Environmental Protection Agency

§ 63.765 Glycol dehydration unit process vent standards.

(a) This section applies to each glycol dehydration unit subject to this subpart that must be controlled for air emissions as specified in either paragraph (c)(1)(i) or paragraph (d)(1)(i) of §63.764.

(b) Except as provided in paragraph (c) of this section, an owner or operator of a glycol dehydration unit process vent shall comply with the requirements specified in paragraphs (b)(1) and (b)(2) of this section.

1) For each glycol dehydration unit process vent, the owner or operator shall control air emissions by either paragraph (b)(1)(i), (ii), or (iii) of this section.

(i) The owner or operator of a large glycol dehydration unit, as defined in §63.761, shall connect the process vent to a control device or a combination of control devices through a closed-vent system. The closed-vent system shall be designed and operated in accordance with the requirements of §63.771(c). The control device(s) shall be designed and operated in accordance with the requirements of §63.771(d), except that the performance levels specified in §63.771(d)(1)(i) and (ii) do not apply.

(ii) The owner or operator of a large glycol dehydration unit shall connect the process vent to a control device or combination of control devices through a closed-vent system and the outlet benzene emissions from the control device(s) shall be reduced to a level less than 0.90 megagrams per year. The closed-vent system shall be designed and operated in accordance with the requirements of §63.771(d). The control device(s) shall be designed and operated in accordance with the requirements of §63.771(d), except that the performance levels specified in §63.771(d)(1)(i) and (ii) do not apply.

(iii) You must limit BTEX emissions from each existing small glycol dehydration unit process vent, as defined in §63.761, to the limit determined in Equation 1 of this section. You must limit BTEX emissions from each new small glycol dehydration unit process
vent, as defined in §63.761, to the limit determined in Equation 2 of this section. The limits determined using Equation 1 or Equation 2 must be met in accordance with one of the alternatives specified in paragraphs (b)(1)(iii)(A) through (D) of this section.

\[ EL_{BTEX} = 3.28 \times 10^{-4} \cdot \text{Throughput} \cdot C_{i,BTEX} \cdot \frac{365 \text{ days}}{\text{yr}} \cdot \frac{1 \text{ Mg}}{1 \times 10^6 \text{ grams}} \]

Equation 1

Where:
- \( EL_{BTEX} \) = Unit-specific BTEX emission limit, megagrams per year;
- \( 3.28 \times 10^{-4} \) = BTEX emission limit, grams BTEX/standard cubic meter-ppmv;
- Throughput = Annual average daily natural gas throughput, standard cubic meters per day.
- \( C_{i,BTEX} \) = average annual BTEX concentration of the natural gas at the inlet to the glycol dehydration unit, ppmv.

\[ EL_{BTEX} = 4.66 \times 10^{-6} \cdot \text{Throughput} \cdot C_{i,BTEX} \cdot \frac{365 \text{ days}}{\text{yr}} \cdot \frac{1 \text{ Mg}}{1 \times 10^6 \text{ grams}} \]

Where:
- \( EL_{BTEX} \) = Unit-specific BTEX emission limit, megagrams per year;
- \( 4.66 \times 10^{-6} \) = BTEX emission limit, grams BTEX/standard cubic meter-ppmv;
- Throughput = Annual average daily natural gas throughput, standard cubic meters per day.
- \( C_{i,BTEX} \) = average annual BTEX concentration of the natural gas at the inlet to the glycol dehydration unit, ppmv.

(A) Connect the process vent to a control device or combination of control devices through a closed-vent system. The closed vent system shall be designed and operated in accordance with the requirements of §63.771(c). The control device(s) shall be designed and operated in accordance with the requirements of §63.771(f).

(B) Meet the emissions limit through process modifications in accordance with the requirements specified in §63.771(e).

(C) Meet the emissions limit for each small glycol dehydration unit using a combination of process modifications and one or more control devices through the requirements specified in paragraphs (b)(1)(iii)(A) and (B) of this section.

