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 regulation for a unit.

Please note that for general operating permit (GOP) applications, responses may be required for questions on this form which are not included as a column in the applicable GOP table. These responses may be needed to determine applicability of certain requirements within a single row of the GOP permit table.

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 the 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 website at www.tceq.texas.gov/permitting/central_registry/guidance.html.

Specific:

Table 1a:

La: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 the 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

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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 Type" is "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."
- ▼ Do not continue for GOPs if "HAP Source" is "AREA" and the "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
PNGL	Process vent is connected to a process natural gas line [40 CFR § 63.765(c)(1)]
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 the 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 not a "FLARE."

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° 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:

Code	Description
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 HAZ2	Description 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 the manufacturer as specified in 40 CFR § 63.772(h)

	OP-UA02 Instruction
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
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Texas Commission on Environmental Quality Glycol Dehydration Unit Attributes Form OP-UA62 (Page 1) Federal Operating Permit Program

Table 1a: 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.:	

GOP Questions highlighted.

Emission Point ID No.	SOP/GOP Index No.	Alternate Means of Emission Limitation (AMEL)	AMEL ID No.	HAP Source	Affected Source Type	Area Source Exemption	Existing Unit

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.:	

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

Texas Commission on Environmental Quality Glycol Dehydration Unit Attributes Form OP-UA62 (Page 3) Federal Operating Permit Program Table 1c: 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.:	

Emission Point ID No.	SOP/GOP Index No.	Control Device Type	Control Device ID No.	Control Device Operation	Performance Test/ Design Analysis Exemption	Performance Test or Design Analysis