

1. Purpose:

The Catholic District School Board of Eastern Ontario recognizes the potential confined space hazards at the work sites operated by the Board and the need for a policy and accompanying procedures to ensure the safety of its employees.

Due to the potential hazards which confined spaces may present to some Board employees, it is the Board's responsibility as an employer to develop and maintain a written program for Confined Spaces which pertains to all confined spaces on Board property. The intent of this program is to ensure that the Board is in compliance with confined space requirements under the Occupational Health and Safety Act of Ontario and its Regulations, to prevent unauthorized entry into confined spaces and to protect the health and safety of those who must enter confined spaces on Board Property.

The Purpose of this procedure is to:

- Protect employees from hazards that are associated with confined spaces.
- Ensure that the Board's personnel are trained and "competent" to undertake work involving confined spaces.
- Ensure that the Occupational Health and Safety Act requirements are met.
- Initiate a rescue procedure in the event that such may be required.

2. Definitions

a) Confined Space

Regulations for Industrial Establishments

"Confined Space" means a space in which, because of its construction, location, contents or work activity therein, the accumulation of a hazardous gas, vapour, dust or fume or the creation of an oxygen deficient atmosphere may occur.

Regulations for Construction Projects

"Confined Space" means a space to which or from which access or egress is restricted and in which, because of its construction, location or contents or the work activity therein, a hazardous gas, vapour, dust or fume or an oxygen-deficient atmosphere may occur.



b) Competent Person

A competent person is a competent person as defined under the Occupational Health & Safety Act Section 1(1)(2).

3. Confined Space Entry Procedures

- a) Only "competent" trained persons shall be involved in confined space entry and confined space work.
- b) Complete checklist prior to leaving the Maintenance Shop to ensure all necessary equipment will be available.
- c) Assume a hazard exists.
- d) Suitable retrieval system must be worn and used for the duration of entry.
- e) Arrangements shall be made to remove a worker from the confined space immediately using personnel on site.
- f) All tools and/or equipment required for the confined space work must be at hand, close to the entrance of the confined space.
- g) Smoking is not allowed in or around a confined space.
- h) Testing shall be done before entering or re-entering a confined space. The atmosphere must be tested, using a gas detector by a competent person, for: oxygen deficiency/enrichment, combustible gases, and toxic gases. The results of the atmospheric tests are to be recorded on the confined spaces entry permit.
- i) Slowly lower gas detector to the bottom of confined space and confirm that no alarm conditions exist. Retrieve gas detector and record readings.
- j) If testing indicates an unsafe atmosphere, DO NOT ENTER. Contact your Supervisor.
- k) Confined space work is to be performed by a minimum of two competent workers.
- l) Enter the work area slowly (wearing retrieval equipment as in d) above). When the work area is reached, mount the gas detector on the worker or within reach and maintain readings at head level while performing work.
- m) If the gas detector indicates an alarm while work is in progress, retreat from the confined space immediately. Do not re-enter without purging and re-testing.
- n) Take note of all hazards for entries and take necessary precautions.

4. Training

The Board shall be responsible for providing adequate training for those employees who have occasion to enter and work in confined spaces. Every person involved in confined space entry

and work must attend training programs and retraining sessions as required by his/her supervisor or manager.

The Manager of Plant Maintenance shall:

- ensure all staff performing confined space entry are trained and competent to enter and work in confined spaces
- maintain an updated listing of Plant Maintenance employees trained and competent in confined space entry
- ensure new employees/transfers are adequately trained before entering and working in confined spaces
- ensure that this procedure is reviewed with staff at least annually

Maintenance Supervisors supervising confined space work shall be competent persons as defined by the Occupational Health and Safety Act.

The confined space-training program shall include at a minimum the following:

- Legislative responsibilities
- Definition and identification of confined spaces
- Operation and maintenance of gas detectors
- Documentation and confined space work permits
- Identification of atmospheric and physical hazards
- Personal Protective Equipment
- Inspection and operation of rescue equipment
- Artificial resuscitation
- Entry and rescue procedures

A written test is required. Consideration will be given to ESL employees in the form of the use of an interpreter or an oral examination.

5. Equipment

The following approved equipment shall be provided for use as required by competent works and shall be inspected by a competent person at the start of each work period:

- approved detection devices to determine oxygen, combustible and toxic content of the atmosphere
- retrieval equipment
- ventilating/purging equipment
- personal protective equipment

- portable lighting

Gas detectors shall be factory tested and calibrated as recommended by the manufacturer. Calibration shall be by factory trained personnel.

