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March 20, 2008

Mr. Peter Tsirigotis
Director, Sector Policy and Programs Division
Office of Air Quality Planning and Standards
U.S. Environmental Protection Agency
Mail Code: D205-01
Research Triangle Park, NC 27711

Re: Implementation Questions for the Spark Ignition IC Engine NSPS (40 CFR 60, Subpart JJJJ) and RICE NESHAP Amendments (40 CFR 63, Subpart ZZZZ)

Dear Mr. Tsirigotis:

EPA published a final rule for reciprocating internal combustion (IC) engines in the January 18, 2008 Federal Register at 73 FR 3568. Two stationary IC engine rules are addressed by this rulemaking: New Source Performance Standards (NSPS) for Stationary Spark Ignition Internal Combustion Engines and National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (hereinafter referred to as the Final Rule). The NSPS is Subpart JJJJ of 40 CFR Part 60 and the NESHAP amends 40 CFR Part 63, Subpart ZZZZ. On March 10, 2008, representatives from the Interstate Natural Gas Association of America (INGAA) met with EPA staff from the Energy Strategies Group to discuss some initial questions and items requiring clarification in the Final Rule. EPA representatives from the Office of General Counsel (OGC) and Office of Enforcement and Compliance Assurance (OECA) participated via conference call.

INGAA members operate IC engines affected by the Final Rule. INGAA submitted comments on the proposed rulemaking in October 2006 and participated in ongoing dialogue with EPA in 2007. Based on review of the Final Rule and initial permitting of potentially affected engines by its members, INGAA identified several implementation questions and issues that require clarification. The purpose of the meeting was to discuss clarification of these issues.

At the March 10 meeting, EPA clarified several issues. However, it was acknowledged that additional issues warrant EPA clarification to avoid unnecessary confusion during implementation of the Final Rule. Since NESHAP requirements are addressed by NSPS compliance for many affected engines, most issues are associated with the NSPS.

INGAA asked about the procedure for clarifying Final Rule requirements at the meeting. Based on EPA's recommendation, INGAA is providing this letter with an Attachment that includes an initial list of questions and issues from the Final Rule that require clarification. Most of the items in the Attachment were discussed at the meeting, but a few additional items are included. Some issues may ultimately require technical corrections to the NSPS or NESHAP, but INGAA would appreciate EPA guidance on these issues, as implementation questions are already arising for engines being permitted and placed into service. INGAA understands that some issues in the Attachment may take longer to address than others, and INGAA would appreciate partial responses, as appropriate, as soon as possible.

INGAA appreciates your assistance in clarifying these issues. If you have any questions or need clarification of any of the questions in the Attachment, please contact me at your convenience at lbeal@ingaa.org or 202-216-5935.

Sincerely,



Lisa Beal
Director, Environment and Construction Policy
Interstate Natural Gas Association of America

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Attachment: INGAA Initial List of Questions for EPA on the January 18, 2008 Final Rule:
IC Engine NSPS (40 CFR 60, Subpart JJJJ) and NESHAP (40 CFR 63, Subpart
ZZZZ) Amendments

ATTACHMENT:

INGAA Initial List of Questions for EPA on the January 18, 2008 Final Rule: IC Engine NSPS (40 CFR 60, Subpart JJJJ) and NESHAP (40 CFR 63, Subpart ZZZZ) Amendments

