

October 22, 2007

Docket ID No. EPA-HQ-OAR-2004-0083
National Emission Standards for Hazardous Air Pollutants for Area Sources:
Electric Arc Furnaces Steelmaking Facilities Docket
U.S. Environmental Protection Agency
Air and Radiation Docket and Information Center
Mailcode: 2822T
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Dear Sir/Madam:

On behalf of the National Association of Clean Air Agencies (NACAA), thank you for this opportunity to comment on the proposed Revision of Source Category Lists for Standards Under Sections 112(c) and 112(k) of the Clean Air Act; and National Emission Standards for Hazardous Air Pollutants for Area Sources: Electric Arc Furnace Steelmaking Facilities, which were published in the *Federal Register* on September 20, 2007 (72 *Federal Register* 53814). NACAA is the national association of air pollution control agencies in 53 states and territories and over 165 metropolitan areas across the country.

NACAA supports the establishment of effective regulations to reduce emissions of hazardous air pollutants from area sources, pursuant to the mandates of the Clean Air Act. The adverse effects of the emissions from these sources in the aggregate are significant and should be ameliorated. In order for these rules to be implemented properly, however, EPA should provide sufficient additional funds for state and local clean air agencies to carry out this important work. Currently, federal grants fall far short of what is needed to support state and local agencies in carrying out their existing responsibilities. In recent years, federal grants for state and local air programs have amounted to only about one-third of what they should be and budget requests for the last two years have called for additional cuts. Additional area source programs, which are not eligible for Title V fees, will require significant increases in resources for state and local air agencies, above and beyond what is currently provided.

Without increased funding, some state and local air agencies may not be able to adopt and enforce additional area source rules. Even for permitting authorities that do not adopt the rules, it is possible that implementation of the standards will increase the workload and resource needs of state and local agencies. For example, synthetic minor permits (or Federally Enforceable State Operating Permits) will need to incorporate all applicable requirements, which would include the area source standards. These requirements also must be enforced. However, Title V permit fee funds are not available for those efforts and many state and local air agencies do not have sufficient resources for these responsibilities. Accordingly, NACAA recommends that EPA provide state and local air agencies with sufficient additional grants so that they may participate in the implementation of these important rules.

Electric arc furnaces (EAFs) in the United States, most of which will be subject to this proposed standard, emit a significant amount of mercury – an estimated 10 tons per year. Accordingly, we believe these sources should be well controlled and we generally support the pollution-prevention approach that EPA is proposing in the rule for addressing mercury. We support a requirement that each affected facility must participate in a program for removing mercury switches prior to being processed by an EAF, either through the National Vehicle Mercury Switch Removal Program (NVMSRP) or an equivalent. We also support EPA's efforts to address particulate matter and opacity emissions in the proposal.

We are concerned, however, that the proposal has some serious deficiencies. Most significant is the lack of enforceable accountability measures that would ensure the effective implementation of the pollution-prevention approach on which the rule is based. The proposal lacks any emissions monitoring requirements to assess and verify the reduction in mercury that the rule is designed to achieve. We also note that the proposed rule does not address any sources of mercury in the scrap beyond automotive switches. These concerns are explained in greater detail below.

Effectiveness of the Switch Removal Program

We believe it is critical that the rule call for provisions to monitor and verify the effectiveness of mercury source-reduction programs such as the NVMSRP or alternative switch-removal efforts. This should be accomplished through written documentation and audits of the participation of suppliers, evaluation of switch-recovery rates, and mercury emissions testing and monitoring by affected facilities. We are dismayed that the proposal does not include such accountability measures. Since the rule does not include effective performance measures, goals or consequences for failure to remove switches, we are concerned that there is no strong incentive for the NVMSRP to continue after the initial funding has been expended.

