From: Sorrell, Virginia

Sent: Friday, August 17, 2018 10:46 PM

To: Marsh, Karen; Hambrick, Amy; Mia, Marcia

Subject: RE: NSPS-OOOOa; fugitive monitoring

Hi Karen,

Ex. 5 Attorney Client (AC)

Thanks,

Ginny

Virginia Sorrell

Air Enforcement Division

Office of Civil Enforcement

U.S. Environmental Protection Agency

Phone: 303-312-6669

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From: Marsh, Karen

Sent: Friday, August 17, 2018 7:38 AM

To: Hambrick, Amy <Hambrick.Amy@epa.gov>; Mia, Marcia <Mia.Marcia@epa.gov>; Sorrell, Virginia <Sorrell.Virginia@epa.gov>

Subject: FW: NSPS-OOOOa; fugitive monitoring

Hi all,

Ex. 5 Attorney Client (AC)

I wanted to check in and see if anyone here thought there was a way I can respond at this point?

Thanks,

Karen

****

Karen R. Marsh, PE

US EPA, OAQPS, Sectors Policies and Programs Division

Fuels and Incineration Group

109 TW Alexander Drive, Mail Code E143-05

Research Triangle Park, NC 27711

Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Thursday, August 16, 2018 9:54 AM

To: Marsh, Karen <Marsh.Karen@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Hey Karen, just wanted to touch base on this again. Thanks!

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Thursday, July 19, 2018 2:16 PM

To: 'Marsh, Karen' <Marsh.Karen@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Hi Karen, me again:-) I wanted to follow-up on a couple things and also ask a couple new questions, especially now since the rule seems to be fairly "stable"

1. See below. Has there been any discussion on how to handle facilities that are shut-in temporarily?

2. Also, is there any guidance on how "injection well" is defined? This term shows up in the definition of wellsite and in the definition of well, it refers to a well into which fluids are injected. Is the term "injected" to be applied when fluids go downhole for disposal? i.e. is it the intention of the rule to include saltwater disposal (SWD) wells as a type of well that would trigger a new facility under the fugitive monitoring portion of the rule? The definition calls out injection wells, but the standard also uses/defines "start of production" for determining when initial surveys are due. Any injection well, whether it is used for disposal or enhanced production, would not have a start of production. Any clarification on this?

Thanks a bunch!

Jamie

From: Marsh, Karen [mailto:Marsh.Karen@epa.gov]

Sent: Friday, February 23, 2018 1:10 PM

To: Jamie Nease <jnease@hlpengineering.com>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Hi Jamie,

I know it's been a while on this question. We are still looking into it. My suggestion in the absence of a response is to continue monitoring since there does not appear to be language in the rule that would allow skipping the monitoring due to a shut-in.

Karen

****

Karen R. Marsh, PE

US EPA, OAQPS, Sectors Policies and Programs Division

Fuels and Incineration Group

109 TW Alexander Drive, Mail Code E143-05

Research Triangle Park, NC 27711

Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Thursday, January 18, 2018 9:08 AM

To: Marsh, Karen <Marsh.Karen@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Is there any guidance on how to handle facilities that are shut-in? Is it expected that you survey anyway or is it acceptable to delay the survey until the sites comes back online?

Thanks!

Jamie

From: Marsh, Karen [mailto:Marsh.Karen@epa.gov]

Sent: Tuesday, January 09, 2018 9:48 AM

To: Jamie Nease <jnease@hlpengineering.com>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Hi Jamie,

Yes, this would be reported as a deviation from the monitoring plan. Let me know if you have any additional questions.

Karen

****

Karen R. Marsh, PE

US EPA, OAQPS, Sectors Policies and Programs Division

Fuels and Incineration Group

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Research Triangle Park, NC 27711

Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Monday, January 08, 2018 5:22 PM

To: Marsh, Karen <Marsh.Karen@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

I'm keeping you very busy with my questions! I have another one….

