

## **Sewer Lift Station Safety Procedure Survey**

	Chattanooga	Clarksville	Knoxville	Murfreesboro	Nashville
1) Does your collection system or plant have sewer lift stations with dry wells that can only be entered by way of a ladder?	Yes.	Yes (the ladder is "part of" or "integral" to the lift station.	Yes.	Yes.	Yes.
2) Do you, or would you consider the entry into these dry wells always a "permit required confined space" entry?	No.	Yes. If the confined space has a danger of engulfment / entrapment, not designed for continuous occupancy, deleterious atmospheric conditions, or if the depth exceeds OSHA requirements for permit-required confined space, then the area will be treated as a permit-required confined space.	Yes.	Yes, 90% of the time.	No.

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3) Under what circumstances do you or would you call this type of space a "nonpermit required confined space?"	If there are working ventilation fans present in the station.	N/A	Only when the following items can be confirmed: No atmospheric hazards, mechanical ventilation not required, historical monitoring data supports no atmospheric hazards, all hazards are eliminated and the opening is guarded.	If under new construction.	Presence of station exhaust fans to eliminate the potential hazardous atmosphere, functioning gas monitors (02, H2S, CO, & LEL).
4) If you are calling entry into a lift station dry well via a ladder "non-permit required," under what circumstances would you reclassify that space as "permit required?"	If vent fans are not working; power outage or flooded drywell.	N/A	If an atmospheric hazard presented itself or if introducing a hazard (e.g. welding).	If there is a leak, an atmospheric hazard, a structural hazard, or if an alarm in plant has alerted us to a risk.	Absence of ventilation and gas meters (potentially hazardous atmosphere).
5) When and how often do you or would you conduct atmospheric monitoring for a workspace such as this?	All of my operators carry oxygen/gas meters to check such stations before entry, and while in such stations.	Always. Continuous monitoring as long as the confined space is occupied.	Monitor prior to entry and continuously in area of personnel.	If entering the space, then 100% of the time.	Continuous (station equipment) and upon entry (employee PPE includes personal gas monitors worn on belt).

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6) Does the presence or absence of powered ventilation change the way gas monitoring is performed or the classification of the space as "permit required" or "nonpermit required?"	Yes, without ventilation these stations would be permit required if portable ventilation was not available either.	No	Powered ventilation does not change gas monitoring or classification.	No, not in our case.	The presence/absence of powered ventilation does not change the SOP for entry with PPE gas monitors. It does impact the space classification as a "permit/non-permit required."
7) Would a malfunctioning sump pump, resulting in sewage on the floor, cause you to classify the dry well as a "permit required confined space?"	Not as long as vent fans were running and gas meters were present.	No. In the example given, the confined space has already been established as "permit-required."	Yes, the introduction of a new hazard would require reclassification.	Yes.	No, provided the sewage is below "boot level" and station exhaust air and gas monitoring remains functional.
8) Would the depth of the water on the floor make a difference in that decision? If yes, at what level?	Yes, it depends on ventilation, metering and other safety issues at each site.	No. See answer above.	No.	No.	Yes, at depths exceeding ~12". At this depth the space is dewatered with submersible pumps and foul air is exhausted before entry is attempted.
9) How many workers generally respond to after-hours sewer lift station trouble calls?	One.	Two minimum.	One.	The minimum is two workers.	Two.

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10) At what point would more workers respond?	If it was in a trouble area within the city or if maintenance or electrical personnel were needed for repair.	When one individual cannot act as supervisor and attendant. When the workload exceeds the abilities of two people to perform their job and meet the requirements of safely performing the work.	After initial investigation and it is deemed that a permit required confined space entry is necessary.	It would depend on the situation, how bad the hazard was, or if we needed more entrance into the space.	In response to a request made by the first-responders.
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