



Texas Commission on Environmental Quality
Form OP-UA62
Glycol Dehydration Unit Attributes

General:

This form is used to provide a description and data pertaining to all emission points, stationary vents, distillation operation vents, and process vents with potentially applicable requirements associated with a particular account number and application. Each table number, along with the possibility of a corresponding letter (i.e., Table 1a, Table 1b), corresponds to a certain state or federal rule. If the rule on the table is not potentially applicable to an emission point, stationary vent, distillation operation vent and/or process vent, then it should be left blank and need not be submitted with the application. If the codes entered by the applicant show negative applicability to the rule or sections of the rule represented on the table, then the applicant need not complete the remainder of the table(s) that corresponds to the rule. Further instruction as to which questions should be answered and which questions should not be answered are located in the “Specific” section of the instruction text. The following is included in this form:

Tables 1a - 1c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart HH: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities

The application area name from Form OP-1 (Site Information Summary) must appear in the header of each page for the purpose of identification for the initial submittal. The date of the initial form submittal must also be included and should be consistent throughout the application (MM/DD/YYYY). Leave the permit number blank for the initial form submittal. If this form is included as part of the permit revision process, enter the permit number assigned by the TCEQ, the area name (from Form OP-1), the date of the revision submittal, and the account number.

Unit attribute questions that do not require a response from all applicants are preceded by qualification criteria in the instructions. If the unit does not meet the qualification criteria, a response to the question is not required. Anytime a response is not required based on the qualification criteria, leave the space on the form blank.

Notwithstanding any qualification criteria in the form instructions or information provided in other TCEQ guidance, the applicant may leave an attribute question blank (or indicate “N/A” for “Not Applicable”) if the attribute is not needed for the applicable requirement determinations of a regulation for a unit.

In some situations, the applicant has the option of selecting alternate requirements, limitations, and/or practices for a unit. Note that these alternate requirements, limitations, and/or practices must have the required approval from the TCEQ Executive Director and/or the U.S. Environmental Protection Agency (EPA) Administrator before the federal operating permit application is submitted.

The Texas Commission on Environmental Quality (TCEQ) requires that a Core Data Form be submitted on all incoming registrations unless all of the following are met: the Regulated Entity and Customer Reference Number have been issued by the TCEQ and no core data information has changed. The Central Registry, a common record area of the TCEQ, maintains information about TCEQ customers and regulated activities, such as company names, addresses, and telephone numbers. This information is commonly referred to as “core data.” The Central Registry provides the regulated community with a central access point within the agency to check core data and make changes when necessary. When core data about a facility is moved to the Central Registry, two new identification numbers are assigned: the Customer Reference (CN) number and the Regulated Entity (RN) number. The Core Data Form is required if facility records are not yet part of the Central Registry or if core data for a facility has changed. If this is the initial registration, permit, or license for a facility site, then the Core Data Form must be completed and submitted with application or registration forms. If amending, modifying, or otherwise updating an existing record for a facility site, the Core Data Form is not required, unless any core data information has changed. To review additional information regarding the Central Registry, go to the TCEQ Web site at www.tceq.texas.gov/permitting/central_registry/guidance.html.

Specific:

Table 1a: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart HH: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities

- ★ **Complete Tables 1a - 1c only for glycol dehydration unit process vents located at oil and natural gas production facilities which meet the criteria specified in 40 CFR § 63.760(a)(1) and either 40 CFR § 63.760(a)(2) or (a)(3), but not meeting an exemption specified in 40 CFR § 63.760(e).**

Emission Point ID No.:

Enter the identification number (ID No.) for the glycol dehydration unit process vent (maximum 10 characters) as listed on Form OP-SUM.

SOP/GOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information *before* determining the GOP index number. For additional information relating to SOP and GOP index numbers please go to the TCEQ website at www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/additional_fop_guidance.pdf.

Alternate Means of Emission Limitation (AMEL):

Enter "YES" if the EPA Administrator has approved an AMEL in accordance with 40 CFR § 63.777. Otherwise, enter "NO."

AMEL ID No.:

If an AMEL has been approved, then enter the corresponding AMEL unique identifier (maximum 10 characters) for each unit. If the unique identifier is unavailable then enter the date of the AMEL approval letter. The unique identifier and/or the date of the approval letter is contained in the compliance file under the appropriate account number. Otherwise, leave this column blank.

