

# MODIFIED (LIGHT-DUTY) WORK PROGRAM

# VI. E.

## **I. OBJECTIVES**

It is City policy to provide a Light Duty Work Program that will give eligible City employees an opportunity to return as quickly as possible to meaningful, productive employment following a work-related injury or illness. The Light Duty Work Program applies when an employee has recovered sufficiently to return to work, but is temporarily unable to return to his/her regular duties. This policy is designed to provide methods by which such an employee may return to work in a temporary, alternative assignment pending his/her expected full recovery.

This policy describes the general guidelines of the Light Duty Work Program. The City reserves the right to change, replace, or eliminate all or any portion of the Light Duty Work Program at any time and in its sole discretion. Furthermore, the City reserves the right to determine whether and to what extent any employee is eligible to or may participate in the Light Duty Work Program, as well as the right to interpret and implement the Light Duty Work Program in its sole discretion.

## **II. PURPOSE**

- A. To establish a program consistent with the City Safety Program that enables an employee to continue using their skills, knowledge, and abilities while temporarily restricted by a work-related injury or illness.
- B. To ensure that employees who have been injured or are suffering from a medical condition adhere to all therapeutic instructions of their physicians or other attending medical authority for their own personal well-being and rehabilitation. To impose appropriate restrictions, which will minimize the risk of unnecessarily jeopardizing the safety of the employees, as well as the safety of the general public.
- C. To return the injured employee to work as soon as possible following an accident or injury.
- D. To establish guidelines for employees restricted to temporary Light Duty when they cannot perform their regularly assigned duties due to work-related injuries or illnesses.

## **III. PROCEDURES**

- A. Due to the nature of certain injuries, Light Duty assignments are at the discretion of the City. The basis for consideration will be the extent to which the above purposes can be met by the Light Duty assignment. The decisions shall include consideration of the current availability of and need for Light Duty assignments. Other considerations such as the needs of each department with respect to personnel shortages and anticipated duration will be evaluated.
- B. The City reserves the right to request a physician's statement and recommendation for Light Duty work.
- C. The physician's statement and recommendations for Light Duty shall include the nature and extent of the employee's restrictions; the probable length of time of the restriction duration; and the prognosis for recovery.
- D. The Administrative Services Coordinator will review the information and review medical requirements with the appropriate Department Head.

- E. If the Department Head and Administrative Services Coordinator determine that a Light Duty assignment should be granted, the Department Head will identify an appropriate assignment.
- F. Upon determination of the Light Duty assignment, the employee shall receive a written notice of the proposed assignment. The notice must be signed by the employee to indicate agreement with the contents and to acknowledge he/she will not violate the medical restrictions as outlined by their Physician. Disciplinary action may be pursued when restrictions are violated.
- G. Each Light Duty assignment will be described in a Light Duty Work form and kept on file.
- H. Upon request, the employee may review the assignment with the appropriate Department Head.
- I. All Light Duty assignments shall be considered temporary and will be reviewed periodically, but no less than every sixty (60) days. Additional doctor's statements may be required, and the continued availability of the light duty assignment and work needs of the position will be reviewed and considered. The employee is required to provide the City with a completed Fitness for Duty/Return to Work Status form after each follow-up appointment with their treating physician. The City will evaluate the employee's medical condition and progress in order to determine his/her ability to return to full duty. If a return to full duty is not possible, the City will pursue other alternatives, which may include return to inactive status, or an extension of Light Duty based on availability of work and other factors as outlined above.

#### **IV. RESTRICTIONS**

- A. There shall be no restrictions on or denial of pay raises or retirement benefits while on Light Duty status unless otherwise specified in a collective bargaining agreement.
- B. While on Light Duty, secondary employment shall be in accordance with current City or departmental policy. However, such secondary employment must adhere to any physical restrictions as determined by the employee's treating physician.
- C. The shift assignment will be determined by the department head as needed to accomplish the tasks assigned while on Light Duty status.
- D. The wearing of the department uniform by personnel shall be at the discretion of the Department Head, and shall be based on the employee's medical restrictions and concerns for safety.
- E. Restrictions of law enforcement powers by sworn personnel may be limited at the discretion of the Police Chief on the basis of the employee's medical restrictions and the employee's safety. These restrictions may include:
  - a. The withdrawal of the right to carry weapons.
  - b. The right to carry or display police identification, etc.
  - c. Uniforms worn outside of the Police Station. This should avoid any situation where an employee is seen in uniform and may be expected by the Public to perform the full range of Police duties, which functions the employee may be unable to perform properly.
- F. Applications for transfer will not be accepted until the physical status of the employee is fully resolved.
- G. Employees on a Light Duty assignment will be subject to City and Departmental policies, procedures, and regulations.

- H. The City has the right to terminate the Light Duty based on performance issues or inability to do the job.
- I. This policy does not limit or alter the rights of an employee under the Workers Compensation Act or the Americans with Disabilities Act.

## **V. PROGRAM ELEMENTS**

### **Program steps that should be followed after an accident occurs:**

1. The employee involved promptly reports the accident as required by City Policy.
2. If the incident is life threatening, emergency personnel will need to be contacted.
3. Occupational Health: The employee should be sent to the City's occupational health provider for treatment.
4. The Supervisor should contact the injured employee as soon as possible following medical treatment to check on his or her welfare.
5. In order to return to work in either a Light Duty or Full Duty capacity, the employee must obtain a completed Fitness for Duty/Return to Work Status form. A copy is attached as **Exhibit A** to this policy.
6. Determine what Light Duty Work tasks are appropriate based on the employee's restrictions. Identify jobs or tasks that can be accomplished on Light Duty Work and have this list available for referencing. In addition, each task should outline the physical requirements necessary for completion. All light duty assignments should be pre-approved within your organization. Light Duty Work assignments should be preplanned by identifying useful, occasional work which is not a major duty of an established job, but which should be done and can be done by employees on Light Duty.
7. Once a modified assignment is identified, the Supervisor will make contact with the injured employee. Should there be concerns presented by the employee regarding the assignment, the City's Occupational Health provider will be contacted for their review and approval. Determine the work schedule, to whom the injured employee will report, and a time period for the Light Duty Work assignment. Communicate these expectations to the injured employee in writing. A Light Duty Assignment Form is included as **Exhibit B**. Emphasize that the medical provider's restrictions must be followed. The employee must acknowledge understanding of the assignment and the requirements to adhere to the light duty work program. A Light Duty Assignment Acknowledgement Form is included as **Exhibit C**.
8. Review the injured employee's work status after each evaluation by the treating physician and determine an appropriate level of Light Duty Work tasks.
9. The Supervisor should work with the Administrative Services Coordinator regarding the injured employee's work status and return to work.