If a repair or confirmation of repair is completed outside of the 30-day window allowed by the rule, would that be considered a deviation of the monitoring plan since the plan is required to describe the frequency for conducting surveys and the prcedures and timeframes for repairing and confirming repair? My hunch is yea, but I want to make sure I am not over-thinking.

Once again, thank you!

From: Marsh, Karen [mailto:Marsh.Karen@epa.gov]

Sent: Tuesday, January 02, 2018 11:33 AM

To: Jamie Nease <jnease@hlpengineering.com>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Jamie,

Based on the example you have provided, it could be possible for 3 surveys to take place within a calendar year. Since monitoring can occur as soon as 4 months, but no more than 6 months after the previous monitoring survey, it is possible for this scenario to occur.

Tanks that are not subject to control (for any reason) are not required to be monitored. However, there may be fugitive emissions components (e.g., valves at the inlet/outlet of the tank) that would be monitored, so it may be necessary to include the tank in the observation path to ensure these components are monitored. Any venting to the atmosphere from the thief hatch would not be considered a fugitive emission for uncontrolled storage tanks.

I hope this helps. I do apologize for the delay in a response.

Karen

****

Karen R. Marsh, PE

US EPA, OAQPS, Sectors Policies and Programs Division

Fuels and Incineration Group

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Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Tuesday, December 12, 2017 3:36 PM

To: Marsh, Karen <Marsh.Karen@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Karen-

I know I will get this question from my clients, so I'll go ahead and ask now. Based on your explanation below, which I do follow, it is possible to have a scenario where three surveys would be required in one calendar year for a wellsite facility.

Example:

Survey date 1/15/18 (next survey due 5/15-7/15/18)

Survey Date 6/30/17 (next survey due 10/30/17-12/30/17)

Survey date 12/30/17

Is this correct?

Also, I wanted to pick your brain on how surveys should be handled specifically to storage tanks at facilities subject OOOOa. The rule is specific in that for tanks that are controlled, any gas detected from the thief hatch is a leak. This implies, that for tanks that are uncontrolled, that gas from the hatch would NOT be a leak.

For tanks that are not controlled, should they even be surveyed at all, i.e. identified within the observation path? If the tank is authorized to vent to atmosphere, would any component on the tank have the potential for a leak? Again, this seems like it would be black and white, but there are so many "what-if" questions that are being raised.

Thanks!

Jamie

From: Marsh, Karen [mailto:Marsh.Karen@epa.gov]

Sent: Wednesday, September 20, 2017 8:08 AM

To: Jamie Nease <jnease@hlpengineering.com>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Jamie,

As you noted, we state in the rule that semiannual monitoring must be at least 4 months apart. Similarly we state that quarterly monitoring at a compressor station must be at least 60 days apart. We don't have a specific definition of quarter or semiannual within NSPS OOOOa. However, we do adopt definitions from the General Provisions (subpart A) and NSPS VVa. In NSPS VVa we have a definition of quarter, which means a 3-month period; the first quarter concludes on the last day of the last full month during the 180 days following initial startup. While we don't have a specific definition of semiannual in the regulation, we have provided guidance to others that limits the interval to a maximum of 6 months.

"Once the initial survey under §60.5397a of Subpart OOOOa is conducted, the clock starts and the next semi-annual inspection would be due within six months. Semi-annual inspections must be at least four months apart. The same would be true for a compressor station, except that subsequent surveys would be conducted every three months."

I hope this helps. Please let me know if you have any additional questions.

Karen

****

Karen R. Marsh, PE

US EPA, OAQPS, Sectors Policies and Programs Division

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Research Triangle Park, NC 27711

Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Monday, September 11, 2017 1:48 PM

To: Marsh, Karen <Marsh.Karen@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Karen-

Under the fugitive monitoring rules, surveys are required semiannually or quarterly. Other than stating that surveys cannot be closer than 4 months or 60 days apart, respectively. Do you know if semiannually or quarterly are defined anywhere in the rule? For example, for the semiannual surveys, are the only requirements that they must be done twice per year and no closer than 4 months? Or is there a rule or guidance document that defines semiannual as no further apart than 6 months?

