

# Warren County Board of Supervisors

## RESOLUTION NO. 388 OF 2023

**RESOLUTION INTRODUCED BY SUPERVISORS STROUGH, CONOVER, FRASIER, GERACI,  
THOMAS, DRISCOLL AND WILD**

### **APPROVING WARREN COUNTY PERMIT-REQUIRED CONFINED SPACE PROGRAM**

WHEREAS, the Insurance Administrator presented to the Legislative, Rules & Governmental Operations Committee a Warren County Permit-Required Confined Space Program, and

WHEREAS, the Legislative, Rules & Governmental Operations Committee has reviewed the program and has recommended that the same be advanced to the full Board of Supervisors for consideration, now, therefore, be it

RESOLVED, that the Warren County Permit-Required Confined Space Program annexed hereto, be and the same hereby is, adopted as the official Program for Warren County.

## **Warren County Permit-Required Confined Space Program**

### **Permit-Required Confined Space Program**

#### **OSHA 29 CFR 1910.146**

The Occupational Safety and Health Administration requires that employers evaluate the workplace to determine if any spaces are permit-required confined spaces.

A confined space is defined as:

1. A space large enough and so configured that an employee can bodily enter and perform assigned work, and
2. A space that has limited or restricted means for entry or exit, and
3. A space that is not designed for continuous human occupancy.

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

1. Contains or has the potential to contain a hazardous atmosphere,
2. Contains a material that has the potential to engulf the entrant,
3. Has an internal configuration such that an entrant could become trapped or asphyxiated or,
4. Contains any other recognized serious safety or health hazard.

On August 6<sup>th</sup>, 2019, and subsequent dates, evaluations were conducted of the spaces throughout Warren County owned properties to identify permit-required and non-permit-required confined spaces. The evaluation was performed by Ian Cary of Needham Risk Management Resource Group, LLC and the Warren County DPW. The survey results are indicative only of areas inspected.

#### **Human Services Building**

Elevator Shaft 1	Permit-Required Confined Space	Mechanical Hazards
Elevator Shaft 2	Permit-Required Confined Space	Mechanical Hazards
Sump Pump Pit	Permit-Required Confined Space	Engulfment Hazard (space is bolted shut)
Air Ducts	Permit-Required Confined Space	Mechanical Hazards

#### **Municipal Center**

Elevator Shaft	Permit-Required Confined Space	Mechanical Hazard
Chimney in boiler room	Permit-Required Confined Space	Atmospheric Hazards, oxygen deficient
Water tank in basement near generator	Permit-Required Confined Space	Engulfment hazard, atmospheric hazards
Crawl Spaces throughout basement	Non-Permit Spaces*	This space may become a permit-required confined space if you create a hazard (e.g. welding).

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## Warren County Permit-Required Confined Space Program

### Sheriff's Building

Lifting station (between municipal building and sheriffs)	Permit-Required Confined Space	Mechanical hazard, atmospheric hazard, oxygen deficient
Grinder pump pit (Muffin Monster) Next to wash bay	Permit-Required Confined Space	Mechanical hazards, Atmospheric hazard, oxygen deficient
Trane Air Handling Units (Mechanical Attic-D)	Permit-Required Confined Space	Mechanical hazard, thermal hazard Can be entered under reclassification
Trane Air Handling Units (Mechanical Attic-L)	Permit-Required Confined Space	Mechanical hazard, thermal hazard Can be entered under reclassification
Dorm - A plumbing chase	Non-Permit Space	Unless you create the hazard
Dorm - B plumbing chase	Non-permit Space	Unless you create the hazard
Grease Interceptor (5 ft x 8 ft long x 5 ft deep) no entry	Permit-Required Confined Space	Mechanical hazard, thermal hazard
Storm Drains and catch basins	Permit-Required Confined Space	Engulfment hazard, atmospheric hazard
Sanitary Sewer portholes	Permit-Required Confined Space	Engulfment hazard, atmospheric hazard

### North Creek Shop

Gasoline Underground Storage Tank (10,000 gal)	Permit-Required Confined Space	Flammable atmosphere, atmospheric hazard, chemical
Diesel Underground Storage Tank (10,000 gal)	Permit-Required Confined Space	Atmospheric hazard, chemical

