

feasibility of a regulatory alternative that would require 98 percent control of batch process vents in processes with uncontrolled organic HAP emissions between 5,000 and 10,000 lb/yr. We concluded that the total impacts of this alternative are unreasonable in light of the HAP emission reductions achieved. The incremental HAP reduction achieved by this above-the-floor alternative is 145 Mg/yr, and the incremental cost is about \$15,000/Mg of HAP controlled. The incremental electricity consumption to operate exhaust gas fans is 5.1 million kilowatt hours per year (kwh/yr). The incremental steam consumption for steam-assist flares is 6 million lb/yr. The incremental fuel energy consumption to operate incinerators and flares and to generate electricity is 340 billion British thermal units (Btu) per year. Total CO, NO_x and SO₂ emissions from combustion of the additional fuel is about 66 Mg/yr. There would be no wastewater or solid waste impacts.

We evaluated the feasibility of a regulatory alternative that would require 98 percent control of organic HAP emissions from continuous process vents that have a TRE index value between 1.9 and 5.0 at existing sources. We concluded that the total impacts of this alternative are unreasonable in light of the HAP emission reductions achieved. The incremental HAP reduction achieved by this above-the-floor alternative is about 400 Mg/yr, and the incremental cost is about \$29,000/Mg of HAP controlled. The incremental electricity consumption to operate exhaust gas fans is 28 million kwh/yr. The incremental steam consumption for steam-assist flares is 83 million lb/yr. The incremental fuel energy consumption to operate incinerators and flares, generate steam, and generate electricity is 2.4 trillion Btu per year. Total CO, NO_x, and SO₂ emissions from combustion of the additional fuel is 400 Mg/yr. There would be no wastewater or solid waste impacts.

We evaluated the feasibility of a regulatory alternative that would require 99 percent control of hydrogen halide and halogen emissions from processes with uncontrolled hydrogen halide and halogen emissions between 500 and 1,000 lb/yr at existing sources. We concluded that the total impacts of this alternative are unreasonable in light of the emission reductions achieved. The incremental HAP reduction achieved by this beyond-the-floor alternative is 1.0 Mg/yr, and the incremental cost is about \$90,000/Mg of HAP controlled. The incremental electricity consumption to operate exhaust gas fans is 31,000 kwh/yr, and the incremental fuel energy

consumption to generate the electricity is 300 million Btu per year. Total CO, NO_x, and SO₂ emissions from the combustion of the additional fuel is 0.27 Mg/yr. The incremental wastewater generated from scrubber controls is 400,000 gal/yr.

We evaluated the feasibility of a regulatory alternative that would require 97 percent control of PM HAP emissions from process vents at existing sources if the uncontrolled PM HAP emissions exceeded 400 lb/yr. The only facility that meets the threshold for control is already controlled. Thus, we concluded that the total impacts of this alternative are unreasonable in light of the emission reductions achieved for a model facility that was based on the characteristics of the controlled facility. The incremental HAP reduction achieved by the above-the-floor alternative for the model facility is 4.3 Mg/yr, and the incremental cost is \$68,000/Mg of HAP controlled. The incremental electricity consumption to operate exhaust gas fans is about 24,000 kwh/yr, and the incremental fuel energy consumption to generate the electricity is 230 million Btu per year. Total CO, NO_x, and SO₂ emissions from combustion of the additional fuel is 0.2 Mg/yr. The quantity of solid waste generated could be greater if the owner or operator elects to use a dust collector that includes water sprays and discharges the collected dust in a slurry form.

For wastewater, we considered a regulatory alternative that would require HON-equivalent control of wastewater streams at existing sources that contain soluble HAP at concentrations between 15,000 ppmw and 30,000 ppmw or that contain partially soluble or mixed HAP at flowrates between 0.5 and 1.0 lpm. We concluded that the total impacts of this alternative are unreasonable in light of the emission reductions achieved. The incremental HAP reduction achieved by this above-the-floor alternative is 160 Mg/yr, and the incremental cost is about \$8,500/Mg of HAP controlled. The incremental electricity consumption to operate pumps is 45,000 kwh/yr. The incremental steam consumption for steam strippers is 8.0 million lb/yr. The incremental fuel energy consumption to generate electricity and steam is 12 billion Btu per year. Total CO, NO_x, and SO₂ emissions from the combustion of additional fuel to generate the electricity and steam is 1 Mg/yr. There may also be solid waste impacts if condensed steam and pollutants from the steam stripper cannot be reused. Small amounts of wastewater in the form of blowdown from the cooling water system for the condenser may also be generated.

For storage tanks at existing sources, we examined two regulatory alternatives. First, for storage tanks with capacities of at least 10,000 gal, we considered an alternative that would require an internal floating roof, external floating roof, or at least 95 percent reduction if the partial pressure of HAP stored in the tank is between 0.5 and 1.0 psia. We concluded that the total impacts of this alternative are unreasonable in light of the emission reductions achieved. The incremental HAP reduction achieved by this above-the-floor alternative is 30 Mg/yr, and the incremental cost is \$19,000/Mg of HAP controlled. The incremental electricity and fuel consumption rates for storage tanks controlled with refrigerated condensers are 16,000 kwh/yr and 155 million Btu per year, respectively. Total CO, NO_x, and SO₂ emissions from combustion of additional fuel is 0.13 Mg/yr, and there would be no wastewater or solid waste impacts. There also would be no environmental impacts or energy impacts for other storage tanks controlled with floating roofs. The second regulatory alternative that we considered would require 95 percent control for storage tanks with capacities less than 10,000 gal. We concluded that the total impacts of this alternative are unreasonable in light of the emission reductions achieved. On an average tank basis, the incremental HAP reduction achieved by this above-the-floor alternative is less than 0.5 Mg/yr, and the incremental cost would be on the order of \$200,000/Mg of HAP controlled. The incremental electricity and fuel energy consumption rates for storage tanks controlled with refrigerated condensers are about 3,100 kwh/yr and 30.0 million Btu per year, respectively. Total CO, NO_x, and SO₂ emissions from combustion of the additional fuel are about 0.025 Mg/yr. There would be no wastewater or solid waste impacts.

Regarding the specific situation described by the commenter in which we did not propose a more stringent option than the equipment leaks LDAR program, we are not aware of any option that could be applied consistently across the source category that would be effective. For example, enclosing all components and venting to control is allowed for process piping located inside of buildings or enclosures, but except in limited cases, we would expect the costs of such an option to be prohibitive. Furthermore, we have developed a revised MACT floor that consists of an LDAR program consistent with the requirements specified in 40 CFR part 63, subpart TT. We then