**EXHIBIT A**  
**CITY OF WARRENVILLE**  
**FITNESS FOR DUTY / RETURN TO WORK STATUS REPORT**

Patient Name: \_\_\_\_\_ Date of Birth: \_\_\_\_\_  
 Job Title: \_\_\_\_\_ *(see attached job description for job duties)*  
 Date of Illness or Injury: \_\_\_\_\_ Type of Illness or Injury: \_\_\_\_\_

- Patient is **unable** to work at this time. *(Please complete physical limitations section below.)*
- Patient may return to work **without** restrictions:  Immediately or  on: \_\_\_/\_\_\_/\_\_\_\_.
- Patient may return to work with the following restrictions on: \_\_\_/\_\_\_/\_\_\_\_. Restrictions will be re-evaluated on \_\_\_/\_\_\_/\_\_\_\_, and are expected to last until: \_\_\_/\_\_\_/\_\_\_\_.

PHYSICAL LIMITATIONS	FULL RESTRICTION	PARTIAL RESTRICTION (Please describe.)	NO RESTRICTION
Sedentary - Lifting/Carrying 0 to 10 lbs.			
Light - Lifting/Carrying 10 to 20 lbs.			
Moderate - Lifting/Carrying 20 to 50 lbs.			
Heavy - Lifting/Carrying 50 to 100 lbs.			
Pulling/Pushing			
Simple Grasping			
Fine Manipulation			
Reaching or Working above the shoulders			
Walking			
Standing/Balancing			
Sitting			
Stooping/Squatting/Bending			
Kneeling/Crawling/Climbing			
Twisting/Rotating			
Running			
Operating a motor vehicle, tractor, etc.			
Visual and/or Auditory			
Concentration/Cognitive			
Environment Factors (heat, cold, dust, chemicals, fumes, etc.)			

- Is patient involved with treatment and/or medication that might affect his/her ability to work?  
 No  Yes, please explain: \_\_\_\_\_
- Other instructions or limitations?: \_\_\_\_\_
- Referrals?: Name \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_\_ Time \_\_\_\_\_

***By signing below, I affirm that I have reviewed the patient's job description.***

Treating Provider Printed Name: \_\_\_\_\_ Phone: \_\_\_\_\_

Address: \_\_\_\_\_

Treating Provider Signature: \_\_\_\_\_ Date \_\_\_/\_\_\_/\_\_\_\_

I, \_\_\_\_\_, do hereby authorize the above named physician to complete the foregoing certification and forward it to my employer: City of Warrenville - Attention: Alma Morgan - Fax: (630) 393-6948.

\_\_\_\_\_  
Signature of Employee

\_\_\_\_\_  
Date

**EXHIBIT B**  
**LIGHT DUTY ASSIGNMENT FORM**

The City of Warrenville has a long history of granting temporary Light Duty Work assignments to employees during periods of restricted duty. The Light Duty Work assignment consists of assisting the \_\_\_\_\_ department.

Insert a brief description of the duties. (Example: The job requires the answering of the telephone and the police radio thereby communicating with police officers and citizens of the public who call for police service. A short entry describing these calls is typed into a computer using a standard keyboard.)

Insert a brief description of the physical requirements. (Example: Physically, all of this work is done while sitting in an armchair. There is no lifting beyond that of a telephone receiver.)

**JOB DESCRIPTION DATA**

1. Job Title \_\_\_\_\_
2. Communication Skills Required \_\_\_\_\_
3. Manual Skills Required \_\_\_\_\_
4. Technical Training & Experience Required \_\_\_\_\_
5. Computer Skills Required \_\_\_\_\_
6. Typing Skills Required \_\_\_\_\_
7. Required to Read and Follow Technical Instructions Yes / No \_\_\_\_\_
8. % of Time Engaged in Physical Labor \_\_\_\_\_
9. % of Time Reading \_\_\_\_\_
10. % of Job Sitting \_\_\_\_\_
11. % Standing \_\_\_\_\_
12. Vision Requirements \_\_\_\_\_
13. Auditory Requirements \_\_\_\_\_
14. % of Time Working at V.D.T. \_\_\_\_\_
15. Max Lifting (Dead Weight) \_\_\_\_\_
16. % of Time Out of Doors \_\_\_\_\_
17. Ability to Operate the Following Power Tools \_\_\_\_\_  
\_\_\_\_\_
18. Ability to Operate the Following Heavy Equipment \_\_\_\_\_  
\_\_\_\_\_
19. Driving Requirements \_\_\_\_\_  
\_\_\_\_\_
20. Works Alone \_\_\_\_\_
21. Works on a "Team" \_\_\_\_\_
22. Job can be Performed Satisfactorily by a Physically Challenged Individual Except for \_\_\_\_\_  
\_\_\_\_\_

**Exhibit C**  
**Light Duty Program Acknowledgement Form**

To participate in Light Duty Work:

- Condition must be medically supported, and
  - A position available.
1. All alternative duty jobs will be temporary assignments only.
  2. Length of the temporary assignment will typically not exceed 90 days unless approved by the Department Head.
  3. To qualify for the Program, and prior to returning to work, employees must have medical support with documentation indicating a potential for returning to their regular jobs.
  4. The employee's participation in the Program will be evaluated a minimum of every 60 days.
  5. If an employee is a participant in the temporary Light Duty Work Program and he or she does not have a full release to their regular job within 90 days, an evaluation to further participate in the program for another 90 days will be performed.
  6. When maximum medical improvement is achieved, the employee will not be eligible for the Light Duty Program.
  7. The participants in the Light Duty Program will work a maximum of 40 hours/week.
  8. The employee will receive regular pay during the time he/she is on Light Duty, and will not be entitled to any pay incentives.
  9. Federal, state and current deductions will be withheld for the hours worked.
  10. If a sick or vacation day(s) is used while on Light Duty, an eight (8) hour day will be deducted from his/her current balance of days available to be used.

