CONFINED SPACE PROGRAM

Rose-Hulman Institute of Technology
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1.0 Purpose

The purpose of this program is to ensure the protection of all authorized Rose-Hulman employees from the hazards associated with confined space entry. This document contains requirements for practices and procedures to protect employees from those hazards of entry into and work within permit required confined spaces. This is the official policy of Rose-Hulman Institute of Technology.

It shall be the policy of Rose-Hulman to reduce the need for confined space entry. It shall also be the policy of Rose-Hulman to eliminate, whenever possible, all confined space hazards in order to reclassify permit-required confined spaces to non-permit required confined spaces. When confined space entry is necessary, all provisions of this document are to be followed.

2.0 Regulatory Reference

OSHA 29 CFR 1910.146

3.0 Scope

This program is applicable to all employees of Rose-Hulman Institute of Technology. An Institute employee is defined as any individual who receives compensation from the Institute for work performed. It includes part-time workers and temporaries.

4.0 Responsibility

The Office of Environmental Health & Safety is responsible for:

- Develop the written Confined Space Program and revise the program as necessary.
- Classify confined spaces as “permit required” or “non-permit required.”
- Provide detailed instruction and training on confined space hazards and entry procedures to those who may enter confined spaces.
- Provide guidance for the proper selection and use of appropriate air monitoring equipment, respiratory protection, and personal protective equipment to meet the requirements of this program.
- Provide instruction to personnel on the proper use of equipment for confined space entry.
- Evaluate and measure atmospheric hazards or advise personnel on routine measurement of atmospheric hazards in confined spaces.
- Provide guidance for the proper selection and use of appropriate safety and rescue equipment to meet the requirements of this program.
- Periodically audit work operations and documentation using canceled permits to evaluate the overall effectiveness of the confined space entry program and ensure that employees participating in entry operations are protected from permit space hazards.
- Conduct work site inspections to review unit compliance with confined space entry procedures.
• Maintain records of equipment maintenance and employee training.
• Inform employees who may enter the permit confined space by posting danger signs or by training.
• Issue and cancel entry permits.
• Identify and evaluate the hazards of permit spaces before employees enter them.
• Assist each Department / Supervisor in identifying confined spaces encountered by his / her employees.

Supervisors are responsible for:
• Identify and report job areas and locations that are or may be confined spaces.
• Identify personnel who will enter confined spaces.
• Identify the personnel under their supervision required to wear respirators.
• Conduct work site inspections to review unit compliance with confined space entry procedures.
• Enforce the lockout program for their department.
• Conduct a pre-entry briefing to inform entrants of possible hazards that may be encountered in a confined space.
• Identify the people who will enter the confined spaces.
• Take the necessary measures to prevent entrance into prohibited permit spaces.

Employees who may enter confined spaces shall:
• Comply with the confined space entry procedures contained herein and with those procedures stipulated by their supervisor and/or EH&S.
• Store, clean, maintain, and guard against damage to equipment that is used for confined space entry.
• Report any deficiencies or malfunction of equipment to a supervisor.
• Understand emergency procedures in case of an accident in a confined space.
• Under no circumstance enter a confined space that is suspect of having a non-respirable atmosphere, even to rescue a fellow employee.
• Participate in training prior to entering any confined space.

Copies of the written program are located in the Office of Environmental Health & Safety and can also be found on the Office of Environmental Health & Safety website.

5.0 Definitions (per OSHA 29 CFR 1910.146)

Confined space: a space that:

• Is large enough and configured that an employee can bodily enter and perform assigned work
• Has limited or restricted means for entry or exit
• Is not designed for continuous employee occupancy

A permit required confined space means a confined space that has one or more of the following characteristics:

• Contains or has a reasonable potential to contain a hazardous atmosphere.
Office of Environmental Health & Safety

- Contains a material that has the potential for engulfing an entrant.
- 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 small cross-section.
- Contains any other recognized serious safety or health hazard.

6.0 Training

Training will be conducted annually for affected staff. Any staff who could potentially enter a confined space shall participate in training prior to entering. EH&S will coordinate training.

