

(1) For a condenser, the design evaluation shall consider the vent stream flow rate, relative humidity, and temperature and shall establish the design outlet organic HAP compound concentration level, design average temperature of the condenser exhaust vent stream, and the design average temperatures of the coolant fluid at the condenser inlet and outlet. The temperature of the gas stream exiting the condenser must be measured and used to establish the outlet organic HAP concentration.

(2) For a carbon adsorption system that regenerates the carbon bed directly onsite in the control device such as a fixed-bed adsorber, the design evaluation shall consider the vent stream flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration level, adsorption cycle time, number and capacity of carbon beds, type and working capacity of activated carbon used for carbon beds, design total regeneration stream mass or volumetric flow over the period of each complete carbon bed regeneration cycle, design carbon bed temperature after regeneration, design carbon bed regeneration time, and design service life of carbon. For vacuum desorption, the pressure drop shall be included.

(3) For a carbon adsorption system that does not regenerate the carbon bed directly onsite in the control device such as a carbon canister, the design evaluation shall consider the vent stream mass or volumetric flow rate, relative humidity, and temperature and shall establish the design exhaust vent stream organic compound concentration level, capacity of carbon bed, type and working capacity of activated carbon used for carbon bed, and design carbon replacement interval based on the total carbon working capacity of the control device and source operating schedule.

(4) For a scrubber, the design evaluation shall consider the vent stream composition, constituent concentrations, liquid-to-vapor ratio, scrubbing liquid flow rate and concentration, temperature, and the reaction kinetics of the constituents with the scrubbing liquid. The design evaluation shall es-

tablish the design exhaust vent stream organic compound concentration level and will include the additional information in paragraphs (i)(5)(i) and (ii) of this section for trays and a packed column scrubber.

(i) Type and total number of theoretical and actual trays;

(ii) Type and total surface area of packing for entire column, and for individual packed sections if column contains more than one packed section.

§ 63.7188 What are my monitoring installation, operation, and maintenance requirements?

If you comply with the emission limitations of § 63.7184 by venting the emissions of your semiconductor process vent through a closed vent system to a control device, you must comply with the requirements of paragraphs (a) and (b) of this section.

(a) You must meet the applicable general monitoring, installation, operation, and maintenance requirements specified in § 63.996.

(b) You must meet the monitoring, installation, operation, and maintenance requirements specified for closed vent systems and applicable control devices in §§ 63.983 through 63.995. If you used the design evaluation procedure in § 63.7187(i) to demonstrate compliance, you must use the information from the design evaluation to establish the operating parameter level for monitoring of the control device.

APPLICATIONS, NOTIFICATIONS, REPORTS, AND RECORDS

§ 63.7189 What applications and notifications must I submit and when?

(a) You must submit all of the applications and notifications in §§ 63.7(b) and (c); 63.8(e), (f)(4) and (f)(6); and 63.9(b) through (e), (g) and (h) that apply to you by the dates specified.

(b) As specified in § 63.9(b)(2), if you start up your affected source before May 22, 2003, you must submit an Initial Notification not later than 120 calendar days after May 22, 2003.

(c) As specified in § 63.9(b)(3), if you start up your new or reconstructed affected source on or after May 22, 2003, you must submit an Initial Notification not later than 120 calendar days