

1.0 Purpose

A sign often identifies confined spaces, but this may not be the case where access is controlled. Confined spaces may include, but are not limited to, sewers, tunnels, manholes, utility vaults and other similar type of enclosures. Each confined space will require a hazard assessment and development of a plan to determine the precautions to be taken. Confined spaces at Nipissing-Parry Sound Catholic District School Board (NPSCDSB) are identified on the confined space audit drawings.

The Program requirements are established to:

- Identification of locations or situations where confined space entry and work is required.
- Safe installation, inspection, maintenance, and repair of equipment and facilities by workers where there is a risk of a hazardous atmosphere caused by the construction, location, contents, or work activity within it.
- Protect and train all workers performing Confined Space Entry in the identified areas by ensuring a safe work environment is established and maintained prior to entering and while performing work in confined spaces.
- Ensure compliance with requirements of the Confined Space Regulations made under the Ontario Occupational Health and Safety Act, O.Reg 629/05 Confined Spaces for Industrial Establishments.

2.0 Application

NPSCDSB employees shall not be permitted to enter any confined spaces. Contractors performing work on behalf of NPSCDSB must meet the requirements of this Program. A list of the school drawings to which this procedure applies is found in Appendix A.

3.0 Roles and Responsibilities

This section outlines the responsibilities for implementation of the Confined Space Entry Program.

3.1 Management

Management shall:

- have the primary responsibility for controlling access to and authorizing work in confined spaces.
- also be responsible to ensure that all employees who are required to work in a confined space are trained.
- ensure the Entry Plan(s) have been performed for all confined spaces
- ensure that each entrance to a confined space is adequately secured against unauthorized entry; or has been provided with adequate barricades, adequate warning signs regarding unauthorized entry,
- make sure that the Confined Space Entry Program has appropriate assessments, plans, documentation, signage, procedures, training and auditing.

3.2 Supervisors

- Supervisors must be familiar with the requirements of this Confined Space Entry Program and ensure contractors under their supervision understand the general and specific procedures.

- Know how to conduct their confined space tasks in accordance with this Confined Space Entry Program.

3.3 Principals

- Ensure unauthorized persons do not enter confined spaces. No person is authorized to enter a confined space without proper approval and training.
- Ensure that each entrance to a confined space is adequately secured against unauthorized entry; or has been provided with adequate barricades, adequate warning signs regarding unauthorized entry, or both
- Understand the hazards and entry plan associated with the confined space they will be entering

3.4 Employees

- Employees must understand the meaning of confined space and the Confined Space Entry Program.
- All NPSCDSB employees are not permitted to enter in confined spaces.

3.5 Contractors

- Individuals contracted to enter and perform work in confined spaces shall comply with legislative requirements and shall work in a manner that is consistent with NPSCDSB's Occupational Health and Safety Policy and Confined Space Entry Program
- Entry does not occur unless absolutely necessary.
- A hazard assessment has been reviewed for adequacy, signed and dated prior to Confined Space Entry.
- A written plan has been developed and is available for the Confined Space Entry.
- Pre-entry testing and inspections are conducted according to the Confined Space Entry Program.
- The precautions and control measures identified in the Confined Space Entry Program are in place and are being followed.
- Other precautions not directly related to the Confined Space Entry Program but required by the OHS Act & Regulations are being followed.
- An entry permit is completed, and posted at the entry to the confined space and maintained by the Attendant throughout the entry.
- Assign an Attendant to be stationed outside or near the entrance to a confined space and fulfill the corresponding Attendant duties under O.Reg. 629/05.
- Signs Confined Space Entry Permit, prior to posting.
- Workers are removed from the space and the adequacy of the safety procedures are reviewed if changes occur during the entry that affect the safety of the workers

3.6 Entrants, Attendants, Rescue Team

3.6.1 Entrants

Entrants shall:

- Ensure that they know the hazards associated with the space
- Abide by all the requirements of the Confined Space Entry Program for each confined space.
- Receive the required Confined Space Entry Program training.

- Complete the permit documenting precautions taken and results of gas testing.
- Communicate any OH&S concerns to their direct supervisor immediately.
- No person is authorized to enter a confined space without proper approval and training.

3.6.2 Attendant

An Attendant must:

- not enter the confined space at any time.
- remain stationed outside and near the entrance to the confined space at all times.
- remain in constant communication with the entrant, as agreed, in advance of entry.
- monitor the safety of the entrant.
- provide assistance to entrant.
- summon the rescue team.
- keep a record of those persons who enter the space and exit the space, on the permit
- prevent any unauthorized entry into the confined space.

3.6.3 Rescue Team

The rescue team will:

- be directly involved with the rescue of person(s) from a confined space
- be trained in rescue procedures and any necessary equipment required during confined space rescue as well as First Aid and CPR
- be responsible for rescue equipment and ensure equipment has been checked and is in place
- be readily available and ensure a response time of less than 5 minutes to reach the confined space.

