Catholic Diocese of Arlington
Confined Space Manual

[Enter Parish or School Name]

I. Introduction

The Diocese of Arlington recognizes certain work environments as hazardous areas. Working in confined spaces poses an increased hazard to our employees and any contractors working in the area. This document establishes guidelines and procedures to ensure the health and safety of personnel entering and working in the pipe tunnel throughout the building. A list of important definitions is in Appendix A and a Decision Tree is in Appendix B.

II. Responsibilities

Each diocesan location is responsible to ensure:

1. All confined spaces are identified and correctly classified.
2. Appropriate signage is posted, and the area is restricted.
3. Selected positions/staff is authorized to work in confined spaces.
4. Authorized personnel receive proper training to recognize confined spaces.
5. Unauthorized personnel are not permitted to enter the confined space.
6. Procedures are implemented to ensure safe and legal entry into the confined spaces.
7. All necessary personnel protective equipment is available and maintained in good condition.

A. **Supervisors.** Supervisors have the primary responsibility for ensuring the health and safety of their employees. Specific confined space responsibilities include:

1. Identifying confined spaces that personnel may enter and ensuring they have been reviewed and classified, and trained;
2. Identifying the duties of designating persons in entry operations (e.g., authorized entrants, attendants, entry supervisors, or persons who test or monitor the atmosphere) and only permitting personnel with the required training. Ensuring personnel receive the proper level of training and that training is documented;
3. Ensuring copies of all permit space reclassification forms are retained and a copy is submitted to the program administrator;
4. Developing and implementing special procedures for confined space entry as needed; and
5. Notifying the program administrator of unauthorized entry of a permit space or an injury or near-miss during a confined space entry.

III. Confined Space Classification and Hazards

Confined spaces can be below or above ground and may be found in almost any workplace. Examples of confined spaces include utility vaults, tanks, sewers, pipes, access shafts, boilers, utility holes, and storage bins. Ditches and trenches may also be a confined space when access or egress is limited.

Each diocesan location will ensure all identified confined spaces have been evaluated and classified as a non-permit or permit-required confined space by the program administrator.

- A **confined space** is a space which is large enough for personnel to enter and perform assigned work, but as one or more of the following characteristics:
    1. Has limited or restricted means for entry or exit;
    2. Is not designed for continuous personnel occupancy; and
    3. May have a hazardous atmosphere.
- ***A non-permit required confined space*** meets the definition of a confined space, and does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.
- A ***permit-required confined space*** is a confined space which contains a recognized serious safety or health hazard, or the potential to contain a hazardous atmosphere

A. **PRCS**. A ***permit-required confined space (PRCS)*** is 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 for engulfing an entrant (e.g. water, sand, dirt);
3. Has an internal configuration such that an entrant could be trapped or asphyxiated by inwardly converging walls or by a floor which slopes downward and tapers to a smaller cross-section, or
4. Contains any other recognized serious safety or health hazard.

B. **Space Evaluation**. The atmosphere of a confined space should be analyzed using equipment sensitive enough to specify, identify and evaluate any hazardous atmospheres that may exist or arise, so that appropriate permit entry procedures can be developed, and acceptable entry conditions stipulated for that space. Evaluation and interpretation of these data, and development of the entry procedure, will be done, or reviewed by the program administrator based on evaluation of all serious hazards.

IV. Confined Space Hazards

The following are common ***confined space hazards*** that would require a space to be classified as a permit-required confined space:

A. **Hazardous Atmospheres**. 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. A space containing a hazardous atmosphere must not be entered under any circumstance. Some examples of common hazardous atmospheres are:

1. **Oxygen-Deficient Atmospheres**: An oxygen-deficient atmosphere has less than 19.5% available oxygen. Any atmosphere with less than 19.5% oxygen must not be entered unless personnel have been trained and have an approved self-contained breathing apparatus (SCBA). This is an atmosphere that is Immediately Dangerous to Life and Health (IDLH). Oxygen deficient atmospheres may develop in the following situations:
    i. Ambient oxygen is consumed by the work being performed, such as welding, cutting or brazing, or it can be decreased by certain chemical reactions (for example, the rusting of metal) or through bacterial action; or
    ii. Ambient oxygen is displaced by another gas, such as carbon dioxide or nitrogen.

