

Below are comments provided by the presenters during an informal educational session facilitated by the Pacific Rim Institute. If formal agency disposition is required, please contact each agency with a formal letter or request.

1. Would EPA reconsider revising the federal air rules for engines to recognize that engines located on platforms in Cook Inlet are “remote”? In June 2012 EPA proposed amendments to all three rules, (NESHAP subpart ZZZZ and NSPS subparts IIII and JJJJ) and in response to comments on January 14, 2013 EPA rejected comments to make these changes. What would be the best way to revisit this issue?”

Agency Comment (EPA): An interested party may petition EPA to revise regulations, providing arguments for the changes (for example, how has the implementation of this set of rules had adverse impacts unique to Cook Inlet platforms?), and including supporting information. A petition would be reviewed and then discussed with the requestor(s). This can begin with a letter to Region 10, which can be forwarded to the appropriate Agency contact at HQ. Any such changes to the rule would go through a public comment process before final action.

2. Could EPA and ADEC elaborate on the severity of non-compliance consequences for situations when an operator was not aware that he was subject to the air emission control regulations?

Agency Comment: EPA and ADEC both take into consideration the facts of each case when deciding if follow up enforcement action is appropriate. The prior knowledge of requirements, or in contrast, the lack of understanding of the requirements, are factors that both agencies take into consideration. When EPA assesses a penalty against a regulated facility, the Agency’s Civil Penalty Policy takes into account both the Degree of Cooperation (to reduce penalties) as well as the Degree of Willfulness or Negligence (to increase them).

3. What constitutes a start-up date under the federal air rules for boilers, incinerators and engines? Is this different for the different rules? Is it at the start of commercial operation of the facility where the engine is located or is it from the time of the testing of a specific engine ahead of the facility start-up? Important to understand as there are time sensitive performance tests that have to be administered, count-down issues.

Agency Comment (SOA DEC and EPA): Due to factors described below, there is no one answer that could cover all circumstances. On this issue, both agencies suggest to contact both ADEC and EPA for a case-by-case consultation in order to identify conditions unique to a specific facility / operations.

State regulation defines "startup" in 18 AAC 50.990(103) as "startup" means (A) for an internal combustion engine aboard a marine vessel, the point in time that emissions begin to exit from the vessel as a result of igniting the engine; and (B) for all other sources, the setting into operation of a source for any reason; so (B) would apply. However, all uses of the word in our regulations are in the context of daily starting of a piece of equipment, not initial commissioning.

For the purposes of Federal rules, most use the definitions in the General Provisions such as 40 CFR 60 Subpart A which states: "Startup means the setting in operation of an affected facility for any

purpose". Part 63 (MACT) Subpart A uses a similar definition for "startup" as "Startup means the setting in operation of an affected source or portion of an affected source for any purpose." The Federal regulations mix the use of the term in the context of both a daily start of a piece of equipment and the initial commissioning. For purposes of Part 63 Subpart ZZZZ, the rule also defines "engine startup" as "Engine startup means the time from initial start until applied load and engine and associated equipment reaches steady state or normal operation. For stationary engine with catalytic controls, engine startup means the time from initial start until applied load and engine and associated equipment, including the catalyst, reaches steady state or normal operation."

So, since the discussion centered around RICE MACT initial performance testing, we would defer to the use of the word in that context. However, ADEC has some compliance latitude because neither Part 63 defined term truly defines what is meant in each context. Thus, for a newly installed unit, until the contractor has "turned over the keys" (metaphorically) and walked away, that the unit has not achieved operation to produce commercial power for sale or use, and thus has not truly achieved startup (in the terms of commissioning) even if it was online for brief moments while (e.g.) an SCR was tuned or a PCM was adjusted. Likewise, a commercial boiler would need to be fired up to check for leaks prior to placing into commercial operation. In the past, ADEC has defined that SIC-coded gold mines and oil and gas production facilities do not reach startup until they either produce gold or start pumping oil into the sales pipeline. Short operations for well-testing, for example, are not startup. But none of that is spelled out in regulation nor policy, so each permit has wrangled over those terms in each unique case, and individual compliance determinations have been made.

EPA's interpretation of the source testing deadline for Part 60 and Part 63 rules is generally 180 days after startup, unless unforeseen circumstances prevented the testing. There is actually very little guidance on the issue of what constitutes "startup" on EPA's Applicability Determinations Index (ADI), found at http://cfpub.epa.gov/adi/index.cfm?CFID=3776929&CFTOKEN=74361339&jsessionid=4e30e12c5f503906175f6183527d4d3173bd&fuseaction=home.dsp_main

With the RICE MACT rule, EPA allows for operators to at least bring an engine up to load, to a steady state to achieve startup. The Boiler MACT does not include language to allow this additional time and we are left with the definition of firing fuel in a boiler to produce steam or heating and/or producing electricity, "or for any other purpose." Absent any guidance on this topic, EPA presenter suggests facility owners contact EPA on a case-by-case basis.

4. Where could we find a copy of the Compliance Assurance Agreement between SOA, DEC and EPA?

Agency Comment (EPA): EPA provided a copy of the Compliance Assurance Agreement. It is a public document. Please see attachment posted on the event's web page.

5. Question-discussion regarding pre-approved emission limits (PAELs) and Owner Requested Limits (ORLs). Some operators use them as a permit avoidance tool. What are the best situations to make use of PAELs and ORLs to avoid the requirement for an air quality operating permit?

