

Messiah College

Confined Space Policy and Procedure

Policy: It is the policy of Messiah College to provide proper methods for the safe entry and work practices in confined spaces. The policy applies to all employees who enter confined spaces at Messiah College. Most work that must be performed in confined spaces will be done by an outside contractor.

Objectives: Identify confined space, implement entry permit system, require testing for hazardous atmospheres, provide safety equipment and ventilation guidelines and establish a required training program for confined space entry. Provide safety requirements to be followed while entering, exiting, and working in confined spaces at Messiah College.

Definitions: **Confined Space:** *A confined space is a space large enough and so configured that an employee can enter and perform assigned work; and has limited or restricted means for entry or exit (i.e. tanks, vessels, storage bins, vaults, elevator pits, sewers, and pits); and is not designed for continuous occupancy.*

Non-permit Required Confined Space: *A space that meets the definition of a confined space, but does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.*

***Non-permit required spaces may become permit confined spaces according to the type of work being performed. Some work (i.e. welding) can create a hazardous atmosphere, thus making it a permit required confined space.*

Permit Required Confined Space: *A space that meets the definition of a confined space, but has one or more of the following characteristics:*

- 1. Contains or has a potential to contain a hazardous atmosphere;*
- 2. Contains a material that has the potential for engulfing an entrant;*
- 3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section; or*

4. *Contains any other recognized serious safety or health hazard.*

Authorized Attendants: *Attendants are individuals stationed outside one or more confined spaces that monitor the authorized entrants.*

Entry Supervisor: *Entry supervisors are responsible for determining if acceptable entry conditions are present prior to entry, for authorizing entry and overseeing entry operations, and for terminating the entry. An entry supervisor may also serve as an attendant or authorized entrant if properly equipped and trained.*

Authorized Entrant: *An employee who is authorized to enter a permit required space. Only employees who are trained as an entrant and have obtained a permit signed by the entry supervisor may enter a permit required confined space.*

Training: *All employees who may enter, attend, or supervise employees entering confined spaces must be trained. New hires that will participate in confined space entry should be trained, by an outside consultant, prior to entering a confined space.*

Equipment: *Gas Monitor
Harness
Lighting
PPE
Radios for communication
Rescue Rope
Respirators
Tripod
Attachment A: Guidance for Confined Space Entry
Attachment B: Confined Space Entry Permit
Attachment C: Procedures for Atmospheric Testing in Confined Spaces
Attachment D: Confined Space Locations at Messiah College*

Confined Space Contractor Contact Information:
*Eichelbergers, Inc.: Luke Lazar 717.766.4800
Ingenuity: Jim Mooney 717.796.9226
Sponaule: Tony 717.703.3245 or 717.564.1515*

Procedure:

Responsibility

Action

Environmental Health and Safety Manager

- 1 Develop and implement the Messiah College Confined Space Program.
- 2 Assist departments identify, label, and document confined spaces. Create and maintain a listing of confined space locations on Messiah Campus.
- 3 Issue and maintain Confined Space Entry Permits.
- 4 Review outside contractor written Confined Space policies, training certificates, and Material Safety Data Sheet's (MSDS's).
- 5 Recommend personal protective equipment (PPE), if necessary.
- 6 Make sure hoist and instrument certifications and calibrations are up to date.

Entry Supervisor

- 1 Conduct evaluations of confined spaces, and classify as either a Permit Required Confined Space or Non-Permit Required Confined Space.
- 2 Conduct atmospheric testing to verify that conditions in the permit space are acceptable for entry throughout the duration of an authorized entry.
- 3 Develop, conduct, and document, employee Confined Space Training.
- 4 Maintain and distribute confined space entry equipment including tripod, air monitoring instrumentation, harnesses, as necessary.

- 5 Notify the Environmental Health and Safety Manager of upcoming confined space activities.
- 6 Identify those employees who will be involved with confined space work and ensure that they have received confined space certification training. The Environmental Health and Safety Manager will maintain a list of those employees who have received this training.
- 7 Obtain a Confined Space Permit from the Environmental Health and Safety Manager prior to work in a permit-required confined space.
- 8 Perform any necessary lockout/tagout procedures needed to ensure safe entry.
- 9 Obtain the appropriate personal protective equipment (PPE), if necessary.
- 10 Obtain the proper safe lighting equipment to enable employees to see well enough to work safely and to exit the space quickly in the event of an emergency.
- 11 Obtain barriers and shields to protect workers from pedestrian and vehicular traffic.
- 12 Obtain the appropriate ladders needed for safe ingress and egress by authorized entrants.
- 13 Ensure rescue, retrieval, and emergency equipment is available to extract or treat injured personnel.
- 14 Ensure employees know emergency procedures (i.e. emergency phone numbers, fire extinguisher locations).