- ▼ **Continue only if "Alternate Means of Emission Limitation" is "NO."**

HAP Source:

Select one of the following options to describe the hazardous air pollutant (HAP) source classification

| Code | Description |
|-------|---|
| MAJOR | Any stationary source or group of stationary sources of HAPs meeting the definition of a major source as defined in 40 CFR § 63.761 |
| AREA | Any stationary of source of HAPs that is not a major source as defined in 40 CFR § 63.761 (i.e. area source of HAPS) |

Affected Source Type:

Select **one** of the following options that describes the affected source. Enter the **code** on the form.

For sources located at a major source of HAPs or area source of HAPs required to comply with major source requirements due to EPA’s once in always in policy:

| Code | Description |
|-------|--|
| LARGE | Large glycol dehydration unit as defined in 40 CFR § 63.761. |
| SMALL | Small glycol dehydration unit as defined in 40 CFR § 63.761. |

For sources located at an area source of HAPs:

| Code | Description |
|-------|--|
| TEGU | Triethylene glycol (TEG) dehydration unit located within an UA plus offset and UC boundary |
| NTEGU | Triethylene glycol (TEG) dehydration unit not located within an UA plus offset and UC boundary |

★ **Complete “Area Source Exemption” only if “Affected Source” or “TEGU” or “NTEGU.”**

Area Source Exemption:

Select **one** of the following options to indicate if the TEG dehydration unit meets an exemption in 40 CFR § 63.764(e)(1). Enter the **code** on the form.

| Code | Description |
|------|---|
| 85- | Actual annual average flowrate of natural gas to the TEG unit is less than 85,000 standard cubic meters per day |
| 90- | Actual average emissions of benzene from the TEG unit process vent are less than 0.90 megagrams per year |
| NONE | The TEG unit does not meet an exemption in 40 CFR § 63.764(e)(1) |

▼ **Do not continue if “Area Source Exemption” is “85-“or “90” or if “Affected Source Type” is “NTEGU.”**

★ **Complete “Existing Unit” only if “Affected Source Type” is “SMALL.”**

Existing Unit:

Enter “YES” if the affected source is an existing small glycol dehydration unit as defined in 40 CFR § 63.761. Otherwise, enter “NO.”

Table 1b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart HH: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities

Emission Point ID No.:

Enter the identification number (ID No.) for the glycol dehydration unit process vent (maximum 10 characters) as listed on Form OP-SUM.

SOP/GOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information *before* determining the GOP index number. For additional information relating to SOP and GOP index numbers please go to the TCEQ website at www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/additional_fop_guidance.pdf.

Process Vent Control:

Select **one** of the following options to indicate the method used to control emissions from the glycol dehydration unit process vent, in accordance with 40 CFR § 63.765. Enter the **code** on the form.

For large glycol dehydration units and area source TEG dehydration units:

| Code | Description |
|--------|---|
| PNGL | Process vent is connected to a process natural gas line [40 CFR § 63.765(c)(1)] |
| CD-CVS | Process vent is connected to a control device or a combination of control devices through a closed-vent system [40 CFR § 63.765(b)(1)(i)] |
| B90 | Process vent is connected to a control device or a combination of control devices through a closed-vent system and the outlet benzene emissions from the control device(s) are reduced to a level less than 0.90 megagrams per year [40 CFR § 63.765(b)(1)(ii)] |
| MOD | Total hazardous air pollutant (HAP) emissions to the atmosphere are reduced by 95% through process modifications alone (For SOP applications only) [40 CFR § 63.765(c)(2)] |
| COMB | Total HAP emissions to the atmosphere are reduced by 95% through a combination of process modifications and one or more control devices (For SOP applications only) |

For small glycol dehydration units:

| Code | Description |
|-------|---|
| BTEX | BTEX emissions are limited by a control device or a combination of control devices through a closed-vent system |
| BMOD | BTEX emissions are limited through process modifications alone |
| BCOMB | BTEX emissions are limited through a combination of process modifications and one or more control devices |
| UNCON | BTEX emissions limit is met through actual uncontrolled operation |

▼ **Do not continue if “Process Vent Control” is “PNGL,” “MOD,” “BMOD,” or “UNCON.”**

Bypass Device:

Enter “YES” if the closed-vent system contains one or more bypass devices that could be used to divert all or a portion of the gases, vapors, or fumes from entering the control device. Otherwise, enter “NO.”

