



**San Joaquin Valley Unified Air Pollution Control District
Supplemental Application Form**



Glycol Dehydration Units

This form must be accompanied by a completed Authority to Construct/Permit to Operate Application form

PERMIT TO BE ISSUED TO:
DEHYDRATOR LOCATION (STREET ADDRESS OR ¼ SECTION, TOWNSHIP, & RANGE)

EQUIPMENT DESCRIPTION

Dehydrator	Manufacturer:	Model:
Gas compressor	Type (IC engine, electric motor, etc.):	Rating: (hp)
Reboiler	Type of fuel used: (i.e., LPG, PUC natural gas, or Process Gas Stream)	Rating: (MMBtu/hr)
	Sulfur Content:	gr/100 scf
Glycol Pump	Type (electric, gas driven, etc.):	Rating: (hp)

Indicate if the dehydrator is exempt from Rule 4408. If it is not exempt, it must meet one of the Rule requirements listed below.

Rule 4408 Exemption	Permitted to operate less than 200 hours per year OR,
	Permitted to dehydrate less than 5 MMSCF of gas per year

A unit not exempt from District Rule 4408 must use one of the following:

- A system that directs all vapors to a vapor control system, a fuel gas system, or a sales gas system, or
- A system that directs all vapors to a flare, incinerator, reboiler, or thermal oxidizer and:
 - Operates continuously in a smokeless mode, and
 - Has an electronically controlled ignition system with an alarm system if the pilot flame fails, and
 - Liquid knock-out system to condense any condensable vapors, and
 - Sight glass ports, if the flame is not visible.
- Another emission control system that controls vent VOC emissions by at least 95 percent averaged over one hour, or to a level no higher than 1.7 lb VOC per MMdscf gas averaged over 24 hours. (provide details)

Is this equipment operated at a production facility prior to custody transfer? Yes No

If glycol dehydrator vents to a vapor control system, a fuel gas system, or a sales gas system go directly to "Health Risk Assessment Data". If not, please fill out all the sections of this form. Attach a gas analysis in either case.

PROCESS DESCRIPTION

Gas Streams/Processes the Dehydrator Serves: (include permit number, if applicable)		
	Wet Gas Pressure: psig	Wet Gas Temperature: °F
Max. Dry Gas Flowrate: MMscf/day	Saturated Gas: <input type="checkbox"/> Yes <input type="checkbox"/> No	Subsaturated Gas: lb H ₂ O/MMscf
Dry Gas Water Content: lb H ₂ O/MMscf	Component Names	Concentration (Volume %, dry)
Dry Gas Absorber Stages:	Carbon Dioxide:	
Lean Glycol Water Content: wt % H ₂ O	Hydrogen Sulfide:	
Glycol Flowrate: Gallon/minute	Nitrogen:	
Recirculation Ratio: Gallon/lb H ₂ O	Methane:	
Glycol Pump Type: <input type="checkbox"/> Electric <input type="checkbox"/> Gas Driven	Ethane:	
Gas Driven Pump Volume Ratio: Acfm gas/gpm glycol	Propane:	
	Isobutane:	
Flash Tank: <input type="checkbox"/> Yes <input type="checkbox"/> No	n-Butane:	
Flash Tank Temperature: °F	Isopentane:	
Flash Tank Pressure: psig	n-Pentane:	
Stripping Gas Option: <input type="checkbox"/> No Stripping Gas <input type="checkbox"/> Use Dry Gas <input type="checkbox"/> Use Flash Gas <input type="checkbox"/> Use Nitrogen	Other:	
	Sulfur content:	
Stripping Gas Flow Rate: scfm	(Please attach gas analysis)	
Control Device: <input type="checkbox"/> No Control Device <input type="checkbox"/> Use Condenser <input type="checkbox"/> Incinerator <input type="checkbox"/> <input type="checkbox"/> Use Condenser/Incinerator	Condenser Temperature: °F	Condenser Pressure: psia
	Incinerator Excess O ₂ : %	
	Incinerator Destruction Efficiency: %	
Rich/Lean Analytical Component Name:	Rich Glycol (mg/L):	Lean Glycol (mg/L):
Isopentane		
n-Pentane		
Cyclopentane		
n-Hexane		
Cyclohexane		
Other Hexanes		
Heptanes		
Methylcyclohexane		
2, 2, 4-trimethylpentane		
Benzene		

INCINERATOR EQUIPMENT AND FUEL DATA

Pilot Type	Intermittent <input type="checkbox"/>	Continuous <input type="checkbox"/>
Pilot Fuel Data	Type of pilot gas fuel: (i.e., LPG, PUC natural gas, or Process Gas Stream)	Sulfur Content: _____ gr/100 scf
	Pilot Fuel Consumption: _____ scf/hr	

Incinerator Gas Fuel Flow Meter(s):

YES NO

Incinerator Pilot Fuel Flow Meter(s):

YES NO

HEALTH RISK ASSESSMENT DATA

Operating Hours	Maximum Operating Schedule: _____ hours per day, and _____ hours per year		
Receptor Data	Distance to nearest Residence	_____ feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest apartment, house, dormitory, etc.
	Direction to nearest Residence	_____	Direction from the stack to the receptor, i.e. Northeast or South.
	Distance to nearest Business	_____ feet	Distance is measured from the proposed stack location to the nearest boundary of the nearest office building, factory, store, etc.
	Direction to nearest Business	_____	Direction from the stack to the receptor, i.e. North or Southwest.
Stack Parameters	Release Height	_____ feet above grade	
	Stack Diameter	_____ inches at point of release	
	Direction of Flow	<input type="checkbox"/> Vertically Upward <input type="checkbox"/> Horizontal <input type="checkbox"/> Other: _____° from vert. or _____° from horiz.	
Exhaust Data	Flowrate: _____ acfm	Temperature: _____ °F	
Facility Location	<input type="checkbox"/> Urban (area of dense population) <input type="checkbox"/> Rural (area of sparse population)		

FOR DISTRICT USE ONLY

Date:	FID:	Project:	Public Notice: Y N
Comments:			