By signing below, I acknowledge receipt and understanding of the light duty assignment description, as well as the conditions included above. I further agree to abide by my medical restrictions as listed by my treating physician on the Fitness for Duty/Return to Work Status form. I understand violations of these restrictions will be cause for disciplinary action.

Employee Signature: \_\_\_\_\_ Date: \_\_\_\_\_

Department Head Signature: \_\_\_\_\_ Date: \_\_\_\_\_

# Permit-Required Confined Space Program

## TABLE OF CONTENTS

I. INTRODUCTION	2
II. POLICY STATEMENT	2
III. PURPOSE	2
IV. APPLICABILITY	3
V. REFERENCES	3
VI. DEFINITIONS	3
VII. CONFINED SPACE HAZARDS	5
VIII. IDENTIFICATION AND POSTING	6
IX. RESPONSIBILITIES	6
X. ENTRY PROCEDURES	8
XI. RECLASSIFICATION TO A NON-PERMIT SPACE	12
XII. EMERGENCY PROCEDURES	12
XIII. PERSONAL PROTECTIVE EQUIPMENT	13
XIV. AIR MONITORING PROCEDURES	13
XV. CONTRACTORS	14
XVI. TRAINING REQUIREMENTS	14
XVII. PERIODIC PROGRAM REVIEW	14
<u>APPENDICES</u>	
A. LIST OF CONFINED SPACES & HAZARD ASSESSMENT	15
B. COPY OF CONFINED SPACE ENTRY PERMIT	16
C. LIST OF AUTHORIZED EMPLOYEES	20
D. OSHA REGULATION 29 CFR 1910.146	21

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

### **I. INTRODUCTION**

Workers may enter into confined spaces to perform special or routine duties required by their employer. In many instances, employees who work in confined spaces also face increased risk of exposure to serious physical injury from hazards such as entrapment, engulfment, and hazardous atmospheric conditions.

The inherent danger in confined space work was the reason for the promulgation of the Confined Space regulation 29 CFR 1910.146 by the Occupational Safety and Health Administration (OSHA). In order to provide employees with optimal protection against the hazards evolving from confined spaces, Warrenville has established the following confined space program. This program was designed in accordance with regulations on confined space entry promulgated by OSHA, subsequently adopted by the Illinois Department of Labor (IDOL).

The program protects employees from hazards that can arise from confined space entry, substantially minimizing or eliminating the chance of illness, injury, or death. This program will also assist the Public Works Department in complying with all aspects of state and federal health and safety regulations regarding confined space entry work.

### **II. POLICY STATEMENT**

This Confined Space Program has been developed to establish safety practices employees must follow where there is danger to employees from confined space entry work. The confined space policy for the Warrenville Public Works Department includes the following provisions:

- Perform the work from outside the confined space, if possible.
- All employees must be trained and authorized before being allowed entry into a confined space. A list of employees authorized to enter confined spaces at Warrenville facilities is provided in Appendix C.
- All confined spaces must be identified.
- Each confined space entry must be assessed for hazards at the time of entry, before the Entrant(s) enters the space.
- A permit is required before entry into a permit-required confined space.
- Fall protection must be used where required.
- A minimum of two authorized employees are required for permit-required confined space entries.
- All confined space rescues must be performed by emergency rescue service.
- Smoking or open flames are strictly prohibited in or near confined spaces.

### **III. PURPOSE**

The Confined Space Program goal is to analyze hazards of confined spaces and determine appropriate safeguards to eliminate or control hazards that could result in serious personal injury or death. This written Confined Space Program explains how the Public Works Department implements the applicable OSHA requirements regarding entry into permit-required confined spaces, and entry into non-permit spaces.

## Permit-Required Confined Space Program

### IV. APPLICABILITY

This Program applies to all Public Works employees who are authorized to enter confined spaces in the City of Warrenville. Contractors are required to have their own Confined Space programs to address these confined space hazards.

### V. REFERENCES

The IDOL regulates employee health and safety for Public Works employees using federal OSHA regulations. OSHA regulations with applicability to this Program include:

- 29 CFR 1910.146: Permit-Required Confined Spaces
- 29 CFR 1910.Subpart D: Walking and Working Surfaces
- 29 CFR 1910.147: The Control of Hazardous Energy (Lockout/Tagout)
- 29 CFR 1926. Subpart M: Fall Protection
- 29 CFR 1910.38: Employee Emergency Plans
- 29 CFR 1910. Subpart I: Personal Protective Equipment
- 29 CFR 1910.1200: Hazard Communication

### VI. DEFINITIONS

**“Attendant”** means a person trained in emergency rescue procedures assigned to remain outside permit-required confined spaces, and to be in communication with and assisting those working inside.

**“Authorized Entrant”** means a worker authorized to enter a permit-required confined space.

**“Confined Space”** means a space that:

- Is large enough, and so configured, that an employee can bodily enter and perform assigned work; and
- Has limited or restricted means for entry or exit (for example, tanks, vessels, silos, storage bins, hoppers, vaults, and pits are spaces that may have limited means of entry.); and
- Is not designed for continuous employee occupancy.

**“Engulfment”** means the surrounding of a person by a liquid or finely-divided (flowable) solid substance. The substance may cause death by filling or plugging the person’s respiratory system or might exert enough force on the body to cause death by strangulation, constriction, or crushing.

**“Entry”** means the passing of any part of a person’s body through an opening into the space.

**“Entry Permit”** means a written document that allows controlled entry into a permit-required confined space; it also contains essential information to ensure a safe entry.

**“Entry Supervisor”** means a person who is responsible for planning a confined space entry by determining if acceptable entry conditions are present, authorizing entry, overseeing entry operations, and terminating work.

## Permit-Required Confined Space Program

**“Hazardous atmosphere”** means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (that is, escape unaided from a permit space), injury, or acute illness from one or more of the following causes:

- Flammable gas, vapor, or mist in excess of 10% of its lower flammable limit (LFL).
- Airborne combustible dust at a concentration that meets or exceeds its LFL.
- Atmospheric oxygen concentration below 19.5 percent or above 23.5 percent.
- Atmospheric concentration of any substance for which a dose or a permissible exposure limit is published in Subpart G, Occupational Health and Environmental Control, or in Subpart Z, Toxic and Hazardous Substances, of 29 CFR 1910 and which could result in employee exposure in excess of its dose or permissible exposure limit.
- Any other atmospheric condition that is dangerous to life or health.