6. Preparation

Ensure all necessary equipment for Confined Space entry is on site and in place before proceeding. Refer to Confined Space Entry Program for details (Appendix 1).

Preparations prior to entry:

- Assume that a hazard exists
- Only "competent" persons shall be involved in confined space entry and confined space work
- Arrangements shall be made to remove a worker from the confined space immediately using personnel on site. Suitable retrieval system shall be worn and used for the duration of the entry
- All tools and/or equipment required for the confined space work must be at hand, close to entrance of the confined space
- No smoking is allowed in or around a confined space.

7. Testing

Before entering or re-entering a confined space, the atmosphere must be tested using a gas detector by a competent person. The atmosphere shall be tested for:

- oxygen deficiency/enrichment
- combustible gases
- toxic gases

The results of these atmospheric tests are to be recorded on the Confined Spaces Entry Permit.

8. Entering

Confined space work is to be performed by a minimum of two competent workers only.

- Slowly lower gas detector to the bottom of the confined space and confirm no alarm conditions exist.
- Retrieve gas detector and record readings.



a) Safe Atmosphere

- The person entering the confined space carries the gas detector. Use rope and bucket to lower necessary handtools to keep hands free.
- Suitable retrieval equipment shall be worn and used for the duration of the entry. Use retrieval devices in accordance with manufacturer's instructions.
- Enter the work area slowly.
- Upon reaching the work area the gas detector is to be mounted in a location within the worker's reach and must be at head level while worker is performing the work.
- Retreat from the confined space should the detector indicate an alarm condition while work is in progress. Do not re-enter without purging and re-testing.

b) Unsafe Atmosphere

Situations where the gas detector alarms are:

i) Ventable and Non-Explosive

The confined space is to be ventilated/purged using a powered ventilator (except when explosive situations are encountered). After a reasonable period of time lower the gas detector and retest. If no alarms are observed, entry can be made as per Case I.

ii) Non-Ventable and Non-Explosive

If alarm is observed on retest, continue to ventilate and retest at regular intervals. In the event the readings are not observed to be reducing, the Supervisor is to be contacted.

iii) Explosive Situations

DO NOT ENTER. Record the readings and contact the Supervisor.

9. Rescue

- a) In the event an emergency removal is required, the following sequence shall be followed:
- retrieve and remove the worker from confined space,
 - activate emergency response - call 911,
 - when a worker is removed and is not breathing, apply artificial resuscitation until help arrives or worker is revived.

**Note: Under NO circumstance is any person to enter a confined space to effect a rescue until additional help and sufficient gear are available.*



CONFINED SPACE ENTRY PROGRAM

(D1:8 Confined Spaces, Appendix 1)

***Catholic District School Board
of Eastern Ontario***

| Revision | Date | Revision Description | Revised By: | Approved By: |
|-----------------|--------------|---------------------------------|--------------------|---------------------|
| 0 | January 2014 | New Edition | | JH&SC |
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Appendix A: HAZARD ASSESSMENT

Appendix B: ENTRY PLAN/PERMIT

Appendix C: RESCUE PLAN/PROCEDURE

Appendix D: COORDINATION DOCUMENT

PROGRAM OBJECTIVE

- 1.1 To describe the methods by which the Catholic District School Board of Eastern Ontario (CDSBEO) intends to comply with Ontario regulatory requirements regarding confined space entry.

SCOPE AND LIMITATIONS

- 2.1 The scope of this Program includes all CDSBEO employees and contractors who manage or coordinate “confined space” entries, and those employees and contractors who enter confined spaces or conduct “related work”.

- 2.2 A “confined space” is defined as:

- a fully or partially enclosed space,
 - *that is not both designed and constructed for continuous human occupancy, and*
 - *in which “atmospheric hazards” may occur because of its construction, location or contents or because of work that is done in it.*

“Atmospheric hazard” means:

- *the accumulation of flammable, combustible or explosive agents,*
- *an oxygen content in the atmosphere that is less than 19.5 percent (%) or more than 23% by volume, or*
- *the accumulation of atmospheric contaminants, including gases, vapours, fumes, dusts or mists, that could,*
 - *result in acute health effects that pose an immediate threat to life, or*
 - *interfere with a person’s ability to escape unaided from a confined space*

“Related work” means:

- *Work that is performed near a confined space in direct support of work inside the confined space (e.g. attendants; persons conducting gas testing).*

“Restricted Space” means:

- *a space from which the egress of a worker is restricted, limited, or impeded, and does not have an “atmospheric hazard”; or*
- *may become a confined space (atmospheric hazards introduced) under specific conditions of use/work (e.g. welding, painting, etc.).*

REGULATORY REFERENCES AND RELATED DOCUMENTS

- 3.1 This program is intended to comply with the following regulations:

- Ontario Industrial Establishments Regulation (O.Reg. 851)

- 3.2 This program is also intended to conform to the guidelines published in the:

- Ontario Ministry of Labour, *Compliance Guideline, Confined Spaces*

ROLES AND RESPONSIBILITIES

Senior Management

- Ensure that a written inventory of confined spaces is prepared and maintained.
- Ensure that the Entry Plans are reviewed by the Maintenance Manager/Supervisor as often as is necessary to ensure that the plans and permits remain accurate and adequate
- Ensure that all CDSBEO employees required to enter into confined spaces or conduct related work receive adequate training.
- Ensure that training is provided by a person with adequate knowledge, training and experience.
- Ensure that written records are created and maintained of who conducted the applicable training, who received the training, the nature of the training, and the date of training.
- Ensure that the records listed in section 5.10.1 are retained as long as necessary.

Maintenance Managers/Supervisors

- Ensure that a written hazard assessment on the space to be entered has been conducted.
- Retain completed Hazard Assessment Documents.
- Ensure that prior to a worker entering a confined space, an entry plan and permit have been developed and implemented by a competent person.
- Review the entry plans as often as necessary to ensure that the plans and permits remain accurate and adequate.
- Ensure that no worker enters a confined space unless an adequate on-site rescue procedure has been developed and is ready for immediate implementation.
- Ensure that no worker enters a confined space until an adequate number of persons trained in the rescue procedures are available for immediate implementation of the on-site rescue procedures.
- Ensure that all CDSBEO employees required to enter into confined spaces or conduct related work receive adequate training.
- Ensure that if employees from more than one employer (e.g. contractors) participate in a confined space entry, that a Coordination Document is prepared. A copy of the document is provided to each employer involved in the entry and the Joint Health and Safety Committee of each employer involved in the entry.

Confined Space Permit Issuer

- Ensure that every worker who enters a confined space or conducts related work follows the plan.
- Ensure that the appropriate acceptable atmospheric level is noted on the permit to facilitate proper interpretation of air testing results.
- Be responsible for signing the permit verifying that the requirements of the relevant plan have been met.
- Ensure that each entrance to confined spaces is, 1) adequately secured against unauthorized entry; or 2) has been provided with adequate barricades, adequate warning signs regarding unauthorized entry, or both.
- Ensure that air testing is conducted with calibrated instruments that are in good working order and are appropriate for the hazards identified in the relevant assessment.
- Ensure that the testing is done in a manner that does not endanger the tester.

Administration

- Maintain those records listed in section 5.10.1.
- Maintain a written record of the qualifications of the person conducting the Assessments.
- Maintain written records of who conducted any applicable training, who received the training, the nature of the training, and the date of training.

SPECIFIC PROGRAM ELEMENTS

1.1 Identifying Confined Spaces

Senior Management shall ensure that a written inventory of confined spaces is prepared and maintained.

The inventory shall be kept in/at the Manager of Plant and Maintenance's office (Master Copy) with site/school specific sections duplicated at the individual specific sites/schools.

1.2 Hazard Assessments

- 1.2.1 Before any worker enters a confined space, the Maintenance Manager/Supervisor shall ensure that a written Hazard Assessment, on the space to be entered, has been conducted.
- 1.2.2 Assessments shall be conducted by a person with adequate knowledge, training, and experience. A written record of the person's qualifications shall be maintained by Administration.
- 1.2.3 The assessment of each confined space shall consider:
 - the hazards that may exist due to the design, construction, location or use of contents of the space; and
 - the hazards that may develop while work is done inside the confined space (e.g. welding, cleaning, etc.)
- 1.2.4 Original confined and restricted space Hazard Assessments have been conducted by Pinchin Environmental Ltd. for each CDSBEO school. The entire list of original assessments (Master Copy) will be maintained by the Manager of Plant and Maintenance. The Hazard Assessment document "template" is also provided in Appendix A.
- 1.2.5 If two or more confined spaces are of similar construction and present the same hazards, their assessments may be recorded in a single document, but each confined space shall be identified on the assessment document.
- 1.2.6 A Hazard Assessment shall be conducted prior to each confined space entry (or at least review and verify, by signing, that the "original" hazard assessment remains relevant and consistent with the planned entry). The Hazard Assessment document shall be signed and dated by the person conducting/reviewing the assessment. Once completed, the document shall be forwarded to the Manager of Plant and Maintenance.
- 1.2.7 A copy of the Hazard Assessment, and record of qualifications of the person who conducted the assessment, shall be provided, on request, to the Joint Health and Safety Committee, or to any worker who performs work to which the hazard assessment relates.