7.0 Confined Space Classification

EH&S will identify and classify every confined space as a:
1. Permit Required Confined Space
2. Non-Permit Confined Space – if the confined space does not present an observable, serious safety hazard or potential / real atmospheric hazard.

8.0 Program Elements

Preventing Unauthorized Entry
In order to prevent unauthorized entry into permit-required confined spaces, the following mechanisms must be utilized:

- Posting warning signs stating “Warning Permit Required Confined Space”
- Installing locks and covers at entry points
- Erecting barriers

Identifying Permit Space Hazards
The following hazards shall be identified prior confined space entry:

- Atmospheric hazards
- Asphyxiating atmospheres
- Flammable atmospheres
- Burns
- Heat stress
- Engulfment
- Electrocution
- Noise
- Uncontrolled release of energy
- Physical (falls, slip, trip)
- Mechanical

Equipment Use and Maintenance
Equipment, including testing, ventilating, lighting, monitoring, communication, and personal protective equipment, necessary for the safe entry into a permit space will be provided and maintained by EH&S.
Calibration will be completed by EH&S. Those trained in confined space entry shall complete a bump test before each use.

Operating manuals for multi-gas meters must remain with the meter at all times.

Contractors shall provide their own equipment (including air monitoring equipment, retrieval equipment, atmosphere abatement equipment, personal protective equipment, etc)

Any time employees enter permit required confined spaces that have a vertical entry must use equipment that is designed for non-entry rescue (Tri-pod, retrieval hoist and harness). EH&S will provide.

Testing for Acceptable Entry Conditions
Permit space evaluation will include all testing conducted before an entry as well as ensuring acceptable entry conditions are maintained throughout the entry. The Confined Space Entry Form outlines conditions to be monitored.

Permit Space Attendant
Any work in a confined space shall require at least one attendant outside a permit space for the duration of the entry operations.

Attendant Emergency Response
To facilitate non-entry rescue, retrieval systems or methods shall be used whenever an authorized entrant enters a permit space, unless the retrieval equipment would increase the overall risk of entry or would not contribute to the rescue of the entrant.

Retrieval systems shall meet the following requirements: each authorized entrant shall use a full body harness, with a retrieval line attached at the center of the entrant’s back. A mechanical device shall be available to retrieve personnel from vertical permit spaces more than five (5) feet deep.

If an injured entrant is exposed to a known substance, a Safety Data Sheet (SDS) or other similar written information must be kept at the worksite. The SDS or written information shall be made available to the medical facility treating the exposed entrant.

Training and Duties of Entry Personnel
There three specific members of a permit required confined space entry team:
- Authorized Entrants
- Attendants
- Lead Worker

Training will be conducted annually providing all staff and their supervisors whose work is regulated by this section acquire the understanding, knowledge, and skills necessary for the safe performance of the duties assigned.

Training shall be provided:
- Before the employee is first assigned duties
- When there is a change in any assigned duties or a change to the permit space
• When it is determined the employee deviates from the procedures outlined by this program and CFR 29 1910.146.

Training shall establish employee proficiency in the duties required by this program and CFR 1910.146 and shall establish new or revised procedures, as necessary, for compliance.

Each employee will receive a certification containing their name, the date of training, and the signatures or the trainers. EH&S will maintain copies of these certifications.

Only trained attendants, authorized entrants, and personnel authorizing or in charge of entry shall work in and around a permit space during an entry procedure.

Rescue and Emergency Services
Terre Haute Fire Department is designated as the rescue team. EHS& will coordinate with THFD to ensure they have visited all confined spaces and have the information needed to perform rescue operations on campus.

Written Permit System
A permit shall be utilized for every entry into permit-required confined spaces. This permit can be obtained from EH&S.

Each canceled entry permit shall be retained for at least one year to facilitate the review of the permit-required confined space program. Any concerns encountered during an entry operation shall be noted so appropriate revisions to the permit space program can be made.

The confined space entry permit forms shall be completed prior to entering all confined spaces that:

• Need to be reclassified to non-permit spaces by means of air monitoring before entering
• Are alternate entry spaces, or
• Are permit-required confined spaces

Coordinating Entry Operations
All outside contractors performing work in confined space entry permit area shall be informed of any fire, explosion, health, or other safety hazards of that confined space. This information shall be based on current or past history of the confined space and the nature of the contractor's work procedure in making such disclosure.