- 15 Must know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- 16 Verifies, by checking that the appropriate entries have been made on the permit, that all tests specified by the permit have been conducted and that all procedures and equipment specified by the permit are in place before endorsing the permit and allowing entry to begin.
- 17 Verifies that rescue services are available and that the means for summoning them are operable.
- 18 Ensures removal of unauthorized individuals who enter or who attempt to enter the permit space during entry operations.
- 19 Determines, whenever responsibility for a permit space entry operation is transferred and at intervals dictated by the hazards and operations performed within the space that entry operations remain consistent with terms of the entry permit and that acceptable entry conditions are maintained.
- 20 Terminates the entry and cancels the permit as required in accordance with this policy.

Authorized Entrant

- 1 Must know the hazards that may be encountered during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- 2 Must communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to

evacuate the space as required by this section.

- 3 Must know how to properly use personnel protective equipment (PPE) provided.
- 4 Must alert the attendant whenever:
 - a. The entrant recognizes any warning sign or symptom of exposure to a dangerous situation.
 - b. The entrant detects a prohibited condition.
- 5 Must exit from the permit space as quickly as possible whenever:
 - a An order to evacuate is given by the attendant or the entry supervisor.
 - b The entrant recognizes any warning sign or symptom of exposure to a dangerous situation.
 - c The entrant detects a prohibited condition.

Authorized Attendants

- 1 Must know the hazards that may be faced during entry, including information on the mode, signs or symptoms, and consequences of the exposure.
- 2 Must be aware of possible behavioral effects (i.e. disorientation, faulty judgment) of hazard exposure in authorized entrants.
- 3 Must continuously maintain an accurate count of authorized entrants in the permit space and ensure that the means used to identify authorized entrants accurately identifies who is in the permit space.
- 4 Must remain in a designated location outside the permit space during entry operations until relieved by another attendant.
- 5 Assist the occupants entering the confined

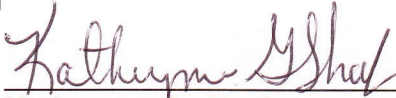
space, but shall not, at any point, enter the confined space.

- 6 Communicates with authorized entrants as necessary to monitor entrant status and to alert entrants of the need to evacuate the space.
- 7 Monitors activities inside and outside the space to determine if it is safe for entrants to remain in the space and orders the authorized entrants to evacuate the permit space immediately under any of the following conditions:
 - a If the attendant detects a prohibited condition.
 - b If the attendant detects the behavioral effects of hazard exposure in an entrant.
 - c If the attendant detects a situation outside the space that could endanger the entrants.
 - d If the attendant cannot effectively and safely perform all the duties stated in this section.
- 8 Summon rescue and other emergency services, safety dispatch x6005, as soon as the attendant determines that entrants may need assistance to escape from permit space hazards. Safety dispatch will notify 911, if necessary.
- 9 Takes the following actions when unauthorized persons approach or enter a permit space while entry is underway:
 - a Warn the unauthorized persons that they must stay away from the permit space.
 - b Advise the unauthorized persons that they must exit immediately if they have entered the permit space.


- c Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the permit space.
- d Performs no duties that might interfere with the attendant's primary duty to monitor and protect the entrants.

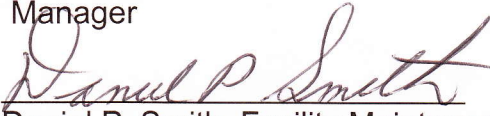
10 Performs non-entry rescues.

Approved Reviewed Revised


Kathrynne G. Shafer, Vice President for Operations

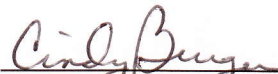

Bradley A. Markley, Director of Facility Services


Hilary Kreider, Environmental Health and Safety Manager


Daniel P. Smith, Facility Maintenance Service Manager


Russ Ehrich, Project Manager


Jared Rudy, Grounds Services Manager


Cindy Burger, Director of Safety and Dispatch Services


Steve Kennedy, Fleet Services Mechanic

"Note - The signed copy of this procedure is filed in the Facility Service Department. By signing this policy you have agreed to enforce the contents and adhere to standards".

Attachment A: Guidance for Confined Space Entry

Permit:

A confined space entry permit is required to authorize entry into a confined space. A sample copy of the required permit is shown as Attachment B.