(D) Demonstrate that the emissions limit is met through actual uncontrolled operation of the small glycol dehydration unit. Document operational parameters in accordance with the requirements specified in §63.771(e) and emissions in accordance with the requirements specified in §63.772(b).

(2) One or more safety devices that vent directly to the atmosphere may be used on the air emission control equipment installed to comply with paragraph (b) of this section.

(c) As an alternative to the requirements of paragraph (b) of this section, the owner or operator may comply with one of the requirements specified in paragraphs (c)(1) through (3) of this section.

(1) The owner or operator shall control air emissions by connecting the process vent to a process natural gas line.

(2) The owner or operator shall demonstrate, to the Administrator’s satisfaction, that the total HAP emissions to the atmosphere from the large glycol dehydration unit process vent are reduced by 95.0 percent through process modifications, or a combination of process modifications and one or more control devices, in accordance with the requirements specified in §63.771(e).

(3) Control of HAP emissions from a GCG separator (flash tank) vent is not required if the owner or operator demonstrates, to the Administrator’s satisfaction, that total emissions to the atmosphere from the glycol dehydration unit process vent are reduced by one of
Environmental Protection Agency § 63.769

the levels specified in paragraph (c)(3)(i) through (iv) of this section, through the installation and operation of controls as specified in paragraph (b)(1) of this section.

(i) For any large glycol dehydration unit, HAP emissions are reduced by 95.0 percent or more.

(ii) For any large glycol dehydration unit, benzene emissions are reduced to a level less than 0.90 megagrams per year.

(iii) For each existing small glycol dehydration unit, BTEX emissions are reduced to a level less than the limit calculated by Equation 1 of paragraph (b)(1)(iii) of this section.

(iv) For each new small glycol dehydration unit, BTEX emissions are reduced to a level less than the limit calculated by Equation 2 of paragraph (b)(1)(iii) of this section.


§ 63.766 Storage vessel standards.

(a) This section applies to each storage vessel with the potential for flash emissions (as defined in §63.761) subject to this subpart.

(b) The owner or operator of a storage vessel with the potential for flash emissions (as defined in §63.761) shall comply with one of the control requirements specified in paragraphs (b)(1) and (2) of this section.

(1) The owner or operator shall equip the affected storage vessel with the cover that is connected, through a closed-vent system that meets the conditions specified in §63.771(c), to a process natural gas line.

(c) One or more safety devices that vent directly to the atmosphere may be used on the storage vessel and air emission control equipment complying with paragraphs (b)(1) and (2) of this section.

(d) This section does not apply to storage vessels for which the owner or operator is subject to and controlled under the requirements specified in 40 CFR part 60, subparts Kb or OOOO; or is subject to and controlled under the requirements specified under 40 CFR part 63 subparts G or CC. Storage vessels subject to and controlled under 40 CFR part 60, subpart OOOO shall submit the periodic reports specified in §63.775(e).

[64 FR 32628, June 17, 1999, as amended at 77 FR 49571, Aug. 16, 2012]

§§ 63.767–63.768 [Reserved]

§ 63.769 Equipment leak standards.

(a) This section applies to equipment subject to this subpart and specified in paragraphs (a)(1) and (2) of this section that is located at a natural gas processing plant and operates in VHAP service equal to or greater than 300 hours per calendar year.

(1) Ancillary equipment, as defined in §63.761; and

(2) Compressors.

(b) This section does not apply to ancillary equipment and compressors for which the owner or operator is subject to and controlled under the requirements specified in subpart H of this part; or is subject to and controlled under the requirements specified in 40 CFR part 60, subpart OOOO. Ancillary equipment and compressors subject to and controlled under 40 CFR part 60, subpart OOOO shall submit the periodic reports specified in §63.775(e).

(c) For each piece of ancillary equipment and each compressor subject to this section located at an existing or new source, the owner or operator shall meet the requirements specified in 40 CFR part 61, subpart V, §§61.241 through 61.247, except as specified in paragraphs (c)(1) through (6) of this section, except that for valves subject to §61.242–7(b) or §61.243–1, a leak is detected if an instrument reading of 500