

**REGULATION 11
HAZARDOUS POLLUTANTS
RULE 7
BENZENE**

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REGULATION 11
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(Adopted March 6, 1985)

11-7-100 GENERAL

- 11-7-101 Description:** The purpose of this Rule is to limit the emissions of benzene from the following sources intended to operate in benzene service; pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, flanges and other product accumulator vessels, and control devices or systems required by this Rule.
- 11-7-110 Exemption, Small User:** The standards contained in this Rule shall not apply to sources at a plant site using or processing less than 1000 Mg (1101 tons) per year of benzene. However, the records required by Section 502.1.4 (a) must be maintained.
- 11-7-111 Exemption, Coke By-Product Plants:** The provisions of this Rule shall not apply to sources located in coke by-product plants.
- 11-7-112 Exemption, Vacuum Service:** The provisions of this Rule shall not apply to equipment in vacuum service, provided a list of equipment so designated is recorded by identification number and kept in a readily accessible location.

11-7-200 DEFINITION

- 11-7-201 Closed-Vent System:** A system that is not open to atmosphere and that is composed of piping, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device.
- 11-7-202 Connector:** Flanged, screwed, welded, or other joined fittings used to connect two pipe lines or a pipe line and a piece of equipment.
- 11-7-203 Control Device:** An enclosed combustion device, vapor recovery system, or flare.
- 11-7-204 Double Block and Bleed System:** Two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.
- 11-7-205 Equipment:** Each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, flange or other connector, product accumulator vessel in benzene service, and any control devices or systems required by this Rule.
- 11-7-206 First Attempt at Repair:** To take rapid action for the purpose of stopping or reducing leakage of organic material to atmosphere using best practices.
- 11-7-207 In Benzene Service:** Any equipment which either contains or contacts a fluid (liquid or gas) that is at least 10 percent benzene by weight.
- 11-7-208 In Gas/Vapor Service:** Equipment which contains process fluid that is in the gaseous state at operating conditions.
- 11-7-209 In Liquid Service:** Equipment which contains process fluid in the liquid state under normal operating conditions.
- 11-7-210 In-Situ Sampling Systems:** Nonextractive samplers or in-line samplers.
- 11-7-211 In VOC Service:** The piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight and is not in liquid service.
- 11-7-212 In Vacuum Service:** Equipment which is operating at an internal pressure which is at least 5 kilopascals (kPa) (.73 psi) below ambient pressure.
- 11-7-213 Leak:** A reading of 10,000 ppm on a portable hydrocarbon detector as approved by the APCO; or indication of liquid dripping from the equipment or an indication that a seal or barrier system has failed.
- 11-7-214 Open-Ended Valve or Line:** Any valve, except pressure relief valves, having one side of the valve seat in contact with process fluid and one side open to atmosphere, either directly or through open piping.

- 11-7-215 **Pressure Release:** The emission of materials resulting from the system pressure being greater than the set pressure of the pressure relief device.
- 11-7-216 **Process Unit:** Equipment assembled to produce a benzene or its derivatives as intermediates or final products, or equipment assembled to use a benzene in the production of a product. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient product storage facilities.
- 11-7-217 **Process Unit Shutdown:** A work practice or operational procedure that stops production from a process unit or part of a process unit. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.
- 11-7-218 **Product Accumulator Vessel:** Any distillate receiver, bottoms receiver, surge control vessel, or product separator in benzene service that is vented to atmosphere either directly or through a vacuum-producing system. A product accumulator vessel is in benzene service if the liquid or the vapor in the vessel is at least 10 percent by weight benzene.
- 11-7-219 **Repaired:** Equipment which is adjusted, or otherwise altered, to eliminate a leak.
- 11-7-220 **Semiannual:** A 6-month period; the first semiannual period concludes on the last day of the last month during the 180 days following initial startup for new sources; and the first semiannual period concludes on the last day of the last full month during the 180 days after the effective date of a specific section in which period is referenced.
- 11-7-221 **Sensor:** A device that measures a physical quantity or the change in a physical quantity, such as temperature, pressure, flow rate, pH, or liquid level.

