

# Cleaning & Restoration™

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## RIA Heads to Texas



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# Damage Repair in Residential and Light Industrial

# CONFINED SPACES

By Graham Dick CR, CMP

**A**ny discussion of confined space must recognize the reality that no matter what you do, productivity slows down. There are many variables in listing and recognizing why you will find significant opportunity to create documentation and line descriptions in your invoicing. To create a reasonably complete checklist, go to your state or province's Occupational Health & Safety Regulations and Guidelines website and search 'confined space'.

Here is an example for British Columbia:

## Confined Spaces

### Part 9: Confined Spaces

*Section 9.1 — Definitions*

*Sections 9.2 to 9.5 — General Requirements*

*Sections 9.6 to 9.8 — Responsibilities*

*Sections 9.9 to 9.11 — Hazard Assessment and Work Procedures*

*Sections 9.12 to 9.16 — Identification and Entry Permits*

*Sections 9.17 to 9.23 — Lockout and Isolation*

*Sections 9.24 to 9.26 — Verification and Testing*

*Sections 9.27 to 9.29 — Cleaning, Purging, Venting, Inerting*

*Sections 9.30 to 9.33 — Ventilation*

*Sections 9.34 to 9.36 — Standby Persons*

*Sections 9.37 to 9.41 — Rescue*

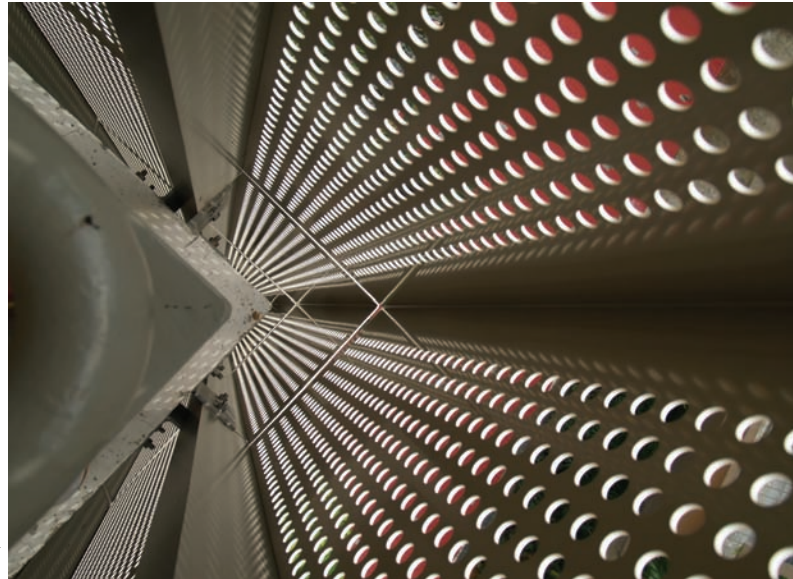
*Sections 9.42 to 9.45 — Lifelines, Harnesses and Lifting Equipment*

*Sections 9.46 to 9.51 — Personal Protective Equipment and Other Precautions*

By structuring the list in the same order as the regulations, it is easier to educate staff and clients, as well as create a formatting structure that is logical, repeatable and can serve all cleaning and restoration companies in a compelling and consistent fashion.

## Hazard Assessment, Work Procedures and Entry Permits

This takes additional time and a level of expertise not associated with a technician billing rate in estimating programs. Specialty instruments must be used to test and a higher standard of documentation must be provided.



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Just as written permits are required for asbestos work, bloodborne pathogen work and other hazardous work environments, a qualified person must conduct this identification and write the appropriate documents.

According to the B.C. Occupational Health and Safety Regulation, a person qualified to conduct confined space hazard assessments and entry procedures must be a:

- Certified Industrial Hygienist (CIH)
- Registered Occupational Hygienist (ROH)
- Certified Safety Professional (CSP)
- Canadian Registered Safety Professional (CRSP)



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- Person with a combination of education, training and experience acceptable to WorkSafeBC.

All of these individuals must have experience in the recognition, evaluation and control of confined space hazards.