1.3 Entry Plans and Permits

- 1.3.1 Before any worker enters a confined space, the Maintenance Manager/Supervisor shall ensure that an entry plan (including necessary procedures) and permit have been developed and implemented

by a competent person to control the actual and potential hazards identified in the associated Hazard Assessment.

- 1.3.2 The Confined Space Entry Permit Issuer shall ensure that every worker who enters a confined space or conducts related work follows the plan.
- 1.3.3 The Entry Plan and Permit may be combined into one document. A Plan/Permit template is provided in Appendix B and includes all information required by sections 119.6 and 119.9 of O.Reg. 851.
- 1.3.4 If two or more confined spaces are of similar construction and present the same hazards, one plan/permit can be developed for the group of spaces identified on the assessment document.
- 1.3.5 Senior Management shall ensure that the plans are reviewed by the Maintenance Manager/Supervisor as often as is necessary to ensure that the plans and permits remain accurate and adequate.
- 1.3.6 A separate entry permit shall be issued before each confined space entry.
- 1.3.7 The permit shall be closed at the end of each shift, unless a competent person verifies (in writing on the entry permit and at the beginning of the next shift) that the permit and work conditions continue to comply with the requirements of the relevant plan.
- 1.3.8 The Confined Space Entry Permit Issuer shall ensure that the appropriate acceptable atmospheric levels are noted on the permit to facilitate proper interpretation of air testing results.
- 1.3.9 The Confined Space Entry Permit Issuer shall be responsible for signing the permit, verifying that the requirements of the relevant plan have been met.

1.4 Attendants

- 1.4.1 For each confined space entry, an attendant shall be assigned and shall:
 - Be stationed outside and near the entrance to the confined space;
 - Be in constant communication with all workers inside the space (using the means of communication described in the relevant plan);
 - Be provided with a device for summoning a rescue response;
 - Not enter the confined space at any time;
 - Monitor the safety of the entrant(s); and
 - Provide assistance (from outside the space) to the entrant(s).

1.5 On-Site Rescue Procedures and Equipment

- 1.5.1 The Maintenance Manager/Supervisor shall ensure that no worker enters a confined space unless an adequate written on-site rescue procedure (including equipment), in accordance with the relevant plan, has been developed and is ready for immediate implementation. A Rescue Plan/Procedure template is provided in Appendix C.
- 1.5.2 Rescue equipment shall be inspected by a person with adequate knowledge, training and experience as often as is necessary to ensure it is in good working order. A written record of the inspection shall be maintained at the site where it is normally stored.
- 1.5.3 The Maintenance Manager/Supervisor shall ensure that no worker enters a confined space until an adequate number of persons trained in the rescue procedures are available for immediate implementation of the on-site rescue procedures. The person(s) must be trained in:
 - The on-site rescue procedures,

- First aid and cardio-pulmonary resuscitation, and
- The use of the rescue equipment required by the relevant plan

1.6 Preventing Unauthorized Entry

- 1.6.1 If there is the possibility of unauthorized entry into a confined space, the Confined Space Entry Permit Issuer shall ensure that each entrance to the space is, 1) adequately secured against unauthorized entry; or 2) has been provided with adequate barricades, adequate warning signs regarding unauthorized entry, or both.

1.7 Atmospheric Testing

- 1.7.1 Air testing shall be conducted, in accordance with the relevant plan, by a person with adequate knowledge, training and experience before, and at adequate intervals during, each confined space entry, to ensure that acceptable atmospheric contaminant levels are maintained in the confined space. Re-testing of a space during a permit period shall also be performed, before any worker re-enters the space, anytime the space has been both unoccupied and unattended.
- 1.7.2 The Confined Space Entry Permit Issuer shall ensure that air testing is conducted with calibrated instruments that are in good working order and are appropriate for the hazards identified in the relevant assessment.
- 1.7.3 The results of all sampling shall be recorded on the Confined Space Entry Plan/Permit.
- 1.7.4 The Confined Space Entry Permit Issuer shall ensure that the testing is done in a manner that does not endanger the tester.