11-7-300 STANDARDS

- 11-7-301 **General:** All equipment subject to this Rule shall be marked in such a manner that it can be readily distinguished from other equipment.
- 11-7-302 **Pumps:** When a leak is detected from a pump a first attempt at repair shall be made not later than five calendar days after its detection. Each leak must be repaired as soon as practicable, but no later than fifteen calendar days after detection.

302.1 Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the monthly monitoring requirements if the dual seal system is operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or, is equipped with a barrier fluid degassing reservoir that is connected by a closed-vent system to a control device that complies with the requirements of 11-7-311; or, is equipped with a system that purges the barrier fluid into a process stream with zero benzene emissions to the atmosphere and, the barrier fluid is not in benzene service and not in VOC service if subject to other Regulation 8 rules or 40 CFR 60; and, each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system or both; and each pump is visually inspected each calendar week for indications of liquids dripping from the pump seal, and, each sensor as described above is checked daily or is equipped with an audible alarm and, the owner or operator determines based on design considerations and operating experience a criterion that indicates failure of the seal system, the barrier system or both and, failure of the system as indicated by the sensor shall indicate a leak.

302.2 Any pump emitting less than 500 ppm is exempt from the requirements of monthly monitoring and the weekly visual inspection if: the pump has no externally actuated shaft penetrating the pump housing; and, the pump is tested for compliance with the 500 ppm limit upon initial start-up, annually, and at any other times when requested by the APCO.

- 2.1 Any pump equipped with a closed-vent system capable of capturing and transporting any leakage from the seal or seals to a control device that complies with Section 311 is exempt from the requirements of monthly monitoring and weekly visual inspection.
- 2.2 Any pump located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement or the daily sensor check provided that each pump or sensor is visually inspected as often as practicable and at least monthly. (Amended May 15, 1985)

11-7-303 Compressors: When a leak is detected from a compressor a first attempt at repair shall be made no later than five (5) calendar days after detection. Each leak shall be repaired as soon as practicable but no later than fifteen calendar days from the date of detection.

- 303.1 Each compressor in benzene service shall be equipped with a seal system that includes a barrier fluid system that prevents leakage of process fluid into the atmosphere and the seal system shall be operated with the barrier fluid at a greater pressure than the compressor stuffing box; or, equipped with a barrier fluid system that is connected by a closed-vent system to a control device that complies with 311; or, equipped with a system that purges the barrier fluid into a process stream with zero benzene emissions to the atmosphere. The barrier fluid shall not be in benzene service and if the compressor is covered by rules contained in Regulation 8, shall not be in VOC service. Each barrier fluid system described in this Section shall be equipped with a sensor that will detect failure of the seal system barrier fluid system or both; each sensor shall be checked daily or shall be equipped with a audible alarm; and 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. Such failure will indicate a leak.
- 303.2 A compressor is exempt from the requirement of 303.1 if it is equipped with a closed-vent system capable of capturing and transporting any leakage from the seal to a control device which complies with Section 311.
- 303.3 Any compressor emitting less than 500 ppm is exempt from the requirements of Section 303.1 provided: It is demonstrated that the compressor is operating at less than 500 ppm above background; and, the compressor is tested for compliance with the 500 ppm emission limit initially upon start-up, annually and at other times as requested by the APCO.

(Amended May 15, 1985)

11-7-304 Pressure Relief Devices in Gas/Vapor Service: Except during pressure releases, emissions from any pressure relief device in gas/vapor service shall not exceed 500 ppm above background.

- 304.1 No later than five (5) calendar days after a pressure release no emissions from a pressure relief device shall exceed 500 ppm above background.
- 304.2 A pressure relief device which is equipped with a closed vent system capable of capturing and transporting any leakage from the pressure relief device to a control device is exempt from Section 304.

11-7-305 Sampling Connecting System: Any sampling connecting system shall be equipped with a closed purge system or closed vent system which complies with Section 311.

- Returns the purged process fluid directly to the process line with zero benzene emissions into the atmosphere; or,
- Collects and recycles the purged process fluid with zero benzene emissions into the atmosphere; or,
- Is designed and operated to capture and transport all the purged process fluid to a control device which complies with Section 311.