EH&S shall inform contractors of Rose-Hulman’s safety rules and emergency plans which may be applicable to the contractor’s employees. Contractors and their employees must not be allowed to enter a confined space until the provisions of this program have been satisfied. When both Rose-Hulman staff and a contractor’s staff are working in or near permit spaces, their entry operations must be coordinated to avoid endangering any personnel.
At the conclusion of the entry operations, the contractor must be debriefed regarding the permit space program that was followed and concerning any hazards confronted or created in permit spaces during entry operations.

It is the responsibility of each contractor who is retained to perform permit space entry operations to obtain any available information regarding permit space hazards and entry operations from Rose-Hulman. They must also coordinate entry operations with Rose-Hulman when both Rose-Hulman and contractor staff will be working in or near permit spaces. Rose-Hulman must be informed of the permit space program that the contractor will follow and of any hazards confronted or created in permit spaces, either through a debriefing or during the entry operations.

**Concluding Entry**
The lead worker will determine when the entry operations have been completed. The permit space will be closed and the permit canceled. The lead worker will enter the date, time, and signature at the bottom of the Confined Space Entry Form.

**Program Review and Revision**
EH&S will review entry operations and revise the procedures to correct any deficiencies before subsequent entries are authorized.
**PERMIT REQUIRED CONFINED SPACE ENTRY PERMIT**

**Date:**

**PRCS #:**

**Department:**

**Name of PRCS:**

**Requested by:**

**Location:**

**Purpose of Entry (Describe work to be performed):**

**Expiration Date:**

**Expiration Time:**

**AIR MONITORING**

<table>
<thead>
<tr>
<th>Type of Meter/Model:</th>
<th>Calibration Date:</th>
<th>Testing Performed by:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Serial or Unit #:</td>
<td>Signature of Tester:</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>TIME</th>
<th>LEL %</th>
<th>OXY %</th>
<th>H₂S PPM</th>
<th>CO PPM</th>
<th>PPM</th>
<th>TIME</th>
<th>LEL %</th>
<th>OXY %</th>
<th>H₂S PPM</th>
<th>CO PPM</th>
<th>PPM</th>
</tr>
</thead>
<tbody>
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</tr>
</tbody>
</table>

**MONITORING SHOULD BE PERFORMED CONTINUOUSLY WHILE WORK IS PERFORMED. BESIDES RECORDING THE INITIAL RESULTS, RECORD RESULTS OF SAMPLING AT THE FOLLOWING INTERVALS: EVERY ______ HOURS or EVERY ______ MINUTES.**

**PRCS CHECKLIST**

<table>
<thead>
<tr>
<th>YES</th>
<th>NO</th>
<th>N/A</th>
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<tbody>
<tr>
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</tbody>
</table>

- Electrical, Mechanical or Hydraulic Energy Sources Locked-Tagged/De-energized/Tested
- All Ignition Sources Remove And Isolated
- Air Monitoring Performed
- Personnel Trained In PRCS Operations (Certified)
- Explosion Proof Lighting Inspected And In Use
- Personnel Approved For Respirator Use
- All Lines Connected To Permit Space Have Been Blinded Or Disconnected
- Required Personal Protective Equipment Inspected, In Good Condition And In Use
- Safety Harness, Lifeline And Extraction Device Inspected, In Good Condition And In Use
- In-house and Outside Emergency Rescue Systems Checked And Active:
  - Rescue Team: YES  | NO  | Fire: YES  | NO  | Ambulance: YES  | NO  |
  - Communication Systems In Place And Tested | Method: |
  - Electrical Equipment Intrinsically Safe And Non Sparking Tools Used
  - Emergency Equipment (SCBAs, Fire Extinguisher, First Aid Kit, Etc.,) Ready For Use
  - Pre-entry Meeting Held And Entry Permit Posted
  - Review of air monitoring data with Entrants and Attendants
  - Hot Work Permit: (Completed & Attached)
  - Ventilation Equipment In Use (Bonded And Grounded)
  - Area Surrounding Permit Space Is Secure And Properly Protected
  - Chemicals required for work in confined space (If yes, attach MSDS’s for those being used.).
PRCS PERSONNEL

I have reviewed the work authorized by this permit and the information contained here in. Written instructions and safety procedures have been received and are understood. Entry cannot be approved if any items are marked in the "No" column. This permit is not valid unless all appropriate items are completed.

