

## VENTURA COUNTY APCD SUPPLEMENTAL FORM - GLYCOL DEHYDRATION

**Note:** Please submit one of these forms for each glycol dehydration unit that you own or operate. Also include a process flow diagram detailing the glycol unit.

### Glycol Dehydration Unit Identification

Facility Name _____	Contact _____
Reboiler Size (MMBTU/Hour) _____	Annual Hours of Operation _____
Type of Glycol (TEG, DEG, EG or Other) _____	

### ROC Uncontrolled Emissions Calculation Input Data

Processed Gas Throughput Data	
Dry Gas Flow Rating (MMSCF/day) dry basis _____	Dry Gas Water Content (lb/MMSCF) _____

**Note:** As an alternative to specifying the dry gas water content, you may specify the number of equilibrium absorber stages. \_\_\_\_\_

Lean Glycol Water Content (wt % water) _____	Range (0-10%, by weight)
Lean Glycol Flow Rate (gpm) _____	or Recirculation Ratio (gal/lb H <sub>2</sub> O) _____
<b>Wet gas data required:</b>	
Wet gas temperature or absorber temperature (°F) _____	Range (32 °F to 150 °F)
Wet gas pressure or absorber pressure (psig) _____	Range (0 psig to 5000 psig)
Is wet gas saturated with water? _____	
If not, enter wet gas water content _____ lb H <sub>2</sub> O / mmscf	

<b>For EG units only enter the following:</b>	
Contact Temperature (°F) _____	Range (-120 °F to 250 °F)
Contact Pressure (psig) _____	Range (0 psig to 5000 psig)

### Wet gas composition (dry basis volume percent):

Methane: _____	Heptanes: _____	Carbon Dioxide: _____
Ethane: _____	C <sub>3</sub> +Heavies: _____	Hydrogen Sulfide: _____
Propane: _____	Benzene: _____	Nitrogen: _____
Butane: _____	Toluene: _____	2,2,4-Trimethylpentane: _____
Pentane: _____	Ethyl Benzene: _____	
n-Hexane: _____	Xylenes: _____	
Other Hexanes: _____		

**Note:** If the wet gas contains compounds not listed, enter C<sub>4</sub>, C<sub>5</sub>, C<sub>6</sub>, and C<sub>7</sub> isomers as butanes, pentanes, other hexanes, and heptanes, respectively. The sum should approximate 100 percent. To convert from ppmv to volume percent, divide by 10,000.

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Is the glycol pump electric or gas driven? \_\_\_\_\_  
 If gas driven, enter the volume ratio, which is the ratio of the volume of gas used (acfm) to the volume of glycol pumped (gpm). \_\_\_\_\_

Note: To convert from standard cubic feet (SCF) to actual cubic feet, use the following formula:

$$\text{Volume in ACF} = 0.0283 * \text{Volume in SCF} * (T+460)/(P +14.7)$$

where T is the gas temperature (°F) and P is the gas pressure (psig)

Does the Unit have a Flash Tank? \_\_\_\_\_  
 If yes, the calculation assumes the flash tank is considered to be in service along the Rich glycol line, downstream of the absorber and upstream of the regenerator.  
 Flash Tank Temperature (°F) \_\_\_\_\_ Range (32 °F to 300 °F)  
 Flash Tank Pressure (psig) \_\_\_\_\_ Range (5 psig to 5000 psig)

Does the unit have a stripping gas system? \_\_\_\_\_  
 If yes, please check the type of gas and the flowrate in SCFM:  
 Dry Gas \_\_\_\_\_ Flash Gas \_\_\_\_\_ Nitrogen \_\_\_\_\_ Other \_\_\_\_\_  
 Gas Flow Rate \_\_\_\_\_ SCFM  
 Additional information about system:  
 \_\_\_\_\_  
 \_\_\_\_\_

Does the glycol unit have an ROC control system? \_\_\_\_\_  
 If yes, describe the system being used: Condenser \_\_\_\_\_ Incinerator \_\_\_\_\_  
 Condenser: Temperature \_\_\_\_\_ °F Incinerator: Ambient Air Temperature \_\_\_\_\_ °F  
 Pressure \_\_\_\_\_ psia Excess Oxygen \_\_\_\_\_ %  
 Combustion Efficiency \_\_\_\_\_ %  
 If control system is not listed above, please describe the system being used:  
 \_\_\_\_\_  
 \_\_\_\_\_