Most estimating programs do not have a listing for an in house 'qualified' expert. For appropriate pricing, go to the "Hazardous" section and consider the pricing for outside expertise. The reality in the industry is that professionals have been gradually increasing the base of knowledge and education while lumping these 'new' skills and knowledge into an old pay

scale. All time to fully comply with government regulations is billable. Explain to the client that hiring a non-complying contractor will result in severe liability issues. A private homeowner may not care, but large property management and insurance clients sure do.

### Lockout and Isolation

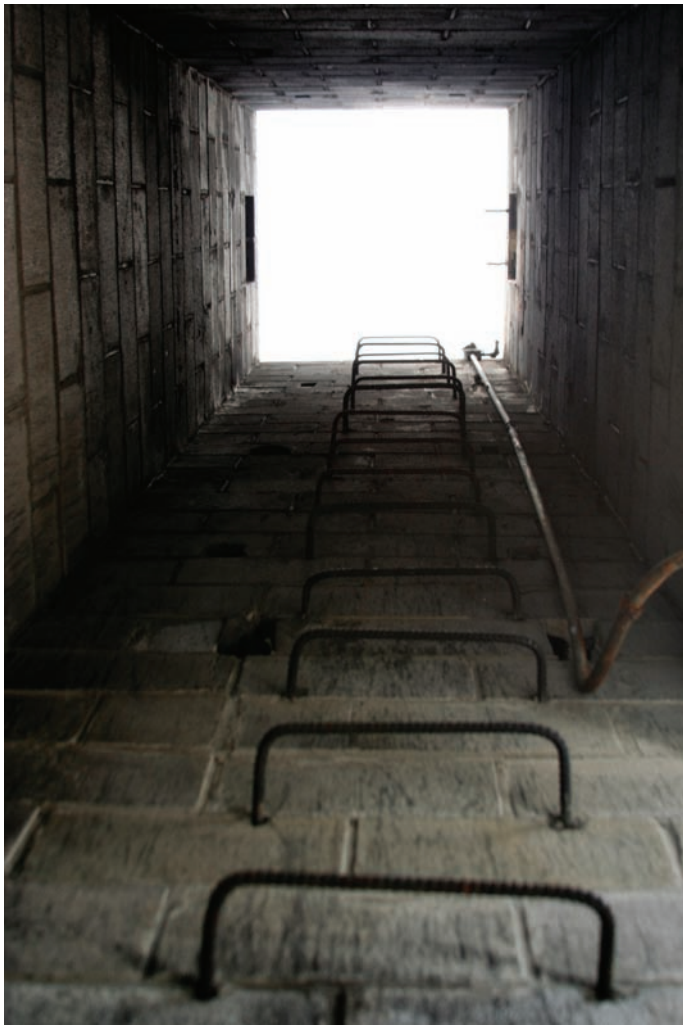
This is where engineering controls are planned to address the specific hazards that have been identified. All jobs need a plan regardless of risk level. A simple written plan and meeting with the production staff prior to implementation will create consensus and hopefully reveal if anything was overlooked. Not to belabor the point, but all this takes time and is a direct cost of the job, bill it as such.

### Verification and Testing

Before work in the confined space can begin, pre-entry testing must occur. This is for medium and high hazard atmosphere conditions. The context of this article deals primarily with low hazard atmosphere conditions, but awareness is important. Document the results and include it in supporting documents for the invoice.

### Cleaning, Purging, Venting, Inerting

Setting up the engineering controls is where the first actual production work takes place. All of the additional equipment



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used to create a safe work environment enhances and speeds up productivity. Proper attention here will save a significant amount of time during the production phase of the work.

There are a number of the considerations when planning the appropriate engineering controls:

- **Temperature Controls** – Shift length will vary greatly if reasonable operating temperatures cannot be maintained. Heat or cooling requirements are much higher when creating a pressure differential and significant air exchange.
- **Access/Egress** – Often there is only one way in and out, and the hatch is 24-30" square. All tools, ventilation ducting and power cords pass through here too.
- **First Aid Preparations** – This includes a kit, backboard, retrieval gear, tools & equipment for emergency access on standby and a certified industrial first aid ticket on site.
- **Electrical Supply** – You must bring your power to the party such as cordless tools and extension cords in good condition. A temp panel with 30-40A is usually sufficient.
- **Lighting** – Auxiliary lighting is always needed, e.g., string lights, wobble lights, etc. Halogen lights tend to be fragile, hot, and increase the risk of contact burn or fire.