2. **Oxygen-Enriched Atmospheres**: Oxygen enrichment refers to air containing more than 23.5 percent oxygen. This dangerous condition is an extreme fire hazard in which static electricity from materials such as hair or clothing can provide the ignition source needed to start a fire. This environment also allows any fire to burn more readily. Oxygen enrichment does not occur naturally and should be investigated.
3. **Flammable atmospheres**: Different gases have different flammable ranges. An atmosphere is considered hazardous if the concentration of any substance exceeds 10% of its lower explosive limit (LEL). If a source of ignition (such as a sparking or electrical tool) is introduced into a space with a flammable atmosphere, an explosion could result.
4. **Toxic atmospheres**: Most substances (liquids, vapors, gases, mists, solid materials, and dusts) can present a hazard in a confined space. Toxic atmospheres contain an atmospheric concentration of one or more substances at or above their Permissible Exposure Limits (PEL) and include any other atmospheric conditions that are IDLH. Toxic substances can come from the following:
   - A product stored in the space;
   - The work being performed in the space. Examples include welding, cutting, brazing, painting, scraping, sanding, degreasing, use of solvents, etc.; or
   - Toxic materials stored in areas adjacent to the confined space. Examples include chemicals or fuel stored in leaking underground storage tanks, or sections of the steam tunnels that may overlay or lie adjacent to a leaking sewer system

B. **Non-Atmospheric Hazards.** Additional serious hazards which should be evaluated and may require a confined space to be classified as a permit-required confined space include but are not limited to:

1. **Hazardous Energy**: Confined spaces may contain hazards from electrical, mechanical, pneumatic or hydraulic energy sources. Hazardous energy sources must be identified and mitigated using proper energy isolation procedures prior to entry.
2. **Lockout-tagout (LOTO)** refers to the safety procedures used to ensure that dangerous equipment has been properly shut-down and is incapable of being started up again prior to the completion of the entry or servicing work. It requires that all hazardous energy sources have been (1) identified (2) isolated and (3) rendered inoperative. Some common forms of energy isolation include electrical circuit breakers, disconnect switches, ball or gate valves, blind flanges, and blocks. Push buttons, e-stops, selector switches, and control panels are not considered proper points for energy isolation. Types of energy that may need to be isolated include potential energy (mechanical springs in tension or compression, compressed gas cylinders, counterweights, etc.), kinetic energy (rotating flywheel/shafts, moving parts, rolling components, parked vehicles, etc.) and utility energy (electricity, compressed air, steam, domestic water, etc.).

C. **Entrapment Hazards**. Examples of entrapment hazards in confined spaces include inwardly converging walls or floors that slope downward and taper to a smaller cross-section (such as air plenums).

D. **Engulfment Hazards**. This refers to the surrounding or burial of the worker in a liquid or loose, finely divided solid material, such as sand or grain. Such materials can suffocate a worker. Examples include:

- Accidental dumping of a product on a worker.
- A worker walking on unstable material such as backfilled soil.

E. **Thermal Hazards**. A thermal hazard is a dangerous condition caused by excessive heat or cold or a hot surface. Personnel engaged in continuous heavy work while wearing PPE (e.g., bodysuit and respirator) in warm surroundings are particularly susceptible to thermal hazards. Heat stress may lead to heat exhaustion, heat cramps, heat stroke, loss of

consciousness, or death. A permit space reclassification form must address any hazards from heat or cold within confined spaces.

F. **Additional Hazards**. Other potentially serious hazards which must be evaluated are biological, animals (e.g., snakes, rodents, spiders, etc.), poor lighting, obstructions, falling objects, slip/trip/fall, radioactive and acute chemical hazards.

V. Training

Each diocesan location is responsible for ensuring personnel are properly trained prior to entering or performing work in confined spaces. Training must be documented, and training records must be kept for as long as it is reasonably expected that an individual will be working in confined spaces.

