



Standard Operating Procedure: Glycol Management

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Scope

The purpose of this procedure is to describe the proper means for recovery and reuse or disposal of glycol solutions used as heat exchange fluids. Such activities include, but are not limited to, HVAC system maintenance requiring glycol containing hydronic systems to be drained, such as coil repair/replacement, valve repair/replacement, new loads added to the system, cleanup after a leak, disposal of container heels, etc. This procedure includes ethylene and propylene glycol solutions.

Responsibility

Anyone handling propylene glycol or other heat exchange fluids on UVA property must comply with this procedure.

Procedures

1. If not done automatically by AiM, the supervisor/project manager will ensure work orders associated with glycol systems include a note that refers workers to this procedure.
2. To conserve resources, glycol solutions should be captured for reuse or recycling where feasible. Reuse involves temporarily storing the material in containers and recharging it back into the system at the end of the task. Recycling involves storing the material in containers and shipping them to a recycling facility. The original chemical supplier may provide recycling services.
3. If the glycol solution must be removed from the pipe or system to complete the task, work with the appropriate zone HVAC maintenance supervisor to:
 - a. Coordinate the project timing with the appropriate zone manager.
 - b. Estimate the quantity of solution to be removed
 - c. Identify any system- or building-specific protocols for conducting the work and handling the glycol solution.
 - d. Review the safety data sheet (SDS) for the particular glycol solution involved in the task to determine health and physical hazards, recommended personal protective equipment (PPE), handling and storage guidelines, and accidental release measures.
 - e. Decide whether the glycol solution will be captured for reuse or for off-site disposal. Under no circumstances can any glycol solution be disposed of down the sanitary sewer system or storm sewer system.
 - i. Determine and obtain the proper type and size containers for storage of all the glycol solution removed. If the solution will ultimately be shipped off-site,

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coordinate with Environmental Health & Safety to ensure proper containers are used; EHS chemical waste staff are available by calling 434-982-4911.

- ii. At the end of the task, return the recovered glycol solution to the system if it will be reused. Otherwise, arrange for EHS to pick up the recovered glycol for shipment to an off-site recycling or disposal facility.
- f. If a glycol solution accidentally gets into the sanitary drain system, quickly report the estimated volume, solution concentration and timing of the incident to Utilities Distribution so they can alert RWSA. If help is needed cleaning up an interior spill or if the glycol solution enters a storm drain or is otherwise spilled outside, follow the procedures in the [spill response SOP](#).