Figure 2. Flowchart of applicability and control requirements for process vessels.
A

Does the vented emission stream contain HAP concentrations < 50 ppmv?

- Yes → Such an emission stream is not a process vessel vent, and no control is required.
- No → Is the vented emission stream routed to a fuel gas system?

- Yes → The emission stream is not a process vessel vent, and no control is required.
- No → Is the vented emission stream routed to a process?

- Yes → The flexible elephant trunk system is not a process vessel vent, and no control is required.
- No → Is a flexible elephant trunk system used to draw vapors away from operators when the vessel is opened?

- Yes → All other vented emissions, including those from automatic cleaning operations, are process vessel vent streams that must be controlled. Control options are specified at C.
- No → All other vented emissions, including those from automatic cleaning operations, are process vessel vent streams that must be controlled. Control options are specified at C.

Figure 2. (continued)
Considering both capture and control, reduce collective emissions of organic HAP with a vapor pressure > 0.6 kPa by > 75 percent and reduce collective emissions of organic HAP with a vapor pressure < 0.6 kPa by > 60 percent. 

Do any of the emitted organic HAP compounds have a vapor pressure at 25° C ≥ 0.6 kPa? 

No: Considering both capture and control, reduce collective emissions of organic HAP by ≥ 60 percent. 

Yes: Considering both capture and control, reduce collective emissions of organic HAP with a vapor pressure ≥ 0.6 kPa by ≥ 75 percent and reduce collective emissions of organic HAP with a vapor pressure < 0.6 kPa by ≥ 60 percent. 

Additional requirements apply if you use a combustion device to control a halogenated vent stream. 

Use a halogen reduction device before the combustion device to reduce the halogen atom mass emissions rate to ≤ 0.45 kg/hr. 

Use a halogen reduction device after the combustion device to reduce emissions of hydrogen halide and halogen HAP by 95 percent or to ≤ 0.45 kg/hr. 

Figure 2. (continued)
Reduce emissions using any of the options below. The requirements are specified in Items 2.a and 4 of Table 1

Are the emissions from a process vessel at a new source?

Yes

Reduce emissions using any of the options below. The requirements are specified in Items 2.b and 4 of Table 1

For non-halogenated vent streams only, vent emissions through a closed-vent system to a flare

Use a condenser that reduces the outlet gas temperature to -5ºC

Do any of the emitted organic HAP compounds have a vapor pressure > 17.2 kPa?

Yes

Use a condenser that reduces the outlet gas temperature to < 2ºC

No

Reduce organic HAP emissions by ≥ 60 percent

Use a condenser that reduces the outlet gas temperature to < 10ºC

Reduce collective emissions of these HAP with a vapor pressure ≥ 0.6 kPa by ≥ 75 percent and reduce collective emissions of HAP with a vapor pressure < 0.6 kPa by ≥ 60 percent.

No

Use a condenser that reduces the outlet gas temperature to < 10ºC

Use a condenser that reduces the outlet gas temperature to < -4°C

No

Use a condenser that reduces the outlet gas temperature to < -4°C

No

Use a condenser that reduces the outlet gas temperature to < -30°C

No

Do any of the emitted organic HAP compounds have a vapor pressure > 0.7 kPa?

Yes

Do any of the emitted organic HAP compounds have a vapor pressure > 0.6 kPa?

Yes

Use a halogen reduction device before the combustion device to reduce the halogen atom mass emission rate to ≤ 0.45 kg/hr.

No

Use a halogen reduction device after the combustion device to reduce emissions of hydrogen halide and halogen HAP by ≥ 95 percent or to ≤ 0.45 kg/hr.

No

Comply with the emissions averaging alternative as specified in §63.8050

Figure 2. (continued)