A. **All Confined Space Work.** All diocesan location personnel and contracted employees involved in confined space work must receive appropriate training in hazard recognition, personal protective equipment, safety equipment, communications equipment, procedures for calling rescue services and proper use of non-entry rescue equipment as needed. This training must:

1. Be conducted before personnel engage in confined space duties, when there is a change in assigned duties, whenever there is a change in operations that presents a hazard about which personnel has not previously been trained and whenever the supervisor has reason to believe either that there are deviations from confined space entry procedures or that there are inadequacies in an individual's knowledge or use of these procedures;
2. Establish personnel proficiency in their duties and introduce new or revised procedures as necessary;
3. Be documented and contain each person's name, the signatures or initials of the trainers, and the dates of training. The certification must be available for inspection by personnel and their authorized representatives; and
4. Include conditions or work practices that may produce a serious hazard in a non-permit confined space that may require that the space is reevaluated by the entry supervisor prior to entry.

B. **Permit-Required Confined Space Work.**

Permit-required confined spaces must only be entered after all serious hazards have been eliminated and the space has been reclassified to non-permit required confined space. If a space cannot be reclassified the entry must not take place. Diocesan location employees will not enter the confined space but are still responsible to make sure contractors are properly trained before entering the confined space (See Appendix B). Specialized training including duties and responsibilities must be provided for the following roles:

1. **Entrants.** Anyone who enters a re-classified permit-required confined space must be trained on the following:
    a. Real and potential hazards that may arise during entry, including information on the mode, signs or symptoms, and consequences of the exposure;
        i. How to properly use all equipment and necessary PPE;
        ii. How to communicate with the attendant as necessary to enable the attendant to monitor entrant status and to enable the attendant to alert entrants of the need to evacuate the space;
        iii. To alert the attendant whenever:

1. The entrant recognizes any warning sign or symptom of exposure to a dangerous situation; or
2. The entrant detects a prohibited condition or another serious hazard.

iv. To exit the space as quickly as possible whenever:

1. The attendant or the entry supervisor give an order to evacuate;
2. The entrant recognizes any warning sign or symptom of exposure to a dangerous situation;
3. The entrant detects a prohibited condition or another serious hazard; or
4. An evacuation alarm is activated.

2. **Attendants.** Personnel stationed outside of a permit space or a reclassified permit space who perform attendant duties as required by this program must be trained on the following:

a. Real and potential hazards that may be faced during entry, including information on the mode, signs or symptoms, behavior effects and consequences of the exposure;

b. How to continuously maintain an accurate count of authorized entrants in the space and ensure that the means used to identify authorized entrants is available and correct;

c. How to communicate with authorized entrants to monitor entrant status and to alert entrants of the need to evacuate the space;

d. Their responsibility to remain outside the space during entry operations until relieved by another attendant;

e. To not perform other duties that might interfere with their primary duty to monitor and protect the authorized entrants;

f. How to monitor activities inside and outside the space to determine if it is safe for entrants to remain in the space, and to order the authorized entrants to evacuate the space immediately under any of the following conditions:

i. If the attendant detects a prohibited condition or another serious hazard;
ii. If the attendant detects the behavioral effects of hazards exposure in an authorized entrant;
iii. If the attendant detects a situation outside the space that could endanger the authorized entrants; or
iv. If the attendant cannot effectively and safely perform all the duties required.

g. How to initiate on-site rescue procedures and, if necessary, summon additional rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance.

h. To take the following actions when unauthorized persons approach or enter a space while entry is underway:

i. Warn the unauthorized persons that they must stay away from the space;
ii. Advise the unauthorized persons that they must exit immediately if they have entered the space; and

iii. Inform the authorized entrants and the entry supervisor if unauthorized persons have entered the space.

i. Summon rescue and other emergency services as soon as the attendant determines that authorized entrants may need assistance; and

j. How to perform non-entry rescues if required.