**“Hot Work”** means any work in a confined space that requires a flame or spark or produces sufficient heat to cause auto ignition (i.e., burning, welding, hot riveting, cutting, drilling, sanding, blasting, and space heating). Hot Work Entry Permits are required.

**“Isolation”** means a process in which the confined space is removed from service and is completely protected against potential hazards through blanking off piping, lockout procedures, mechanical blockage, or disconnecting linkage.

**“Non-Permit-required Confined Space”** means a space that meets the definition of “confined space” but does not meet the definition of a “permit-required confined space” because it does not have the potential to contain any hazard capable of causing serious physical harm. A non-permit confined space (non-permit space) meets the following conditions:

- All hazards have been eliminated before entry.
- Atmospheric hazards present can be controlled by forced air ventilation alone.
- No work will be done in the space that will create a hazard.

**“Permit-Required Confined Space (Permit Space)”** means a confined space that has one or more of the following characteristics:

- Contains or has a potential to contain a hazardous atmosphere;
- 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 smaller cross-section; or
- Contains any other recognized serious safety or health hazard.

**“Rescue Service”** means the personnel designated to rescue workers from permit-required confined spaces.

**“Retrieval System”** means retrieval lines, chest or full-body harnesses, wristlets, and lifting devices or anchors, used for non-entry rescue of persons from permit-required confined spaces.

**“Testing”** means the process used to identify and evaluate confined space hazards. Testing includes specifying the tests that are to be performed in the confined space.

## Permit-Required Confined Space Program

### VII. CONFINED SPACE HAZARDS

Appendix A contains a list of confined spaces by type at Warrenville facilities, their associated hazards, and their initial classification as either a permit or non-permit space.

Some confined spaces can contain hazardous atmospheres or other types of hazards such as electrical or mechanical hazards. Some confined spaces do not contain any hazards capable of causing death or serious physical harm. Each space must be evaluated before entry to determine if hazards are present, what hazards are likely, and to be able to eliminate and/or control these hazards before entry into the space. Work from the outside the confined space whenever possible.

#### **Hazards of Confined Spaces.**

Confined spaces can contain both atmospheric hazards and physical hazards.

Atmospheric hazards include:

- Oxygen deficiency due to the presence of other gases or rust.
- Excess oxygen (makes things burn easily).
- Explosive dust atmospheres.
- Flammable atmospheres containing methane, propane, or other explosive gases.
- Combustion by-products like carbon monoxide (CO) and carbon dioxide (CO<sub>2</sub>).
- Hydrogen sulfide (H<sub>2</sub>S), methane, and oxygen deficiency from decaying waste, sewage, or stagnant water.
- An atmospheric concentration of any substance at a level that is greater than the Permissible Exposure Limit (PEL).
- Any atmospheric condition that is immediately dangerous to life and health (IDLH).

Physical hazards must be locked out or controlled before entry, and may include:

- Electrical hazards.
- Mechanical exposure.
- Temperature.
- Engulfment.
- Entrapment.
- Other hazards, which may include:
  - Falls from ladders or railings
  - Falling objects
  - Wet surfaces
  - Noise from mechanical equipment
  - Cold stress
  - Becoming wedged in a narrow part of the structure

#### **Hazardous Conditions that Prohibit Entry**

A confined space should not be entered if there is a hazardous atmosphere or serious physical hazard that is immediately dangerous to life and health. Identify the cause of the hazards and perform corrective actions before entering.

Hazardous atmospheric conditions that prohibit entry include:

- An oxygen-deficient (less than 19.5%) atmosphere, which can cause suffocation.

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

- An oxygen-enriched (greater than 23.5%) atmosphere, which can cause a fire hazard.
- A potentially explosive atmosphere caused by the presence of combustible gases (such as methane from sewage and decaying waste), liquids, vapors, or dust at greater than 10% of their lower flammable limit (LFL).
- A concentration of any hazardous substance above its OSHA Permissible Exposure Limit (PEL) or above the exposure limit given on the MSDS (Material Safety Data Sheet). This situation can occur in confined spaces that are:
  - Associated with combustion processes (i.e., there is equipment running in the confined space which releases combustion products such as hydrocarbons and carbon monoxide).
  - Associated with sewage or wastewater operations. This is the greatest atmospheric hazard of confined spaces at Public Works facilities.

Physical hazardous conditions that prohibit entry include:

- Physical Hazards that are immediately dangerous to life and health (IDLH), such as:
  - A liquid or solid that may engulf.
  - Exposed conductors that may electrocute.
  - Uncontrolled energy that has the potential to be in the space at the time of entry.

### **VIII. IDENTIFICATION AND POSTING**

#### **Identifying Confined Spaces**

Confined space training includes identifying confined spaces. If an employee encounters a non-labeled space that fits the description of a confined space, the employee must contact their supervisor so arrangements can be made for the space's assessment and positive identification as a confined space. If an employee has already entered the space, he or she must leave it until the space is evaluated.

#### **Labeling Confined Spaces**

Where possible and practical, post warning signs identifying permit-required confined spaces at the entry points. The signs must distinguish between permit and non-permit spaces and prohibit unauthorized entry.

### **IX. RESPONSIBILITIES**

#### **Public Works Director, Management Analyst and Division Lead Supervisors**

The Public Works Director, Management Analyst and Division Lead Supervisors are responsible for the following:

- Ensuring policy is up to date with Federal and State Requirements.
- Ensuring that the required training is conducted. The Management Analyst will track training.
- Ensuring policy and procedures in this program are implemented and enforced.
- Arranging for annual review of the program. The Management Analyst will be responsible for reminding the Director and Supervisors to complete the annual review.
- Acting as a liaison with regulatory authorities as necessary.
- Actively soliciting ways to improve the program from employees.