1. There is confusion regarding the rule effective date (March 18, 2008) and compliance dates identified in §63.6595(a)(4) – (7). For example, area source engines comply based on NSPS compliance, yet §63.6595(a)(6) includes a January 18, 2008 compliance date under the NESHAP. The requirements for the different dates are not clear, especially when an engine complies with the NESHAP based on NSPS compliance. For example, if an area source engine larger than 500 horsepower (hp) was installed in early January it is an affected unit, but addresses NESHAP requirements based on NSPS compliance. Since this unit is subject on “day one” of rule applicability, what is the relevance of the March 18 and January 18 dates? For example, when does the “clock start” that triggers deadlines (e.g., timing for initial performance test)?
2. Based on comments from INGAA and others, the Final Rule added a provision that allows operator-defined maintenance plans to be used, even if an engine is certified. This issue was a primary INGAA concern in our comments on the proposed rule. As discussed at the March 10, 2008 INGAA meeting with EPA, if an engine is following the compliance approach based on an operator-defined maintenance plan, the NSPS does not intend to require operators to follow manufacturer defined O&M procedures. However, one interpretation of the Final Rule text in §60.4243(a) and (b)(1) is that a certified engine using operator-defined maintenance (i.e., operating as a non-certified engine) must use manufacturer-defined settings and follow applicable provisions in 40 CFR Part 1068. EPA indicated at the meeting that it was not intended for criteria in §60.4243(a) prior to (a)(1) to apply to certified engines that opt to use operator-defined maintenance – i.e., the unit is not linked to manufacturer settings or Part 1068.

Please clarify that engines under §60.4243(b)(1) that follow an operator-defined maintenance plan do *not* need to “adjust engine settings according to and consistent with the manufacturer’s instruction” and do not need to “meet the requirements specified in 40 CFR part 1068, subparts A through D...”

3. Clarification is required regarding “NO_x + HC” emissions limits for natural gas-fired engines. The NSPS includes NO_x + HC limits for natural gas-fired engines >25 hp to <100 hp, and for emergency engines <130 hp. For the former category, the rule indicates that HC is assumed to be zero for performance tests of natural gas-fired units. It is not apparent that HC is assumed to be zero for natural gas-fired emergency engines. INGAA expects that EPA intends for HC to be assumed as zero for all natural gas-fired units with NO_x + HC limits. Please clarify. If HC is not assumed as zero for all natural gas-fired engines with NO_x + HC limits, additional issues arise. INGAA can provide a list of those issues to EPA if needed.
4. Clarification is required regarding the hydrocarbon species to include in “additive VOC test methods” for natural gas-fired sources. The Final Rule includes several methods for VOC measurement. VOC measurement from gas-fired engines can be more challenging than liquid fuels because methane, which is not a VOC, comprises the vast majority of hydrocarbon in the exhaust. For natural gas-fired engines, the “additive methods” included

in the Final Rule are appropriate (i.e., Method 18, Method 320, and ASTM D6348-03), and INGAA has commented extensively on this issue since rule proposal.

For additive methods, VOC is based on a sum of appropriate hydrocarbon species. The Final Rule does not identify the species to include and the responsibility is placed on the operator to identify the appropriate species using a “survey” approach, which is not well defined. Please identify the approach and frequency for completing such a survey for gas-fired IC engines.

In addition, INGAA requests EPA’s assistance in developing and executing testing that serves as a “one-time” survey to develop the approved list of hydrocarbon species for “additive VOC methods” for natural gas-fired engines. To minimize future test complexity and burden, INGAA envisions testing that would address the survey requirement for all subsequent VOC performance tests of natural gas-fired sources under Subpart JJJJ. Please advise on how INGAA and other stakeholders should proceed to complete such a project.

5. Test extension requests may be required to meet the deadline for the initial performance test. The schedule for the initial NSPS performance test for an uncertified engine is 60 days “after achieving the maximum production rate”, per §60.8(a). For engines, this will typically be about 60 days after startup. Certified engines that require performance tests are allowed up to a year to complete the initial test. If the engine is subject to RICE MACT requirements, 180 days is allowed for the initial test. The 60 day test requirement is burdensome due to the timing for scheduling, test plan preparation, test notification, etc. In addition, this schedule introduces NESHAP and NSPS inconsistencies. Test deadline extensions beyond 60 days will be desirable, especially due to confusion regarding the rule “effective date” (see item 1 above). Please clarify the requirements and limitations associated with test extension requests. Please advise on the likelihood of EPA approval of test extension requests or conditions under which EPA will be receptive to extending the initial performance test deadline beyond 60 days.
6. There appears to be a citation error in §63.6590(b)(1). This provision indicates that only an initial notification is required for certain engines and cites §63.6645(h) regarding notification requirements. However, provision (h) addresses a different notification requirement, and it appears that §63.6645(f) should be the citation for Initial Notification of an otherwise unaffected engine.
7. The timing for initial notification under the NSPS requires clarification for cases where an operator orders multiple engines that will be subsequently sited. Under §60.4230, “the date that construction commences is the date the engine is ordered by the owner or operator.” For some industries, a single engine order will often include multiple units, with engine siting determined at a subsequent date that may exceed required notification schedules.