- A. A confined space entry permit/checklist must be filled out by the Entry Supervisor. Or the Environmental Health and Safety Manager.
- B. Only those who have been trained in the areas described in this policy by Messiah shall sign the confined space entry permit.
- C. A thorough review of the checklist must be completed at the confined space location by the Entry Supervisor. The signed permit, along with special precautions to be followed, must be handed to and discussed with those persons who will enter the confined space.
- D. It shall be specific exactly when the permit will begin and expire.

NOTE: For NO reason will the permit extend into the following shift or day without being reissued and approval.

- E. The approved permit shall be posted in closed proximity to the confined space entrance. Also, a sign stating that a "Confined Space Entry is in Progress" shall be posted in close proximity to the confined space.
- F. The Environmental Health and Safety Manager shall retain each cancelled entry permit for at least one (1) year.

Training:

Persons who are required to work in confined spaces or in support of those working in confined spaces (attendants) shall be trained and received instructions in the following areas:

- ! Nature of the work to be performed
- ! Emergency confined space entry and exit procedures
- ! Use of entry and emergency equipment

Preparation of Confined Space Prior to Entry

Removal of Residual Materials:

Residual materials in the confined space shall be removed before work is started. Sludge or encrustation shall be removed to as large an extent as possible before entry.

Exception can be made only if low levels of hazardous materials are involved and the employee is totally isolated from exposure to any harmful residual from the materials/hazards created by it (i.e. suffocation hazard of partially filled tanks, crush hazards of materials caked on top/sides of the space). Exceptions are to be considered on a case-by-case basis.

In cases where the residual material is flammable, present a potential health and/or toxicity hazard, entry shall **not** be permitted until the concentration of vapors/gases are below the “Immediately Dangerous to Life and Health” (IDLH) levels as established by NIOSH/OSHA. The IDLH levels are published in the NIOSH/OSHA Pocket Guide to Chemical Hazards. See the Environmental Health and Safety Manager or the NIOSH web site.

If the IDLH level is not listed in the guide, the concentration of flammable vapors/gases must not be above the “Short Term Exposure Level” (STEL).

Purging:

- A. The confined space must be purged to ensure fresh air prior to entries using a mechanical air blower or exhauster that is safe for service in the specific environment.

Exceptions to Part A can occur in cases where it is not practical to ventilate the area because the residual materials cannot be removed. In such cases, SCBA or continuous airline respirators must be worn. (This exception does not apply when residual material is flammable).

- B. Thorough purging is best accomplished by carefully choosing the best location of the suction and discharge of the exhaust blower/exhauster. Locate the blower suction and discharge at the opposite ends of the confined space or attach a flexible duct to the exhauster suction and extend it to a remote part of the space when only a single opening is available.
- C. The rate and volume of fresh air purging is to be determined by the nature and quantity of the residual material and the size and configuration of the confined space.

- D. The discharge of the purged air must be located where it will not present a flammability/toxicity hazard.

Isolation:

All pipelines, which are intended to discharge a hazardous material into the confined space, must be isolated from the confined space as follows:

- A. Where practical, each pipeline shall be physically disconnected from the space or unit, and blind flanges installed and tagged on the live end of the pipe. All blind flanges are to be of materials that are corrosion resistant and must be rated for the line pressure, per ASME specifications.
- B. If the requirements of (A) are not practical, acceptable isolation may be achieved by installing slip blanks between flanges in the pipeline upstream of the line's entry into the unit, but as close as possible to the piping entrance.
- C. If (A) and (B) are not possible or practical, and the materials are NOT hazardous, isolation may be achieved by locking and tagging tow valve in series in the closed position and providing an open bleed line between the valves with a visible discharge (DOUBLE BLOCK AND BLEED).
- D. If (A, B, C) are all totally impractical, the pipelines should be re-engineered to permit compliance or an alternate plan for safe isolation should be developed and approved by the person responsible for signing off on the confined space entry permit.

Lock-Out:

All electrically controlled movable equipment (agitators, storage tank pumps, elevator motor, fans and other energized equipment) that could cause injury if energized, shall be deactivated and locked and tagged in the OFF position, in accordance with Messiah's LOCK-OUT/TAG-OUT procedures.

Moveable Equipment Drives:

In addition to LOCKOUT and where practical, it is recommended that any movable equipment drives have the drive belt physically disconnected or the electric motor leads be disconnected.