3. **Entry Supervisor.** The person responsible for determining if acceptable entry conditions are present in a reclassified permit space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this document. The entry supervisor may also perform the roles of the attendant. The entry supervisor must be trained on and is responsible for:

   a. Ensuring all serious hazards have been eliminated and the space has been reclassified to non-permit required confined space;

   b. Each entry is performed safely;

   c. Knowing potential hazards that may arise during entry, including information on the mode, signs or symptoms, and consequences of the exposure;

   d. Ensuring the permit space reclassification form is filled out completely and correctly;

   e. Verifying that the appropriate entries have been made on the reclassification for, that all required tests have been conducted and that all required procedures and equipment are in place before endorsing and allowing entry to begin;

   f. Ensuring all hot work is authorized through the local Fire Marshal on a separate hot work permit and has been reviewed by the program administer;

   g. Signing the reclassification form prior to allowing entry and ensuring that entry operations remain consistent with the terms on the form;

   h. Ensuring the reclassification form is available at the work site outside the confined space;

   i. Verifying that emergency and rescue services are available and that the means for summoning additional services are operable;

   j. Notifying unauthorized individuals who enter, or attempt to enter, the reclassified permit space during entry operations to leave;

   k. Terminating the entry and canceling the permit space reclassification form when entry operations covered by the form have been completed, or when a condition that is not allowed under the form such as a serious hazard arises in or near the space; and

   l. Ensuring that after an entry is completed one copy of the completed permit space reclassification form is retained by the diocesan location and the original is submitted to the program administrator in OPCF.

VI. Procedures

A. Confined Space Hazards

Since confined spaces are not designed for continuous occupancy, they often have limited ventilation and other hazards that are not controlled as they would be in occupied spaces. These hazards fall into two main categories — hazardous atmospheres and safety hazards.

Atmospheric hazards include the following:	**Safety hazards** include the following:

• Toxic contaminants • Oxygen deficient or enriched environments • Flammable vapors	• Mechanical hazards such as rotating parts • Electrical hazards such as exposed wiring • Engulfment with materials such as grain • Water/drowning in liquids • Falls in or into the space

B. **Confined Space Entry Procedures**

Personnel must notify their supervisor prior to entering and performing work in confined spaces and should work in pairs whenever possible. The following procedures must be followed prior to entering any confined space:

1. Any condition making it unsafe to remove an entrance cover will be eliminated before the cover is removed.
2. When entrance covers are removed, the opening must be promptly guarded by a railing, temporary cover, or other temporary barrier that will prevent an accidental fall through the opening and that will protect each employee working in the space from foreign objects entering the space. Appropriate vehicle and pedestrian barriers must be used.
3. All safety policies and procedures must be followed.
4. Metal ladders must not be used when working around electrical equipment.
5. There must be no smoking in a confined space.
6. Adequate lighting must be provided and used.
7. Personal protective equipment must be provided and worn as necessary for safe entry into a confined space.
8. Any use of chemicals must be pre-approved by the program administrator.
9. Safety Data Sheets (SDSs) must be available for all hazardous materials used or may be encountered during the entry.
10. Welding, soldering, cutting, or other hot work must be pre-approved by the program manager in consultation with the program administrator and requires a Hot Work Permit approved by the local Fire Marshal.
11. Contractors who send their employees into confined spaces under the control of the Office of Planning, Construction, and Facility Maintenance (OPCF) will be informed of the potential hazards, safety rules, and emergency procedures by the department.

When there are changes in the use of a non-permit confined space or if hazards are introduced to the space, the space must be reevaluated by the program administrator prior to entry. Examples of actives requiring reevaluation are:

1. Application or storage of solvents, paints, chemicals or other materials that could potentially create a hazardous atmosphere in a confined space;
2. Hot work operations (welding, cutting, brazing, soldering, etc.);
3. A physical hazard such as unguarded equipment is introduced into the space; or
4. Any other real or potential hazards are introduced or discovered in the space.

C. **Permit-Required Confined Space Reclassification and Entry Procedures**

Permit-required confined spaces must only be entered after all serious hazards have been eliminated, and the space has been reclassified to non-permit required confined space. If a space cannot be reclassified prior to entry, the entry must not take place.

The pipe tunnel is a permit-required confined space which must be reclassified to non-permit required confined spaces prior to entry. If the permit space poses no actual or potential atmospheric hazards and if all serious hazards within the space are eliminated without entry into the space, the permit space may be reclassified as a non-permit confined space for as long as all serious hazards remain eliminated. Control of atmospheric hazards through forced air ventilation alone does not constitute an elimination of the hazard. The diocesan location must document the basis for determining that all serious hazards in a permit space have been eliminated on the permit space reclassification form. If it is necessary to enter the space to control any serious hazards, then the entry must not take place. If a serious hazard arises within a space, personnel must exit the space immediately. The entry supervisor and program administrator must be notified, and the space reevaluated prior to reentry.