- 305.1 In-situ sampling systems are exempt from the requirements of Section 305.

11-7-306 Open-Ended Valves: Open-ended valves or lines shall be equipped with a cap, blind flange, plug, or a second valve which shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

- 306.1 Any open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
- 306.2 When a double block and bleed system is used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with Sections 306 and 306.1 at all other times.

11-7-307 Valves: When a leak is detected from a valve a first attempt at repair shall be made not later than five (5) days from the date of detection. Each leak shall be repaired as soon as practicable, but no later than fifteen (15) calendar days from the date of detection.

307.1 Any valve for which a leak is not detected for two (2) consecutive months may be monitored the first month or every quarter, beginning with the next quarter. When a leak is detected the valve shall be monitored monthly until a leak is not detected for two (2) successive months.

307.2 A first attempt to repair as specified in Section 307 above shall include but is not limited to the following best practices where practicable:

- (a) Tightening of bonnet bolts
- (b) Replacement of bonnet bolts
- (c) Tightening of packing gland nuts
- (d) Injection of lubricants into lubricated packing

307.3 Any valve emitting less than 500 ppm above background which has been designated as no detectable emissions is exempt from the provisions of Section 307 if:

The valve has no external actuating mechanism in contact with the process fluid; and

The valve is tested initially upon designation; annually, and at other times as requested by the APCO.

307.4 Any valve designated as an unsafe-to-monitor valve is exempt from the monthly monitoring requirements if:

The owner or operator demonstrates to the satisfaction of the APCO that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with those requirements; and,

The owner or operator of the valve has a written plan that requires monitoring of the valve as frequently as is practicable, during safe-to-monitor times.

307.5 Any valve designated as a difficult to monitor valve is exempt from the monthly monitoring requirements if:

The owner or operator of the valve demonstrates to the satisfaction of the APCO that the valve cannot be monitored without elevating the monitoring personnel more than two (2) meters above a support surface; and

The process unit within which the valve is located is an existing process unit; and

The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once a year. (Amended May 15, 1985)

11-7-308 Pressure Relief Devices in Liquid Service, Flanges and Other Connectors: Pressure relief devices in liquid service, flanges and other connectors shall be monitored within five (5) calendar days after evidence of a potential leak is found by visual, audible, olfactory, or other detection methods.

308.1 When a leak is detected, a first attempt to repair it shall be made no later than five (5) calendar days after detection. First attempts at repair are defined in Section 307.2 above.

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

(Amended May 15, 1985)

11-7-309 Product Accumulator Vessels: Each product accumulator vessel shall be equipped with a closed-vent system capable of capturing and transporting any leakage from the vessel to a control device.

