for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined by the methods specified in §61.245(c). This system can be designed as a closed, positive pressure, gas blanketing system.

(i) Except, the owner or operator may elect to install, operate, and maintain a pressure relief device, vacuum relief device, an access hatch, and a sampling port on each process vessel, tar storage tank, and tar-intercepting sump. Each access hatch and sampling port must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

(ii) The owner or operator may elect to leave open to the atmosphere the portion of the liquid surface in each tar decanter necessary to permit operation of a sludge conveyor. If the owner or operator elects to maintain an opening on part of the liquid surface of the tar decanter, the owner or operator shall install, operate, and maintain a water leg seal on the tar decanter roof near the sludge discharge chute to ensure enclosure of the major portion of liquid surface not necessary for the operation of the sludge conveyor.

(b) Following the installation of any control equipment used to meet the requirements of paragraph (a) of this section, the owner or operator shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Method 21 (40 CFR part 60, appendix A) and procedures specified in §61.245(c), and shall visually inspect each source (including sealing materials) and the ductwork of the control system for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted on a semiannual basis and at any other time after the control system is repressurized with blanketing gas following removal of the cover or opening of the access hatch.

(1) If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Method 21, a leak is detected.

(2) If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

(3) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

(4) A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

(c) Following the installation of any control system used to meet the requirements of paragraph (a) of this section, the owner or operator shall conduct a maintenance inspection of the control system on an annual basis for evidence of system abnormalities, such as blocked or plugged lines, sticking valves, plugged condensate traps, and other maintenance defects that could result in abnormal system operation. The owner or operator shall make a first attempt at repair within 5 days, with repair within 15 days of detection.

(d) Each owner or operator of a furnace coke by-product recovery plant also shall comply with the requirements of paragraphs (a)–(c) of this section for each benzene storage tank, BTX storage tank, light-oil storage tank, and excess ammonia-liquor storage tank.

§61.133 Standard: Light-oil sumps.

(a) Each owner or operator of a light-oil sump shall enclose and seal the liquid surface in the sump to form a closed system to contain the emissions.

(1) Except, the owner or operator may elect to install, operate, and maintain a vent on the light-oil sump cover. Each vent pipe must be equipped with a water leg seal, a pressure relief device, or vacuum relief device.

(2) Except, the owner or operator may elect to install, operate, and maintain an access hatch on each light-oil sump cover. Each access hatch must be equipped with a gasket and a cover, seal, or lid that must be kept in a closed position at all times, unless in actual use.

(3) The light-oil sump cover may be removed for periodic maintenance but must be replaced (with seal) at completion of the maintenance operation.
(b) The venting of steam or other gases from the by-product process to the light-oil sump is not permitted.

(c) Following the installation of any control equipment used to meet the requirements of paragraph (a) of this section, the owner or operator shall monitor the connections and seals on each control system to determine if it is operating with no detectable emissions, using Method 21 (40 CFR part 60, appendix A) and the procedures specified in §61.245(c), and shall visually inspect each source (including sealing materials) for evidence of visible defects such as gaps or tears. This monitoring and inspection shall be conducted semiannually and at any other time the cover is removed.

1. If an instrument reading indicates an organic chemical concentration more than 500 ppm above a background concentration, as measured by Method 21, a leak is detected.

2. If visible defects such as gaps in sealing materials are observed during a visual inspection, a leak is detected.

3. When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected.

4. A first attempt at repair of any leak or visible defect shall be made no later than 5 calendar days after each leak is detected.

§61.134 Standard: Naphthalene processing, final coolers, and final-cooler cooling towers.

(a) No (“zero”) emissions are allowed from naphthalene processing, final coolers and final-cooler cooling towers at coke by-product recovery plants.

§61.135 Standard: Equipment leaks.

(a) Each owner or operator of equipment in benzene service shall comply with the requirements of 40 CFR part 61, subpart V, except as provided in this section.

(b) The provisions of §61.242-3 and §61.242-9 of subpart V do not apply to this subpart.

(c) Each piece of equipment in benzene service to which this subpart applies shall be marked in such a manner that it can be distinguished readily from other pieces of equipment in benzene service.

(d) Each exhauster shall be monitored quarterly to detect leaks by the methods specified in §61.245(b) except as provided in §61.136(d) and paragraphs (e)–(g) of this section.

1. If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

2. When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after it is detected, except as provided in §61.242-10 (a) and (b). A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) Each exhauster equipped with a seal system that includes a barrier fluid system and that prevents leakage of process fluids to the atmosphere is exempt from the requirements of paragraph (d) of this section provided the following requirements are met:

1. Each exhauster seal system is:

   i. Operated with the barrier fluid at a pressure that is greater than the exhauster stuffing box pressure; or

   ii. Equipped with a barrier fluid system that is connected by a closed vent system to a control device that complies with the requirements of §61.242-11; or

   iii. Equipped with a system that purges the barrier fluid into a process stream with zero benzene emissions to the atmosphere.

2. The barrier fluid is not in benzene service.

3. Each barrier fluid system shall be equipped with a sensor that will detect failure of the barrier fluid system, or both.

   i. Each sensor as described in paragraph (e)(3) of this section shall be checked daily or shall be equipped with an audible alarm.

   ii. The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

4. If the sensor indicates failure of the seal system, the barrier fluid system, or both (based on the criterion determined under paragraph (e)(4)(ii) of this section), a leak is detected.