3.7 JHSC

The JHSC has a right to the following Confined Space Entry documents, when requested:

- a copy of any Coordination Document
- a copy of the Confined Space Entry Program
- a copy of any Hazard Assessment

The JHSC also has the following consultation rights:

- Be consulted by the NPSCDSB with regard to the development and maintenance of the Confined Space Program.
- Be consulted in regard to the development of worker training.
- Be consulted by the NPSCDSB with regard to reviewing the confined space training on an annual basis, as well as whenever there is a change in circumstances.

4.0 Hazard Assessment

4.1 Identifying Confined Spaces and Hazards

Potential confined spaces were evaluated to determine if it is a “confined space” per O.Reg. 629/05. The following table is provided to facilitate evaluation of areas that may or may not be considered a confined space:

Is it designed and constructed for continuous human occupancy?	Is it possible to have an atmospheric hazard?	Is It A Confined Space?
Yes	Yes	No
Yes	No	No
No	Yes	Yes
No	No	No

Workspaces such as offices, maintenance rooms, control rooms, etc., are obvious places that are designed for humans to occupy for long periods of time (continuously). These spaces are not considered a confined space, regardless of the atmospheric hazards that may occur in them. Occupational health and safety legislation and regulations apply and must be complied with to protect workers.

4.2 Hazard Assessment

A Hazard Assessment has been completed for all confined spaces. Refer to Appendix A for a complete list of drawing showing where the confined space is. A confined space Hazard Assessment Form was used in determining the confined space. A copy of the form is located in Appendix C.

Hazard Assessments will be available for every entry into the confined spaces listed in Appendix A and shall be reviewed prior to each entry to verify that the same conditions exist as well as the adequacy of the plan and permit documents. Once reviewed and determined adequate, the hazard assessment will be signed and dated, prior to entry.

A confined space will be re-assessed whenever changes are introduced to the space that could affect the adequacy of the entry plan instructions and controls developed for the space or when inadequacies with the Plan are identified as a result of the entry or incident occurring during the entry.

A listing of “potentially hazardous spaces” (not considered to be confined spaces) is included in Appendix H for information purposes. It should be noted that a hazard assessment was performed on these areas and it was determined that these spaces are not confined spaces. However, the work to be performed in these spaces should be re-evaluated for additional potential hazardous conditions prior to working in these spaces. Proper control measures for the hazards should be implemented, if required.

A Hazard Assessment may include any or all of the following hazards/controls:

- Oxygen deficiency/oxygen enrichment
- Flammable, combustible or explosive agents
- Toxic air contaminants, smoke, fumes, and dusts and corresponding exposure levels
- Residual chemicals/materials

- Ignition hazards, including hot work, tools and other potential sources of ignition
- Chemical contact hazards, including acids, alkalis
- Physical hazards, including mechanical hazards, thermal stress, humidity, radiation, noise and vibration, working/walking surfaces, engulfing materials, physical obstacles, poor visibility
- Electrical hazards, including lines and cables, exposed terminals
- Traffic hazards, including pedestrian, mobile equipment
- Biological hazards, including animals and biological agents
- Other hazards related to the confined space, including piping/distribution systems, pressurizing fluids, any type of uncontrolled energy (water, liquid, vapour, electric, magnetic, gaseous, etc.), limited access and egress
- Necessary precautions for safe entry and work
- Emergency procedures and equipment required
- PPE required
- Attendant requirement

Atmospheric hazard decision trees are provided in Appendix B.

5.0 Confined Space Entry Plan

5.1 Development

Each Confined Space location indicated on the drawing located in Appendix A shall have a Base Entry Plan. When a Contractor is hired to enter a confined space, the Base Entry Plan will be developed by the respective Contractor.

5.2 Content

The Base Plan will include:

- duties of workers
- measures and procedures to control hazards (including PPE, isolation of energy sources, ventilation, etc.)
- attendants
- atmospheric testing,
- provisions for on-site rescue procedures
- rescue equipment and methods of communication
- adequate means for entry and exit.

6.0 Confined Space Entry Permit

6.1 Verification

All confined space entries will require that a Confined Space Entry Permit be completed. The authorizing Supervisor will verify that the Permit complies with the corresponding Confined Space Entry Plan and sign their name, prior to entry. A copy of the corresponding Confined Space Entry Plan will be included and will form part of the Confined Space Entry Permit.

6.2 Maintenance

The Attendant will keep a record of those persons who enter the space and exit the space, on the Confined Space Entry Permit for the duration of the Confined Space Entry Permit. The Attendant does not need to sign workers in and out for every minor exit required to work in the space, such as leaving momentarily to obtain a nearby tool.

6.3 Cancellation

Confined Space Entry Permits will be cancelled by the Supervisor upon completion of the work, or when any prohibited condition arises. Permits cannot be left open and “allowed to” expire. Cancelled permits will be kept by the Plant Department for 1 year.