★ **Complete “Flow Indicator” only if “Bypass Device” is “YES.”**

Flow Indicator:

Enter “YES” if a flow indicator is installed at the inlet to the bypass device. Otherwise, enter “NO.”

Sealed Closed Vent System:

Enter “YES” if the closed-vent system contains joints, seams, or other connections that are permanently or semi-permanently sealed (e.g., a welded joint between two sections of hard piping or a bolted and gasketed ducting flange). Otherwise, enter “NO.”

Unsafe To Inspect:

Enter “YES” if any parts of the closed-vent system are designated as unsafe to inspect, as described in 40 CFR § 63.773(c)(5)(i) - (ii). Otherwise, enter “NO.”

Difficult To Inspect:

Enter “YES” if any parts of the closed-vent system are designated as difficult to inspect, as described in 40 CFR § 63.773(c)(6)(i) - (ii). Otherwise, enter “NO.”

Table 1c: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63), Subpart HH: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities

Emission Point ID No.:

Enter the identification number (ID No.) for the glycol dehydration unit process vent (maximum 10 characters) as listed on Form OP-SUM.

SOP/GOP Index No.:

Site operating permit (SOP) applicants should indicate the SOP index number for the unit or group of units (maximum 15 characters consisting of numeric, alphanumeric characters, and/or dashes prefixed by a code for the applicable regulation [i.e., 60KB-XXXX]). General operating permit (GOP) applicants should indicate the appropriate GOP index number in this column from the applicable GOP table (SSS-FF-XXX). Applicants should complete all applicable GOP attribute information *before* determining the GOP index number. For additional information relating to SOP and GOP index numbers please go to the TCEQ website at www.tceq.texas.gov/assets/public/permitting/air/Guidance/Title_V/additional_fop_guidance.pdf.

Control Device Type:

Select **one** of the following options for the type of control device. Enter the **code** on the form.

Enclosed Combustion Devices:

| Code | Description |
|-------|-----------------------------|
| THERM | Thermal vapor incinerator |
| CATA | Catalytic vapor incinerator |
| BPH | Boiler or process heater |

Vapor Recovery Devices:

| Code | Description |
|-------|---|
| COND | Condenser |
| RCADS | Regenerable carbon adsorption system |
| NCADS | Nonregenerable carbon adsorption system |

Other Control Device:

| Code | Description |
|-------|-------------|
| FLARE | Flare |

Control Device ID No:

If applicable, enter the identification number for the control device to which tank emissions are routed (maximum 10 characters). This number should be consistent with the identification number listed on the Form OP-SUM (Individual Unit Summary).

- ▼ **Do Not Continue** if “Control Device Type” is “FLARE.”
- ★ **Complete “Control Device Operation” only** if “Process Vent Control” is “CD-CVS,” “COMB,” “BTEX,” or “BCOMB” *and* “Control Device Type” is “THERM,” “CATA,” or “BPH.”

Control Device Operation:

Select **one** of the following options for the operation of the enclosed combustion device. Enter the **code** on the form.

For Large Glycol Dehydration Units:

| Code | Description |
|-----------|---|
| TOC/HAP95 | Reduces the mass content of either total organic compounds (TOC) or total hazardous air pollutants (HAP) in the gases vented to the device by greater than or equal to 95.0 weight percent |
| TOC/HAP20 | Reduces the concentration of either TOC or total HAP in the exhaust gases at the outlet to the device to a level less than or equal to 20 ppmv on a dry basis corrected to 3% oxygen |
| MRTT | Operates at a minimum temperature of 760 ⁰ C provided the control device has demonstrated, under 40 CFR §63.772(e), that combustion zone temperature is an indicator of destruction efficiency |
| MASS | The mass content of BTEX in the gases vented to the control device is reduced |

For Small Glycol Dehydration Units:

| | |
|-----------|--|
| MASS | The mass content of BTEX in the gases vented to the control device is reduced |
| TOC/HAP20 | Reduces the concentration of either TOC or total HAP in the exhaust gases at the outlet to the device to a level less than or equal to 20 ppmv on a dry basis corrected to 3% oxygen |

Performance Test/Design Analysis Exemption:

Select one of the following options to indicate the specific control device performance test/design analysis exemption being used. Enter the code on the form.

