



**Kansas Department of Health and Environment
Division of Environment
Bureau of Air and Radiation**

GAS DEHYDRATION UNIT

- 1) Source ID Number: _____
- 2) Company/Source Name: _____
- 3) Emission Unit Identification: _____
- 4) Normal Operating Schedule: _____ hrs/yr
- 5) Absorbent: Ethylene Glycol (EG)_____ Triethylene Glycol (TEG)_____ Diethylene Glycol (DEG) _____
- 6) Indicate source of Natural Gas: _____ Gathering; _____ Pipeline
- 7) Complete the following information for Dehydrator Technical Specifications:

Manufacturer: _____
Date of Manufacture: _____
Model No.: _____
Serial No.: _____
Unit Designation No.: _____
Date of Latest Modification: _____
- 8) Operating Conditions:

Station Capacity _____MMSCF/day
Suction Pressure: _____psig
Discharge Pressure: _____psig
Inlet Temperature: _____°F
Discharge Temperature: _____°F
- 9) Reboiler Capacity: _____MMBTU/hr

**GAS DEHYDRATION UNIT
(cont.)**

10) Wet Gas:

Temperature: _____°F

Pressure: _____psig

COMPONENT	CONCENTRATION (vol. %, dry basis)
Carbon Dioxide	
Hydrogen Sulfide	
Nitrogen	
Methane	
Ethane	
Propane	
Isobutane	
n-Butane	
Isopentane	
n-Pentane	
Cyclopentane	
n-Hexane	
Cyclohexane	
Other Hexanes	
Heptanes	
Methylcyclohexane	
2,2,4-Trimethylpentane	
Benzene	
Toluene	
Ethybenzene	
Xylenes	
C ₈ +Heavies	
Others	
NOTE: PLEASE ATTACH THE EXTENDED GAS ANALYSIS WITH THIS FORM.	

Is the wet gas saturated with water? Yes _____; No _____

- or -

Wet gas water content: _____lbs of H₂O/MMSCF

GAS DEHYDRATION UNIT (cont.)

11) Dry Gas:

Flow Rate: _____ MMSCF/day

For TEG Dehydrators:	For EG Dehydrators:
Water Content: _____ lbs of H ₂ O/MMSCF - or - Absorber Stages: _____	Contractor Temperature: _____ °F Contractor Pressure: _____ psig

12) Lean Glycol:

Water Content: _____ wt % H₂O

Flow Rate: _____ gpm

- or -

Recirculation Ratio: _____ gal/lb H₂O

13) Pump:

Glycol Pump Type: Electric/Pneumatic _____; Gas Injection _____

Gas Injection Pump Volume Ratio: _____ acfm gas/gpm glycol

14) Flash Tank:

Include a Flash Tank? Yes _____; No _____

Temperature: _____ °F

Pressure: _____ psig

Is the flash tank gas sent to regenerator? Yes _____; No _____; N/A _____

If no, is the flash tank gas routed to the following:

Combustion device _____, efficiency _____ %

Recycled/compressed _____

Used as stripping gas _____

Vented to the atmosphere _____

**GAS DEHYDRATION UNIT
(cont.)**

15) Stripping Gas:

Uses: Dry Gas _____; Flash Gas _____; Nitrogen _____; None _____
Gas Flow Rate: _____scfm

16) Check the following for control device options:

Condenser _____; Combustion device _____; None _____

Condenser:

Temperature: _____°F

Pressure: _____psig

Combustion device:

Ambient Air Temperature: _____°F

Excess Oxygen: _____%

Destruction Efficiency: _____%