6.4 Requirements

A sample Confined Space Entry (Base Plan) and Permit is located in Appendix D and contains the following required information as well as other records:

- location of confined space
- description of work to be performed
- description of hazards and corresponding control measures
- time period for which the entry permit applies
- name of the Attendant and Entrant
- record of each worker’s entries and exits (time)
- list of the equipment required for entry and rescue, and verification that equipment is in good working order
- results of atmospheric testing
- any hot work, adequate provisions for the hot work and corresponding control measures

7.0 Confined Space Entry Procedure

The following section outlines the steps to be taken prior to each confined space entry:

- 1) Complete hazard assessment
- 2) Establish Plan that includes required procedures and PPE required for entrant
- 3) Establish communication between entrant and attendant
- 4) Perform atmospheric testing prior to entry, record results on Permit form
- 5) Complete Entry Permit and post Entry Permit near confined space
- 6) Station attendant outside confined space
- 7) Execute required control procedures (hot work, lockout/tagout, ventilation)
- 8) Enter space and monitor continuously

Step 1: Hazard Assessment

The hazard assessment shall be reviewed and verified by the Confined Space Entry supervisor prior to each entry to verify that the same conditions exist. A confined space will be re-assessed whenever changes are introduced to the space that could affect the adequacy of the entry plan instructions and controls developed for the space or when inadequacies with the Plan are identified as a result of the entry or incident occurring during the entry.

Any new suspect confined spaces not identified on the drawings in Appendix A should be immediately reported to the Plant Department to be evaluated prior to entry.

The hazard assessment shall include but is not limited to; oxygen content, flammability, toxics, energy, engulfment, entrapment and personal safety (see form in Appendix C).

Step 2: Establish Plan and Procedures & Protective Equipment

Based on hazard assessment, determine appropriate control measures and equipment required for Confined Space Entry. The “plan” will be incorporated into the “entry permit”.

Step 3: Establish Communication

Communication between attendant and entrant, and attendant and rescue team must be established and in place depending on the specific confined space. The means of communication between the attendant and the entrant must be appropriate for the space, especially in areas with high background noise, or possible interference with radio or cell phone transmissions.

Possible methods of communication between the attendant and entrant may include; verbal, cell phone, two-way radios, hand signals, rope tugs or tapping. Means of communication must be in place prior to entry into the confined space.

Step 4: Perform atmospheric testing prior to entry

Atmospheric testing shall be performed in accordance with section 8.0 Controls (section on Atmospheric Testing). Atmospheric testing shall be monitored prior to every entry when space is vacant. If ventilation is required, atmospheric testing shall be performed after a 10 minute ventilation period and continuously during entry.

If atmospheric conditions are found to be unacceptable, entry is not permitted until adequate control methods, such as ventilation, are implemented or installed to ensure acceptable levels. If acceptable atmospheric levels are not possible, breathing air supply (either using supplied air system or self-contained breathing apparatus (SCBA)), is required.

If at any time atmospheric conditions are found to be unacceptable while the entrant is working in the confined space, no matter what the reason, all personnel shall immediately exit the space and no others shall enter until atmospheric conditions are returned to acceptable levels.

Step 5: Entry Permit

Prior to entry, the entry permit shall be correctly and completely filled out. Each entry permit shall be given a unique entry permit number such as year/ building identifier/confined space #/number. For example if entering confined space number 01 in St Hubert in 2011 the corresponding entry permit number would be 2011-PP-01-01.

The entry permit shall be verified by the Entry Supervisor and signed. No entry into any confined space is permitted without a valid entry permit.

Step 6: Station Attendant

Attendant shall be posted near entrance of confined space for duration of work and shall be in constant communication with entrant(s) while working in confined space. Attendant shall not enter confined space unless relieved by qualified person (attendant) and entry can be safely performed.

Step 7: Execute Required Procedures

Ensure control measures have been properly performed, including lock-out / tag-out of all necessary equipment. If a hot work permit is required, ensure hot work permit paper work is properly filled out and a copy attached to the entry permit.

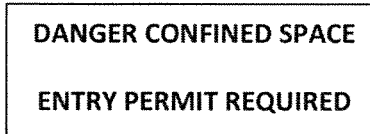
Step 8: Enter Space and Monitor

All entrants shall use the sign-in log when entering space and sign-out when exiting. Attendant shall be responsible for maintaining sign in/out log for the duration of the work. Atmospheric conditions shall be monitored continuously while in the confined space.

8.0 Controls

8.1 Placarding

Every confined space will be identified by a unique number and a placard posted at the entry point to the confined space in order to warn workers of the confined space hazard. Communication corresponding to confined spaces will clearly indicate:



8.2 Entry Authorization

All confined space entries will be authorized by the Supervisor. Authorization will be granted by the Supervisor only after all requirements of the Confined Space Entry Program and corresponding documented measures have been complied with.

8.3 Prevention of Unauthorized Entry

Prior to Confined Space Entry, a means of barricading, cordoning off, taping off and posting will be used in order to notify persons in the area of restricted access to the confined space entry point as well as related work area.

An Attendant will be assigned by a Confined Space Entry Supervisor, and located outside or near the entrance, to the confined space. The Attendant will not enter the confined space but will remain in constant communication with the Entrant while monitoring the Entrant's safety as well as preventing any unauthorized entry. All entries will be documented by the Attendant on the Confined Space Entry Plan/Permit.