### Airport

Gasoline Underground Storage Tank (10,000 gal)	Permit-Required Confined Space	Flammable atmosphere, atmospheric hazard, chemical
Jet Fuel (15,000 gal)	Permit-Required Confined Space	Flammable atmosphere, atmospheric hazard, chemical
Aviation Gas (15,000 gal)	Permit-Required Confined Space	Flammable atmosphere, atmospheric hazard, chemical
Diesel Underground Storage Tank (10,000 gal)	Permit-Required Confined Space	Flammable atmosphere, atmospheric hazard, chemical

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### DPW Office in Warrensburg

Sump Pump Pit under stairs	Not enterable	Engulfment
Sump Pump Pit in storage room	Not enterable	Engulfment
Water Truck Vehicle #91-13	Permit-Required Confined Space	Engulfment
Tank Sprayer Truck #01-02	Permit-Required Confined Space	Engulfment
Crawl Space	Non-permit space	Unless you create the hazard

### Old Shop Warrensburg

Gasoline Underground Storage Tank (10,000 gal)	Permit-Required Confined Space	Flammable atmosphere, atmospheric hazard, chemical
Diesel Underground Storage Tank (10,000 gal)	Permit-Required Confined Space	Atmospheric hazard, chemical
Multiple Storm Drains and catch basins	Permit-Required Confined Space	Engulfment
Sanitary Sewer Access	Permit-Required Confined Space	Oxygen deficient, atmospheric hazard
Oil Water Separator (currently rusted shut)	Permit-Required Confined Space	Atmospheric hazard, oxygen deficient

### Fish Hatchery

Manhole access to septic tank (women's bathroom)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard
Manhole access to septic tank (men's bathroom)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard
Manhole access to septic tank (office)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard

### Toney Pit

Salt Brine Tank 1	Permit-Required Confined Space	Engulfment, chemical
Salt Brine Tank 2	Permit-Required Confined Space	Engulfment, chemical
Salt Brine Tank 3	Permit-Required Confined Space	Engulfment, chemical
Salt Brine Tank 4	Permit-Required Confined Space	Engulfment, chemical

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**Fairgrounds**

Old Septic System	Not enterable	Atmospheric hazards, oxygen deficient
Septic Tank, North (manhole access)	Permit-Required Confined Space	Atmospheric hazards, Oxygen deficient
Septic Tank, South (manhole access)	Permit-Required Confined Space	Atmospheric hazards, Oxygen deficient

**South End Shop**

Salt Brine Tank 1	Permit-Required Confined Space	Engulfment, chemical
Salt Brine Tank 2	Permit-Required Confined Space	Engulfment, chemical

**New Shop Warrensburg**

Oil Water Separator	Permit-Required Confined Space	Atmospheric hazards, flammable atmosphere
Boiler 1	Permit-Required Confined Space	Thermal hazard, atmospheric hazard
Boiler 2	Permit-Required Confined Space	Thermal hazard, atmospheric hazard
Boiler 3	Permit-Required Confined Space	Thermal hazard, atmospheric hazard
Air Handler and Air Ducts	Permit-Required Confined Space	Mechanical hazard
Storm Drains	Permit-Required Confined Space	Engulfment hazard when raining

**Country-Side Adult Home**

New Pump Tank	Permit-Required Confined Space	Atmospheric hazards, oxygen deficient
New Bilge Tank	Permit-Required Confined Space	Atmospheric hazards, oxygen deficient
Grease Trap in kitchen (2 x 3 ft and ~3.5 ft deep)	Not bodily enterable	Atmospheric hazards

**Up Yonda Farm**

Clivus – Multrum Composting Toilet	Permit-Required Confined Space	Atmospheric hazards, oxygen deficient
Clivus – Multrum Composting Toilet	Permit-Required Confined Space	Atmospheric hazards, oxygen deficient

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### Warren County Permit-Required Confined Space Program

**Bolton Fuel Farm**

Gasoline Underground Storage Tank (2,000 gal)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard, flammable atmosphere
Diesel Underground Storage Tank (6,000 gal)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard

**Horicon Fuel Farm**

Gasoline Underground Storage Tank (8,000 gal)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard, flammable atmosphere
Diesel Underground Storage Tank (8,000 gal)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard

**Lake Luzerne Transfer Station**

Gasoline Underground Storage Tank (8,000 gal)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard, flammable atmosphere
Diesel Underground Storage Tank (8,000 gal)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard

**Hague Fuel Farm**

Gasoline Underground Storage Tank (2,000 gal)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard, flammable atmosphere
Diesel Underground Storage Tank (6,000 gal)	Permit-Required Confined Space	Atmospheric hazards, chemical hazard

**Train Station in Thurman**

Effluent Pump Pit	Permit-Required Confined Space	Atmospheric Hazards, oxygen deficient
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**North Creek Railroad**

Septic Tank (manhole access)	Permit-Required Confined Space	Atmospheric Hazards, oxygen deficient
Septic Tank (manhole access)	Permit-Required Confined Space	Atmospheric Hazards, oxygen deficient

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## **Warren County Permit-Required Confined Space Program**

Warren County will inform exposed employees of the existence and location of Permit-Required Confined Space, or will label each space identified as meeting the criteria of a Permit-Required Confined Space with the following language:

“Danger – Permit-Required Confined Space – Do Not Enter”

Warren County will follow a formal permit system when entering designated Permit-Required Confined Spaces which cannot be entered under the reclassification procedure. To ensure the safety of both employees and contractors, the Warren County will take the following steps:

1. Post signs at Permit-Required Confined Space.
2. Provide exposed employees with training on the hazards associated with permit spaces and indicate which spaces they will not be allowed to enter.
3. Inform contractors that the space they are going to work in is a Permit-Required Confined Space as defined by OSHA 1910.146. Inform the contractor of any known hazards, any experience the employer has had with that space and any protective measures the employer has used when entering the space. A debriefing session must be conducted at the conclusion of the work in the permit space.

It is important to note that all confined spaces do not meet the requirements of a “Permit-Required Confined Space” but, in certain circumstances a non-permit space may become a permit space, for example, if a gas leak has occurred in a crawl space, then this space would have a hazardous atmosphere and be classified as a Permit-Required Confined Space.

### **Reclassification Procedures**

There is a provision within the regulation that allows County employees to enter spaces without a formal Permit-Required Confined Space program under certain circumstances.

1910.146 (c)(7)(i) – states that “if a permit space poses no actual or potential atmospheric hazards and if all hazards within the space are eliminated without entry into the space, the permit space may be reclassified as a non-permit space for as long as the non-atmospheric hazards remain eliminated.”

- If it is necessary to enter the space to eliminate hazards, then this entry must be performed under a formal permit system.
- The employer shall document the basis for determining that all hazards in a permit space have been eliminated, through a certification that contains the date, the location of the space, and the signature of the person making the determination. The certificate shall be made available to each employee entering the space.
- If hazards arise within a permit space that has been reclassified to a non-permit space, each employee in the space shall exit the space immediately. The employer will then reevaluate the space and determine whether the space must be again classified as a Permit-Required Confined Space.

Before employees are allowed to enter a space under the provisions of reclassification, the entry supervisor will complete the reclassification work sheet (Appendix A) and post it near the opening

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of the space. The supervisor will explain the rationale for reclassification to each employee entering the space.

The following areas may be entered under reclassification.

- Air Ducts
- Trane Air Handling Units

### **Sewer Entry**

OSHA 29 CFR 1910.146 Appendix E creates standards for sewer system entry.

Sewer entry differs in three vital respects from other permit entries; first, there rarely exists any way to completely isolate the space (a section of a continuous system) to be entered; second, because isolation is not complete, the atmosphere may suddenly and unpredictably become lethally hazardous (toxic, flammable or explosive) from causes beyond the control of the entrant or employer, and third, experienced sewer workers are especially knowledgeable of entry and work in their permit spaces because of their frequent entries. Unlike other employments where permit space entry is a rare and exceptional event, sewer workers' usual work environment is a permit space.

(1) Adherence to procedure. The employer should designate as entrants only employees who are thoroughly trained in the employer's sewer entry procedures and who demonstrate that they follow these entry procedures exactly as prescribed when performing sewer entries.