Atmospheric Testing:

The atmospheric testing described below shall be performed on all confined spaces before entry.

- A. Flammable gases, vapors or mists:

A flammable gas test shall be performed using an appropriate meter calibrated as per the manufacturer's recommendations and qualitatively test before each

use. Concentrations of gases, vapors, or mists will not exceed ten percent of its lower explosive level (LEL).

B. Oxygen:

An oxygen test for deficiency and enrichment shall be performed using an appropriate meter before entering **ALL** confined spaces. The sample shall be taken at representative points with the unit. The oxygen concentration must be in the range of 19.5% to 23.5% before entry is permitted.

C. Additional Contaminants:

When the confined space has contained material which is toxic by inhalation, the confined space must be tested by analyzing a grab sample taken at a representative point. This testing shall be performed using direct-reading instruments (i.e. Draeger tubes, etc.). Results shall be such that persons will not be exposed to concentrations above those specified by industry standards.

D. Ambient Temperature:

Consideration shall be given to providing a confined space that is neither excessively hot nor cold. Engineering controls, administrative controls or personal protective equipment controls shall be implemented to counteract the hazard (decreasing order of preference).

Respiratory Protection Requirements

- A. If the atmosphere in a confined space is a potential health hazard and/or toxic, personnel entering the confined space must wear an open circuit, positive pressure, full-face piece airline respirator or a full-face piece SCBA.
- B. If the atmosphere in a confined space is below the IDLH level, personnel entering a confined space must wear, as a minimum requirement, PAPR (Positive Air Purified Respirator) and check all O₂ levels.
- C. Negative pressure air purifying respirators SHALL NOT be worn for confined space entry if the atmosphere is hazardous.
- D. For welding or gas cutting operations in a confined space, personnel shall wear the same respiratory protection as in (A).
- E. Airline respiratory protection may be deleted in areas that are open top with adequate general ventilation and if the confined space does not contain any materials hazardous to health.

- F. In areas with limited access, respirators may be deleted, providing all three of the following conditions exists:
- The vessel is free of any potentially hazardous materials
 - Welding or gas cutting is not being performed.
 - Mechanical ventilation is provided.
- G. Breathing air in cylinders for use with airline respirators and/or SCBA apparatus must meet or exceed Grade D requirements as outlined in the Compressed Gas Association Standards.
- H. All respiratory protection equipment must be NIOSH/OSHA approved for the service for which it is being used.

Electrical Appliance:

- A. Lighting equipment for confined space entry shall be powered by a 12-volt electrical system. If a 110-volt system is preferred, a ground fault interrupter must be connected to the electrical system outside of the confined space.
- B. All electrical systems must be an approved type for the location and hazards.
- C. If powered electrical tools are used in a confined space, a ground fault interrupter must be connected to the electrical system outside of the confined space.

Emergency Response Equipment:

- A. A full-body harness and D-ring shall be properly fitted to each person entering an enclosed confined space. A lifeline shall be attached to the body harness extending out to the primary exit to the attendant and shall be located as to permit safe removal of the individual.
- B. Where rescue is to be accomplished by lifting the person vertically, mechanical hoisting equipment shall be provided directly above the entry opening (for purposes of hoisting the person by the lifeline), mounting either on overhead structures (capable of supporting the weight of the person) or on a detachable pulley support frame. The equipment shall be such that a rescue team can readily lift the person.
- C. A continuous supplied air respirator shall be located near the attendant ready for immediate use.

Exit Capabilities:

Before entry, the means of exiting shall be determined. Any special precautions for entry or exit must be taken and clearly specified on the permit checklist. Each case must be evaluated separately.

Attendants and Rescue Teams:

- A. All confined space operations shall require an Authorized Attendant for personnel in the unit. The Attendant's primary function is to assure continued safe work in the confined space throughout the duration of the job and to call for rescue aid if assistance is required.
- B. An Authorized Attendant may pass tools but shall have no other job that will take his/her attention away from the person(s) in the confined space (i.e. Attendant must not walk to a vehicle parked away from the personnel in the confined space to get tools, etc.).
- C. An Authorized Attendant must be trained in the duties assigned to confined space entry and rescue. Training records should be kept on file for five years.
- D. An Authorized Attendant shall be required to wear a body harness and have a separate lifeline and air-supplied breathing apparatus at the confined space location.
- E. An Authorized Attendant shall maintain either constant observation of person(s) in confined space, maintain constant radio, or voice contact with the employee in the confined space.
- F. An Authorized Attendant shall provide constant surveillance of the work and protective equipment associated with the confined space entry.
- G. An Authorized Attendant shall visually observe the continuous gas and oxygen monitor. If an alarm is activated, the Authorized Attendant shall notify the individual in the confined space to abort the entry.
- H. Whenever an emergency condition requires the immediate removal of a person, the Authorized Attendant shall:
 - Summon aid immediately by activating a previously agreed to alarm/notification plan.
 - Perform rescue work from OUTSIDE the confined space.

