Message

**From**: Beeler, Cindy [/O=EXCHANGELABS/OU=EXCHANGE ADMINISTRATIVE GROUP (FYDIBOHF23SPDLT)/CN=RECIPIENTS/CN=9B11E688258C462BAB293A6DF8FF4B27-BEELER, CYNTHIA]
**Sent**: 7/24/2018 2:26:38 PM
**To**: Garwood, Gerri [Garwood.Gerri@epa.gov]
**Subject**: RE: Oil & Gas LDAR - SIP vs. NSPS OOOOa and AIMM vs. AMEL - Beeler Summary for Your Review

Thanks, Gerri!

**Cindy Beeler**
US EPA Region 8
Tel: 303-312-6204
Beeler.Cindy@epa.gov

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**From:** Garwood, Gerri
**Sent:** Tuesday, July 24, 2018 8:26 AM
**To:** Beeler, Cindy <Beeler.Cindy@epa.gov>
**Subject:** RE: Oil & Gas LDAR - SIP vs. NSPS OOOOa and AIMM vs. AMEL - Beeler Summary for Your Review

Thanks Cindy. I know a bit about the background on this previously, so I think I understand what the issue is. I have no edits on your bullets.

Thanks!

Gerri
919-541-2406

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**From:** Beeler, Cindy
**Sent:** Tuesday, July 24, 2018 10:19 AM
**To:** Marsh, Karen <Marsh.Karen@epa.gov>; Garwood, Gerri <Garwood.Gerri@epa.gov>
**Subject:** RE: Oil & Gas LDAR - SIP vs. NSPS OOOOa and AIMM vs. AMEL - Beeler Summary for Your Review

Thanks, Karen and thanks to you, Gerri, for helping with this topic. I've endeavored to keep the entire story together in this email chain. If you'd like to discuss let me know and I'll give you a ring.

If you could take a look at the bullets below, that I could communicate to Colorado, I'd appreciate your confirmation or edits. Karen M confirmed they were okay as is (**right, Karen?**).

**Cindy Beeler**
US EPA Region 8
Tel: 303-312-6204
Beeler.Cindy@epa.gov

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**From:** Marsh, Karen
**Sent:** Tuesday, July 24, 2018 8:13 AM
**To:** Garwood, Gerri <Garwood.Gerri@epa.gov>; Beeler, Cindy <Beeler.Cindy@epa.gov>
**Subject:** FW: Oil & Gas LDAR - SIP vs. NSPS OOOOa and AIMM vs. AMEL - Beeler Summary for Your Review

Cindy,

I'm looping Gerri Garwood in on this discussion as well. I know we have Jason involved (from MTG) but Gerri will also play a role on AMELs from MPG. Please include her during any subsequent discussions.

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

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**From:** Beeler, Cindy
**Sent:** Friday, July 20, 2018 9:10 AM
**To:** Marsh, Karen <Marsh.Karen@epa.gov>; Dewees, Jason <Dewees.Jason@epa.gov>; Mia, Marcia <Mia.Marcia@epa.gov>; Branning, Amy <Branning.Amy@epa.gov>; Odendahl, Steve <Odendahl.Steve@epa.gov>; Fulton, Abby <Fulton.Abby@epa.gov>
**Subject:** RE: Oil & Gas LDAR - SIP vs. NSPS OOOOa and AIMM vs. AMEL - Beeler Summary for Your Review

I will cast my understanding from our call this week in bullet form for ease of editing (even adding bullets, if you deem helpful). CDPHE's AIMM Team will be expecting some input from me on what I've learned looking into this – next meeting is 7/26, and then 8/23.

**Ex. 5 Attorney Client (AC)**

Ex. 5 Attorney Client (AC)

Thanks everyone for your engagement on this issue – I'd be lost without you!