<table>
<thead>
<tr>
<th>ROLE</th>
<th>NAME</th>
<th>SIGNATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATTENDANT</td>
<td></td>
<td></td>
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<tr>
<td>ATTENDANT</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUTHORIZED ENTRANT</td>
<td></td>
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<tr>
<td>AUTHORIZED ENTRANT</td>
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<td>AUTHORIZED ENTRANT</td>
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<td></td>
</tr>
<tr>
<td>AUTHORIZED ENTRANT</td>
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</tbody>
</table>

I have verified that items on this permit are complete and accurate, have been reviewed with PRCS personnel and meet all entry requirements set forth. I have verified that communication and emergency rescue systems are activated. Confined Space work can begin...

ENTRY SUPERVISOR

Permit Issued Date: [ ] Permit Issued Time: [ ]

REQUIRED SAFETY EQUIPMENT / SPECIAL TOOLS / EQUIPMENT

- [ ] Continuous Forced Ventilation
- [ ] Protective Clothing
- [ ] Acid Suit
- [ ] Fall Protection
- [ ] Full Body Harness
- [ ] Air Testing Equipment
- [ ] Low Voltage Lights
- [ ] GFCI
- [ ] Sump Pump
- [ ] Head Protection
- [ ] Hearing Protection
- [ ] Eye Protection
- [ ] Hand Protection
- [ ] Foot Protection

Respiratory Protection:
- [ ] Respirator (specify cartridge): _______________________________
- [ ] Powered Air Purifying (PAPR)
- Other: _______________________________

- [ ] Mechanical Lift Device (required for vertical Permit-Required entries > 5 feet deep)
- [ ] Retrieval Line/Full Body Harness (Required for permit-required entries unless creates hazard or will NOT aid in rescue. Safety Manager shall document reason for waiving.)

Reason: __________________________________________________________________________
_____________________________________________________________________________
_____________________________________________________________________________

Termination of CS Permit

Terminated By:

(Print Name) __________________________ (Signature) __________________________ (Date) __________________________ (Time) __________________________