Thanks!

Jamie N. Nease

117 Park Center Street

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From: Marsh, Karen [mailto:Marsh.Karen@epa.gov]

Sent: Monday, January 23, 2017 2:13 PM

To: Jamie Nease <jnease@hlpengineering.com>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Hi Jamie,

I am so sorry for the delay in responding to your question. We had some folks on our end that needed to weigh in before responding.

There are three potential scenarios for reporting the US well ID under 60.5420a(b).

1. If you have a well site that contains one or more wells, and they are affected facilities under NSPS OOOOa, then you would report the US well IDs for the wells which are affected facilities in that report.

2. If you have a well site that contains fugitive emissions components that are an affected facility under NSPS OOOOa, then you would report the US well IDs that are associated with the fugitive emissions components located at that well site.

3. If you have a well site that contains other affected facilities under NSPS OOOOa, including, but not limited to pneumatic pumps, pneumatic controllers, or storage vessels, then you would report the US well IDs for any wells associated with that affect facility. For example, if you have a storage vessel located at a well site with 3 wells but only 1 well sends fluids to that storage vessel, then you would only report the US well ID for the well that sends fluids to that storage vessel when reporting information for the storage vessel affected facility.

Again, please let me know if you have any additional questions. I'll try to respond in a more timely fashion as well.

Thanks,

Karen

****

Karen R. Marsh, PE

US EPA, OAQPS, Sectors Policies and Programs Division

Fuels and Incineration Group

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Research Triangle Park, NC 27711

Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Friday, December 02, 2016 11:40 AM

To: Marsh, Karen <Marsh.Karen@epa.gov>; Howard, Jodi <Howard.Jodi@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Jodi/Karen-

I don't think I ever got an answer to a couple questions below, Specifically:

1. In the reporting requirements in 5420a(b), the annual report should include the US well ID, as applicable. I may be over thinking this, but the US well ID would obviously apply to the well affected facilities, but would it apply elsewhere? I don't think it would apply to compressors, tanks, pumps, pneumatic controllers, natural gas processing plants, or sweetening units since those are equipment specific, but what about fugitive emission components at wellsites? If so, do you identify every US well ID associated with the facility? This list has the potential to get quite lengthy.

Thanks!

Jamie

From: Marsh, Karen [mailto:Marsh.Karen@epa.gov]

Sent: Friday, October 07, 2016 9:41 AM

To: Jamie Nease <jnease@hlpengineering.com>

Cc: Howard, Jodi <Howard.Jodi@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Jamie,

I'd be happy to respond to your question related to which scenario is applicable as you've outlined below. In this case, both facilities would be applicable to the fugitive emissions standards at §60.5397a.

The definition of "well site" at §60.5430a is intended to include well sites at natural gas storage sites.

§60.5430a: Well site means one or more surface sites that are constructed for the drilling and subsequent operation of any oil well, natural gas well, or injection well. For purposes of the fugitive emissions standards at §60.5397a, well site also means a separate tank battery surface site collecting crude oil, condensate, intermediate hydrocarbon liquids, or produced water from wells not located at the well site (e.g., centralized tank batteries).

Please let me know if you have any further questions.

Karen

****

Karen R. Marsh, PE

US EPA, OAQPS, Sectors Policies and Programs Division

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Direct: (919) 541-1065; email: marsh.karen@epa.gov

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Wednesday, October 05, 2016 12:13 PM

To: Marsh, Karen <Marsh.Karen@epa.gov>

Subject: FW: NSPS-OOOOa; fugitive monitoring

Ken, would you be able to assist with my questions below while Jodi is out? Specifically the question below as it pertains to the fugitive monitoring portion of OOOOa:

Specific to fugitive emission components at a wellsite, I want to know which facility in the following scenario would be applicable assuming each is new or modified after 9/18/15, or would both be applicable:

a. Facility A: remote wellhead and separator, where production is separated, metered, commingled back together and piped to a centralized tank battery (I am confident this would be an applicable facility)

b. Facility B: Centralized tank battery that processes total production from Facility A (I am not as confident on this, but this scenario is so very common in South Louisiana)

Jamie N. Nease

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From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Wednesday, October 05, 2016 10:04 AM

To: 'Howard, Jodi' <Howard.Jodi@epa.gov>

Cc: 'Thompson, Lisa' <Thompson.Lisa@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Jodi, see below. Just wanted to follow-up. These are some issues that we have come across in the last few weeks when determining applicability.

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Tuesday, August 30, 2016 3:13 PM

To: 'Howard, Jodi' <Howard.Jodi@epa.gov>

Cc: 'Thompson, Lisa' <Thompson.Lisa@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Jodi-

I have a few additional questions for you:

1. In the reporting requirements in 5420a(b), the annual report should include the US well ID, as applicable. I may be over thinking this, but the US well ID would obviously apply to the well affected facilities, but would it apply elsewhere? I don't think it would apply to compressors, tanks, pumps, pneumatic controllers, natural gas processing plants, or sweetening units since those are equipment specific, but what

about fugitive emission components at wellsites? If so, do you identify every US well ID associated with the facility? This list has the potential to get quite lengthy.

2. Is there an exemption for compressors where the gas stream compressed is less than a certain threshold of VOC? I have a client who has compressors (not at a wellsite) that compress CO2. The gas is approx. 98% CO2 with the remainder being hydrocarbons. The definition of centrifugal compressor references natural gas and the definition of reciprocating compressor references process gas. Process gas and natural gas are not defined in this subpart or in 60.2.

3. Specific to fugitive emission components at a wellsite, I want to know which facility in the following scenario would be applicable assuming each is new or modified after 9/18/15, or would both be applicable:

a. Facility A: remote wellhead and separator, where production is separated, metered, commingled back together and piped to a centralized tank battery

b. Facility B: Centralized tanks battery that processes total production from Facility A

Thank you for any guidance you can provide!!

Jamie

From: Howard, Jodi [mailto:Howard.Jodi@epa.gov]

Sent: Friday, July 08, 2016 9:28 AM

To: Jamie Nease <jnease@hlpengineering.com>

Cc: Thompson, Lisa <Thompson.Lisa@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

The capital expenditure exception under 60.5365a(f) is not applicable to the fugitive emissions monitoring program (60.5397a).

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Friday, July 01, 2016 3:23 PM

To: Howard, Jodi <Howard.Jodi@epa.gov>

Cc: Thompson, Lisa <Thompson.Lisa@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

One more question for you. Since modification under this section of the rule refers only to the addition of a new well or fracking/refracking an existing well, does the capital expenditure exception under 60.5365a(f) apply since modifications under this subpart don't necessarily have anything to do with new equipment? The rule, as far as fugitive emissions go, seem pretty specific on what a modification is

From: Howard, Jodi [mailto:Howard.Jodi@epa.gov]

Sent: Wednesday, June 29, 2016 12:03 PM

To: Jamie Nease <jnease@hlpengineering.com>

Cc: Thompson, Lisa <Thompson.Lisa@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Wednesday, June 29, 2016 12:11 PM

To: Howard, Jodi <Howard.Jodi@epa.gov>

Cc: Thompson, Lisa <Thompson.Lisa@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Jodi, thanks so much for your response. Where I am getting hung up is on the addition of a new well to an existing wellsite. Applicability for this modification would be based on whether the modification occurred after 9/18/15. I am trying to determine what date (specific to the well) I would use to determine if my modification occurred after 9/18/15.