AT NO TIME SHALL AN INDIVIDUAL ENTER THE CONFINED SPACE UNTIL ADDITIONAL ASSISTANCE ARRIVES AT THE SCENE.

- A. When performing rescue work the Authorized Attendant must wear and use self-contained breathing apparatus and/or positive pressure airline respirator, have a lifeline attached to his/her harness and another trained person outside the area before entry.
- B. For every location involved in confined space entry, a rescue team shall be assigned and trained annually to provide quick and effective first aid, CPR and

rescue. Training in First Aid and CPR is available through the Messiah College Safety Department.

Burning Inside Confined Spaces:

- A. All the standard procedures required for burning or hot work as per Messiah College policy shall be followed.
- B. Air monitoring will be conducted on a continuous basis. If the monitor indicates flammability concentrations in the confined space other than zero, welding or other burning will be stopped immediately and will resume only after an investigation shows that it is safe to do so.
- C. Where welding or burning will take place inside a unit, NIOSH/OSHA approved continuous airline respirators or positive pressure self-contained breathing apparatus shall be required for all persons inside the unit.
- D. Welding or burning shall not be done if flammable dusts are present in the confined space or in the air around the confined space.

Other Hazardous Work in Confined Space

If it is necessary to perform other hazardous work inside the confined space, the nature of the job, the hazards and the necessary safety precautions shall be thoroughly evaluated on a case-by-case basis. The Entry Supervisor or the Environmental Health and Safety Manager shall clearly describe the precautions effectively to all those who will do the work.

Equipment and Tools

- A. Tools shall be in good condition and proper for the use intended.
- B. For entry into metal confined spaces, all portable electric equipment must have ground fault circuit interrupters installed at the electrical outlet or the supply voltage shall be 12-volt or less.
- C. When there is the possibility of flammable liquids or gases being present, any electrical tools or equipment must be explosion proof or intrinsically safe.
- D. If there is a possibility of flammable liquids or gases being present, spark-generating operations (grinding, drilling, scraping, hammering with spark generating tools, etc.) shall not be permitted.
- E. Good illumination within the confined space shall be provided.
- F. Cylinders of compressed gases must not be taken into a confined space. Exempt from the rule are cylinders that are part of a self-contained breathing

apparatus or resuscitation equipment.

Personal Protective Equipment

- A. Normal requirements for proper personal protective equipment apply for confined space entry.
- B. All personal protective equipment requirements must be designated on the permit form, and fully explained to the persons involved in the confined space entry.

Completion of Work

- A. When work has been completed in a confined space, the Entry Supervisor or the Environmental Health and Safety Manager shall verify the following:
 - All personnel, equipment and materials have been removed from the confined space.
 - Locks and tags have been removed from all valves and piping and disconnected lines secured.
 - Personnel working in the confined space have removed all electrical equipment locks and tags.
 - All openings have been secured for normal operations.
 - Housekeeping has been completed.
 - The Environmental Health and Safety Manager shall retain each cancelled entry permit for at least one (1) year.
Any problem encountered during an entry operation shall be noted on the pertinent permit so that appropriate revision to the permit space program can be made.
- B. After all items have been completed, the Entry Supervisor can remove his/her lock from the main deactivation point and make the equipment ready for service.
- C. Emergency stand-by equipment shall be replaced and made ready for service.

Equipment Design:

- A. All new equipment large enough to accommodate entry shall be designed with minimum 24-inch diameter manhole.
- B. All new equipment layouts, which will require confined space entry, shall be designed with facility isolation in mind.

1. Safety Procedures:

Energy Lock-Out:

Double Blinds/Blanks: (isolation)

Ventilation Requirements:

Signs:

Barricades:

Trenching Requirements:

Briefing (Emergency Action Plan):

(Employee Alarm System/Communication):

Continuous Air Monitoring Requirements: (for/by)

2. Protective Equipment Used: (Circle)

Harness*

Lifting Device

Lifeline*

Personal Protective Equipment: _____

3. Other Permits in Space (e.g. hot work): _____

Other Contractors in Space: _____

4. Comments:

Permit Posted At: _____

5. Certification:

All procedures required by this permit and (29 CFR 1910.146) will be enforced.