If permit was terminated prior to completion of work, state reason:
<table>
<thead>
<tr>
<th>#</th>
<th>Confined Space ID#</th>
<th>Location</th>
<th>Description</th>
<th>Area (Approximate Size)</th>
<th>Point of Entry (Size, shape &amp; numbers of openings)</th>
<th>Confined Space Hazards (See descriptions below)</th>
<th>Photo ID #</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WT Main</td>
<td>North of water tower in grass</td>
<td>Concrete Vault: containing piping &amp; valves</td>
<td>20’-4” x 8’-6” x 6’-4” deep.</td>
<td>2 – Steel plate hinged lids (25” x 25”) with special tool keyed lock. 2 side wall mounted ladder rungs inside opening</td>
<td>ATM; ENG (water) &amp; ENV</td>
<td>WT Main Pit #1 - #2 - #3.</td>
</tr>
<tr>
<td>2</td>
<td>WT Sidewalk Pit</td>
<td>North edge of sidewalk that runs along main campus road, north of water tower</td>
<td>Concrete Vault: Water valves &amp; piping</td>
<td>9’-10’ x 8’-10” x 7’-8” deep.</td>
<td>2 – lift off metal plates (19” x 32” each). No build in ladder.</td>
<td>ATM; ENG (water; currently 1 ft standing).</td>
<td>WT Sidewalk Pit #1 &amp; #2.</td>
</tr>
<tr>
<td>3</td>
<td>Lobo Pit</td>
<td>In landscape planter on northeast side of building entry</td>
<td>Concrete Pit: Steam piping &amp; valves</td>
<td>8ft diameter x 8ft deep.</td>
<td>26” Manhole cover – slide off lid.</td>
<td>ATM; ENG (water)</td>
<td>Lobo Pit #1.</td>
</tr>
<tr>
<td>4</td>
<td>Fountain Pit</td>
<td>West side of water fountain in grass.</td>
<td>Concrete vault: Pumps &amp; piping for water fountain</td>
<td>7’ x 5’-6” x 8’-5” deep.</td>
<td>Fiberglass hinged lid (32” x 32”) with padlock. Extension ladder in pit for access.</td>
<td>ATM; ENG (water); OTH (Chemical); ELE.</td>
<td>Fountain 1</td>
</tr>
<tr>
<td>5</td>
<td>Roadway BSB</td>
<td>Middle of road on west drive from New Olin Bldg.</td>
<td>Concrete Pit: Steam piping &amp; valves</td>
<td>6ft diameter pipe x 8 ft deep.</td>
<td>26” Manhole cover – slide off lid.</td>
<td>ATM; ENG (water); TMP (hot steam); Other (traffic)</td>
<td>BSB Pit #1 &amp; #2</td>
</tr>
<tr>
<td>6</td>
<td>Mees Hall Pit</td>
<td>In landscape planter on east side of north entrance to bldg.</td>
<td>Concrete vault: Water &amp; Steam piping &amp; valves</td>
<td>7ft x 8ft x 8’-6” deep.</td>
<td>24” Manhole cover – slide off lid. Limited access under manhole with cut opening (15” x 12”) in metal plate approx. 16” below lid. No ladder access.</td>
<td>ATM; ENG (water);</td>
<td>Mess Pit #1 &amp; #2</td>
</tr>
<tr>
<td>7</td>
<td>Scharpenburg (Scharp) Hall Pit</td>
<td>Corner of west sidewalk area to bldg.</td>
<td>“Unknown” – unable to open cover.</td>
<td></td>
<td></td>
<td>ATM: ENG (water); &amp; Other hazards to need to be evaluated when opened?</td>
<td>Scharp Pit</td>
</tr>
<tr>
<td>8</td>
<td>CT Auditorium Cooling Tower</td>
<td>Outside area within bldg. structure having entrance door from inside</td>
<td>Elevated metal water cooling structure containing fans &amp;</td>
<td>Size of inside space not determined at this time.</td>
<td>22”10 diameter removable lid fastened with 4 screw knobs. 2 entry points (east &amp; west ends of cooling tower).</td>
<td>ELE &amp; MCH</td>
<td>CT Auditorium #1 &amp; #2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>auditorium area</td>
<td>motors/pumps.</td>
<td>Access located 3ft above catwalk.</td>
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<tr>
<td>9</td>
<td>SRC Pool</td>
<td>In mechanical room of SRC building</td>
<td>Concrete vault below floor level; holding tank for treated water for pool.</td>
<td>13ft x 7ft x 9ft deep.</td>
<td>Metal plate (33.5” x 33.5”) removable lid. Ladder rung on side wall access.</td>
<td>ENG (treated water); OTH (chemical)</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>SRC Mechanical</td>
<td>In mechanical room of SRC bldg.</td>
<td>Concrete vault below floor level; water valve pit.</td>
<td>3’-4” x 5ft x 6ft deep.</td>
<td>Fiberglass grated cover (3’-4” x 5ft). No built in access.</td>
<td>ATM; Didn’t get photo?</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>LCB North 1</td>
<td>North side of Lost Creek on west side of sidewalk in grass area</td>
<td>Concrete vault below ground: electrical utility vault.</td>
<td>5ft x 9ft x 10ft</td>
<td>34” Manhole cover – slide off lid. Hanging rung ladder for access.</td>
<td>ATM; ELE LCB North #1 &amp; #1-A</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>LCB North 2</td>
<td>North side of Lost Creek on west side of sidewalk in grass area, south of LCB North 1</td>
<td>Concrete vault below ground: electrical utility vault.</td>