The entry supervisor must ensure the following procedures are performed prior to entering a reclassified permit-required confined space:

1. The entry supervisor must designate the persons who are to have active roles (authorized entrants, attendants, and atmospheric testing personnel) in entry operations and ensure they have received documented PRCS entry training.
2. A permit space reclassification form must be completed and signed by the entry supervisor. The permit space reclassification form must be kept outside of the confined space and made available to the authorized entrants for review. The permit space reclassification form must document the steps taken to mitigate hazards and reclassify the space to a non-permit space.
3. Atmospheric testing is completed and documented.
4. A tripod and/or other non-entry retrieval equipment is available during all vertical entries if it is possible that the equipment could be used to safely rescue entrants from the confined space.
5. Entry supervisors are responsible for ensuring individuals are trained in emergency and rescue procedures, and that authorized entrants don harnesses prior to entering the space.

During the entry:

1. At least one attendant must be stationed outside the space to which entry is authorized for the duration of entry operations.
2. Atmospheric testing is completed and documented.
3. The entry supervisor or attendant must cancel the form and end the entry if any of the following occur during the entry:
    a. A serious hazard is detected within the space; or
    b. A prohibited condition arises.

Additionally, the entry supervisor must ensure:

1. The duration of the entry does not exceed the time required to complete the assigned task or job identified on the reclassification form.
2. The permit space reclassification form must be terminated when:
    a. The entry operations covered by the form have been completed; or
    b. A condition that is not allowed under the form arises in or near the permit space.

3. A copy of all completed permit space reclassification forms must be submitted to the diocesan location program administrator.

D. Atmospheric Testing Procedures

Prior to performing atmospheric testing personnel must complete documented training covering all used monitoring equipment. Atmospheric testing must be performed and documented when evaluating a new confined space, prior to and during a non-permit space and a reclassified permit-required space entry, or when a potential atmospheric hazard is introduced into a space. Additionally, individuals performing atmospheric testing must:

1. Review the manufacturer's product manual and heed all warnings and cautionary statements.
2. Check the instrument's calibration records and ensure the instrument has been calibrated within the last 30 days or per the manufacture's requirements. If not, ensure the instrument is properly calibrated before use.
3. Bump test instrument per the manufacturer's instructions. If the instrument fails, the bump test it must be recalibrated prior to use.
4. Measurement of values for each atmospheric parameter must be made for at least the minimum response time of the test instrument specified by the manufacturer.
5. When monitoring for entries involving a descent into atmospheres that may be stratified, the atmospheric envelope must be tested a distance of approximately 4 feet (1.22 m) in the direction of travel and to each side. If a sampling probe is used, the entrant's rate of progress should be slowed to accommodate the sampling speed and detector response.
6. A test for oxygen is performed first because most combustible gas meters are oxygen dependent and will not provide reliable readings in an oxygen deficient atmosphere. Combustible gases are tested for next because the threat of fire or explosion is both more immediate and more life threatening, in most cases, than exposure to toxic gases and vapors. If tests for toxic gases and vapors are necessary, they are performed last.

E. Pre-entry Atmospheric Testing

The atmosphere in all permit-required confined space atmospheres must be tested for oxygen concentration, combustible gases, carbon monoxide, hydrogen sulfide, and any known or suspected toxic or hazardous substances prior to entry. Pre-entry sampling must be conducted from outside of the space and cover various levels within the space (i.e. at least top, middle, and bottom), and around all conduits, pipes, or cables. Intrinsically safe equipment must be used if a flammable atmosphere is present or is suspected of being present. All atmospheric testing results must be recorded on the permit space reclassification form. If more than 15 minutes have elapsed between pre-entry atmospheric testing and the actual entry, all tests must be performed again prior to entry.

F. Non-Entry Conditions

If any of the following atmospheric conditions are encountered before or during the entry, the reclassification form must be canceled, and entry must not take place:

1. Oxygen levels below 20.5% or greater than 21.5% by volume;
2. Combustible gas levels greater than 5% of the lower explosive limit (LEL);
3. Hazardous substance levels where exposure could result in death, acute illness or impairment of ability to self-rescue;

4. Airborne combustible dust or other particulates obscures vision to five feet or less; or
5. Any atmospheric condition recognized as immediately dangerous to life or health is present.