#### **Utility Division Lead Supervisor or Streets Division Lead Supervisor**

The Utility Division Lead Supervisor or Streets Division Lead Supervisor are responsible

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

for the following:

- Enforcing the program requirements on a day-to-day basis.
- Ensuring the identification and initial evaluation of confined spaces.
- Ensuring the availability of the proper equipment needed to enter confined spaces.
- Reporting to the Public Works Director any problems related to confined space entry.
- Ensuring documentation related to confined space entry is maintained.

### **Entry Supervisor**

The Utility Division Lead Supervisor and Streets Division Lead Supervisor acts as or appoints an individual(s) to the position of Entry Supervisor for permit-required entries. An employee may function as an Entry Supervisor if they have been trained in this role and are authorized.

The Entry Supervisor must make sure conditions are safe for the entry, know the hazards of the entry and symptoms of exposures, verify that atmospheric and control measures are implemented, oversee the project, and terminate the permit. He or she must also:

- Issue, sign, and post a confined space permit at the entrance to the permit space before allowing anyone to enter it, and keep out unauthorized personnel.
- Determine and identify on the permit actual and potential hazards of entry at the site.
- Assure that a safe internal atmosphere is maintained.
- Allow Entrant to review the gas monitor if requested.
- Verify that rescue services and means for summoning them are available.
- Notify the Entrant(s) of the hazards involved and precautions to follow.
- Ensure the Attendant knows the work, can summon help, and can communicate.
- Anticipate and protect against hazards that the work might create.
- Maintain the safe conditions the permit requires.
- Suspend the permit and evacuate Entrant(s) if safe conditions are not maintained.
- Return the permit to the Division Lead Supervisor.

### **Authorized Entrants**

Entrants must be able to control the hazards in confined spaces. He or she must also:

- Know the hazards inherent to the space.
- Know how to use equipment properly.
- Never remove the lifeline.
- Maintain communications and contact with the Attendant.
- Exit the space when:
  - Evacuation is called for by the Attendant
  - Alarms sound on monitoring equipment
  - Warning signs are recognized
  - Prohibitive conditions are encountered

### **Attendants**

Permit-required confined space entries require the use of an Attendant. An Attendant is a trained and authorized employee stationed outside the permit space, who monitors the authorized Entrant(s) and confined space conditions and performs all Attendant duties including:

- Never entering the space, including reaching into the hole to hand tools back and forth.
- Having no other duties that will divert his/her attention.

## Permit-Required Confined Space Program

- Knowing the hazards and signs of exposure to the hazards.
- Maintaining communication with the Entrant(s) at all times.
- Informing Entrant(s) of changes in hazardous conditions so they can exit the space.
- Remain at the post until entry is completed and the Entrant(s) have left the space.
- Keeping unauthorized persons out of the space.
- Summon emergency services by calling 9-1-1
- Informing the emergency team of the hazards present when they arrive at the site.

### Non-Permit Standby

An attendant is not required per OSHA for non-permit-required confined space entries. Monitoring of non-permit-required confined spaces is required. Duties for non-permit confined space entries include the following:

- Inspect external and internal conditions for hazards prior to, and during entry.
- Carry a means of communication to contact a Supervisor at all times.
- Evacuate a non-permit-required space if a hazard becomes present and immediately notify supervisor.

### Outside Emergency Team

If there is an emergency, staff shall contact 911 immediately and request a response to the location of the crew.

### Performing More Than One Role

An Attendant may also function as the Entry Supervisor during a permit-required confined space entry. Also, Entrants and Attendants may rotate duties if trained in both roles.

## X. ENTRY PROCEDURES

### General Entry Considerations

To control confined space hazards, entry employees must:

1. Identify and control external hazards.
2. Provide guarding for the opening.
3. Assure that internal hazards do not exist.
4. Be able to recognize any warning signs of a dangerous situation.
5. Perform air monitoring before entry.
6. Complete a confined space entry permit for permit spaces, or record entry conditions on the entry log for non-permit spaces before entering.
7. Periodically monitor the air inside the confined space at least every ten (10) minutes and record the results of the testing.
8. Use personal fall protection when required.
9. Ensure rescue provisions are in place.
10. Report to the Supervisor-in-Charge (can be verbal) upon leaving the confined space.
11. Be able to communicate with the Attendant during a permit entry.
12. Leave the space immediately if a hazard is detected.

### Non-Permit-Required Confined Space Entry Procedures

#### *Required Personnel.*

Entry into non-permit spaces requires specific authorization from the Supervisor or use of a non-permit confined space entry log (see Appendix B). An Entry Supervisor is not required for non-permit entries into confined spaces so long as no hazard or concern of a

## Permit-Required Confined Space Program

hazard exists.

### *Pre-Entry Evaluation Procedures.*

Evaluate non-permit spaces before entry to ensure physical and atmospheric conditions have not changed since initial evaluation and that there are no hazards present which may warrant its reclassification to a permit-required space. Take into consideration any work that will be done in the confined space that may create hazard, and notify the supervisor if a reclassification to a permit entry is necessary.

### *Procedures for Non-Permit Entries.*

The procedure for entry into non-permit confined spaces is as follows:

1. Gather all required equipment and obtain tools necessary to do the work.
2. The Entrant, or Entrants, must each be equipped with an appropriate means of communication.
3. If more than one employee, one worker functions as the standby who always stays outside the non-permit space and the other worker(s) enters the space and performs the work.
4. Guard the confined space to protect it from external hazards.
5. Safely remove any covers to the confined space.
6. Begin documenting the entry on the non-permit entry log (see Appendix B).
7. Using the monitoring instrument, test the air inside the confined space before actually entering it. Monitor for the following:
  - a. Oxygen
  - b. Combustibles
  - c. Hydrogen sulfide (H<sub>2</sub>S)
  - d. Carbon monoxide (CO) (this level should be 0)

If levels of air contaminants are detected, or if the oxygen content is not normal (approximately 20.9%), let the supervisor know of the situation.