Supervisor (sign)

Date

Time

All procedures required by this permit and (29 CFR 1910.146) were followed; the permit removed and voided, and the confined space locked/closed.

Supervisor (sign)

Date

Time

Equipment Problems: _____

Incidents/Accidents: _____

Comments: _____

A copy of this permit will be on file in the Environmental Health and Safety Managers Office in the Lenhart Building.

Attachment C: Procedures for Atmospheric Testing in Confined Spaces

Atmospheric testing is required for two distinct purposes:

1. Evaluation of hazards of the permit space.
2. Verification that acceptable conditions exist for entry into that space.

1. **Evaluation Testing:** The atmosphere of a confined space should be analyzed using equipment of sufficient sensitivity and specificity to identify and evaluate any hazardous atmospheres that may exist or arise, so that appropriate permit entry procedures can be developed and acceptable entry conditions stipulated for that space. Evaluation and interpretation of these data and development of the entry procedure should be done by, or reviewed by, a technically qualified professional (e.g. OSHA consultation service, or certified industrial hygienist, registered safety engineer, certified safety professional) based on evaluation of all serious hazards.

2. **Verification Testing:** The atmosphere of a permit space which may contain a hazardous atmosphere should be tested for residues of all containments identified by evaluation testing using permit specified equipment to determine that residual concentrations at the time of testing and entry are within the range of acceptable entry conditions. Testing order should be oxygen, flammables, and then toxics. Results of testing (i.e. actual concentration) should be recorded on the permit in the space provided adjacent to the stipulated acceptable entry condition.

3. **Duration of Testing:** Measurement of values for each atmospheric parameter will be monitored continuously.

4. **Testing stratified atmospheres:** When monitoring for entries involving descent into atmospheres which may be stratified, the atmospheric envelope should be tested a distance of approximately four (4) feet (1.22 meters) in the direction of travel and to each side. If a sampling probe is used, the entrant's rate of progress should be slowed to accommodate the sampling speed and detector response.

5. **Retest:** Periodically retest to verify that the atmosphere remains within acceptable entry conditions.

Attachment D: Confined Space Locations at Messiah College

	Number of spaces	Location	Description of location	Permit Required	Contracted out for entry?
Sollenberger Sports Center:					
Water Storage Tanks	2	Mechanical Room	Under Pool, 1,000 gallon tanks	Yes	Yes
Pool Surge Pits	2	Pool Area	Between lane and Diving Pool	Yes	Yes
Pool Filter Tanks	3	Mechanical Room	Under Pool, 1,000 gallon tanks	No	Yes
Eisenhower Campus Center:					
Boiler Tank	1	Rm 113 Mechanical Room	3,000 gallon tank	No	Yes
Cooling Tower	1	Outside Mechanical Room	Near Loading Dock	Yes	Yes
Water Storage for Cooling Tower	1	Rm 113 Mechanical Room	Underground	Yes	Yes
Smith Residence:					
	1	Rm C4 Mechanical Room	1,000 gallon tank Boiler Tank	No	Yes
Naugle Residence:					
	1	Rm B13 Mechanical Room	1,000 gallon tank Boiler Tank	No	Yes
Miller/Hess Residence:					
	1	Outside, in front of Hess	93,000 gallons Boiler Holding Tank	Yes	Yes
Witmer Residence:					
	1	Rm 008 Mechanical Room	2,000 gallon tank Boiler Tank	No	Yes
Climenhaga Fine Arts:					
	2	West side of building	11,000 gallon tanks	Yes	Yes
Frey Hall:					
	2	Rm 41	10,000 gallon tanks	Yes	Yes
Kelly Residence:					
	2	Rm C6A	500 gallon tanks	No	Yes

	Number of Spaces	Location	Description of Location	Permit Required	Contracted out for entry?
South Complex:	1	Outside, Northside of building	85,000 gallon tank	Yes	Yes
Bertram House:	1	Outside, towards Starry Field	500 gallon tank Grinder Pump Tank	No, if LO/TO	No
Larson Student Union:	1	Grease trap, delivery entrance	300 gallon	No	Yes
Engle Health Center:	1		500 gallon tank Electric Hot Water	Yes	Yes
	1		500 gallon tank Storage Tank	Yes	Yes
Boyer Hall:	1	B001	Crawl space	No	No
Total:	26				

Waiting on information from Upper Allen Township regarding locations of sewer/water manholes