G. **Post-entry Atmospheric Testing**

Continuous monitoring must be conducted for oxygen, combustible gases, carbon monoxide, hydrogen sulfide and any other known or suspected toxic or hazardous substances during all reclassified permit space entries in the areas where entrants are located. All monitoring devices must be equipped with an audible alarm. Testing results must be recorded on the reclassification form at least every 15 minutes during entry. Both the entry supervisor and the program administrator must be notified immediately if an unacceptable atmospheric condition is encountered during entry.

VII. Labeling

Signage for non-permit required confined spaces is not required; however, it is recommended for spaces that may be accessed by untrained personnel. Recommended signage is as follows:

CAUTION
CONFINED SPACE
AUTHORIZED PERSONNEL ONLY

Permit-required spaces, which could be inadvertently entered, must be labeled as a permit-required confined space using the following language:

DANGER
PERMIT-REQUIRED CONFINED SPACE
DO NOT ENTER

A. **Contractor Awareness**

When a contractor is hired to perform work that involves confined space entry, they must:

1. Notify their supervisor and the program administrator prior to entry, and as far in advance as possible.
2. Inform the contractor, in writing, that the workplace contains confined spaces and that permit space entry is only allowed through compliance with a permit space program meeting.
3. Apprise the contractor of any precautions or procedures that the diocesan location has implemented for the protection of all personnel in or near the confined space where contractor personnel will be working.
4. Apprise the contractor of the elements, including the hazard(s) identified and the diocesan experience with the space, that make the space in question a permit-required confined space.
5. Coordinate entry operations with the contractor when diocesan location personnel will be working in or near confined spaces with the contractor personnel; and
6. Consult with the contractor at the conclusion of entry operations regarding any hazards confronted or created in confined spaces during entry operations.

All records associated with the above section must be maintained as a part of the permanent record with the terminated entry permit(s).

VIII. References

This document is a policy for the diocesan location to use when they have identified a confined space on diocesan property. Please refer to OPCF and the federal website for more information: https://www.osha.gov/SLTC/confinedspaces/index.html and www.OSHA.gov

APPENDIX A

Definitions

"Acceptable entry conditions" means the conditions that must exist in a space to allow entry and to ensure that personnel involved with a confined space entry can safely enter into and work within the space.

"Atmosphere-controlled confined space" means a permit-required confined space in which potential or actual atmospheric hazards can be eliminated prior to entry or can be controlled with continuous forced mechanical ventilation.

"Atmospheric testing" or **"testing"** means the process by which atmospheric hazards are identified and evaluated. Testing includes specifying the tests that are to be performed prior to entering a space. If electronic or thermal equipment is used to perform such tests, and the possibility exists of an explosive substance or a hazardous atmosphere due to flammable gases and vapors, then the testing equipment must be approved for use in such explosive or flammable conditions as required by section 2540.2.

"Attendant" means an individual stationed outside a permit space or a reclassified permit space who performs attendant's duties as required by this program.

"Confined space" is any space that is large enough and so configured that personnel can bodily enter and perform assigned work, has limited or restricted means for entry or exit and is not designed for continuous personnel occupancy. Confined spaces may include, but are not limited to: storage tanks, pits, vats, vessels, environmental chambers, utility holes, vaults, pump or lift stations, septic tanks, boilers, pipelines, tunnels, ventilation and exhaust ducts, trenches, and excavations.

"Control measure" means a system or device used, or action taken, to control or prevent the introduction of physical hazards into a confined space.

"Emergency" means any occurrence or event inside or outside of a confined space that could endanger entrants.

"Engulfment" means the surrounding of a person by finely divided solids or a liquid. A worker in a storage tank filled with sawdust, for example, could fall into an air pocket, be surrounded entirely by sawdust, and suffocate to death.

"Entrant" means diocesan location staff, or a contractor, who enters a confined space.

"Entry" means any action resulting in any part of an individual's body breaking the plane of any opening of a confined space, and includes any work activities inside the confined space

"Entry permit" or **"permit"** means the written or printed document that is provided by the employer to allow and control entry into a permit space.