Under §60.4245(c), initial notification is required for uncertified engines 500 hp or larger per the requirements in §60.7(a)(1), and the notification must include the address of the affected source. §60.7(a)(1) requires submittal as follows, “A notification of the date construction... of an affected facility is commenced postmarked no later than 30 days after such date. This requirement shall not apply in the case of mass-produced facilities which are purchased in completed form.”

The 30 day criterion is problematic for engine orders where siting does not occur within this time period. In addition, it is unclear whether IC engines are considered “mass-produced facilities which are produced in completed form”, which would imply that notification is not required. Please clarify the notification requirement for IC engines under §60.7(a)(1). If notification is required, please clarify how to address the case where engine siting is not defined within 30 days of the engine order.

8. The NESHAP includes a 200 hour “engine burn-in period” for new, reconstructed, and rebuilt engines in §63.6640(d). This allowance is not included in the NSPS. Since NESHAP affected units will also be subject to the NSPS, please clarify how to address this issue under the NSPS for NESHAP affected units. Also, please clarify how or if “burn-in” should be addressed when NESHAP requirements are fulfilled based on NSPS compliance.
9. §60.4244(a) requires that, “each performance test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.” Please clarify the load requirement related to “highest achievable load”. As an example situation, operating constraints on the particular day that the performance test is scheduled may prevent achieving 90% load, but that load may be achievable on a different day when operations are not limited. Alternatively, an engine’s maximum operating load may never exceed 90% of the “peak rating” due to operating constraints that always preclude “high load” operation. Does EPA intend for the requirement to complete the performance test at “highest achievable load” to include a point-in-time load limitation that may be exceeded subsequent to the performance test? Or, does EPA intend for this allowance to require testing within 10 percent of the peak load that can be achieved in practice for the affected engine?
10. References to the 500 hp threshold in the NSPS and NESHAP need clarification. In its October 2006 comments on the proposal, INGAA noted inconsistencies in the proposed rule and that the existing RICE NESHAP includes a threshold of >500 hp for “larger” units. INGAA recommended consistency for the 500 hp threshold in the NSPS and NESHAP. For example, the existing RICE MACT includes an applicability threshold for engines 500 hp and larger (i.e., >500 hp), while the proposal included reference thresholds of \geq 500 hp. To avoid confusion, a common reference is desirable. In its Response to Comments (RTC) Memorandum for the Final Rule, EPA indicates that it has addressed this issue.

On page 227 of the RTC Memo, EPA indicates that corrections were completed and states, “The threshold/engine categories were intended to be greater than or equal to 500 HP for large engines and less than 500 HP for small engines. This is consistent with the engine size thresholds proposed in the NESHAP.” This response indicates that <500 hp is intended as cut point between larger and smaller engines (i.e., smaller category *excludes* 500 hp). However, the previously existing RICE MACT NESHAP and this Final NESHAP include a large engine threshold >500 hp (i.e., smaller category *includes* 500 hp). For example, §63.6590(a)(1)(i) states, “For stationary RICE with a site rating of more than 500 brake horsepower (HP) located at a major source of HAP emissions ...”. The EPA RTC response properly reflects the Final NSPS, which includes 500 hp engines in the larger engine category (e.g., see Table 1 and notification criteria in §60.4245(c)). Thus, despite the RTC Memo response, it does not appear that INGAA’s comment was addressed. Please clarify this issue and whether the 500 hp threshold can be consistently applied according to the previously existing RICE MACT criteria.