

severe weather makes the process dangerous. One commenter said the company does not allow work on the quench tower during freezing weather due to safety concerns. One commenter recommended that baffles be cleaned daily or as often as weather conditions allow and that repair of damaged or missing baffles be initiated within 30 days and completed as soon as practicable. Materials needed for repair are not always available in a short time frame. Three commenters said that their experience indicates that monthly cleaning of baffles is adequate and added that additional cleaning should be performed if the upward flow of the steam plume is obstructed. These commenters also noted that it may not be possible to complete repairs to damaged baffles prior to the next scheduled monthly inspection and suggested that a requirement to initiate repairs prior to the next inspection is more appropriate.

Two commenters noted that some plants have backup quench stations that are used when the primary quench tower is unavailable because of maintenance or malfunction. These backup stations are used only a small amount of the time, and they are not designed to capture quenching emissions (*i.e.*, they have no stacks or baffles). Both commenters requested that EPA clarify that backup quench stations are not subject to the requirements for baffles.

Response: We agree with the comment that baffles reduce PM emissions. In addition, we believe that baffles also reduce the emission of HAP metal compounds contained in the particles of grit released, as well as semivolatile and VOC such as polycyclic aromatic hydrocarbons (PAH) and benzene, when green coke is quenched. Semivolatile organic compounds evolve from green coke and condense to form fine PM or condense on other particles during the quenching process. Consequently, baffles reduce emissions of both metal and organic HAP.

To clarify the provision for 95 percent coverage, we revised the coverage requirement to read that no more than 5 percent of the cross sectional area of the quench tower can be exposed to the sky when viewed from below. We understand there are several different designs and configurations used for baffles. However, there are many different factors that affect emissions from quench towers. For example, it is likely that the design of the quench tower affects the level of emission control and may also affect the choice of baffle type and configuration.

Consequently, we do not believe it is appropriate to prescribe in the final rule the use of a particular baffle type or design and have provided the flexibility for the owner or operator to make this determination. However, all types of baffles must have adequate coverage to provide effective emission control for quench towers.

We believe requirements for daily cleaning, monthly inspection, and prompt repair of damaged baffles are reasonable and necessary to ensure that they are well maintained. These practices are common at many coke plants, and the frequencies are based on industry responses to a nationwide survey. However, we agree that repairing baffles during inclement weather conditions is a personnel safety issue. We also agree that there may be operational problems when baffles are washed during freezing weather. Consequently, we revised the requirement to wash baffles daily to allow daily washing to be suspended when the highest measured ambient temperature throughout the day is less than 30 degrees Fahrenheit. We understand that the time needed for repair can vary depending on the extent of repair needed and the availability of materials. Therefore, we have written the final rule to require that the repair of damaged or missing baffles be initiated within 30 days and that the repairs be completed as soon as practicable.

We gathered information on the use of backup quench stations by surveying coke plants. A total of nine coke plants among the 12 responding to the survey have 13 backup quench stations. Only one of these 13 backup quench stations is equipped with baffles, and the stations are typically used less than 5 percent of the time. Based on the information we received, we conclude that MACT for backup quench stations at existing coke oven batteries does not include the installation of baffles. We have specified in the final rule our subcategorization of backup quench stations, and we have defined this subcategory as those quench stations that are used for less than 5 percent of quenches for any coke oven battery in any 12-month period. However, the best-controlled similar source has baffles in the backup quench station. Consequently, the requirements for installing, inspecting, cleaning, and repairing baffles applies to backup quench stations at new batteries.

In addition, the TDS limit applies to backup quench stations because the existing State limits we used to determine the MACT floor apply to quench water, whether it is used in

regular quench towers or backup quench stations. There is no reason to permit the use of higher TDS levels for quenching merely because a backup quench station is used.

E. What Were the Major Comments on the Proposed Standard for Battery Stacks?

Comment: One commenter stated that EPA has not adequately subcategorized batteries in developing the MACT for battery stacks, and that the EPA should have distinguished among short and tall batteries, pulse-fired batteries, batteries using preheated coal, batteries of older design, and foundry coke batteries that are consistently operated at longer coking times. The commenter also stated that each battery is unique with respect to the factors that affect battery stack emissions. Consequently, the O&M program required to control these emissions differs from battery to battery. The factors affecting emissions include the age and condition of the battery's refractory, the condition of the stack canal, the battery design, sealing carbon, coal properties and coke specifications, and the design and efficiency of the by-product recovery plant.

Response: We disagree with the commenter that we have not subcategorized batteries adequately in establishing performance standards for battery stacks. Our current database shows that the proposed opacity limits have been achieved on a continuing basis by numerous batteries with a variety of physical and operational differences. We do not believe that more subcategories are needed beyond those in the proposed rule.

At proposal, we had months of COMS data demonstrating that the limits for by-product batteries had been achieved by ten of the 46 by-product batteries. After proposal, we obtained data for six additional batteries that also achieve the proposed limits. In total, we have 13 months of data for each of five batteries, 18 months of data for each of eight batteries, and 12, 50, and 65 months of data for each of three batteries. Our database now covers 35 percent of all by-product batteries, spanning all types and ages and covering all seasons of the year. Among the 16 batteries demonstrated to have achieved the proposed MACT opacity limits are short and tall batteries, furnace and foundry coke batteries, and batteries with gun flue and under jet underfiring systems. Also included are batteries that use pulse firing, preheated coal, and underfiring gas with and without desulfurization. They range in age from 8 to 46 years.