Entry into the non-permit space may proceed if the following conditions are met:

- Oxygen is at normal levels within the space.
  - No hazardous air contaminants have been detected.
  - All physical hazards have been eliminated.
  - All test results have been documented.
  - Any protective equipment needed has been donned.
  - Any personal fall protection needed is utilized when required.
  - There will be no hazards created by work done in the space.
8. Other employee(s) on site should stay outside the space at all times, continuously monitoring activities within the space, and maintaining contact with the Entrant(s).
  9. In the event of an emergency, call 911.
  10. Entrant(s) should perform periodic air testing during entry. Document all atmospheric monitoring tests on the entry log. The Entrant(s) must leave the confined space if the air monitoring detects a hazard or if additional hazards are discovered or created. If a hazardous condition occurs in the space, the Supervisor-in-Charge must be notified immediately. Re-entry is prohibited until a re-evaluation of the space is completed and safe conditions are restored or the entry is made following the permit-required confined space entry procedures.
  11. Upon completion of work, remove tools from the space, and take and record final

## Permit-Required Confined Space Program

instrument readings.

12. If work is interrupted and the Entrant(s) must leave the space, the space must be re-evaluated before re-entry.

### Permit-Required Confined Space Entry

The entry procedures for permit-required confined spaces are designed to reduce or eliminate the hazards and, if at all possible, reclassify the permit space to a non-permit space.

#### *Preparations for Permit Entries.*

The procedure for preparing for entry into permit confined spaces is as follows:

1. The Entry Supervisor issues the authorization to enter the permit area.
2. Gather all of the equipment and tools necessary to do the work.
3. Workers present must be equipped with a means of communication. Each worker must have their City issued phone with them at all times. One worker functions as the Attendant who must always stay outside the space. One worker functions as the Entrant. One worker functions as the Entry Supervisor. One worker can function as both the Entry Supervisor and the Attendant.
4. The Entry Supervisor initiates the confined space entry permit.

#### *Evaluating the Space/Completing the Permit*

Follow the steps below for conducting the confined space evaluation and completing the entry permit.

1. Prior to entry, document the following on the permit:
  - Permit space to be entered
  - Identification number of the confined space, if applicable.
  - Purpose of the entry
  - Date of entry
  - The authorized Attendant
  - The authorized Entrant(s)
  - The name of the Entry Supervisor
  - Date and time permit expires
2. Evaluate the confined space for atmospheric and physical hazards. Follow the procedure below for testing the air inside the permit space:
  - Test the air inside the confined space before actually entering it. Monitor at different levels and in hard to reach spots where gases can accumulate. Use a sampling probe and tubing.
  - Air contaminants are detected, or if the oxygen content is not normal, determine the reason for the abnormal readings and perform the appropriate corrective actions (i.e., ventilating, cleaning). Record test results on the permit.
3. Document the control measures used to isolate the space, and control or eliminate any atmospheric and/or physical hazards identified during the evaluation. Control measures, which may be needed include the following:
  - Ventilation
  - Lockout/Tagout
  - External Barricades and Signs
  - Lighting
4. Document that acceptable entry conditions have been achieved after implementation of control measures, and record final atmospheric test results before entry. The employee

## Permit-Required Confined Space Program

- performing the air testing must initial the permit.
5. Emergency Services. Emergency services telephone of 9-1-1 should be listed on the permit.
  6. At all times, the authorized Entrant(s) and the Attendant will remain in verbal contact with the Entrant(s) connected to a lifeline.
  7. Check equipment needed. This includes gas testing, personal protective, personal fall protection, ventilating, communications, and lighting equipment.
  8. List any other information needed for the permit entry to ensure Entrant safety. Examples include measures needed for heat or cold stress. If welding or other hot work will be performed inside the confined space, a hot work permit must also be completed.
  9. Prior to entry, the Entry Supervisor reviews the control measures taken, the test results, and the required work. The Entry Supervisor certifies the control measures taken and confirms the classification of the confined space as one of the following:
    - Non-permit space
    - Permit-required space

If all hazards have been eliminated or only atmospheric hazards remain which ventilation controls, and the work will not create any hazards in the confined space, then the Entry Supervisor may reclassify the confined space as a non-permit space. Then follow procedures for non-permit entries.

If any hazards remain that cannot be eliminated or controlled by ventilation alone, or if work may release additional hazards, the space is classified as a permit-required confined space. Entry then requires rescue provisions. Entry will proceed as follows after the completed permit is posted at the entrance to the permit space.

### *Entering and Working Inside the Permit Confined Space*

1. The Entry Supervisor must inform employees of any potential hazards remaining in the permit space before entry, and must also brief the Entrant(s) and Attendant on emergency procedures and verifies that emergency personnel are available.
2. Once the space is approved for entry by the Entry Supervisor, the Entrant(s) must:
  - Obtain personal protective equipment (PPE).
  - Ensure the equipment and tools needed to perform the work are present.
  - Use designated means of communication to maintain contact with the Attendant.

### *Monitoring the Entry Work*

1. The Attendant must regularly check on the welfare of the Entrant(s), stay outside the space. If the Entrant does not respond when being checked by the Attendant, the Attendant should call 911.
2. The Entrant(s) must leave the confined space under the following circumstances:
  - Air monitoring detects a hazard
  - Forced air ventilation malfunctions or stops
  - Additional hazards are discovered or created
  - The Attendant tells the Entrant(s) to leave the space or informs the Entrant(s) of problems; or
  - The Attendant is no longer able to remain in attendance
3. If circumstances dictate interruption in the work, or conditions for which entry was

## Permit-Required Confined Space Program

approved change, the Entrant(s) must leave the space, the space must be re-evaluated, and a new permit completed before re-entry.

### *Ending the Entry*

The Attendant or Entrant ends the entry upon work completion or if unsafe conditions are detected.

1. Upon work completion, the Entrant(s) retrieves tools or equipment and cleans up the space as necessary before ending the entry.
2. Check to make sure no one is within the confined space and perform all measures required to bring the confined space back to normal service.
3. The Entrant may need to reverse lockout or other safety procedures. This may include:
  - Unblocking mechanical parts so they can move freely
  - Securing the hatch or manhole cover
  - Removing blinds from lines and pipes
  - Removing locks and tags from energy sources
  - Testing to be sure sources are working properly
4. After ensuring the space is returned to the proper conditions, the Entry Supervisor:
  - Removes the permit
  - Signs and dates the permit, and notes the time.
  - Documents problems encountered during the entry and any suggestions to avoid problems in the future.
  - Returns the completed permit to the Division Lead Supervisor for filing.
  - Record the final atmospheric readings to close out permit.

