

Excerpt from Federal Register proposal notice (September 20, 2007) starting on page 53818:

C. Summary of the proposed requirements

This section presents a summary of the requirements of the proposed rule. Additional details and the rationale for the proposed requirements are provided in the following section IV.D of this preamble.

1. Applicability and Compliance Dates

The proposed NESHAP applies to each new or existing EAF steelmaking facility that is an area source of HAP. We are proposing that the owner or operator of an existing area source that does not have to install or modify emissions control equipment to meet the opacity limit for fugitive emissions comply with all applicable rule requirements no later than six months after the date of publication of the final rule in the **Federal Register**. We are proposing that the owner or operator of an existing area source that must install or modify emission control equipment to meet the opacity limit for fugitive emissions may request a compliance date for the opacity limit that is no later than two years after the date of publication of the final rule in the **Federal Register** based on a demonstration to the satisfaction of the permitting authority that the additional time is needed. The owner or operator of a new affected source would be required to comply with all applicable rule requirements by the date of publication of the final rule in the **Federal Register** (if the startup date is on or before promulgation) or upon startup (if the startup date is after promulgation).

2. Proposed MACT Standards for the Control of Mercury

The proposed standards for mercury are based on pollution prevention and require an EAF owner or operator who melts scrap from motor vehicles either to purchase (or otherwise obtain) the motor vehicle scrap only from scrap providers participating in an EPA-approved program for the removal of mercury switches or to fulfill the alternative requirements described below. EAF facilities participating in an approved program must maintain records identifying each scrap provider and documenting the scrap provider's participation in the EPA-approved mercury switch removal program. A proposed compliance option is for the EAF facility to prepare and operate pursuant to an EPA-approved site-specific plan that includes specifications to the scrap provider that mercury switches must be removed from motor vehicle bodies at an efficiency comparable to that of the EPA-approved mercury switch removal program (see below). An equivalent compliance option is provided for facilities that do not utilize motor vehicle scrap that contains mercury switches.

We expect most facilities that use motor vehicle scrap will choose to comply by purchasing motor vehicle scrap only from scrap providers who participate in a program for removal of mercury switches that has been approved by the Administrator. The National Vehicle Mercury Switch Recovery Program (NVMSRP)¹ would be an approved program under this proposed standard. Facilities choosing to use the NVMSRP as a compliance option would have to assume all of the responsibilities for steelmakers as described in the Memorandum of Understanding. The NVMSRP is described in detail in section IV.D.1 of this preamble.

EAF facilities could also obtain scrap from scrap providers participating in other programs. To do so, the facility owner or operator would have to submit a request to the Administrator for approval to comply by purchasing scrap from scrap providers that are participating in another switch removal program and demonstrate to the Administrator's satisfaction that the program meets the following specified criteria: (1) there is an outreach program that informs automobile dismantlers of the need for removal of mercury switches and provides training and guidance on switch removal, (2) the program has a goal for the removal of at least 80 percent of the mercury switches, and (3) the program sponsor must submit annual progress reports on the number of switches removed and the estimated number of motor vehicle bodies processed (from which a percentage of switches removed is easily derivable).

EAF facilities that purchase motor vehicle scrap from scrap providers that do not participate in an EPA-approved mercury switch removal program would have to prepare and operate pursuant to and in conformance with a site-specific plan for the removal of mercury switches. The facility's scrap specifications would have to include a

¹ Additional details can be found at <http://www.epa.gov/mercury/switch.htm> and in section IV.D.1 of this preamble. In particular, see the signed Memorandum of Understanding.

requirement for the removal of mercury switches, and the plan must include provisions for obtaining assurance from scrap providers that mercury switches have been removed. The plan would be submitted to the Administrator for approval and would demonstrate how the facility will comply with specific requirements that include: (1) a means of communicating to scrap purchasers and scrap providers the need to obtain or provide motor vehicle scrap from which mercury switches have been removed and the need to ensure the proper disposal of the mercury switches, (2) provisions for obtaining assurance from scrap providers that motor vehicle scrap provided to the facility meets the scrap specifications, (3) provisions for periodic inspection, site visits, or other means of corroboration to ensure that scrap providers and dismantlers are implementing appropriate steps to minimize the presence of mercury switches in motor vehicle scrap, (4) provisions for taking corrective actions if needed, and (5) requiring each motor vehicle scrap provider to provide an estimate of the number of mercury switches removed from motor vehicle scrap sent to the facility during the previous year and the basis for the estimate. The Administrator would be able to request documentation or additional information from the owner or operator at any time. The site-specific plan must establish a goal for the removal of at least 80 percent of the mercury switches. All documented and verifiable mercury-containing components removed from motor vehicle scrap would count towards the 80 percent goal.