1.8 Training

- 1.8.1 The Maintenance Manager/Supervisor shall ensure that all CDSBEO employees required to enter into confined spaces or conduct related work receive adequate training. Training shall include, but not necessarily be limited to:

General Training

- the contents of this Program
- recognition of hazards associated with confined spaces

Plan-Specific Training

- plan-specific training, in accordance with the relevant plan, to work safely and properly
- 1.8.2 General and Plan-Specific Training may be combined into one training program.
- 1.8.3 The training program(s) shall be developed in consultation with the JHSC.
- 1.8.4 Senior Management and/or Maintenance Manager/Supervisor shall ensure that the training is provided by a person with adequate knowledge, training and experience.
- 1.8.5 Senior Management shall ensure that written records are created and maintained of who conducted the training, who received the training, the nature of the training (e.g. a course manual), and the date of training. These records shall be maintained by Administration in accordance with section 5.10 of this program.
- 1.8.6 Senior Management shall ensure that the training programs are reviewed, in consultation with the JHSC, whenever there is change in circumstances that may affect the safety of a worker who enters

a confined space, and in any case, at least annually. A written record of this review shall be maintained by Administration.

1.9 Multiple Employer Entries

- 1.9.1 If employees from more than one employer participate in a confined space entry (e.g. enter the space or conduct related work) the Maintenance Manager/Supervisor shall ensure that a Coordination Document is prepared (where CDSBEO is considered the Lead Employer as defined in O.Reg. 851).
- 1.9.2 The Lead Employer means:
- An employer who contracts for the services of one or more other employers or independent contractors in relation to one or more confined spaces that are located, 1) in the lead employer's own workplace, or 2) in another employer's workplace.
- 1.9.3 A Coordination Document template is provided in Appendix D.
- 1.9.4 The Maintenance Manager/Supervisor shall provide a copy of the Coordination Document to each employer involved in the planned entry and the Joint Health and Safety Committee (or Health and Safety Representative) of each employer involved in the entry.

1.10 Record Keeping

- 1.10.1 Senior Management shall ensure that the following records are retained as specified in 5.10.2:
- Hazard Assessments
 - Plans
 - Records of Training
 - Entry Permits (including air testing results)
 - Rescue Equipment Inspection Records
 - Co-ordination Documents
- 1.10.2 Records shall be retained for at least the longer of the following periods: 1) one year after the document is created; or 2) the period that is necessary to ensure that at least the two most recent records (of each of the documents listed in 5.10.1) that relate to a specific confined space.

1.11 Program Review

- 1.11.1 The Joint Health and Safety Committee (JHSC) shall establish a schedule to review this program.

Confined Space Hazard Assessment

Appendix A

Date: _____ Assessor: _____ (signed) _____

Location: _____ Space Identifier: _____

Does this assessment apply to the other spaces of "similar construction and same hazards"?

If so, identify all spaces to which this assessment applies: _____

SPACE CHARACTERIZATION:

Description of Space: _____

Function: _____ Size, Configuration: _____ Indoor/Outdoor: _____

Above/Below Grade: _____ Entry Points: _____ Access: _____

Supply Lines: _____ Mechanical Equipment: _____ Ventilation: _____

Adjacent Operations: _____

Contents of the Space (review MSDS if applicable): _____

PLANNED WORK CONDUCTED IN THE SPACE:

Purpose of Entry: _____

Who will conduct work in this space? Employer? Single Contractor? Multiple Employers?

Type of Work Conducted: _____

Inspection: _____

Cold Work: _____ Hot Work: _____

ATMOSPHERIC HAZARDS (identify):

Oxygen Enrichment/Depletion: _____

Flammables: _____ Toxics: _____

NON-ATMOSPHERIC HAZARDS:

Access/Egress Restrictions: _____ Adjacent Operations: _____ Communication: _____

Corrosion: _____ Drowning: _____ Electrical: _____

Entanglement: _____ Falling: _____ Falling Objects: _____

Insects/Vermin: _____ Ladder Condition: _____ Materials Movement: _____

Microbiologicals: _____ Moving Equipment: _____ Noise: _____

Physical Obstruction: _____ Slip/Trip Hazards: _____ Stored Energy: _____

Supply Lines Discharges: _____ Temperature: _____ Vehicle Traffic: _____

Visibility Poor: _____ Work Space Limited: _____

Note: Follow specific confined space entry procedures in accordance with the relevant plan/permit, and the CDSBEO Confined Space Entry Program.

| |
|---|
| <p>CDSBEO – _____ <i>Print location name</i></p> <p style="text-align: right; border: 1px solid black; padding: 2px 5px;">Appendix B</p> <p style="text-align: center;">CONFINED SPACE ENTRY PLAN/PERMIT Name/Location of Confined Space</p> |
|---|

Entry into a confined space is not allowed until this permit is completed and authorized.