## **XI. RECLASSIFICATION TO A NON-PERMIT SPACE**

A permit space can be designated a non-permit space after testing, evaluation, and hazard elimination have been completed. If all hazards are eliminated or only atmospheric hazards remain which ventilation controls, and work does not create any hazards in the confined space, then the Entry Supervisor may reclassify the confined space as a non-permit confined space.

Normal work activities can proceed as long as there are no hazards present in the space. Conduct periodic air monitoring while in the reclassified space.

## **XII. EMERGENCY PROCEDURES**

Entrants must evacuate the confined space if:

1. Air monitoring detects a hazard.
2. Forced air ventilation, or other equipment in use, stops.
3. Additional hazards are discovered or created.
4. The Attendant tells the Entrant(s) to leave the space.
5. The Attendant is no longer able to remain in attendance.

Attendants must:

1. Call 911 in an emergency situation.
2. Never enter a confined space to perform a rescue.
3. Ensure rescue services are available.

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

4. Ensure, before entry, that an open line of communication is available to summon emergency services if necessary.
5. Inform Entrants to evacuate when required.
6. Inform the rescue team of the hazards present once they are at the confined space site.

Management shall notify IDOL within 8 hours of the incident, should three or more employees need to be hospitalized or a fatality were to occur.

### **XIII. PERSONAL PROTECTIVE EQUIPMENT**

In carrying out the requirements of the permit system, the Entry Supervisor evaluates the equipment and clothing that a particular entry requires. The protective equipment an Entrant needs depends on the hazards of the confined space. The entry permit should list required protective equipment. For confined space entries, the following personal protective equipment may needed:

- Eye and face protection
- Hard hat
- Safety shoes or boots
- Protective clothing
- Gloves

Inspect protective clothing and equipment before use. Replace broken equipment. After use, clean the equipment as instructed and store it in a safe, clean area.

### **XIV. AIR MONITORING PROCEDURES**

Atmospheric testing of confined spaces is performed for two reasons:

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

Confined space entry requires initial and periodic air testing. Under certain conditions, continuous monitoring is necessary during entry, such as:

- Work can cause a hazardous atmosphere.
- There is reason to believe air quality can deteriorate.
- In a sewer system confined space and forced air ventilation cannot be used.

Before Entrant(s) can enter a confined space, an authorized and trained person must conduct tests for atmospheric hazards from outside the confined space.

Monitoring shall be done in the following sequence:

- **OXYGEN** – Most combustible gas sensors are oxygen dependent. Any abnormal oxygen level shall be investigated. Oxygen deficiencies will lead to incorrect combustible readings.
- **COMBUSTIBLE GASES** – The threat of fire or explosion is both more immediate and life threatening.
- **TOXIC GASES** – Toxic gases are dependent on the space being monitored. Carbon Monoxide (CO) & Hydrogen Sulfide (H<sub>2</sub>S) are the most common. Other gases such as Chlorine, Sulfur Dioxide, Carbon Dioxide and Nitrogen are commonly found.

If oxygen is outside the normal range, or if combustibles or any hazardous gases or toxic

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

materials are detected, determine the reason for the abnormal readings and perform the appropriate corrective actions (i.e., ventilate, clean) before entry. The authorized employee conducting the monitoring shall document each test result.

### **XV. CONTRACTORS**

Contractors must maintain a confined space program in compliance with 29 CFR 1910.146, and use their own equipment and permit for permit-required confined space entries.

### **XVI. TRAINING REQUIREMENTS**

Only authorized and trained employees are allowed to enter confined spaces. They must be trained in the duties they are authorized to perform with regard to confined space entry. Training shall be provided:

- Before the employee is first assigned confined space duties.
- Before any change in assigned duties.
- Whenever there is a change in operations that affects the employee.
- When there is reason to believe there are inadequacies in an employee's knowledge.
- When a regulatory change affects the program.

### **XVII. PERIODIC PROGRAM REVIEW**

A periodic program review shall be conducted (at least annually). The review should include the following:

- Review procedures, implementation, and related records.
- Review the list of confined spaces and hazard assessment in Appendix A, and update as necessary.
- Review confined spaces classified as non-permit and re-evaluate to determine that all potential hazards have been addressed.

## Permit-Required Confined Space Program

### APPENDIX A

#### LIST OF CONFINED SPACES AND HAZARD ASSESSMENT

<b>Building/ Location</b>	<b>Type/ Description</b>	<b>Access</b>	<b>Hazards</b>	<b>Classification</b>
City Wide	Storm Sewer Structures	Top	Air Quality	Non-Permit-required Confined Space
City Wide	Sanitary Sewer Structures	Top	Air Quality	Non-Permit-required Confined Space
Cantera Lift Station 28270 Diehl Road	Sanitary Sewer Dry Well	Top	Air Quality	Non-Permit-required Confined Space
Emerald Green Lift Station 29W336 John Bardeen Drive	Sanitary Sewer Dry Well	Top	Air Quality	Non-Permit-required Confined Space
Fox Hollow Lift Station 1S681 Essex Lane	Sanitary Sewer Dry Well	Top	Air Quality	Non-Permit-required Confined Space
Herrick Hills Lift Station 3S665 Breme Drive West	Sanitary Sewer Dry Well	Top	Air Quality	Non-Permit-required Confined Space
Stafford Lift Station 28W523 Riverview Drive	Sanitary Sewer Dry Well	Top	Air Quality	Non-Permit-required Confined Space
Ray Street Lift Station 62W602 Ray Street	Sanitary Sewer Dry Well	Top	Air Quality	Non-Permit-required Confined Space
Warren Avenue Lift Station 3S631 Warren Ave	Sanitary Sewer Dry Well	Top	Air Quality	Non-Permit-required Confined Space
Riverside Parkway Lift Station 29W440 Riverside Parkway	Sanitary Sewer Dry Well	Top	Air Quality	Non-Permit-required Confined Space
Williams Road Lift Station 2S601 Williams Road	Sanitary Sewer Dry Well	Top	Air Quality	Non-Permit-required Confined Space