8.4 Energy Isolation

Prior to Confined Space Entry, all energy sources must be isolated and controlled to ensure that no material or contaminants enter the confined space through process lines, drains, vents, etc.

8.5 Lock Out and Tag-out Procedures

Workers must be protected against any hazard(s) associated with equipment or electrical energy inside the confined space by ensuring that they are de-energized or otherwise controlled.

All energy isolation will be done according to the NPSCDSB Lock Out/Tag Out procedures.

8.6 Isolating Lines

'Blanking' is the insertion of a solid metal barrier, called a blank, between the flanges of two sections of pipe. A confined space extends to the blank.

'Disconnecting' is the removal of a section of piping to ensure that no material can flow into the confined space. Note: care must be taken to ensure that high-pressure or toxic material cannot pass across a disconnected space (e.g. high pressure steam can cross between the sections of pipe if the piece that has been removed is in-line with the two sections of pipe).

If blanking or disconnecting piping is not practical in the circumstances for technical reasons the confined space must be adequately protected against the release of hazardous substances into the confined space by other adequate means.

8.7 Other Measures

Other adequate measures for protecting against hazards associated with equipment or electrical energy can include a “double-block and bleed” system or the formation of a properly engineered “freeze plug”.

Unguarded equipment, or equipment that may have exposed moving parts or that may create a pinch point, will be de-energized or blocked to prevent movement. However, a properly guarded pump or fan need not be de-energized. In a confined space in which flammable, combustible or explosive agents might accumulate, the same equipment must be de-energized or designed so that it does not create a spark.

8.8 Entrance Cover Removal

Wherever possible, all unsafe conditions will be eliminated before removing an entrance cover. After removing an entrance cover, where there is a vertical descent, the confined space opening will be guarded with a railing, temporary cover, or other temporary barrier to prevent accidental falls through the opening. Measures will also be put in place to protect entrants from objects falling into the space.

8.9 Atmospheric Testing

8.9.1 Requirements

Atmospheric testing is required when the relevant assessment determines that the confined space may contain atmospheric hazards. The results of testing and calibration information will be documented on the Confined Space Entry Plan/Permit.

Where indicated by the Hazard Assessment and Plan, before Confined Space Entry, the atmosphere will be tested with a calibrated instrument in good working order and in a manner that is appropriate for the hazard(s) identified in the relevant assessment.

When monitoring a confined space, the following procedure should be used:

- a) Test equipment function, (i.e. battery test and all-level function)
- b) Ensure all monitor warning alarms are set appropriately
- c) Test for the following atmospheric hazards:
 - i. Oxygen content– 19.5% to 23.0%
 - ii. Flammable gases and vapors–
 - 1) less than 25% LEL for inspection work
 - 2) less than 10% LEL for cold work (work that does not produce sparks or other sources of ignition); and,
 - 3) less than 5% LEL for hot work (spark producing work or other sources of ignition as a result of the work to be performed) and the requirements of 5.11 are complied with.
 - iii. Potential toxic air contaminants- less than established limits in O.Reg.833 or designated substance regulations (or ACGIH TLVs if not in O.Reg. 833).
- d) The first test must be done near the entry point, with probe placed approximately 2” above the entry point.

- e) Insert the probe through an inspection port or another opening to take atmospheric reading
- f) If neither combustible nor toxic gases are present, remove the cover and then sample the atmosphere at several levels (heights).
- g) Once the readings have been taken, they must be recorded on the Confined Space Entry Plan/Permit.
- h) If an explosive, oxygen-deficient or toxic atmosphere is detected, entry into the confined space is not permitted. Hazard control measures such as ventilation and purging must be employed and space re-tested prior to entry (refer to section 8.4.3).

8.9.2 Frequency

Testing of the confined space must be performed prior to each and every entry and then continuously while work is underway, to ensure that acceptable atmospheric levels are maintained. Entrants must be allowed an opportunity to observe the pre-entry and periodic testing.

Where applicable, testing will be conducted prior to purging/ventilation and again after purging/ventilation, and prior to each new entry into the space. A new entry takes place when all entrants have vacated the space and one of the workers or a new worker is going to enter the space.

8.9.3 Response to Elevated Findings and Exit Procedure during Confined Space Entry

If a hazardous atmosphere is detected during Confined Space Entry, all of the following will occur:

- Evacuate workers from the space immediately.
- Cancel the Confined Space Entry Permit.
- Evaluate the space to determine how the hazardous atmosphere developed.
- Implement measures to protect workers from the hazardous atmosphere before re-entry.
- Before re-entry into the same space, verify the Plan and new Permit correspond and are verified and that the space is safe for entry.

8.9.4 Continuous Monitoring

Continuous monitoring is required when performing hot work, when there may be a flammable or explosive atmosphere, in an inert space or where a toxic atmosphere is likely to be generated or present during the Confined Space Entry or as set out in the Plan. Continuous monitoring will be accomplished using appropriate personal gas detectors worn by all Entrants during Confined Space Entry.