Agency Comment (SOA DEC): PAELs do not avoid the requirement for an air quality operating permit, but provide a simple means for small power plants to limit their NO_x to avoid Title V only for that pollutant. The PAEL regs themselves do not avoid anything and do not assume NO_x emissions will be the highest. All the regs do is provide a pre-approved means to limit NO_x Potential to Emit (PTE) from diesel

engines based on AP-42 by limiting fuel use. If the actual NOx emission factor is less than AP-42, you do not get credit for that, and if the actual emission factor is higher than AP-42, you do not get penalized. The PAEL regs specify the emission factor to use for NOx for the diesel engines listed in the PAEL and subject to the PAEL limit. The PAEL regs do not consider or address other pollutants or other equipment in any way.

Since the PAEL is an enforceable limit on the amount of fuel consumed in diesel engines, it will also limit the PTE of other pollutants from diesel engines, but it does not provide a default emission factor like it does for NOx. An applicant is free to limit their fuel use in diesel engines under a PAEL to whatever they want. Based on that fuel use, one calculates the PTE of other pollutants from diesel engines using the most accurate emission factors available. One can then determine the PTE for the source and discern whether a permit is required.

If there is a need to restrict the PTE other than through fuel use or from equipment other than diesel engines in order to avoid a permit, then they would need to do so with an ORL.

An ORL is used for specific limitations that a stationary source may want to take that provide an enforceable method of limiting emissions. It's not good enough in a regulatory fashion to simply state that the source does not emit if there is no enforceable limitation. That limitation can be used to "avoid" any other regulation such as MACT applicability under certain circumstances (unless already subject), limit emissions to below Title V, or other items. The bulk gasoline distribution PAEL is actually a specific ORL applied to one source category.

6. What are the consequences when and operator with a PAEL exceeds the threshold?

Agency Comment (SOA DEC): All compliance issues are handled either through informal means such as a compliance review and compliance letter, or through formal enforcement such as a notice of violation. The compliance history of the source is always considered, and ADEC tends to offer compliance assistance as a first step. ADEC prefers to help sources stay in compliance rather than proceed with formalized enforcement methods. The key to any issue is communication with the source, the source responsible representatives being forthcoming with self-reporting, and taking self-corrective action to eliminate or reduce repetition of the exceedance. Generally, if ADEC sees the source take corrective action, then ADEC would temper our own response until events warrant agency action.

7. Clarify definition of non-road engines vs. stationary.

Agency Comment (EPA): Definitions Attached. Please see link posted on the event's web page.

8. Clarify definition on emergency vs. non-emergency engines.

Agency Comment (EPA): Definitions Attached. Please see link posted on the event's web page.

9. Because the definition of "remote Alaska" is different in the three federal air rules for engines, what is the best way to request EPA to make the definition consistent?

Agency Comment (EPA): Please see response to question # 1, above.

10. Discussion of haz-mat storage and removal from the remote sites in Alaska is almost impossible. More common-sense solutions are needed.

Please see response to Question 11 below.

11. Use of urea and ammonia as an emission control measure is not practical in arctic Alaska as the cold temperatures and limited time to get them to work make them an emission control measure with questionable effectiveness. Other approaches are needed to be tested and approved.

Agency Comment for 10 and 11: (EPA and SOA DEC): Storing and using ammonia does bring additional considerations and regulatory requirements. Under EPA's Accidental Release Program (112(r)), facilities which store 20,000 pounds of ammonia (20% concentration or greater), are required to prepare a Risk Management Plan (RMP). The RMP is a safety program for the use and handling of the ammonia complying with 40 CFR Part 68. Therefore they must have approved operating procedures following industry standards, train their operators on the hazards of the process and emergency shutdown, a maintenance program, and coordinated with the local emergency responders. For more details and EPA's R10 112(r) point of contact information, please see <http://yosemite.epa.gov/R10/airpage.nsf/Enforcement/rmp>

Propose PRI and other interested groups facilitate a follow up discussion of effective ways to deal with storing and using ammonia, and alternative emission control systems. Perhaps bring in vendors to demonstrate their alternative technologies.

12. What is the most effective way to request EPA to revise the rule to allow operators to use tier 4 engines?

At issue is:

- a. The infrastructure does not exist in rural AK to support the use of Urea for NOx SCR (a requirement of almost ALL final Tier 4 engines < 800HP), therefore, it is impracticable to use final Tier 4 engines in rural AK. Also, since the engine manufacturer is required to certify the emissions of Tier rated engines, it is not possible to operate a Tier 4 engine with the SCR removed or disabled. This would most likely derate or make the engine inoperable and violate the emissions certification of the engine.
- b. Tier 3 engines may be used, but 2014 model year and later engines must be equipped with a particulate matter filter to reduce PM by 85% compared to engine out PM emissions (ironically, reducing the PM of a Tier 3 marine engine by 85% would reduce the PM emissions below the final Tier 4 PM requirement).
- c. Tier 3 engines manufactured for the U.S. Emergency Engine market are not very fuel efficient - as the emergency engine market is focused on purchase cost, not operating cost, since the engines rarely run and consume little fuel. The fuel economy penalty of presently available Tier 3 emergency engines is 15% to 20% less than the Tier 3 engines that used to be manufactured prior to Tier 4.

Agency Comment (EPA): There are a variety of ways to affect EPA's rulemaking process. The best approach is to provide scientific data that supports petitioners' request for changes to regulations. Please reference response to question #1 above.