## Permit-Required Confined Space Program

### APPENDIX B NON-PERMIT CONFINED SPACE CERTIFICATION

Date: \_\_\_\_\_

<b>Permit Space:</b> Identity: _____ Purpose: _____ Hazards: _____		
<b>Monitoring:</b> List readings of monitoring instruments. Tester Signature _____		
	<b>Oxygen (%)</b>	<b>Explosive (% LEL)</b>
<b>Initial Reading</b>		
<b>5 Minute w/Ventilation</b>		
<b>10 Minute w/Ventilation</b>		
<b>15 Minute w/Ventilation</b>		
<b>30 Minute w/Ventilation</b>		
<b>Forced-Air Ventilation:</b> Size, power source of blower, length of time before entry, backup		
Model/Size: Gas/Electric: Backup: Initial entry waiting period:		
<b>Safe Entry Procedures:</b>		
<b>Entrance Covers</b> – when removed, ensure proper fall protection is in place.  <b>Testing</b> – before entering the space, the internal atmosphere shall be tested, with a calibrated direct- reading instrument, of oxygen content, for flammable gases and vapors, and for potential toxic air contaminants, in that order. Allow entrant to review pre-entry testing.  <b>Ventilation</b> – before entering, ensure the forced air ventilation has eliminated any hazardous environment. Continue the ventilation until all employees have left the space. Ensure the intake air supply for the blower is not drawing airborne contaminants and blowing these contaminants into the confined space.		
<b>Emergency Procedures:</b>		Emergency Rescue Number: <b><u>911</u></b>
If a hazardous atmosphere is detected during entry: - Evacuate all personnel from the space immediately - Determine source of contaminated atmosphere - Revise safe entry procedures or reclassify to permit-required confined space.		

**Recordkeeping Requirement:** Maintain completed copies on file for one year from the date of entry.

Authorized Signature \_\_\_\_\_

## Permit-Required Confined Space Program

### INSTRUCTIONS FOR COMPLETING THE NON-PERMIT CONFINED SPACE ENTRY PERMIT

- Identify Permit Space:** Record the date and time period for the entry. Record a uniquely recognizable location for the confined space. Also record the reason or purpose for entering the confined space. And record the known or suspected hazards that may be present in the confined space.
- Record monitoring results:** Record the initial readings for oxygen levels, flammable levels, and toxic levels. Oxygen levels must be between 19.5% - 23.5% oxygen by volume. Personnel will not be permitted to enter the oxygen levels are lower than 19.5% or if the oxygen levels are higher than 23.5%. Flammable levels must not exceed 10% of the lower explosive limit. Personnel must be removed from the space if the LEL is 10% or higher. Toxic levels that reach the PEL will have an adverse effect on the body and personnel will be required to wear respiratory equipment. No person will be permitted in the confined space if the oxygen level is not between 19.5% - 23.5%, greater than 10% of the LEL, or above the PEL without appropriate respiratory protection. Record periodic readings while personnel are operating in the confined space to ensure the standards are met.
- To achieve an environment that will permit entry, ventilation may be introduced into the space(s). A permit will be required to enter the space unless it can be demonstrated the space is safe using engineering controls such as ventilation. To demonstrate the safe levels, this form must be completed. Once the initial readings are completed, insert the ventilation and take readings at 5, 10, 15, and 30 minute times. If the readings demonstrate acceptable levels, the space may be demonstrated safe by duplicating the process.
- Ventilation:** Forced air ventilation equipment must be identified to ensure the same rated equipment is used to duplicate the process. Record the model/size, the type (gas/electric), backup equipment, and the flow period prior to entry.
- Safe entry procedures:** Standard, unless additional information is added, such as lockout/tagout or other procedures to eliminate hazards.
- Emergency procedures:** Standard, unless additional information is added.
- Signature:** The permit must be signed by the supervisor in charged. Also indicate the date/time when the permit was cancelled.

# Permit-Required Confined Space Entry

## Emergency: Call 911

Date: \_\_\_\_\_

Entry period (1) day maximum: \_\_\_\_\_

Identify location: \_\_\_\_\_

Purpose: \_\_\_\_\_

Hazards: \_\_\_\_\_

Supervisor: \_\_\_\_\_

Entrant(s): \_\_\_\_\_

Attendant(s): \_\_\_\_\_

**Monitoring: List readings of instruments**

	Oxygen (%) Between 19.5% and 23.5%	Explosive (%LEL) Must be below 10%	Toxic (PPM) Instrument will beep and flash if over PPM of toxics
<b>Initial Reading</b>			
<b>Periodic Readings</b> ↓			
Time:			

**Permit-Required Confined Space Program**

**Requirements:** Complete prior to entry

**YES/NO/NA**

**ALL LINES MUST BE CHECKED ✓**

- Area around pertaining problem is safe for workers and barricaded off from the general public.**
- Lockout/Tag-out and De-energized**
- Purge/Flush/Vent**
- Proper ventilation**
- Tripod and Safety Crank**
- Escape harness for Entrant(s)**
- Lighting**
- Protective Clothing**
- Medical Requirements**
- Lines Capped/Broken/Opened**
- Hot Work**
- Fire Extinguisher**
- Lifelines**
- Correct P.P.E. used for job type.**

**Communication used:** \_\_\_\_\_

**Comments:** \_\_\_\_\_

**Time taken to repair (start to finish):** \_\_\_\_\_

**Crew members:** \_\_\_\_\_

**TESTER SIGNATURE:** \_\_\_\_\_

**FORM FILL SIGANTURE:** \_\_\_\_\_

**SUPERVISOR SIGNATURE:** \_\_\_\_\_

**Permit-Required Confined Space Program**

**APPENDIX C**

**AUTHORIZED EMPLOYEE LIST FOR SPECIFIC CONFINED SPACES**

<b>Non-permit-required Confined Space</b>	<b>Authorized Employees</b>
Sanitary Sewer Structures Storm Sewer Manholes Sanitary Sewer Dry Well	Lead Supervisors Laborer Utility Worker All must have been trained in this policy and in the field

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

### **APPENDIX D**

The following OSHA regulations accompany this policy.

#### **REGULATIONS**

1910.146	Permit-Required Confined Spaces
1910.146appa	Permit-Required Confined Space Decision Flow Chart
1910.146appb	Procedures for Atmospheric Testing
1910.146appc	Examples of Permit-Required Confined Space Programs
1910.146appd	Confined Space Pre-Entry Check List
1910.146appe	Sewer System Entry
1910.146appf	Permit-Required Confined Space