

SLEIS GUIDANCE

How to Report Glycol Dehydrators in SLEIS

Emissions Inventory Section | Air Quality Division | deq.ok.gov

Processes

- Report one emission unit with two processes¹
 - One process for the still
 - o One process for the reboiler

Release Points

- The glycol dehydrator will have at least one release point,² but may have more depending on the equipment's configuration
 - o If the still and reboiler vent to the atmosphere separately, report two release points: one for the reboiler stack and one for the still vent
 - o If the still vent is routed to the reboiler for fuel, report one release point for the reboiler
 - If the still vent routes to a flare, a unique still vent release point should not be created³

Control Devices

• Condensers, flame management systems, glow plugs, flares or other control devices may be associated with a glycol dehydrator

- Flares
 - Still vent emissions and, possibly, flash tank emissions may be routed to a flare. If this is the case follow the DEQ flare guidance document.
- Flash Tanks
 - Flash tanks allow the rich glycol stream to undergo a step down in pressure from the highly pressurized contactor tower. During this depressurization VOCs can be released.
 The VOCs can be routed to the inlet separator or to the glycol reboiler.
 - The reboiler has episodic downtime when the reboiler stops firing because the glycol has reached the high temperature set point. During this downtime, VOCs routed from the flash tank are still arriving at the reboiler stack where the emissions are not combusted and are vented directly to the atmosphere.

Adopted April 21, 2020

¹ If the flash tank routes exclusively to the facility's inlet separator, then it does not need to be identified as a process. If the flash tank emissions are routed somewhere other than the inlet separator and/or the reboiler, the flash tank may need to be identified as a separate process. If there is confusion, please reach out to Emission Inventory staff for guidance.

² If the dehydration unit has **no** specific release points, please reach out to the Emission Inventory staff for guidance.

³ If the still vent emissions are routed to a flare, the flare will be the release point and will be set up as a separate process.

 When flash tank emissions are routed to a reboiler, a maximum control efficiency of 50% can be claimed unless a flame management system or glow plugs are present.⁴

Emissions

- Report emissions associated with the process from which they occur
 - Still vent emissions are reported at the still process. If still vent emissions are routed to the reboiler or a flare, uncheck the 'Process is Reported' box in SLEIS to indicate that no emissions are reported at the still process.
 - o Reboiler emissions are reported at the reboiler process.
 - o If the flash tank routes to the reboiler, any uncombusted VOC emissions from the flash tank should be reported at the reboiler process.

⁴ If the dehydration unit is equipped with a flame management system or glow plugs, please reach out to Emission Inventory staff for guidance.