(2) Atmospheric monitoring. Entrants should be trained in the use of, and be equipped with, atmospheric monitoring equipment which sounds an audible alarm, in addition to its visual readout, whenever one of the following conditions are encountered: Oxygen concentration less than 19.5 percent; flammable gas or vapor at 10 percent or more of the lower flammable limit (LFL); or hydrogen sulfide or carbon monoxide at or above 10 ppm or 35 ppm, respectively, measured as an 8-hour time-weighted average. Atmospheric monitoring equipment needs to be calibrated according to the manufacturer's instructions. The oxygen sensor/broad range sensor is best suited for initial use in situations where the actual or potential contaminants have not been identified, because broad range sensors, unlike substance-specific sensors, enable employers to obtain an overall reading of the hydrocarbons (flammables) present in the space. However, such sensors only indicate that a hazardous threshold of a class of chemicals has been exceeded. They do not measure the levels of contamination of specific substances. Therefore, substance-specific devices, which measure the actual levels of specific substances, are best suited for use where actual and potential contaminants have been identified. The measurements obtained with substance-specific devices are of vital importance to the employer when decisions are made concerning the measures necessary to protect entrants (such as ventilation or personal protective equipment) and the setting and attainment of appropriate entry conditions. However, the sewer environment may suddenly and unpredictably change, and the substance-specific devices may not detect the potentially lethal atmospheric hazards which may enter the sewer environment.

Although OSHA considers the information and guidance provided above to be appropriate and useful in most sewer entry situations, the Agency emphasizes that each employer must consider the unique circumstances, including the predictability of the atmosphere, of the sewer permit spaces in the employer's workplace in preparing for entry. Only the employer can decide, based upon his or

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her knowledge of, and experience with permit spaces in sewer systems, what the best type of testing instrument may be for any specific entry operation.

The selected testing instrument should be carried and used by the entrant in sewer line work to monitor the atmosphere in the entrant's environment, and in advance of the entrant's direction of movement, to warn the entrant of any deterioration in atmospheric conditions. Where several entrants are working together in the same immediate location, one instrument, used by the lead entrant, is acceptable.

(3) Surge flow and flooding. Sewer crews should develop and maintain liaison, to the extent possible, with the local weather bureau and fire and emergency services in their area so that sewer work may be delayed or interrupted and entrants withdrawn whenever sewer lines might be suddenly flooded by rain or fire suppression activities, or whenever flammable or other hazardous materials are released into sewers during emergencies by industrial or transportation accidents.

(4) Special Equipment. Entry into large bore sewers may require the use of special equipment. Such equipment might include such items as atmosphere monitoring devices with automatic audible alarms, escape self-contained breathing apparatus (ESCBA) with at least 10 minute air supply (or other NIOSH approved self-rescuer), waterproof flashlights, and may also include boats and rafts, radios and rope stand-offs for pulling around bends and corners as needed.

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**Warren County Permit-Required Confined Space Program**

**Reclassification Permit**

**Appendix A**

1. Permit Space Location \_\_\_\_\_

2. Job task \_\_\_\_\_

3. a) Are there any hazardous atmospheres present or potentially present? YES          NO

b) Is continuous forced air ventilation needed to maintain acceptable levels? YES          NO

c) Record air monitoring test results below:

Substance	Acceptable Level	Readings/Time						
Oxygen	19.5% - 23.5%							
Explosive (Gas/Vapor)	< 10% LEL							
Carbon Monoxide	50 PPM							
Hydrogen Sulfide	10 PPM							

4. Is atmospheric testing equipment calibrated? YES          NO  
 If Yes, list equipment \_\_\_\_\_

**Note: If hazardous atmospheres are present or ventilation is needed to control levels, then reclassifying the space is not possible. It is necessary to eliminate the atmospheric hazard to reclassify.**

5. Is an engulfment hazard present? YES          NO  
 If Yes, what control measure is used to eliminate the engulfment hazard? \_\_\_\_\_

6. Is there an entrapment hazard? YES          NO  
 If Yes, list the steps to be taken to eliminate the hazard \_\_\_\_\_

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### Warren County Permit-Required Confined Space Program

- |   |     |    |
|---|-----|----|
| 7. Have all the hazardous energy sources (including chemical and physical hazards) been eliminated? | YES | NO |
|---|-----|----|

Check isolating methods used to eliminate the hazard(s):

- de-energize equipment
  - locking out electrical circuits and related training provided
  - tagging out electrical circuits and related training provided
  - physically block machinery so it cannot move
  - blank or blinds
  - double block and bleed
  - locking and/or tagging valves
  - disconnecting lines
  - other procedures, be specific \_\_\_\_\_
- 