- 11-7-310 Delay of Repair:** Repair of equipment from which leaks have been detected may be delayed if the repair is technically infeasible without the shut-down of a process unit and the equipment is repaired before the end of the next process unit shut-down.
- 310.1 Repair of equipment from which leaks have been detected may be delayed if the equipment is isolated from the process and does not remain in benzene service.
- 310.2 Repair of valves may be delayed if the owner or operator demonstrates to the satisfaction of the APCO that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair; and, when repairs are made, the purged material is collected and destroyed, or recovered in a control device which complies with Section 311.
- 310.3 Repair of a valve may be delayed beyond a process unit shutdown if the valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted and valve assembly supplies have been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than six (6) months after the first process unit shutdown.
- 310.4 Repair of pumps may be delayed if repair requires the use of a dual mechanical seal system that includes a barrier fluid system and repair is completed as soon as practicable; but not later than six (6) months after the leak is detected.
- 11-7-311 Closed Vent Systems and Control Devices:** Vapor recovery systems shall have a recovery efficiency of 95 percent or greater.
- 311.1 Enclosed combustion devices shall have a minimum destruction efficiency of 95 percent or greater for benzene; or shall be designed to provide a residence time of at least 0.50 seconds at a minimum temperature of 760°C (1400°F).
- 311.2 Flares used as a control device for benzene emissions shall be steam-assisted, air-assisted or non-assisted and shall meet the following requirements:
- (1) Be designed for and operated with no visible emissions except for a period not to exceed three (3) minutes during any one (1) hour.
 - (2) Be operated with a flame present at all times.
 - (3) Be used only with a combustion gas containing a net heating value of 11.2 MJ/scm (300 Btu/scf) or greater if the flare is steam assisted or air assisted; or with a net heating value of 7.45 MJ/scm or greater if the flare is nonassisted.
 - (4) Steam assisted and air assisted shall be designed for and operated with an exit velocity of less than 18 m/sec (60 ft/sec).
 - (5) Air assisted flares shall be designed and operated with an exit velocity less than velocity, VMAX, as determined by 40 CFR Part 61.
- 311.3 Closed Vent Systems: No emissions from any closed vent system shall exceed 500 ppm. These systems shall be monitored initially upon startup, annually, and at other times as requested by the APCO.
- 3.1 A first attempt at repairs shall be made no later than five (5) calendar days after detection of a leak which results in any emissions which exceed 500 ppm.
- 3.2 Leaks resulting in any emissions which exceed 500 ppm shall be repaired as soon as practicable but not later than fifteen (15) calendar days after detection.
- 3.3 Closed vent systems and control devices used to comply with this Rule shall be maintained and operated in conformance with their design specifications at all times when emissions are vented to them.

(Amended May 15, 1985)

- 11-7-312 Alternative Standards for Valves in Benzene Service:** Allowable percentage of valves leaking. An owner or operator may elect to have all valves within a process unit comply with an allowable percentage of valves leaking equal to or less than 2.0 percent provided the following requirements are met:
- 312.1 The owner or operator notifies the APCO that the owner or operator has elected to meet the alternate standard as provided for in Section 312; such notification to be made ninety (90) days prior to implementing the standard.
 - 312.2 All valves in benzene service within a process unit shall be monitored initially upon designation, annually, and at other times as requested by the APCO. The monitoring of all valves within the process shall be completed within one week, and the leak percentage shall be determined by dividing the number of valves in benzene service for which leaks are detected by the number of valves in benzene service in the process unit.
 - 312.3 A leak from any valve shall be repaired pursuant to Section 307.
 - 312.4 An owner or operator who elects to have all valves within a process unit comply with the alternative standard contained in Section 312 shall not operate a process unit with a valve leak rate greater than 2.0 percent of the valves contained in that process unit.
 - 312.5 If an owner or operator elects to no longer comply with the alternative standard provided for in Section 312, the owner or operator shall notify the APCO that compliance will be achieved by meeting the requirements of Section 307. (Amended May 15, 1985)
- 11-7-313 Alternative Standard For Valves In Benzene Service-Skip Period Leak Detection and Repair:** An owner or operator may elect to comply with the alternative standard listed below for all valves within a process unit provided the APCO is notified ninety (90) days prior to the implementation of such a standard.
- 313.1 An owner or operator shall comply initially with the provisions of Section 307.
 - 313.2 After two (2) consecutive quarterly leak detection periods with the valves leaking equal to or less than 2.0 percent an owner or operator may skip one (1) of the quarterly leak detection periods for valves in benzene service.
 - 313.3 After five (5) consecutive quarterly leak detection periods with the valves leaking equal to or less than 2.0 percent, an owner or operator may skip three (3) of the quarterly leak detection periods for valves in benzene service.
 - 313.4 If, during any of the above inspections, the percentage of valves leaking is found to exceed 2.0 percent, an owner or operator shall comply with the requirements of Section 307. (Amended May 15, 1985)
- 11-7-314 Alternative Means of Emission Limitation:** Permission may be granted by the APCO to use an alternative control plan to comply with the provisions of this Rule subject to the following conditions:
- 314.1 Where the standard is an equipment design or operational requirement each owner or operator must apply to the APCO for permission to use an alternative control plan and must collect and verify test data to justify the plan. The APCO will compare test data for the means of emission limitation to test data for the equipment design and operational requirements and may condition the permission on requirements which he deems necessary to assure operation and maintenance which will achieve the same emission reduction as the equipment, design and operational requirements.
 - 314.2 Where the standard is a work practice the following requirements must be met.
 - (1) Each owner or operator applying to the APCO for permission to use an alternative means of emission reduction shall collect and verify the necessary test data to establish the equivalency of the alternative method of emission reduction.
 - (2) For each source for which permission is requested, the emission reduction achieved by the work practice shall be demonstrated for a period of at least twelve months.
 - (3) Each owner or operator applying for permission to use an alternative plan shall commit in writing each source to work

practices which provide for emission reduction equal to or greater than the emission reductions achieved by the required work practices.

- (4) In considering the APCO will compare the demonstrated emission reduction from the alternative means of emission limitation to the demonstrated emission reduction for the required work practices.
- (5) The APCO may condition the permission to utilize an alternative means of emission limitation on requirements that may be necessary to assure operation and maintenance necessary to achieve the same emission reduction as the required work practices of this Rule.

314.3 An owner or operator may offer a unique or innovative approach to demonstrate the alternative means of emission limitation.

314.4 Manufacturers of equipment used to control equipment leaks of benzene may apply to the APCO for permission for an alternative means of emission limitation which achieves a reduction in emissions of benzene achieved by the equipment, design and operational requirements of this Rule.

11-7-400 ADMINISTRATIVE REQUIREMENTS

11-7-401 Inspection: An owner or operator shall visually inspect each calendar week all pumps subject to this Rule for indications of liquid dripping from the seal. Pumps which have been designated by the owner or operator for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and any pump equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a control device which complies with Section 311 are exempt from this requirement. (Amended May 15, 1985)

11-7-402 Initial Report: Within 90 days of adoption for an existing source or within 90 days of startup of a new source an owner or operator shall state that the provisions of this Rule are being implemented including the following information on each source:

- (a) Equipment identification number and process unit identification number.
- (b) Type of equipment (pump, valve, etc.)
- (c) Percent by weight benzene in the fluid.
- (d) Process fluid state at the equipment (gas/vapor or liquid).
- (e) Method of compliance.

(Amended May 15, 1985)

11-7-403 Reporting: A report shall be submitted to the APCO semiannually starting 6 months after the initial report required in Section 402 above that includes the following information:

- (a) Process unit identification
- (b) For each month during the semiannual reporting period:
 - Number of valves for which leaks were detected as described in Sections 307 and 313.
 - Number of valves for which leaks were not repaired as required in Section 307.
 - Number of pumps for which leaks were detected.
 - Number of pumps for which leaks were not repaired as required in Section 302.
 - Number of compressors for which leaks were detected.
 - Number of compressors for which leaks were not repaired as required in Section 303.
 - The facts that explain any delay of repairs and where appropriate, why a process unit shutdown was technically infeasible.
- (c) Dates of process unit shutdowns which occurred within the semiannual reporting period.

- (d) Revisions to items reported according to paragraph Section 402 if changes have occurred since the initial report or subsequent revisions to the initial report.
- (e) The results of all performance tests to determine compliance with Sections 302.2, 303.3, 307.3, 311.3, 312.3, and 313 conducted within the semiannual reporting period.
- (f) In the first report submitted as required in Section 402 the report shall include a reporting schedule stating the months that semiannual reports shall be submitted. Subsequent reports shall be submitted according to that schedule, unless a revised schedule has been submitted in a previous semiannual report. (Amended May 15, 1985)

11-7-500 MONITORING AND RECORDS

11-7-501 Monitoring: An owner or operator shall monitor monthly all valves and pumps subject to this Rule. Valves and pumps which have been designated by the owner or operator for no detectable emissions as indicated by an instrument reading of less than 500 ppm above background are exempt from this requirement.

11-7-502 Records:

502.1 An owner or operator subject to this Rule shall comply with the following recordkeeping requirements. Records of more than one process unit may be kept in a single recordkeeping system providing each record identifies the process unit.