We recommend that the final rule include explicit performance measures, as well as measures of accountability to ensure that the vehicle switch collection and emissions reductions milestones are met. These accountability measures should include mercury emission testing requirements sufficient to verify, for each facility and on an industry-wide basis, that mercury removal programs are successful in reducing emissions and specific requirements to ensure the effectiveness of the NVSMRP and/or other collection programs.

Although the proposal states that no feasible methods of emissions testing exist for any EAF facility (e.g., continuous emissions monitoring), there are monitoring technologies that are adaptable for use by any facility in this industry. Batch process emissions are tested and monitored in many industrial sectors and EPA has established emission standards for many batch processes without requiring the use of continuous monitors (e.g., Pesticide Active Ingredient Manufacturing, Miscellaneous Organic Chemical Manufacturing). There are several statistical techniques that account for the variability of emissions, the first of which is to require that facilities collect a sufficient number of measurements over time to allow for the proper characterization of variability.

EPA has recently promulgated the "sorber tube" method for sampling stack gases at coal-fired power plants [40 CFR Part 75 Appendix K]. Because this method of monitoring mercury is capable of sampling flue gases over any period believed necessary (hours or even days), there appears to be little impediment to using this method to sample "batch" processes like those at an

EAF. Further, because the method is very simple to set up, mercury can be monitored far more frequently than with other mercury sampling methods.

It is very important that the rule include effective sampling or monitoring requirements, or it will be difficult to ascertain the program's emission reductions and effectiveness. One element of this monitoring program should include a requirement to test emissions within six months of the final rule to establish a baseline for each facility.

With respect to the effectiveness of the switch-removal element of the program, we recommend that the rule include enforceable measures of accountability that include consequences if the programs do not meet their goals. The proposal does not provide enforceability with respect to switch-removal programs nor does it ensure related emissions reductions. At the very least, the rule should include quantifiable performance measures, such as expectations that a certain percentage of switches will be collected from end-of-life vehicles.

Approval of Alternative Switch Programs

The proposal calls for the Administrator to approve switch-removal programs but indicates that part of the approval process can be delegated to the permitting authority. There may be many varying programs and elements of programs that individual companies or facilities may wish to implement. Some states do not have any experience with these programs. We recommend that EPA retain the responsibility for approving programs and provide clear criteria for an acceptable program and use these criteria to approve existing state programs that are not part of the NVMSRP.

Enforceability Across Media Programs

NACAA is concerned about the ability of air agencies to enforce a pollution-prevention program that will, in many cases, be overseen by solid and hazardous waste programs. The requirements of the switch-removal program must be incorporated in air permits and the provisions must be clearly understood and enforceable by air agencies, in cooperation with their counterparts in other media programs. If these provisions are not explicit in the program, this pollution-prevention approach will not be effective.

Other Mercury-Added Products

In addition to automotive switches, there are other products that contain mercury that are included in the scrap metal used by EAFs, amounting to a significant amount of mercury entering the system. These items include components in household and commercial appliances (e.g., tilt switches, thermometers and flame sensors), heating and air conditioning units and industrial equipment. We strongly recommend that the final standards address these other mercury sources as well, perhaps by inclusion in a removal program (e.g., expansion of the NVSMRP program).

Removal of Other Contaminants

NACAA generally supports the philosophy behind EPA's proposed pollution-prevention provisions designed to remove chlorinated plastics, lead and free organic liquids from the feed stock entering the EAF. We agree that this could be a cost-effective way of reducing certain hazardous air pollutant (HAP) emissions from the facility that would not be captured by the baghouse.

However, EPA then states in Section 63.10685(a)(1) and (a)(1)(iv) that: “the requirements for a pollution prevention plan do not apply to the routine recycling of baghouse bags or other internal process or maintenance materials in the furnace.” NACAA urges EPA to strike this language from both places. These materials are not defined in the rule. Under this proposed language, if an inspector found chlorinated plastics, lead or free organic liquids in an EAF’s feedstock, the inspector would need to demonstrate that these wastes did not stem from the ill-defined “internal process materials or maintenance materials”. This type of loophole renders the pollution plan unenforceable. Further, the pollution-prevention plan would be an excellent opportunity to determine if and when baghouse bags, internal process materials or maintenance materials contain significant amounts of chlorinated plastics, lead, and free organic liquids and, if so, the best approach to reduce these contaminants from the feedstocks so as to reduce the HAPs emitted by the EAF.