8.9.5 Ventilation

(a) Purging

If atmospheric hazards exist or are likely to exist in a confined space, the confined space shall be purged, ventilated or both, before any worker enters it, to ensure that acceptable atmospheric levels are maintained while any worker is inside. In some cases, the ventilation of the space will continue throughout the Confined Space Entry.

Where toxic gases or vapours are present, spaces will be purged wherever possible; contaminants will be displaced with fresh supply air to the space.

(b) Ventilating

Ventilation of a space will either be accomplished through displacing air and diluting it through the introduction of fresh air or the continuous removal of contaminants by local exhaust ventilation for point sources. To ensure adequate ventilation, the points of air supply and exhaust should be separated as far as possible. Openings must be provided for the entry of clean replacement air or to allow the exhaust of air. Pure oxygen must not be used to ventilate a confined space.

(c) Failure Alarm

To warn of ventilation failure and facilitate safe exit of Entrants from the space, an adequate warning system such as an audible or visual alarm and exit procedure shall be provided. The alarm should be activated by a flow or pressure switch in the air stream rather than by electrical failure or other motive power failure. Refer to Section 8.9.3 *Response to Elevated Findings and Exit Procedure during Confined Space Entry* for exit procedure during alarm.

(d) Other precautions

If it is not practical, for technical reasons, to ventilate or purge, a worker entering the confined space shall use,

- (i) Adequate respiratory protective equipment (to be used during Confined Space Entry and signed off as appropriate on Entry Permit)
- (ii) Adequate equipment to allow persons outside the confined space to locate and rescue the worker if necessary, and
- (iii) Such other equipment as is necessary to ensure the worker's safety.

All personal protective equipment (PPE) must be inspected by a person with adequate knowledge, training and experience, appointed by the employer, and shall be in good working order before the worker enters the confined space.

8.9.6 Hot Work

(a) Precautions

In the case of an explosive or flammable gas or vapour, the space must be either:

- i) Made safe by inerting with an inert gas and continuously monitoring the atmosphere, particularly with regard to oxygen concentration. Workers must wear adequate respiratory protective equipment and equipment to allow persons outside the confined space to locate and rescue them, if necessary, or
- (i) The following precautions must be taken:
 - 1) The space is purged and continuously ventilated to maintain an atmosphere of less than 5% of the LEL;
 - 2) The space is purged and continuously ventilated to maintain an oxygen concentration of 19.5% - 23%;
 - 3) The atmosphere in the confined space is continuously monitored;
 - 4) The entry permit includes adequate provisions for hot work and details the appropriate measures to be taken; and
 - 5) An alarm and exit procedure are in place to provide adequate warning and allow safe escape if the levels in a) or b) above are not met. It is good practice to incorporate a safety factor that provides for adequate warning should the levels be approached.

(b) Hot Work Permit

A completed NPSCDSB Hot Work Permit will be included with the Confined Space Entry Permit, prior to authorizing the entry.

(c) Personal Protective Equipment

All workers entering a confined space must have adequate personal protective equipment based on the Hazard Assessment, identified in the Plan and in accordance with respective Regulations.

9.0 Rescue Procedures

9.1 Identify Team

The Entry Supervisor will ensure that before a confined space entry can occur, rescue procedures are in place and the members of the rescue team are immediately available for the duration of the entry.

9.2 On-Site Rescue Procedures

If at any time there is questionable action or non-movement by the entrant inside the confined space, the attendant will make an immediate communication check. If there is no response or a questionable response, the attendant will order the entrant in the confined space to evacuate the space immediately.

If possible, the entrant(s) will initiate self-rescue by climbing out of the confined space.

If self-rescue is not possible, the attendant will activate Confined Space Rescue Team by the means of communication recorded on the entry permit. The attendant will attempt to retrieve the entrant via the connected retrieval line (for vertical confined space entry only).

If retrieval of entrant is required by means other than a tripod/winch (vertical confined space entry), the attendant should immediately contact the Confined Space Rescue Team.

If the entrant is disabled due to falling or impact, the attendant shall activate Confined Space Rescue Team and the entrant will not be removed from confined space until paramedics arrive and/or unless immediately dangerous to life.

Under no circumstances shall the Attendant enter space to perform rescue.

9.3 Training Requirements and Records

The custodians will be provided with a one day training regarding the awareness of confined space.

The Contractor shall provide a record of training of rescue personnel to the Plant Department. The Contractor Rescue Team must have the following:

- Have completed a minimum of 1 day confined space awareness course with ½ day practical component
- Be trained in confined space rescue procedures including scenarios
- Have received training in confined space rescue equipment
- Have undergone respiratory fit testing and be capable of wearing a respirator
- Have received training in First Aid and CPR.
- First aid and cardiopulmonary resuscitation (FA/CPR);

All members of the Rescue Team shall have all required elements of training.