Space Location/Identifier: _____

Hazard Assessment Conducted Immediately Prior to Entry? Yes (attach document)

Purpose of Entry: _____

Type of Work to be Conducted: _____

Are Multiple Employers Involved? No Yes – if yes, also refer to Coordination Document

Date of Entry: _____

Permit Period: From: _____ To: _____

SUMMARY OF POTENTIAL HAZARDS AND CONTROLS (see attached Hazard Assessment)

| HAZARD | CONTROL MEASURE |
|--|--|
| <i>Atmospheric</i> | |
| <i>Example:</i> Toxics (sludge/hydrogen sulfide) | Remove manhole / general dilution ventilation/blower ventilation |
| | |
| <i>Non-Atmospheric</i> | |
| <i>Example:</i> Energy/electrical from pump activation | Lock-out tag out electrical. |
| Physical Obstructions (access restriction) | Remove manhole. Rebar ladder for access. |
| Poor Lighting | Flashlight |
| | |
| | |

ENTRY PROCEDURES
 (update as necessary to ensure all hazards identified in the Assessment are adequately controlled)

DO NOT ENTER THE SPACE UNTIL ALL OF THE FOLLOWING ARE COMPLETE.

- | | |
|---|--------------------------|
| <u>General</u> | <u>Complete?</u> |
| 2. All entry team members have received plan-specific safe entry/confined space training? | <input type="checkbox"/> |
| 3. Written on-site rescue procedures have been prepared and communicated? | <input type="checkbox"/> |
| <i>Refer to separate written Rescue Procedures that apply to this space (attached)</i> | |
| 4. Adequate number of rescue personnel (qualified in first aid/CPR) ready for immediate implementation? | <input type="checkbox"/> |

Hot work involved? No Yes - Refer to specific hot work procedures and permit

- | | |
|--|--------------------------------------|
| <u>Preparation of the Space (Example)</u> | <u>Complete</u> ^{√?} |
| Inform affected employees of any shutdown of facilities. | <input type="checkbox"/> |
| Close all areas potentially discharging into the pit. | <input type="checkbox"/> |

Appendix B – Confined Space Entry Plan/Permit

- Work area is free of clutter, debris, etc.
- Flush pit (if required) and drain the pit as low as possible.
- Isolate discharge supply line, if possible.
- Open any electrical disconnects.
- Lock-out the electrical disconnect and tag it.
- Open plug on check valve to ensure check valve holds.
- Provide continuous ventilation.
- Provide artificial lighting.
- Adequate barricades and/or signage against unauthorized entry are in-place?
- All electrical power tools and devices used inside the pit are ground-fault protected.

Entry and Rescue Equipment

- Protective Gloves Safety Glasses/Goggles Protective Clothing
- Retrieval System Harness/Lifeline Artificial Lighting
- Hard Hat Particulate Respirator First Aid Kit
- Communication Device (if attendant/entrant out of visual/verbal contact)

Verification of equipment inspection/good working order: _____ (sign)

5.

6. Air Testing

Notes: Do not enter the space unless acceptable air quality conditions exist.

7. The results of each air sample must be recorded on the table below.

Ensure that the entire space is tested.

The pit shall be re-tested prior to re-entry, if it has been both unoccupied and unattended.

RESULTS OF AIR MONITORING

| Chemical | Location/Condition | Time | Result | Acceptable Limit |
|-----------------------|--------------------|------|--------|------------------|
| Oxygen | | | | 19.5-23 percent |
| | | | | 19.5-23 percent |
| Lower Explosion Limit | | | | less than 5% LEL |
| | | | | less than 5% LEL |
| Hydrogen Sulfide | | | | less than 10 ppm |
| | | | | less than 10 ppm |
| Other Toxic(s) | | | | |
| | | | | |

Test Equipment: Calibrated/Bump Tested Gas Monitor

Other? (specify type): _____

I have conducted the air monitoring and verify the results shown in the above table.

Name: _____ (sign)

Attendant's Duties

- Attendant is qualified? Confirmed√?
- Attendant assigned and stationed at entrance to the pit.
- Attendant in constant communication with entrant and monitors the safety of entrant.
- Attendant has means of summoning rescue response.

Note: The attendant shall not enter the space at any time!

Entry into the Space

- Entrant enters pit using ladder or retrieval system. Complete√?
- Entrant wears gas monitor while in the pit.