NACAA is also concerned that the metallic scrap restrictions and exemptions are vague and nearly unenforceable. For example, the proposed rule commonly uses the phrase "to the extent practicable". In Section 63:10685(a)(1)(i), the proposal requires that scrap materials must be depleted "to the extent practicable" of undrained used oil filters, chlorinated plastics, and free organic liquids. This phrase is used again in association with removal of lead-containing components. Additionally, the proposed rule refers to removal of lead-containing components from scrap according to "standard industry practice." While the intent of these provisions is clear – it is almost impossible to ensure 100-percent removal – this phrase makes the requirement unenforceable. We recommend that EPA either define the terms or establish concrete criteria.

Opacity

The proposed rule identifies opacity standards for melt shops exclusive to EAF or ladle metallurgy operations and no other sources. First, the term “melt shop” should be defined so that the applicability of the opacity standard is accurately applied. Further, the current definition (restricting the opacity standard to the operation of an EAF or ladle) is unenforceable. Based on states’ experiences, many different operations are known to occur within a melt shop, including ladle preheating, slag handling and diesel vehicle operation. Thus, without having at least one other person positioned within the building viewing all operations within, it would be impossible to know whether emissions observed outside of a building were associated with all the activities of a melt shop, or solely the EAF or ladle metallurgy operations. NACAA suggests removing the exclusivity of the opacity standard to EAF or ladle metallurgy operations alone.

Residual Risk

NACAA supports basing mercury emission standards for EAFs on the application of Maximum Achievable Control Technology (MACT), rather than Generally Available Control Technology. However, a number of issues exist with EPA’s analysis and the rule as proposed. First, sources subject to MACT standards will later require Residual Risk assessments under Section 112(f) of the Clean Air Act. If there are no mercury emission standards, it may be very difficult for EPA to conduct its Residual Risk determination. How will EPA calculate Residual Risk when there has been no attempt to establish baseline mercury emissions, the effectiveness of the switch removal program, or emissions after controls are implemented?

Other Controls

EPA estimates that, after full implementation of a vehicle switch program, mercury emissions from EAF would be reduced by 50 percent, to five tons per year. EPA calculates the cost-effectiveness of installing powdered activated carbon (PAC) injection to remove 90 percent of the remaining five tons at \$22 million per ton, or \$11,000 per pound of mercury removed. This value is similar to mercury control costs anticipated by EPA for municipal waste combustors and medical waste incinerators, and is well below the control costs expected from implementation of the utility boiler Clean Air Mercury Rule. Without further analysis to determine the non-air quality health and environmental impacts and energy requirements, it appears that powdered activated carbon injection is a cost-effective control for mercury emissions and was rejected by EPA prematurely. We recommend that EPA require controls beyond the vehicle switch program, such as PAC injection, in the final rule.

Capture Systems

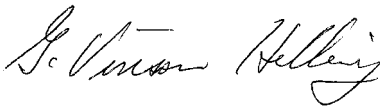
The proposal requires that a capture system must collect “gases and fumes” (Section 63.10686[a]), while a capture system is defined in Section 63.10692 as collecting “particulate matter”. We believe that neither of these terms is correct; the capture system should be described as capturing “emissions” generated from the EAF and other metallurgy operations, etc.

Conclusion

In conclusion, NACAA believes there are many benefits to pursuing a pollution-prevention approach and are supportive of EPA’s intention to remove pollutants, especially mercury, before they enter the EAF. However, we believe EPA should address the serious concerns we have before issuing a final regulation.

Thank you for this opportunity to comment on the proposal. Please contact us if we can provide additional information.

Sincerely,



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