9.4 Rescue Equipment

Rescue equipment will include harnesses and lifelines, hoist/retrieval systems, self-contained breathing apparatus, fall arrest, safety footwear, protective gloves, personal flotation device and/or hard hats. The rescue equipment and procedures will be documented on each Confined Space Entry Plan and available and present at the Confined Space Entry point prior to entry taking place. The emergency equipment shall be inspected and verified to be in good working condition prior to the entry. This inspection will be documented.

9.5 Rescue Procedures and the Confined Space Entry Plan

The Contractor Rescue Team will ensure that the Rescue Plan will be able to effectively remove a worker who has been overcome in a specific confined space. If entry is required to perform a rescue, rescue personnel must be properly trained and protected against all hazards within the specific confined space.

A minimum of two rescue team members should be included in each rescue plan. The Attendant will not be part of the Rescue Team and will remain in place stationed outside and near the entrance to the confined space. The Attendant may assist the rescue from outside the space, as long as the work does not impede the Attendant's duties.

On-Site Rescue Procedures Shall Be Included In The Plan

Developed For Each Confined Space, Prior To Confined Space Entry.

10.0 Contractors

10.1 Regulatory and Program Requirements

Contractor must comply with O.Reg.628/05 as well as the requirements of the NPSCDSB Confined Space Entry Program (compliant with O.Reg.629/05 for Industrial workplaces).

A copy of this Confined Space Entry Program will be provided to each Contractor performing Confined Space Entry work for the duration of this CSE Program.

The Contractor will have their own Confined Space Entry Program and the Contractor Program must meet or exceed the NPSCDSB Confined Space Entry Program.

10.2 Coordination Document

If there is more than one employer performing work within the same confined space at a time, a Coordination Document is required. A sample Coordination Document is provided in Appendix F.

With the exception of construction projects, the Coordination Document must be prepared by NPSCDSB.

The Constructor is responsible for the preparation of the Coordination Document if more than one contractor is hired to perform work in the same confined space or related work with respect to the same confined space on a construction project.

The Coordination Document ensures that employer duties with respect to the following subject matters are performed in a way that protects the health and safety of all workers performing Confined Space Entry or Confined Space Entry related work:

- confined space program;
- hazard assessment;
- written plan;
- plan-specific training (if applicable);
- entry permits;
- written on-site rescue procedures and equipment;

- isolation of energy and control of materials movement;
- attendants;
- entering and exiting;
- unauthorized entry;
- atmospheric testing;
- explosive and flammable substances; and
- ventilation and purging of atmospheric hazards.

11.0 Training

11.1 Content

Supervisors, attendants, entrants and rescue team members must be adequately trained in O.Reg. 629/05, this Confined Space Entry Program, Plan, Permit process, hazard assessment/identification and controls, rescue awareness, equipment to be used, personal protective equipment, and documentation.

Workers with emergency rescue responsibilities will need training related to rescue. Training must include hands-on experience with the safety equipment including the personal protective equipment and safety harnesses.

11.2 Minimum Training Requirements

Minimum training requirements for various positions are outlined below. Training requirements and needs should be reviewed on an annual basis.

Supervisor - Must be aware of all hazards associated with a confined space and communicate this to the workers. Must communicate and monitor the procedures surrounding safe entry and work are followed. Must communicate how to work safely around the hazards identified. Supervisor must enforce the proper use and care of required PPE (eyes, ears, and foot protection). Must ensure all workers assigned to a confined space have undergone the prescribed training.

Confined Space Worker (entrant, attendant) - This encompasses all individuals preparing, entering, guarding or testing the confined space. Every worker who works in or with a confined space must receive adequate training in the recognition of hazards associated with confined spaces and training to be able to safely perform the assigned duties for that specific confined space.

On-site Rescuers – An adequate number of on-site rescue workers must be available to perform rescue in accordance with the Rescue Plan. In addition to general confined space training, they will need to be trained in First aid and CPR, on-site rescue procedures, and use of rescue equipment.

All workers – Basic awareness at H&S meetings that confined spaces are present, where they are and that there is prohibited entry to all confined spaces unless authorized by supervisor.

11.3 Training Personnel/Positions to be Trained

Basic awareness of confined spaces Entrant, Attendant, Supervisor, Rescue Team.

11.4 Review

Training will be reviewed whenever there are changes in the Confined Space Program or at least annually.

12.0 Documentation and Recordkeeping

12.1 Required written documents:

- Co-ordination document (if applicable)*
- Program *
- Hazard Assessment
- Plan
- Training records
- Confined Space Entry permit
- On-site rescue procedures *
- On-site rescue equipment inspection records
- Air testing results

All of the above documents are incorporated within the “entry permit” except for those with an asterisk. The for the purposes of the Confined Space Entry Program, the plan, onsite rescue equipment inspection records and air testing results have been incorporated into one document, the Permit, in Appendix D.

12.2 Retention

The Plant Department must retain all of the above documents for at least 1 year after they are created, and at least the two most recent records of each document must be retained, with the exception of the Confined Space Program which must be maintained at all times if the workplace includes a confined space that workers may enter to perform work.