Appendix B – Confined Space Entry Plan/Permit

Chemical products not permitted inside the pit (unless considered in hazard assessment).
Authorizations (see below) are completed prior to entry.

Notes: If the gas monitor alarms, the Entrant shall exit the space immediately.
The Entrant shall immediately leave the space if he/she experiences any unusual health symptoms or if he/she is instructed by the Attendant to leave the space.
If the ventilation system fails, the Attendant will immediately instruct the Entrant to evacuate the space.

AUTHORIZATIONS

I have read this plan/permit and understand my responsibilities during this entry procedure.

Entrant: _____ at _____ on _____.
(Signature) (Time) (Date)

Attendant: _____ at _____ on _____.
(Signature) (Time) (Date)

I confirm that the information reported in this permit is correct and that all necessary safety precautions have been taken to make the space safe for entry and to ensure that the space remains free from hazards for the duration of this permit period.

Supervisor: _____ at _____ on _____.
(Signature) (Time) (Date)

Entry/Exit Record

Entrant (name) _____ **Time of Entry/Time of Exit:** _____
Entrant (name) _____ **Time of Entry/Time of Exit:** _____

Exit/Post Entry

Complete ✓?

Entrant exits space by ladder or retrieval system.
Following completion of the work, conditions are restored to normal operating conditions.

Permit Closed at End of Shift? Yes No – If no, Supervisor (XXX) (or delegate) to provide written verification that work conditions continue to comply with the requirements of this plan at the beginning of each shift (or a new, separate permit can be opened):

Shift 2 Verification: _____ (name/date/time)

When the work is completed, this Permit must be forwarded to the Plant and Maintenance Department

Name/Location of Space
(Description of Space)

Attach digital photo – if possible

Confined Space On-Site Rescue Procedure

Confined Space Location/I.D.: _____ Associated Plan/Permit No. _____

Before any worker enters a confined space, adequate written on-site rescue procedures (in accordance with the relevant plan/permit) that apply to the confined space must be developed and ready for immediate implementation by the on-site rescue team. The Hazard Assessment must also be reviewed with the rescue Team.

1. Rescue Team:

An adequate number of rescue personnel must be available for immediate implementation of the on-site rescue procedures. Personnel must be trained on the specific procedures, in addition to first aid and CPR and the use of relevant rescue equipment and methods. The specific responsibilities of the rescue team members shall be communicated and reviewed in a pre-entry meeting.

Rescue Team Members and Responsibilities:

Note: The confined space "Attendant" must remain in place outside and near the entrance to the confined space. The Attendant shall not be part of the rescue team, unless he/she is replaced by an alternate attendant, during the rescue.

2. Methods of Communication:

Communication methods must be established between the entrant(s) and the attendant, and between the attendant and the rescue team. Indicate the methods of communication below:

- | | | | |
|---|--|--|--|
| <ul style="list-style-type: none">• Two-way radios• Lifeline• Whistle | <div style="border: 1px dashed black; padding: 2px;">NO</div> <div style="border: 1px dashed black; padding: 2px;">IDS</div> | <ul style="list-style-type: none">Visual alarmVoice communicationAudible alarm | <div style="border: 1px dashed black; padding: 2px;">NO</div> <div style="border: 1px dashed black; padding: 2px;">IDS</div> <div style="border: 1px dashed black; padding: 2px;">NO</div> <div style="border: 1px dashed black; padding: 2px;">IDS</div> <div style="border: 1px dashed black; padding: 2px;">NO</div> <div style="border: 1px dashed black; padding: 2px;">IDS</div> |
|---|--|--|--|

Indicate who will contact emergency services, and how: _____

3. Rescue Procedure:

Outline the rescue procedure:

Rescue Equipment:

Rescue equipment must be readily available and appropriate for entry into the confined space. Equipment shall include (check those that apply):

- | | | |
|--|--|--|
| <ul style="list-style-type: none">• Harnesses• Lifelines• Retrieval systems such as tripods, davit arms or hooking devices• Winch• Supplied air breathing apparatus/SCBA respirator• Communication system (e.g. two-way radio)• First Aid Kit• Stretcher• Other personal protective equipment• Other (specify): _____ | <div style="border: 1px dashed black; padding: 2px;">NO</div> <div style="border: 1px dashed black; padding: 2px;">IDS</div> <div style="border: 1px dashed black; padding: 2px;">NO</div> <div style="border: 1px dashed black; padding: 2px;">IDS</div> <div style="border: 1px dashed black; padding: 2px;">NO</div> <div style="border: 1px dashed black; padding: 2px;">IDS</div> <div style="border: 1px dashed black; padding: 2px;">NO</div> <div style="border: 1px dashed black; padding: 2px;">IDS</div> <div style="border: 1px dashed black; padding: 2px;">NO</div> <div style="border: 1px dashed black; padding: 2px;">IDS</div> | <p style="text-align: right;">Specify: _____</p> <p style="text-align: right;">Specify: _____</p> <p style="text-align: right;">Specify: _____</p> |
|--|--|--|