**Cindy Beeler**
US EPA Region 8
Tel: 303-312-6204
Beeler.Cindy@epa.gov

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-----Original Appointment-----
**From:** Beeler, Cindy
**Sent:** Thursday, June 28, 2018 11:27 AM

**To:** Beeler, Cindy; Marsh, Karen; Dewees, Jason; Mia, Marcia; Branning, Amy; Odendahl, Steve; Fulton, Abby
**Subject:** Oil & Gas LDAR - SIP vs. NSPS OOOOa and AIMM vs. AMEL
**When:** Wednesday, July 18, 2018 8:00 AM-9:00 AM (UTC-07:00) Mountain Time (US & Canada).
**Where:** Skype Meeting ... Ex. 6 Personal Privacy (PP)

7/2/18 Update:
Karen Marsh needed to reschedule and we need Ms. Marsh! Looks like everyone else's calendars were clear at this time.

Thanks ALL!

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→ Join Skype Meeting

This is an online meeting for Skype for Business, the professional meetings and communications app formerly known as Lync.

Join by Phone

Ex. 6 Personal Privacy (PP)

Help

Ex. 5 Attorney Client (AC)

# Ex. 5 Attorney Client (AC)

******** **BACKGROUND** **********

DEPARTMENT OF PUBLIC HEALTH AND ENVIRONMENT
Air Quality Control Commission
REGULATION NUMBER 7
Control of Ozone via Ozone Precursors and Control of Hydrocarbons via Oil and Gas Emissions

***AIMM Reg. Text*** (https://www.colorado.gov/pacific/sites/default/files/5-CCR-1001-9.pdf) ... p.84-85

XII.L.8. Alternative approved instrument monitoring methods may be used in lieu of, or in combination with an infra-red camera, EPA Method 21, or other approved instrument monitoring method to inspect for leaks as required by Section XII.L., if the following conditions are met:

XII.L.8.a. The proponent of the alternative approved instrument monitoring method applies for a determination of an alternative approved instrument monitoring method or program. The application must include, at a minimum, the following:

XII.L.8.a.(i) The proposed alternative approved instrument monitoring method manufacturer information;

XII.L.8.a.(ii) A description of the proposed alternative approved instrument monitoring method including, but not limited to:

XII.L.8.a.(ii)(A) Whether the proposed alternative approved instrument monitoring method is a quantitative detection method, and how emissions are quantified, or qualitative leak detection method;

XII.L.8.a.(ii)(B) Whether the proposed alternative approved instrument monitoring method is commercially available;

XII.L.8.a.(ii)(C) Whether the proposed alternative approved instrument monitoring method is approved by other regulatory authorities and for what application (e.g., pipeline monitoring, emissions detected);

XII.L.8.a.(ii)(D) The leak detection capabilities, reliability, and limitations of the proposed alternative approved instrument monitoring method, including, but not limited to, the ability to identify specific leaks or locations, detection limits, and any restrictions on use, as well as supporting data;

XII.L.8.a.(ii)(E) The frequency of measurements and data logging capabilities of the proposed alternative approved instrument monitoring method;

XII.L.8.a.(ii)(F) Data quality indicators for precision and bias of the proposed alternative approved instrument monitoring method;

XII.L.8.a.(ii)(G) Quality control and quality assurance procedures necessary to ensure proper operation of the proposed alternative approved instrument monitoring method;

XII.L.8.a.(ii)(H) A description of where, when, and how the proposed alternative approved instrument monitoring method will be used; and

XII.L.8.a.(ii)(I) Documentation (e.g., field or test data, modeling) adequate to demonstrate the proposed alternative approved instrument monitoring method or program is capable of achieving emission reductions that are at least as effective as the emission reductions achieved by the leak detection and repair provisions in Section XII.L.

XII.L.8.a.(iii) The Division will transmit a copy of the complete application and any other materials provided by the applicant to EPA..

XII.L.8.a.(iv) Public notice of the application is provided pursuant to Regulation Number 3, Part B, Section III.C.4.

XII.L.8.a.(v) The Division and the EPA approves the proposal. The Division will transmit a copy of the application and any other materials provided by the applicant, all public comments, all Division responses and the Division's approval to EPA Region 8. If EPA fails to approve or disapprove the proposal within six (6) months of receipt of these materials, EPA will be deemed to have approved the proposal.