For construction projects, these documents must be retained for the duration of the project, and at least one year after the completion of the project.

12.3 Distribution and Availability

The Co-ordination document and Confined Space Program document must be provided to the JHSC and other employers, where applicable. The Hazard Assessment document must be provided, upon request, to the JHSC. Entry Permits must be readily available to every person who enters the confined space or performs related work during the time for which it applies (posted).

The plan, training records, on-site rescue procedures, rescue equipment inspection and air testing results documents should be readily available at the workplace. For Construction projects: The Plant Department must keep available for inspection at the project the assessment, plan, co-ordination document, record of training, entry permit, record of inspection of rescue equipment, and air testing records. After the completion of the project, The Plant Department or the Constructor must keep a copy of these documents for at least one year.

Confined Space Entry Procedure

1. Complete the entry permit.
2. Control all hazards.
3. Set up barricades and warning signs as needed around entry point.
4. Atmospheric testing to be completed before confined space entry & periodically, air testing device will remain with the entrant during entry. Ventilating or purging may be required.
5. Ensure a qualified confined space rescue team is on site prior to entry.
6. Test radio communication equipment and stay in contact at all times.
7. The attendant shall keep a record of who enters and exits the space.

Confined Space Emergency Procedure

1. The attendant, upon receiving an emergency call from the entrant(s) will contact the appropriate emergency unit, ex. Fire Department or Medical Unit.
2. The rescue team will then commence the rescue.

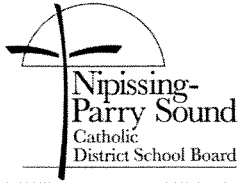
Medical Emergency

Once the injured entrant is extracted from the space on going care will be performed until EMS arrives.

Fire Emergency

Once all entrants reach the access point the access will be closed and all personnel will immediately vacate the building by the nearest designated exit.

A COPY OF ALL PERMITS WILL BE RETAINED AT THE SCHOOL FOR
AMINIMUM OF TWO YEARS
A COPY TO MUST BE FAXED TO THE MANAGER OF OPERATIONS OR
DESIGNATE



Confined Space Entry Permit

Date & Time Issued: _____ / _____ Expires: _____ / _____

School: _____

Permit Entry Location: _____ Purpose of Entry: _____

Company: _____

Entry Worker: 1: _____ 2: _____ 3: _____

Attendant: _____

All Entrants, Attendant(s), Rescue team members Verified Trained for Duties. Yes _____ No _____

Hazard(s) of Space: Atmospheric _____ Engulfment _____ Electrical _____
 Mechanical _____ Water _____ Other _____

Equipment Available/ Required								
	YES	NO	N/A		YES	NO	N/A	
Calibrated Gas Monitor				Protective Clothing				
Safety Harness & Lifeline				Ventilation				
First Aid Kit				Breathing Apparatus				
Emergency Lighting				Tools				
Intrinsically Safe Equipment				Communication				

Entry cannot be approved if any entries are marked with the "NO" column.
 This permit is **not valid** unless all items are completed.

Testing & Monitoring Periodic _____ Continuous _____

Oxygen: 19.5% - 23% - 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

Flammability: <10%LEL 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

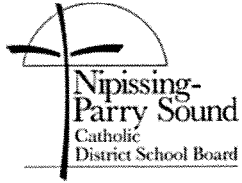
H2S Concentrations 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

Co Concentration 1) _____ 2) _____ 3) _____ 4) _____ 5) _____

Additional Work Permits Required _____ Not Required _____

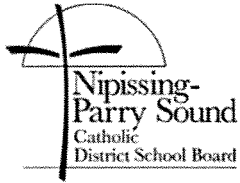
Entry is Authorized _____ (Attendant)

Entry is Authorized _____ (Supervisor)



Confine Space Co-ordination Document

Confined Space Location:			
Building (or Location on Grounds):		Room:	
Name of Equipment or space to be entered:			
Notes:			
Has a copy of Confined Space Program been given to all other employers (contractors)? (If any employer does not have a JHSC or H&S representative a copy of the confined space program must be given to each worker)			
Yes <input type="checkbox"/>		No <input type="checkbox"/>	
Has a copy of the hazard assessment for the relevant confined space been given to all other employers (contractors)? (If any employer does not have a JHSC or H&S representative a copy of the hazard assessment must be given to each worker)			
Yes <input type="checkbox"/>		No <input type="checkbox"/>	
Have all workers received plan specific training?			
Yes <input type="checkbox"/>		No <input type="checkbox"/>	
If Lock-out/Tag-out is to be performed have all workers received lockout Training?			
Yes <input type="checkbox"/>		No <input type="checkbox"/>	
Atmospheric testing to be performed by (results to be recorded on Entry Permit) :			
Ventilation and Purging (If required) to be performed by:			
I have Received:			
1	A copy of NPSCDSB 's Confined Space Program		
2	A copy of the NPSCDSB hazard assessment for the relevant confined space		
3	Training in confined space entry and awareness		
Employer	Name	Signature	Date (mm/dd/yy)



On-Site Rescue Procedure

On-Site Rescue Plan

The attached On-Site Rescue Plan and these Procedures are part of the written plan for the confined space and are based on the assessment of hazards in this space.

