

## Germantown Campus Confined Space Inventory

Type of Space	Description/ Use	Potential Hazards	Minimum Testing Required for Entry	Other	Sample
<b>HVAC Vaults and IT Vaults</b>	Concrete-lined pits for heating/cooling water feed/return, and voice and data telecommunications conduits.	Standing water, hot pipes (in HVAC vault), electrical conductors (if sump pump is installed), CO or CO2 from automobile exhaust or organic decomposition, low O2 from metal oxidation. H2S from underground sources.	O2, CO, H2S	Inspect sides for damage. Determine need to pump water. Are electrical conduits exposed? Is there sufficient space to work? Collect air monitoring history to determine if spaces require positive ventilation when opened. HVAC vault can be very warm and may need ventilation for comfort.	
<b>Stormwater Sumps and Ejection Pits</b>	Collection point for stormwater runoff from building and surrounding impermeable surfaces.	Engulfment, electrical power to pumps. Low O2. Risk of hazardous contaminants is low.	O2	Lock Out/Tag Out	
<b>Stormwater Drains (Exterior)</b>	Underground pipes and chambers to collect and direct stormwater runoff to a waterway. Access points allow entrance for clearing drains or maintenance/inspection on filtration, sedimentation/separation systems.	Toxic or flammable gases from upstream sources or decay of organic matter, low oxygen, oils or other contaminants, insects or small animals, engulfment.	O2, CO2, H2S, Flammable Gases	College employees do not enter the storm drains. Filtration systems are managed by contract.	   
<b>Sanitary Sewer Ejection Pits</b>	Collection point for wastewater requiring pretreatment before discharge to the sanitary sewer.	Engulfment, microbiological hazard, corrosive chemicals for cleaning/sanitization, low O2 from biological or chemical activity.	O2	Lock Out/Tag Out	

Type of Space	Description/ Use	Potential Hazards	Minimum Testing Required for Entry	Other	Sample
<b>Heating Boiler</b>	Pressure vessels for heating utilities	Heat, steam, low O2	O2, other monitoring for hazards introduced into space	Lock Out/Tag Out, active ventilation	
<b>HVAC Housing - Air handlers, heating units</b>	Housing for heating/cooling units and fans. Most are installed on rooftops. Excludes ducts without mechanical equipment.	Electrical/mechanical heat, fuel for non-electrical heating units.	None Expected	HVAC equipment with a standard door would not normally be considered a confined space. However, any space may require Lock-out/Tag-out before entry. If equipment is not guarded or guards will be removed, the equipment must be locked out or entry made under a written work permit	
<b>Elevator Shafts</b>	Vertical spaces for passenger and freight lifts.	Mechanical, electrical, hydraulic fluid	Not required unless work introduces a hazard to space.	Lock-out/Tag-out -- secure the elevator car and moving parts.	
<b>Crawl spaces/unexcavated spaces</b>	Space under buildings for access to utilities, ductwork, etc.	Mechanical, electrical, hot/cold surfaces	Not required unless work introduces a hazard to space	None identified	
<b>Water Treatment WFI Tank</b>	Water Storage	Low oxygen, Corrosive liquids, Hot liquids, Engulfment from liquids, Steam	Oxygen, %LEL, Corrosive atmosphere (HCl)	Lockout utilities	