## Ventilation

Ventilation is one of the most important variables to control in a confined space. What are the ambient requirements by law per technician? What type of contamination is being removed and how? Temperature controls were discussed above, but what about the effect on the air quality when sanding, blasting or other disruptive activities send millions of spores or contaminants into the air? CF regulations require mechanical extraction or dilution or both. HEPA vacuum attachments to all tools that abrade should be common sense. The point is to maintain airborne contaminants below exposure limits.

## Standby Persons

The guidelines define the requirements according to a low, medium or high hazard atmosphere space. Here is an excerpt to show an example of the low hazard regulation since this is the one we deal with most frequently.

According to the B.C. OHSR, a *low hazard atmosphere* “means an atmosphere which is shown by pre-entry testing or otherwise known to contain clean respirable air immediately prior to entry to a confined space and which is not likely to change during the work activity, as determined by a qualified person after consideration of the design, construction and use of the confined space, the work activities to be performed, and all engineering controls required by this Regulation.”

According to the regulation, the standby person cannot be located inside the confined space. His responsibility is to regularly check on the well-being of the worker in the confined space. This means at least every 20 minutes or more as required by the entry procedures. He can also pass supplies into the space (without entering), remove debris that is brought to the access point, change vacuum bags, filters on NAM's, and take pertinent notes on the activities taking place.

## Rescue

A rescue worker must not enter a confined space without an additional worker located outside to render assistance. This means the standby person technically cannot be the only rescue worker. The client (insured homeowner) is not considered an additional worker.

Be aware that although confined space rescues have been handled by fire departments, this may not always be the case. Many emergency response personnel (including ambulance and emergency first aid) may require that the worker first be removed before receiving treatment. The employer is responsible for the rescue of a worker from a confined space. Under the B.C. OHSR, “*if the rescue persons are employees of another firm, or an agency such as a fire department, there must be a written agreement detailing the services that are to be provided.*” And, if the employer has a “rescue team:”

- Every person assigned rescue duties must be properly equipped and adequately trained to carry out such duties.
- A practice drill must be conducted annually.

Records of training and practice drills must be maintained by the employer of the rescue persons.

Make sure the standby person knows the proper procedure for calling, identifying the location, type of injury, and any difficulties or hazards in retrieving the injured worker.

### **Lifelines, Harnesses and Lifting Equipment**

If appropriate for the situation, this equipment must be on the site. Rental of this equipment is required if you don't do enough of this work to warrant purchasing it.

### **PPE and Other Precautions**

The use of appropriate PPE is an area where there is some controversy. Not in the mind of the qualified person specifying the PPE, but in the mind of the workers. The pragmatic realities can be quite different from what has been specified. For instance, the difficulty of wearing a PAPR and a hard hat with a Tyvek™ suit in a 36" crawlspace and being able to see and operate the tools can be very frustrating. Preventing heat exhaustion can be a challenge. Compounding this can be

uneven surfaces, mud or sewage, construction debris and plumbing and ducting that restricts movement.

Even then the typical technician just wants to get in and get out, and a lot of companies turn a blind eye to some of these requirements. However, it's time to comply and get paid for compliance. The risk or claims manager can be helpful in this regard because they should not knowingly hire companies that do not have the documentation to support safe work practices.

Although the examples used here are Canadian, my U.S. sources say that although the laws vary slightly, the principles are the same. The reality in the industry is that restoration professionals have been gradually increasing their knowledge and education while lumping 'new' skills and knowledge into an old pay scale. While the category of 'certified technician' has been used for many years, the expected knowledge base has changed significantly. Working safely means following the regulations.

Following proper OHS pays and it really does impact the bottom line in a positive way. The investment will provide a bigger ROI than that next 'widget' you want to buy. ■

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