For Boilers and Process Heaters:

| Code | Description |
|------|--|
| 44+ | Design heat input capacity is greater than or equal to 44 megawatts (MW) [40 CFR § 63.772(e)(1)(ii)] |
| FUEL | Vent stream is introduced into the boiler or process heater with the primary fuel or is used as the primary fuel [40 CFR § 63.772(e)(1)(iii)] |
| HAZ1 | Burning hazardous waste, a final permit under 40 CFR Part 270 has been issued and complying with the requirements of 40 CFR Part 266, subpart H; or burning hazardous waste and compliance has been certified with the interim status requirements of 40 CFR Part 266, Subpart H (For SOP applications only) [40 CFR § 63.772(e)(1)(iv)] |
| SAME | A performance test, which uses the same methods specified in 40 CFR § 63.772, was conducted for another regulation promulgated by the EPA and either no process changes have been made since the test, or the owner or operator can demonstrate that the results of the performance test reliably demonstrate compliance despite process changes [40 CFR § 63.772(e)(1)(vi)] |
| NONE | No performance test/design analysis exemption is being utilized. |

For Thermal Vapor Incinerators:

| Code | Description |
|------|--|
| HAZ2 | Control device is a hazardous waste incinerator for which the owner or operator has been issued a final permit under 40 CFR Part 270 and is complying with the requirements of 40 CFR Part 264, subpart O, or has certified compliance with the interim status requirements of 40 CFR Part 265, subpart O (For SOP applications only) [40 CFR § 63.772(e)(1)(v)] |
| SAME | A performance test, which uses the same methods specified in 40 CFR § 63.772, was conducted for another regulation promulgated by the EPA and either no process changes have been made since the test, or the owner or operator can demonstrate that the results of the performance test reliably demonstrate compliance despite process changes [40 CFR § 63.772(e)(1)(vi)] |
| NONE | No performance test/design analysis exemption is being utilized. |

For Catalytic Vapor Incinerators, Condensers and Carbon Adsorption Systems:

| Code | Description |
|------|--|
| SAME | A performance test, which uses the same methods specified in 40 CFR § 63.772, was conducted for another regulation promulgated by the EPA and either no process changes have been made since the test, or the owner or operator can demonstrate that the results of the performance test reliably demonstrate compliance despite process changes [40 CFR § 63.772(e)(1)(vi)] |
| NONE | No performance test/design analysis exemption is being utilized. |

★ **Complete “Performance Test or Design Analysis” only if “Performance Test/Design Analysis Exemption” is “NONE.”**

Performance Test or Design Analysis:

Select **one** of the following options to indicate the method used to demonstrate the control device achieves its appropriate performance requirements specified in 40 CFR § 63.771(d)(1), (e)(3), or (f)(1). Enter the **code** on the form.

For Boilers, Process Heaters, and Vapor Incinerators:

| Code | Description |
|------|---|
| PT | Performance test conducted as specified in 40 CFR § 63.772(e)(3) |
| PTM | Performance test conducted by manufacturer as specified in 40 CFR § 63.772(h) |

For Condensers:

| Code | Description |
|------|--|
| PT | Performance test conducted as specified in 40 CFR § 63.772(e)(3) |
| DA | Design analysis conducted as specified in 40 CFR § 63.772(e)(4) |
| MOD | Using the procedures documented in the GRI report entitled, “Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions” as inputs for the model GRI-GLYCalc™, Version 3.0 or higher, to determine condenser performance |

**Texas Commission on Environmental Quality
Glycol Dehydration Unit Attributes
Form OP-UA62 (Page 2)
Federal Operating Permit Program**

**Table 1b: Title 40 Code of Federal Regulations Part 63 (40 CFR Part 63)
Subchapter HH: National Emission Standards for Hazardous Air Pollutants From Oil and Natural Gas Production Facilities**

| | | |
|-------------------|--------------------|--------------------------------|
| Date: | Permit No.: | Regulated Entity No.: |
| Area Name: | | Customer Reference No.: |

| Emission Point ID No. | SOP/GOP Index No. | Process Vent Control | Bypass Device | Flow Indicator | Sealed Closed Vent System Control | Unsafe to Inspect | Difficult to Inspect |
|-----------------------|-------------------|----------------------|---------------|----------------|-----------------------------------|-------------------|----------------------|
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