Prior to entry and/or work in the confined space:

1. The entry supervisor will ensure that the attached "on-site rescue plan" for the confined space has been completed and that all the rescue equipment identified in the plan is available to effect a rescue in the confined space.
2. The entry supervisor will ensure that an adequate number of appropriately trained persons (as documented in the attached "on-site rescue plan") are available for immediate implementation of these on-site rescue procedures that apply to the confined space.
3. The entry supervisor will review all emergency procedures, including procedures relating to emergencies outside the confined space with all entrants and other related personnel.
4. The attendant establishes communication with all workers, using the means described in the attached "on-site rescue plan".

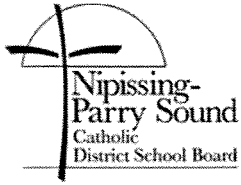
On entry and while working in the confined space:

1. The attendant who is stationed outside and near the entrance to the confined space as described in the attached "on-site rescue plan" remains in constant communication with all workers inside the confined space.
2. The attendant must be notified immediately if an entrant recognizes:
 - unusual action/ behaviour
 - an unexpected hazard
 - an unsafe act or
 - detects a condition prohibited by the permit
3. Entrants must exit the confined space as quickly as possible, when:
 - an order to evacuate is given by the attendant or entry supervisor
 - an entrant recognizes a sign or symptom of over-exposure
 - an unacceptable condition arises or
 - an evacuation alarm is activated.

In the event of a confined space rescue:

1. The attendant does not enter the confined space but immediately summons a rescue response from the on-site rescue team, using the means of communication described in the attached "on-site rescue plan".

Additional Comments: _____



On-Site Rescue Procedure

ON-SITE RESCUE PLAN			
Confined Space Location:		Building:	Date:
Attendant:		Employer:	
Employer:		(2)	
On-Site Rescue Personnel/Designation		(3)	
(1)		(4)	
Methods of Communication: Attendant to Rescue Personnel: <input type="checkbox"/> Phone <input type="checkbox"/> Audible Signal <input type="checkbox"/> Radio <input type="checkbox"/> Intercom Attendant to workers: <input type="checkbox"/> Phone <input type="checkbox"/> Radio <input type="checkbox"/> Intercom <input type="checkbox"/> Audible Signal <input type="checkbox"/> Visual Hand Signal <input type="checkbox"/> Rope Signal			
Methods of Rescue: <input type="checkbox"/> External (Retrieval) <input type="checkbox"/> Internal: _____ <input type="checkbox"/> Congested: _____ <input type="checkbox"/> Hauling System Required: _____ <input type="checkbox"/> Patient lowering system required/lowering area: _____ <input type="checkbox"/> Anchor overhead: _____ Anchorage: <input type="checkbox"/> Beam <input type="checkbox"/> Stairwell <input type="checkbox"/> Support Strut <input type="checkbox"/> Support Column <input type="checkbox"/> Other: _____ Pre-Rigging required? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Rescue Equipment Requirements (check a where applicable below and indicate quantity needed): <input type="checkbox"/> Hauling Systems: _____ <input type="checkbox"/> Carabiners: _____ <input type="checkbox"/> Pulleys: _____ <input type="checkbox"/> Shock absorbers/lanyards: _____ <input type="checkbox"/> Anchor Straps: _____ <input type="checkbox"/> Webbing: _____ <input type="checkbox"/> Ascenders: _____ <input type="checkbox"/> Body Harnesses: _____ <input type="checkbox"/> Rigging Plates: _____ <input type="checkbox"/> Safety Lines: _____ <input type="checkbox"/> Main Lines: _____ <input type="checkbox"/> Wrist/Ankle Harnesses: _____ <input type="checkbox"/> Fire Extinguishers: _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____ <input type="checkbox"/> _____			
Rescue Equipment Inspections identified rescue equipment inspected by competent worker: _____ Employer: _____ Record of inspection(s) attached <input type="checkbox"/> Yes			
Medical Equipment Requirements (check a where applicable below and indicate quantity needed): <input type="checkbox"/> First Aid Kit: _____ <input type="checkbox"/> Packaging Device: _____ <input type="checkbox"/> <input type="checkbox"/>			
Additional PPE Requirements (Indicate what is needed): <input type="checkbox"/> High Visibility Vests <input type="checkbox"/> Hearing Protection <input type="checkbox"/> Safety Boots <input type="checkbox"/> Hard Hats <input type="checkbox"/> Safety Glasses/Goggles <input type="checkbox"/> Gloves <input type="checkbox"/> Face Shield <input type="checkbox"/> <input type="checkbox"/>			
Description of Space (include location of attendant): 			
Diagram of Space (Use Back of Page if needed) 			
Completed by: _____ <input type="checkbox"/> Entry Supervisor <input type="checkbox"/> Attendant <input type="checkbox"/> Other: _____ Date: _____			