**Statement of Basis** (https://www.colorado.gov/pacific/sites/default/files/5-CCR-1001-9.pdf)

***Alternative approved instrument monitoring method ("AIMM")*** ... p.183

The Commission has adopted a process for the review and approval of alternative instrument monitoring methods. The CAA prohibits a state from modifying SIP requirements except through specified CAA processes. EPA interprets this CAA provision to allow EPA approval of SIP provisions that include state authority to approve alternative requirements when the SIP provisions are sufficiently specific, provide for sufficient public process, and are adequately bounded such that EPA can determine, when approving the SIP provision, how the provision will actually be applied and whether there are adverse impacts. (State Implementation Plans: Response to Petition for Rulemaking; Restatement and Update of EPA's SSM Policy Applicable to SIPs; Findings of Substantial Inadequacy; and SIP Calls to Amend Provisions Applying to Excess Emissions During Periods of Startup, Shutdown and Malfunction, 80 Fed. Reg. 33917-33918, 33927 (June 12, 2015)) Therefore, the Commission includes an application and review process in the SIP for the potential approval of instrument monitoring methods as alternatives to an infra-red camera or EPA's Method 21. The approval may also include modified recordkeeping and reporting requirements based on the capabilities of the potential alternative instrument monitoring method. This proposed process does not alter the stringency of Colorado's well production facility and natural gas compressor station LDAR program because an alternative AIMM must be capable of reducing emissions through the detection and repair of leaks comparable to the leaks detected and repaired as specified in the SIP to be potentially approvable.

The Commission received comments from stakeholders requesting that the Commission explicitly provide for the ability to employ certain alternatives not equipped with the leak detection capabilities of infra-red cameras or Method 21. These stakeholders emphasized that monitoring technologies are evolving rapidly and new technologies and monitoring programs are being developed that, when used on their own or in conjunction with other methods, may provide the same or better leak detection and repair results, at potentially lower costs. The process outlined in Section XII.L.8. requires an applicant to demonstrate that the proposed alternative monitoring achieves emission reductions that are at least as effective as the leak detection and repair program in Section XII.L. The Commission intends that the rule be flexible enough to allow the Division to consider such alternative monitoring methods or programs, as long as the applicant can demonstrate that the proposed method or program achieves emission reductions that are as effective as other approved technologies or methods.

To make this demonstration, an applicant may consider demonstrating that a program of alternative inspection frequencies, pollutants detected, or leak thresholds for repair achieves emission reductions comparable to the inspection frequencies and leaks requiring repair thresholds in Section XII.L., thus the consideration of an alternative leak detection program. The Commission recognizes that current, established approaches or methodologies to evaluate the performance of alternative monitoring technologies and programs as compared to baseline monitoring technologies (infra-red camera, EPA Method 21) do not yet exist. However, such methodologies are being developed. For example, the Interstate Technology and Regulatory Council (ITRC), in which Colorado participates, is developing, but has not yet published, a guidance document to establish, if possible, a consensus for evaluating and comparing the effectiveness of leak detection technologies. While the criteria for evaluating the effectiveness of an alternative program as compared to the base program is being developed, alternative monitoring method applicants may submit an application for approval of an alternative monitoring method but must be prepared to present a robust and complete evaluation of the technology or program's performance that allows for comparison to the base technologies in the SIP. It is possible the Division may delay consideration and final determination regarding an alternative monitoring method or program application until established comparison criteria are developed or submitted. Taking into account the deliberations of the ITRC process, the Commission expects that the Division will consider complete applications in a timely manner.

The Commission also received comments from stakeholders requesting that the Commission clarify EPA's participation regarding potential alternative monitoring methods. As discussed above, the Commission believes that the process to review and potentially approve alternative monitoring methods is sufficiently constrained such that EPA, when approving the process, can be assured as to what emission reductions any such alternative monitoring will achieve in the context of the Section XII.L. LDAR program. However, the Commission also recognizes EPA's technical knowledge and is requiring the Division to continue to engage with EPA concerning alternative monitoring methods. Specifically, the Division must provide complete applications to EPA early in the review process, which has previously ranged from three to nine months. The Division must also provide EPA six (6) months after approval of an alternative for further EPA review. The Commission believes this process provides sufficient time for meaningful engagement with EPA.

**Cindy Beeler**
US EPA Region 8
Tel: 303-312-6204
Beeler.Cindy@epa.gov

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