- |  |     |    |
|--|-----|----|
| 8. Is it necessary to enter the permit space to determine if the hazard has been eliminated? | YES | NO |
|--|-----|----|

***If yes, then the entry must be performed in accordance with a Confined Space Entry Permit***

- |  |     |    |
|--|-----|----|
| 9. Have all the employees who will enter the declassified space been instructed to immediately evacuate the space if a hazard is detected? | YES | NO |
|--|-----|----|

If No, instruct employees of this safety precaution measure

- |   |     |    |
|---|-----|----|
| 10. Has a procedure been instituted to re-evaluate the space and reclassify it back to a permit space if the need arises? | YES | NO |
|---|-----|----|

If No, institute steps to properly re-evaluate the space and prohibit entry and if necessary, reclassify it back to a permit space.

If Yes, describe procedure \_\_\_\_\_

---

- |  |     |    |
|--|-----|----|
| 11. Have employees participating in the entry operation had an opportunity to review this safe entry certification form? | YES | NO |
|--|-----|----|

\_\_\_\_\_  
Signature of Certifying Individual

\_\_\_\_\_  
Date

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# Permit-Required Confined Space Entry Permit

## 1. Permit Conditions

Reason for entry:	Entry date: Permit expiration <i>(date and time)</i> :
Entrant:	Acceptable entry conditions:
Entrant:	
Entrant:	
Attendant:	
Attendant:	
Description:	Location:
Known and potential hazards:	
Additional required permits <i>(for example hot work, radiological work permit, penetration permit)</i> :	

## 2. Requirements Checklist *(check all that apply)*

Equipment	Personal protective equipment and personal monitors
Non-entry rescue equipment <input type="checkbox"/> Full body harness <input type="checkbox"/> Tripod / hoist <input type="checkbox"/> Lifeline	Gloves: <input type="checkbox"/> Leather <input type="checkbox"/> Impervious <input type="checkbox"/> Chemical resistant <input type="checkbox"/> Other:
Area security: <input type="checkbox"/> Warning signs <input type="checkbox"/> Barricades <input type="checkbox"/> Ladder <input type="checkbox"/> Fall protection equipment <input type="checkbox"/> Ventilation fan or blower <input type="checkbox"/> Fire extinguisher <input type="checkbox"/> Self-contained breathing apparatus (SCBA) <input type="checkbox"/> Air purifying respirator: specify cartridge type: <input type="checkbox"/> Other:	Face / eye protection: <input type="checkbox"/> Face shield <input type="checkbox"/> Goggles <input type="checkbox"/> Other: <input type="checkbox"/> Footwear <input type="checkbox"/> Coveralls <input type="checkbox"/> Head protection <input type="checkbox"/> Radiation dosimeter(s) <input type="checkbox"/> Pocket ion chamber (PIC) <input type="checkbox"/> Other: <input type="checkbox"/> Other:

### Warren County Permit-Required Confined Space Program

**3. Pre-entry Checklist**

<input type="checkbox"/> Verify adequate confined space training <input type="checkbox"/> Pre-entry briefing on specific hazards and control methods <input type="checkbox"/> Notify subcontractors of permit and hazard conditions <input type="checkbox"/> Non-entry rescue and procedure in place <input type="checkbox"/> Notify affected departments and persons of service interruption <input type="checkbox"/> Lines blocked or broken <input type="checkbox"/> Drain space <input type="checkbox"/> Off-site rescue service notified	Control of hazardous energy: <input type="checkbox"/> Lockout / tagout (LOTO) <input type="checkbox"/> Zero-voltage verification (ZVV) <input type="checkbox"/> Other: Communication: <input type="checkbox"/> Radio <input type="checkbox"/> Rope signals <input type="checkbox"/> Hand signals <input type="checkbox"/> Verbal Lighting: <input type="checkbox"/> Hazardous location rated <input type="checkbox"/> Standard Air flush: <input type="checkbox"/> Preliminary <input type="checkbox"/> Continuous <input type="checkbox"/> Other:
--	---

**4. Personnel Entry and Exit Record** *(to be completed as needed before and during work)*

	Entrant name:	Attendant name:	Entrant name:	Attendant name:	Entrant name:	Attendant name:
Time in						
Time out						
Time in						
Time out						
Time in						
Time out						
Time in						
Time out						
Time in						
Time out						
Time in						
Time out						
Time in						
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Notes:

