

establishing the capacity cutoff value for combustion control to be consistent with the capacity cutoff for existing tanks at petroleum refineries (again consistent with comments urging that the petroleum and asphalt NESHAP be consistent insofar as they apply to similar types of emission sources).

Therefore, the floor for asphalt storage tanks with a capacity of 177 cubic meters or greater and storing asphalt with a maximum vapor pressure of 10.4 kPa or greater (*i.e.*, Group 1 asphalt storage tanks) at existing and new sources is combustion control. The floor for asphalt storage tanks with a capacity of 177 cubic meters or greater storing asphalt with a maximum vapor pressure less than 10.4 kPa (*i.e.*, Group 2 asphalt storage tanks) at existing and new sources is the opacity limit specified in the asphalt NSPS. As at proposal, however, we are not determining a floor level of control for tanks less than a capacity of 1.93 Mg. Based on the tank capacity data from the Asphalt Roofing Manufacturers Association survey, less than 2 percent of the tanks have capacities less than 1.93 Mg, and only one of those tanks is vented to a PM control device.

The EPA is also applying much this same reasoning in determining a MACT floor for asphalt loading racks. The proposed MACT for asphalt loading racks at existing, new, and reconstructed affected sources was based on the fact that greater than 12 percent of the loading racks were controlled with a combustion device operating at or above 1200 °F. Although we do not have vapor pressure data for loading racks, we believe (as with storage tanks) that it is reasonable to assume that facilities are using combustion devices to control emissions from loading racks that are used to transfer high-vapor pressure asphalt because of the greater potential for emissions from this asphalt and the appropriateness of controlling volatile emissions using combustion devices. Consequently, the EPA believes that the MACT floor for loading racks transferring high-vapor pressure asphalt at existing and new sources is a combustion device regardless of whether or not it is part of an integrated system. In the absence of vapor pressure data, and to be consistent with the approach used for high-vapor pressure (Group 1) asphalt storage tanks, we based the vapor pressure cutoff for loading asphalt racks on the maximum true vapor pressure cutoff (10.4 kPa) for existing storage tanks in the petroleum refinery NESHAP.

For loading racks used to transfer low-vapor pressure asphalt at existing and

new sources, as with low-vapor pressure (Group 2) asphalt storage tanks, we are unable to develop a separate standard for integrated systems. However, unlike the asphalt NSPS for storage tanks, an existing regulation does not exist for asphalt loading racks that would establish a minimum level of the MACT floor. Therefore, a MACT floor for loading racks transferring asphalt with a maximum vapor pressure less than 10.4 kPa at existing and new sources could not be established.

In summary, the MACT floor for tanks with an asphalt storage capacity of 177 cubic meters or greater and storing asphalt with a maximum vapor pressure of 10.4 kPa or greater at existing and new sources is based on a combustion device operating at or above 1200 °F. For tanks with asphalt storage capacities of 177 cubic meters or greater or storing asphalt with a maximum vapor pressure less than 10.4 kPa, the MACT floor for existing and new sources is represented by the opacity limit in the asphalt NSPS. The opacity limit of the asphalt NSPS also represents the MACT floor for asphalt storage tanks with capacities less than 177 cubic meters but greater than or equal to 1.84 cubic meters at existing and new sources. For loading racks used to transfer asphalt with a maximum vapor pressure of 10.4 kPa or greater at existing and new sources, the MACT floor is a combustion device operating at or above 1200 °F. The MACT floor for loading racks used to transfer asphalt with a maximum vapor pressure less than 10.4 kPa at existing and new sources is no additional control.

Also, as explained in detail in the preamble to the proposal (66 FR 58620–21), we continue to believe that controls beyond the MACT floor for high-vapor pressure asphalt storage tanks and loading racks (where the floors have not changed between the proposed and final rule) are not technically or economically feasible (*i.e.*, there are no known controls that would reduce HAP emissions more than combustion control), so that MACT for the high-vapor pressure asphalt storage tanks and loading racks is represented by their respective MACT floors.

For the low-vapor pressure asphalt storage tanks (for which we have made a different floor determination), the only control option beyond the MACT floor is control with a combustion device. However, given the relatively low HAP emissions from this equipment, the incremental cost-effectiveness (greater than \$3,000,000 per megagram of HAP reduced) of increasing the level of HAP reduction achieved by a PM control device (93.3 percent) (the device we

anticipate would be used to achieve the opacity standard which is the MACT floor) to that achieved by a combustion device (95 percent) is not a justifiable option. (Additional energy use likewise would be required to achieve this modest incremental HAP reduction as well.) Therefore, MACT for low-vapor pressure asphalt storage tanks is represented by the MACT floor.

For low-vapor pressure asphalt loading racks, the control options beyond the MACT floor are a PM control device and a combustion device. However, as with low-vapor pressure asphalt storage tanks, the high costs per megagram of HAP reduction (greater than \$500,000 per megagram of HAP reduced) achieved by controlling low-vapor pressure asphalt loading rack emissions with either a PM control device or combustion device make the beyond the MACT floor options economically infeasible. Therefore, MACT for low-vapor pressure asphalt loading racks is represented by the MACT floor.

Because we are specifying vapor pressure as a cutoff for different groups of tanks, it is necessary to identify how such a determination would be made if a facility were required to do so. Following proposal, the EPA met with industry representatives to identify an appropriate test method for determining the vapor pressure of stored asphalt, if EPA were to promulgate such a cutoff. According to the industry and EPA representatives, a standardized or consensus test method for measuring the vapor pressure of stored asphalt has not been established. (See the summary of the September 17, 2002 meeting with petroleum refinery representatives in Docket No. OAR–2002–0035.) Currently, the industry uses nomographs or other relationships depicting the vapor pressure of petroleum liquids as a function of storage temperature vapor pressure and asphalt composition (*e.g.*, flux versus oxidized) to determine the vapor pressure of stored asphalt.

Since there is no standardized test method for measuring the vapor pressure of stored asphalt, the EPA believes that the final rule should specify a temperature that equates to a vapor pressure of 10 kPa, instead of requiring facilities to physically measure asphalt vapor pressure. According to industry representatives, asphalt flux reaches 10.4 kPa at approximately 500 to 550 °F (oxidized asphalt would require higher temperatures to reach 10.4 kPa). The temperature estimate cited by the industry representatives was confirmed on a theoretical level using a regression equation for asphalt vapor pressure as a