Example: Operator is drilling a new well that will flow into an existing tank battery. What is the date that my modification occurred? Is it:

-The date that the operator entered into a contractual obligation to drill the well? Yes. Refer to the definition of commence in the general provisions. If this occurs after 9/18/15 at an existing well site (drilling of a new well), the collection of fugitive emissions components are now an affected facility under 60.5365a(i)(3)(i).

-The date the well was spud? No

-The date the well was completed? No

-The date the operator entered into a contractual obligation to construct new equipment/pipeline for the new well? No.

The date range from when an operator enters a contractual agreement to begin drilling a well to the startup of production is quite large. I'm trying to nail down what date would be used to determine when my modification occurred.

Jamie

From: Howard, Jodi [mailto:Howard.Jodi@epa.gov]

Sent: Wednesday, June 29, 2016 10:27 AM

To: Jamie Nease <jnease@hlpengineering.com>

Cc: Thompson, Lisa <Thompson.Lisa@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Jamie,

Please see my responses to your questions below which are all based on applicability for the collection of fugitive emissions at a well site (i.e. the affected facility). Here is some background information:

The General Provisions (40 CFR 60.2) for New Source Performance Standards state the following:

Commenced means, with respect to the definition of new source [new compressor station or well site] in section 111(a)(2) of the Act, that an owner or operator has undertaken a continuous program of construction or modification or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of construction or modification.

Construction means fabrication, erection, or installation of an affected facility.

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Wednesday, June 29, 2016 10:14 AM

To: Thompson, Lisa <Thompson.Lisa@epa.gov>

Cc: Howard, Jodi <Howard.Jodi@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Great, thank you so much!

From: Thompson, Lisa [mailto:Thompson.Lisa@epa.gov]

Sent: Wednesday, June 29, 2016 8:49 AM

To: Jamie Nease <jnease@hlpengineering.com>; Moore, Bruce <Moore.Bruce@epa.gov>

Cc: Hambrick, Amy <Hambrick.Amy@epa.gov>; Howard, Jodi <Howard.Jodi@epa.gov>

Subject: RE: NSPS-OOOOa; fugitive monitoring

Hi Jamie,

Thank you for your email. I am referring you to Jodi Howard (cc'd), who is the prime contact for the fugitives program.

Should you have other questions, please don't hesitate to reach out.

Lisa

From: Jamie Nease [mailto:jnease@hlpengineering.com]

Sent: Tuesday, June 28, 2016 9:23 AM

To: Moore, Bruce <Moore.Bruce@epa.gov>

Cc: Hambrick, Amy <Hambrick.Amy@epa.gov>; Thompson, Lisa <Thompson.Lisa@epa.gov>

Subject: NSPS-OOOOa; fugitive monitoring

Good morning! Hoping you can provide some guidance on the following. In the fugitive monitoring applicability, a wells site facility constructed, modified or reconstructed after 9/18/15 is an affected facility. It is considered modified when the following takes places after 9/18/15:

(i) A new well is drilled at an existing well site;

(ii) A well at an existing well site is hydraulically fractured; or

(iii) A well at an existing well site is hydraulically refractured.

For these three items, what date would you look at to determine applicability? In this specific case, the applicability date would be after September 18, 2015.

The startup of production of the new well, the spud date of the well, the date drilling begins, etc.? For applicability purposes, the startup of production is not a consideration. Applicability is based on when the commencement of construction, reconstruction or modification begins.

We are looking at several wells that were drilled last year where drilling began prior to 9/18/15 but the well was completed after so I'm not sure if they should be in or out. If construction was commenced prior to September 18, 2015, the provisions of subpart OOOOa are not applicable regardless of when the well was completed.

The only thing that is really clear in the regulation is that the initial survey date is based on the startup of production, which makes me want to think that would be the date to use in this case, but I'm not sure. The applicability of the rule and the initial survey are independent of one another and also have different dates. The applicability of the rule can be found in subpart OOOOa at 60.5365a(i). The specific fugitive emissions requirements can be found at 60.5397a.

Any guidance you could provide would be greatly appreciated!

Jamie N. Nease

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