"Entry supervisor" or **"supervisor"** means the person responsible for determining if space where entry is planned, for authorizing entry and overseeing entry operations, and for terminating entry as required by this document.

"Ground-fault circuit-interrupter" is a device designed to disconnect an electric circuit when it seeks ground through a person or a grounded object, thus preventing electric shock and fires.

"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:

- A flammable gas, vapor or mist in excess of 10% of its lower flammable limit (LFL);
- An oxygen-deficient atmosphere containing less than 19.5% oxygen by volume or an oxygen-enriched atmosphere containing more than 23.5% oxygen by volume;

- Airborne combustible dust at a concentration that meets or exceeds its LFL (airborne combustible dust which obscures vision at five feet or less);
- An atmospheric concentration of any substance for which a dose is published in Group 14 for Radiation and Radioactivity, or a permissible exposure limit is published in Section 5155 for Airborne Contaminants which could result in personnel exposure in excess of its dose or permissible exposure limit, and that could cause death, incapacitation, impairment of ability to self-rescue, injury or acute illness; or
- Any other atmospheric condition that is immediately dangerous to life or health (IDLH).

"Hot work permit" means the written authorization from the local Fire Marshall to perform operations (e.g., welding, cutting, burning or heating) capable of providing a source of ignition.

"Immediately dangerous to life or health (IDLH)" means any condition that poses an immediate or delayed threat to life, or that would cause irreversible adverse health effects, or that would interfere with an individual's ability to escape unaided from a space.

"Isolation" means the process by which a permit space is removed from service and completely protected against the release of energy and material into the space by such means as: blanking or blinding; misaligning or removing sections of lines, pipes, or ducts; lockout-tagout of all sources of energy; or blocking or disconnecting all mechanical linkages.

"Lockout-tagout" means placing locks and tags on the energy isolating device (e.g. breaker boxes, control switches, valves, etc.) to prevent the unauthorized re-energization of the device or circuit while work is being performed by personnel. Tags must indicate that the energy isolated device must not be operated until the lock and tag are removed by the individual(s) who installed them.

"Non-permit confined space" or **"non-permit space"** means a confined space that does not contain or, with respect to atmospheric hazards, have the potential to contain any hazard capable of causing death or serious physical harm.

"Permit space reclassification form" or **"reclassification form"** means the form used to document the reclassification of a permit space to a non-permit space.

"Permit-required confined space" or **"permit space"** means a confined space that has one or more of the following characteristics:

- Contains or has the 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 (such as noise, welding, electricity, radiation, or moving parts of machinery).

"Permit-required confined space program" means the overall program at the diocesan location for controlling and, where appropriate, for protecting personnel from, permit space hazards and for regulating personnel entry into permit spaces.

"Permit system" means an employer's written procedure for preparing and issuing permits for entry and for returning the permit space to service following termination of entry.

"Program administrator" means the individual appointed by the Office of Planning, Construction, and Facilities Maintenance (OPCF) who is qualified by appropriate training and/or experience to administer the program.

"Prohibited condition" means any condition in a reclassified permit space that is not allowed during the period when entry is authorized.

“Reclassified permit-required confined space” or **“reclassified permit space”** means a permit-required confined space that has been temporarily reclassified to a non-permit required confined space.

“Rescue team” means those persons whom the employer has designated prior to any permit-required confined space entry to perform rescues from confined spaces.

“Retrieval system” means the equipment used for non-entry rescue of persons from reclassified permit spaces, and includes retrieval lines, chest or full body harness, and a lifting device or anchor. A retrieval line is primarily of use in vertical confined spaces and must not be used in confined spaces consisting of horizontal tunnels or spaces where obstructions could increase the hazard to the entrant during emergency non-entry removal.

“Serious hazard” means a hazard where there is a substantial probability that death or serious physical harm could result. A serious injury or illness is one that requires employee hospitalization for more than 24 hours for other than medical observation, or in which a part of the body is lost, or permanent disfigurement occurs.

“Space owner” means the diocesan location who owns, controls access, or has the primary responsibility for overseeing a confined space.

APPENDIX B

Confined Space Entry Decision Tree