The above equipment must be inspected as often as is necessary to ensure it is in good working order, by a person with adequate knowledge training and experience. A record of these inspections must be in writing, in accordance with the CDSBEO Confined Space Program.

Confined Space Coordination Document

Appendix D

Activity/Project:

Location:

Confined Space I.D.:

Date of Entry:

Maintenance Manager/Supervisor:

Phone:

The Lead Employer (_____) shall be responsible for:

- | | |
|--|---|
| <input type="checkbox"/> Identify Confined Spaces | <input type="checkbox"/> Develop Confined Space Program |
| <input type="checkbox"/> Conduct Hazard Assessments | <input type="checkbox"/> Develop Plans |
| <input type="checkbox"/> Isolation of Energy | <input type="checkbox"/> Control of Materials Movement |
| <input type="checkbox"/> Entering & Exiting | <input type="checkbox"/> Unauthorized Entry |
| <input type="checkbox"/> Explosive & Flammable Substances | <input type="checkbox"/> Ventilation / Purging of Atmospheric Hazards |
| <input type="checkbox"/> Develop Written Rescue Procedures | <input type="checkbox"/> Develop Permits |
| <input type="checkbox"/> Provide Plan-Specific Training* | <input type="checkbox"/> Provide Entry and Rescue Equipment* |
| <input type="checkbox"/> Provide Attendant | <input type="checkbox"/> Conduct Atmospheric Testing |

Other Duties: _____

The Contractor (_____) shall be responsible for:

- | | |
|--|---|
| <input type="checkbox"/> Identify Confined Spaces | <input type="checkbox"/> Develop Confined Space Program |
| <input type="checkbox"/> Conduct Hazard Assessments | <input type="checkbox"/> Develop Plans |
| <input type="checkbox"/> Isolation of Energy | <input type="checkbox"/> Control of Materials Movement |
| <input type="checkbox"/> Entering & Exiting | <input type="checkbox"/> Unauthorized Entry |
| <input type="checkbox"/> Explosive & Flammable Substances | <input type="checkbox"/> Ventilation / Purging of Atmospheric Hazards |
| <input type="checkbox"/> Develop Written Rescue Procedures | <input type="checkbox"/> Develop Permits |
| <input type="checkbox"/> Provide Plan-Specific Training* | <input type="checkbox"/> Provide Entry and Rescue Equipment* |
| <input type="checkbox"/> Provide Attendant | <input type="checkbox"/> Conduct Atmospheric Testing |

Other Duties: _____

Acknowledgement:

Date:

The Contractor (_____) shall be responsible for:

- | | |
|--|---|
| <input type="checkbox"/> Identify Confined Spaces | <input type="checkbox"/> Develop Confined Space Program |
| <input type="checkbox"/> Conduct Hazard Assessments | <input type="checkbox"/> Develop Plans |
| <input type="checkbox"/> Isolation of Energy | <input type="checkbox"/> Control of Materials Movement |
| <input type="checkbox"/> Entering & Exiting | <input type="checkbox"/> Unauthorized Entry |
| <input type="checkbox"/> Explosive & Flammable Substances | <input type="checkbox"/> Ventilation / Purging of Atmospheric Hazards |
| <input type="checkbox"/> Develop Written Rescue Procedures | <input type="checkbox"/> Develop Permits |
| <input type="checkbox"/> Provide Plan-Specific Training* | <input type="checkbox"/> Provide Entry and Rescue Equipment* |
| <input type="checkbox"/> Provide Attendant | <input type="checkbox"/> Conduct Atmospheric Testing |

Other Duties: _____

Acknowledgement:

Date:

Note: Contractors must provide copies of this coordination document to their JHSC or HS Reps.

Note: *Sharing of responsibilities for general training, personal protective equipment and records are not permitted under Ontario Regulation. Each party is individually responsible for ensuring compliance with these requirements.

Note: Records shall be retained by the employer responsible for creating them.

Signed copies of this completed document shall be returned to the Plant and Maintenance Depart.