An equivalent compliance option would be provided for EAF steelmakers who do not utilize motor vehicle scrap that contains mercury. The option would require the facility to certify that the only materials they are charging from motor vehicle scrap are materials recovered for their specialty alloy, such as chromium in certain exhaust systems. Such materials are known not to contain mercury, and because the specialty steels must meet stringent product quality and performance specifications, automobile scrap with contaminants such as mercury, lead, zinc, and copper is not accepted.²

3. Proposed GACT Standards for EAF and Ladle Metallurgy Operations

We propose that the owner or operator would be required to install, operate, and maintain capture systems for EAF and ladle metallurgy operations that convey the collected gases and fumes to a venturi scrubber or baghouse for the removal of PM. We are proposing separate emissions limits for new and existing EAF steelmaking facilities that produce less than 150,000 tpy of stainless or specialty steel, and for larger, non-specialty EAF steelmaking facilities. The small facilities would be required to comply with a PM emissions limit of 0.8 pounds of PM per ton (lb/ton) of steel for each control device serving an EAF or ladle metallurgy operation and an opacity limit of 6 percent for melt shop emissions. All other EAF steelmaking facilities (both existing and new) would be required to meet a PM limit of 0.0052 grains per dry standard cubic foot (gr/dscf) for emissions from a control device for an EAF or ladle metallurgy operation. The opacity of emissions from melt shops from these sources would be limited to 6 percent.

Performance tests would be required for each emissions source to demonstrate initial compliance with the PM and opacity limits. Provisions are included in the proposed rule for conducting the tests. The owner or operator of an existing EAF steelmaking facility would be allowed to certify initial compliance with the emissions limits if a previous test was conducted during the past 5 years using the methods and procedures in the rule and either no process changes have been made since the test, or the owner or operator can demonstrate that the test results, with or without adjustments, reliably demonstrate compliance despite process changes.

All EAF steelmaking facilities would be required to obtain a title V permit. The proposed rule would require each EAF steelmaking facility to monitor the capture system, PM control device, and melt shop; maintain records; and submit reports according to the compliance assurance monitoring (CAM) requirements in 40 CFR part 64. The existing part 64 rule requires the owner or operator to establish appropriate ranges for selected indicators for each emissions unit (i.e., operating limits) such that operation within the ranges will provide a reasonable assurance of compliance with the emissions limitations or standards.

The CAM rule requires the owner or operator to submit certain monitoring information to the permitting authority for approval. This information includes: (1) the indicators to be monitored; (2) the ranges or designated conditions for such indicators, or the process by which such indicator ranges or designated conditions will be established; (3) performance criteria for the monitoring; and if applicable, (4) the indicator ranges and performance

² Letter from Joseph Green, Counsel to the Specialty Steel Industry of North America, to Steve Fruh, Environmental Protection Agency. Information Regarding Specialty Steel Industry Segment. July 30, 2004.

criteria for a CEMS, COMS, or predictive emissions monitoring system. The owner or operator also must submit a justification for the proposed elements of the monitoring control device (and process and capture system, if applicable) and operating parameter data obtained during the conduct of the applicable compliance or performance test.

If monitoring indicates that the unit is operating outside of the acceptable range established in its permit, the owner or operator must return the operation to within the established range consistent with 40 CFR 64.7(d).

4. Proposed GACT Standards for Scrap Management

In addition to meeting PM and opacity limits reflecting GACT, we are also proposing that EAF facilities be required to restrict the use of certain scrap or follow a pollution prevention plan for scrap inspection and selection that minimizes the amount of specific contaminants in the scrap.

The proposed requirements are based on two pollution prevention approaches depending on the type of scrap that is used, and a facility may have some scrap subject to one approach and other scrap subject to the other approach. One provision is for scrap that does not contain certain contaminants and would simply prohibit the processing of scrap containing these contaminants (restricted scrap). Compliance would be demonstrated by a certification that the owner or operator will not process scrap with the contaminants. This scrap management approach is expected to be most useful to stainless and specialty steel producers with stringent scrap specifications that do not permit the use of motor vehicle scrap and scrap containing free organic liquids. The other approach for scrap that may contain certain contaminants is more prescriptive and requires a pollution prevention plan, scrap specifications, and procedures for determining that these requirements are met. This pollution prevention approach was developed primarily for carbon steel producers that accept motor vehicle scrap and many other types of ferrous scrap.

Under the restricted scrap provision, the plant owner or operator would agree to restrict the use of certain scrap, including metallic scrap from motor vehicle bodies, engine blocks, oil filters, oily turnings, machine shop borings, transformers and capacitors containing polychlorinated biphenyls (PCBs), lead-containing components, chlorinated plastics, or free organic liquids. The restriction on lead-containing components would not apply to the production of leaded steel (where lead is obviously needed for production).

The other proposed scrap management provision would require the plant owner or operator to prepare a pollution prevention plan for metallic scrap selection and inspection to minimize the amount of chlorinated plastics, lead (except for the production of leaded steel), and free organic liquids. This plan would be submitted to the Administrator for approval. The owner or operator would be required to keep a copy of the plan onsite and train plant personnel with materials acquisition or inspection duties in the plan's requirements.

The plan would include specifications for scrap materials to be depleted (to the extent practicable) of lead-containing components (except for the production of leaded steel), undrained used oil filters, chlorinated plastics, and free organic liquids. The plan would also contain procedures for determining if these requirements are met (e.g., visual inspection or periodic audits of scrap suppliers) and procedures for taking corrective actions with vendors whose shipments are not within specifications.

5. Proposed Requirements for Recordkeeping and Reporting

Area sources subject to the proposed requirements for EAF and ladle metallurgy operations would be subject to the recordkeeping and reporting requirements of the part 64 CAM rule. The general recordkeeping requirements of the part 64 rule directs the owner or operator to comply with the recordkeeping requirements for title V operating permits in 40 CFR 70.6(a)(3)(ii), which require records of analyses, measurements, and sampling data. The part 64 rule also requires the owner or operator to maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan (QIP), any activities undertaken to implement a QIP, and other supporting information required by the part 64 rule (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions).

The general reporting requirements of part 64 require the owner or operator to submit monitoring reports to

the permitting authority in accordance with the requirements for facilities with title V operating permits. The title V reporting requirements in 40 CFR 70.6(c)(1) and 40 CFR 71.6(c)(1) include a 6-month monitoring report, deviation reports, and annual compliance certifications. The reporting requirements under part 64 requires that the 6-month monitoring report include: (1) summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken; (2) summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and (3) a description of the actions taken to implement a QIP during the reporting period. Upon completion of a QIP, the owner or operator must include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

All EAF steelmaking facilities subject to this proposed NESHAP would also be subject to certain specified requirements of the NESHAP general provisions (40 CFR part 63, subpart A). The general provisions include requirements for initial notifications; startup, shutdown, and malfunction records and reports; recordkeeping; and semiannual excess emissions and monitoring system performance reports. The information required in these records and reports is similar to the information required by the CAM rule (40 CFR part 64) and the operating permits rules (40 CFR parts 70 and 71).

The proposed NESHAP also includes specific recordkeeping and reporting requirements for area source facilities subject to requirements for control of contaminants from scrap. The area source facilities would be required to keep records to demonstrate compliance with the requirements for their pollution prevention plan for minimizing the amount of chlorinated plastics, lead, and free organic liquids charged to a furnace or for the use of only restricted scrap and the site-specific plan for mercury or any of the mercury compliance options.

As noted above, facilities subject to the site-specific plan for mercury would be required to keep records and submit semiannual reports on the number of mercury switches removed by the scrap provider or the weight of mercury recovered from those switches, an estimate of the percent of mercury switches recovered, and certification that the recovered mercury switches were managed at RCRA-permitted facilities. In contrast, facilities participating in an EPA-approved program for switch removal must keep records that identify their scrap providers and document that they participate in an approved switch removal program. As discussed in more detail in section IV.D.1 of this preamble, we are proposing to require more extensive records for a site-specific plan than for an approved program because extensive recordkeeping, reporting, and measurement of success are already required for approval of such a removal program, the NVMSRP being the prime example.

All facilities subject to the requirements for the control of contaminants from scrap would be required to submit semiannual reports according to the requirements in §63.10(e) of the general provisions. The report would identify any deviation from the rule requirements and the corrective action taken.