30 days of first attempt. • Definition of "repaired" updated to state that a component is not considered repaired until it has been resurveyed to verify there are no fugitive emissions.	Pgs. 31/163, 230, 233 of 235
Monitoring Plan	The monitoring plan must include a site plan and a defined observation path.	The monitoring plan must include procedures to ensure that all fugitive emission components are monitored during each survey. A site plan and defined observation path may be used for this purpose, but are no longer specifically required.	Pgs. 63/160 of 235
Alternative Means of Emission Limit	The current rule contains provisions for requesting an alternative means of emission limit, but none are specified.	Facilities that are subject to, and comply with, certain state leak detection and repair programs may comply with those state programs in lieu of NSPS OOOOa. States included in the final rule include: CA, CO, OH, PA, TX, and UT.	Pgs. 35/165 of 235

[13] Page numbers are from the pre-publication version of the final rule, that are available on EPA's website.

Well Affected Facilities

Requirement Category	Previous Requirement	New Requirement	Page Number[14]
Separator	With limited exceptions, a separator must be maintained onsite for the entirety of the separation flowback period.	The separator must be maintained onsite or must be otherwise available for use at a centralized facility or well pad that services the affected facility during well completions.	Pgs. 19/151 of 235
Flowback Definition	The definition does not distinguish flowback from screenouts, coil tubing cleanouts, or plug drill-outs.	• The EPA revised the definition of "flowback" to exclude screenouts, coil tubing cleanouts, and plug drill-outs. • The EPA added definitions for screenout, coil tubing cleanout, and plug drill-out.	Pgs. 19/229, 230, 233 of 235

Closed Vent System

Requirement Category	Previous Requirement	New Requirement	Page Number[15]
Engineer Certification	Assessment of the closed vent system (CVS) design must be performed by a qualified professional engineer (PE).	The assessment can be performed by a qualified PE or in-house engineer.	Pgs. 26/181 of 235
CVS monitoring (storage vessels)	Monthly auditory, visual, and olfactory (AVO) inspections.	Either monthly AVO inspections or optical gas imaging (OGI) monitoring when performing required fugitive emissions monitoring surveys.	Pgs. 27/189 of 235
CVS monitoring (pneumatic pumps)	Annual Method 21 no-detectable emission (NDE) inspections.	Either annual Method 21 NDE, monthly AVO, or OGI monitoring when performed required fugitive emissions monitoring surveys.	Pgs. 27/190 of 235

Pneumatic Pumps

Requirement Category	Previous Requirement	New Requirement	Page Number[16]
Exceptions to Emissions Reduction Requirement	May perform an engineering assessment to demonstrate that achieving the required emissions reduction is technically infeasible for non-greenfield sites.	The exception is extended to both greenfield and non-greenfield sites.	Pgs. 21/154 of 235
Engineer Certification	A PE is required to certify any finding of technical infeasibility.	The certification can be made by either a qualified PE or in-house engineer.	Pgs. 23/154 of 235

[14] Page numbers are from the pre-publication version of the final rule, that are available on EPA's website.
[15] Ibid.
[16] Ibid.

Storage Vessels

Requirement Category	Previous Requirement	New Requirement	Page Number[17]
Potential to Emit (PTE) Calculation	• PTE calculations must be performed on an individual-tank basis. • PTE calculations based on the first 30 days of production to an individual storage vessel for all	• PTE calculations can be averaged across multiple tanks that are manifolded together and vented to control device that reduces emissions by at least 95%, if use of the control device is practically and legally enforceable. • PTE calculations can be based on a throughput limit established in a permit or on maximum throughput established via an engineering model.	Pgs. 24/146 of 235

Natural Gas Processing Plant

Requirement Category	Previous Requirement	New Requirement	Page Number[18]
Capital Expenditure	The percent of the replacement cost, "Y," is determined using an equation based on the number of years since the year of facility construction.	"Y" is based on a ratio of the consumer price index (CPI) at the time of facility construction and the current CPI.	Pgs. 37/228 of 235

Notes:

(1) Additional changes to NSPS OOOO/OOOOa were made as a part of the Policy Rule and Technical Rule. This summary is not intended to be comprehensive. If needed, Tora can help assess how the changes impact your specific facility/facilities.
(2) The final rules have not yet been published in the Federal Register.
(3) A permit modification may be required to address the revised rules.

[17] Page numbers are from the pre-publication version of the final rule, that are available on EPA's website.
[18] Ibid.