1.1 When a leak is detected as specified in Sections 302, 303, 307, and 308, the following requirements apply:

- (a) A weatherproof and readily visible identification, marked with the equipment identification number shall be attached to the leaking equipment.
- (b) The identification on the valve may be removed after it has been repaired; and after it has been monitored for two successive months as specified in Section 307.1 during which no leak has been detected.

1.2 When a leak is detected as specified in Sections 302, 303, 307, and 308, the following information shall be recorded in a log and shall be kept for two (2) years in a readily accessible location.

- (a) The instrument and operator identification number and the equipment identification numbers.
- (b) The date the leak was detected and the dates of each attempt to repair the leak.
- (c) Repair methods applied in each attempt to repair the leak.
- (d) Above 10,000 ppm if the maximum instrument reading measured with an approved combustible gas meter after repair attempt is greater than 10,000 ppm.
- (e) Repair delayed and the reason for the delay if a leak is not repaired within 15 calendar days after the discovery of the leak.
- (f) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
- (g) The expected date of successful repair of the leak if a leak is not repaired within 15 calendar days.
- (h) Dates of process unit shutdowns that occur while the equipment is unrepaired.
- (i) The date of successful repair of the leak.

1.3 The following information pertaining to the design requirements for closed-vent systems and control devices described in Section 311 shall be recorded and kept in a readily accessible location:

- (a) Detailed schematics, design specifications, and piping and instrumentation diagrams.

- (b) The dates and descriptions of any changes in the design specifications.
 - (c) A description of the parameter or parameters monitored, as required in Section 311 to ensure that control devices are operated and maintained in conformance with their design and an explanation of why the parameter (or parameters) was selected for the monitoring.
 - (d) Periods when the closed-vent systems and control devices required in Sections 302, 303, 304, 305, and 309 are not operated as designed, including periods when a flare pilot light does not have a flame.
 - (e) Dates of startups and shutdowns of the closed-vent systems and control devices required in Sections 302, 303, 304, 305, and 309.
- 1.4 The following information pertaining to all equipment subject to the requirements in Sections 302 to 314 shall be recorded in a log that is kept in a readily accessible location:
- (a) A list of identification numbers for equipment subject to the requirements of this Rule.
 - (b) A list of identification numbers for equipment signed by the owner or operator he elects to designate for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, under the provisions of Sections 302, 303 and 307.
 - (c) A list of equipment identification numbers for pressure relief devices required to comply with Section 304.1.
 - (d) The dates of each compliance test required in Sections 302.2, 303.3, 304.1, and 307.3.
 - (e) The background level measured during each compliance test in item (d).
 - (f) The maximum instrument reading measured at the equipment during each compliance test in item (d).
 - (g) A list of identification numbers for equipment in vacuum service.
- 1.5 The following information pertaining to all valves subject to the requirements of Sections 307.4 and 307.5 shall be recorded in a log that is kept in a readily accessible location:
- (a) A list of identification numbers for valves that are designated as unsafe to monitor, an explanation for each valve stating why the valve is unsafe to monitor, and the plan for monitoring each valve.
 - (b) A list of identification numbers for valves that are designated as difficult to monitor, an explanation for each valve stating why the valve is difficult to monitor, and the planned schedule for monitoring each valve.
 - (c) The following information shall be recorded for valves complying with Section 313.
 - A schedule of monitoring and;
 - The percent of valves found leaking during each monitoring period.
 - (d) The following information shall be recorded in a log that is kept in a readily accessible location:
 - Design criterion required in Sections 302.1 and 303.1 and an explanation of the design criterion; and
 - Any changes to this criterion and the reasons for the changes.
 - (e) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in the applicable section of this Rule.

An analysis demonstrating the design capacity of the process unit, and an analysis demonstrating that equipment is not in benzene service. Information and data used to demonstrate that a piece of equipment is not in benzene service shall be recorded in a log that is kept in a readily accessible location.

(Amended May 15, 1985)

11-7-600 MANUAL OF PROCEDURES

11-7-601 Measurement for Benzene: Monitoring and compliance determination required by this Rule shall be conducted as set forth in 40 CFR 61 and the Manual of Procedures.