**Section 218.504 Monitoring Requirements for Batch Operations**

a) Every owner or operator using an afterburner to comply with Section 218.501 of this Subpart shall install, calibrate, maintain and operate, according to manufacturer's specifications, temperature monitoring devices with an accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius, equipped with continuous recorders.

1) Where a catalytic afterburner is used, temperature monitoring devices shall be installed in the gas stream immediately before and after the catalyst bed.

2) Where an afterburner other than a catalytic afterburner is used, a temperature monitoring device shall be installed in the combustion chamber.

b) Every owner or operator using a flare to comply with Section 218.501 of this Subpart shall install, calibrate, maintain and operate, according to manufacturer's specifications, a heat sensing device, such as an ultra-violet beam sensor or thermocouple, at the pilot light to indicate continuous presence of a flame.

c) Every owner or operator using a scrubber to comply with this Section 218.501 of this Subpart shall install, calibrate, maintain, and operate, according to manufacturer's specifications, the following:

1) A temperature monitoring device for scrubbant liquid having an accuracy of ± 1 percent of the temperature being monitored expressed in degrees Celsius and a specific gravity device for scrubbant liquid, each equipped with a continuous recorder; or

2) A VOM monitoring device used to indicate the concentration of VOM exiting the control device based on a detection principle such as infra-red photoionization, or thermal conductivity, each equipped with a continuous recorder.

d) Every owner or operator using a condenser to comply with Section 218.501 of this Subpart shall install, calibrate, maintain, and operate, according to manufacturer's specifications, the following:

1) A condenser exit temperature monitoring device equipped with a continuous recorder and having an accuracy of ± 1 percent of the temperature being monitored expressed in degrees Celsius; or

2) A VOM monitoring device used to indicate the concentration of VOM such as infra-red, photoionization, or thermal conductivity, each equipped with a continuous recorder.

e) Every owner or operator using a carbon absorber to comply with this Subpart shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, the following equipment:

1) An integrating regeneration steam flow monitoring device having an accuracy of ± 10 percent, and a carbon bed temperature monitoring device having an accuracy of ± 1 percent of the temperature being monitored expressed in degrees Celsius, both equipped with a continuous recorder; or

2) A VOM monitoring device used to indicate the concentration level of VOM exiting such device based on a detection principle such as infra-red, photoionization, or thermal conductivity, each equipped with a continuous recorder.

f) Every owner or operator using a boiler or process heater with a design heat input capacity less than 44 Mw to comply with Section 218.501 of this Subpart shall install, calibrate, maintain, and operate, according to the manufacturer's specifications, a temperature monitoring device in the firebox with an accuracy of ± 1 percent of the temperature being measured expressed in degrees Celsius, equipped with a continuous recorder. Any boiler or process heater in which all process vent streams are introduced with primary fuel is exempt from this requirement.

g) The owner or operator of a process vent shall be permitted to monitor by an alternative method or may monitor parameters other that those listed in subsections (a) through (f) of this Section, if approved by the Agency and USEPA. Such alternative method or parameters shall be contained in the source's operating permit as federally enforceable permit conditions.

h) Notwithstanding subsections (a) through (g) of this Section, sources using a scrubber, shell and tube condenser using a non-refrigerated cooling media, or other control device meeting the criteria of Section 218.501(c) of this Subpart, are required to monitor compliance with the requirements of this Subpart on and after the earlier to occur of the date such device is replaced for any reason or December 31, 1999.

(Source: Added at 19 Ill. Reg. 7359, effective May 22, 1995)