<td>5ft x 9ft x 10ft</td>
<td>34” Manhole cover – slide off lid. Hanging rung ladder for access.</td>
<td>ATM; ELE LCB North #2</td>
<td></td>
</tr>
<tr>
<td>13</td>
<td>LCB South 1</td>
<td>South side of Lost Creek on east side of sidewalk in grass area</td>
<td>Concrete vault below ground: electrical utility vault.</td>
<td>5ft x 9ft x 10ft</td>
<td>34” Manhole cover – slide off lid. Hanging rung ladder for access.</td>
<td>ATM; ELE LCB South #1</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>LCB South 2</td>
<td>South side of Lost Creek on east side of sidewalk in grass area, south of LCB South 1</td>
<td>Concrete vault below ground: electrical utility vault.</td>
<td>5ft x 9ft x 10ft</td>
<td>34” Manhole cover – slide off lid. Hanging rung ladder for access.</td>
<td>ATM; ELE LCB South #2</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>CT Meyers</td>
<td>North side of Meyers building</td>
<td>Elevated metal water cooling structure containing fans &amp; motors/pumps.</td>
<td>Size of inside space not determined at this time.</td>
<td>Access to cooling tower from east and west side of unit. Each access is 32” x 34” in hinged metal panel with turn handle opener. Access panels located on metal catwalks approx. 8ft above ground.</td>
<td>ELE; &amp; MCH. CT Meyers #1 &amp; #2</td>
<td></td>
</tr>
<tr>
<td>16</td>
<td>Hatfield Pit</td>
<td>Near top of dock drive on east side of bldg.</td>
<td>Concrete vault located below concrete drive; Hot water valves</td>
<td>6ft x 6ft x 7ft deep.</td>
<td>29” Manhole cover - slide off lid; Access with permanent rung ladder.</td>
<td>ATM; OTH (traffic) Hatfield Pit #1 &amp; #2</td>
<td></td>
</tr>
<tr>
<td>17</td>
<td>CT Percopo</td>
<td>On east end of Percopo Building in</td>
<td>Elevated metal water cooling</td>
<td>Size of inside space not</td>
<td>22” diameter removable lid fastened with 4 screw</td>
<td>ELE; MCH CT Percopo #1 &amp; #2</td>
<td></td>
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<tr>
<td>18</td>
<td>CT Hulman</td>
<td>On roof of bldg. between building sections with access from inside door.</td>
<td>Elevated metal water cooling structure containing fans &amp; motors/pumps</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td></td>
<td></td>
<td>Size of inside space not determined at this time.</td>
<td>27” x 34” hinged panel door with handle opener. Access to panel from catwalk with ladder access. Panel access – 2ft off of catwalk</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19</td>
<td>Deming Pit</td>
<td>East end of building off east edge of sidewalk</td>
<td>Concrete vault located below ground.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>4ft x 9ft x 6’-6” deep.</td>
<td>30” x 30” hinged stainless steel lid, with special tool keyed lock. Attached ladder access under lid.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20</td>
<td>New Olin Sanitary Pit</td>
<td>Basement mechanical room.</td>
<td>Interior of pit – unknown; not opened at this time. Sanitary sewer lines for bldg. with pumps.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Size undetermined at this time – estimated: 5’-6” diameter pit</td>
<td>29” x 50” hinged metal plate lid.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21</td>
<td>New Olin Water Pit</td>
<td>Basement mechanical room.</td>
<td>Interior of pit – unknown; not opened at this time. Storm drain collection pit with pumps.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Size undetermined at this time – estimated: 46” diameter pit</td>
<td>23” x 33” hinged metal plate lid.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>Elevator Pits</td>
<td>Various Campus buildings</td>
<td>Pit at bottom of elevator shafts</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Not determined at this time</td>
<td>Through elevator doors that are opened at lowest level.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23</td>
<td>Water Tower</td>
<td>East end of ???</td>
<td>Main elevated water storage tank</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>??? gals</td>
<td>Through main riser manway – bolted metal cover &amp; tank top access???</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Legend:
- **ATM** = Atmosphere Conditions
- **ENG** = Engulfment
- **ENV** = Environment (Slip/Trip/Falls)
- **MCH** = Mechanical
- **TMP** = High Temperatures
- **BIO** = Biological Hazards
- **ELE** = Electrical
- **ENT** = Entrapment
- **FEA** = Flammable/Explosive Atmosphere
- **ODE** = Oxygen Deficient/Enriched
- **OTH** = Other
- **TXA** = Toxic Atmosphere

Comments: