

# REPORT ON WASHROOM FACILITIES IN THE CONSTRUCTION INDUSTRY



### REPORT ON WASHROOM FACILITIES IN THE CONSTRUCTION INDUSTRY

Spring 2021

The BC Building Trades commissioned the Harwood Safety Group to provide this report examining the current law and practices regarding the provision of washroom facilities on construction sites.

THE BC BUILDING TRADES provides coordination and support to affiliated construction unions. By working together, organized construction workers achieve a powerful voice in government, in bargaining, and in their communities.

THE HARWOOD SAFETY GROUP is a leading occupational health and safety firm in B.C. Their consultants have decades of experience in safety and hygiene practice, law, training and working with WorkSafeBC.

Graphic design by Hands On Publications



#207 – 88 10th Street New Westminster, BC V3M 6H8 778-397-2220 info@bcbuildingtrades.org

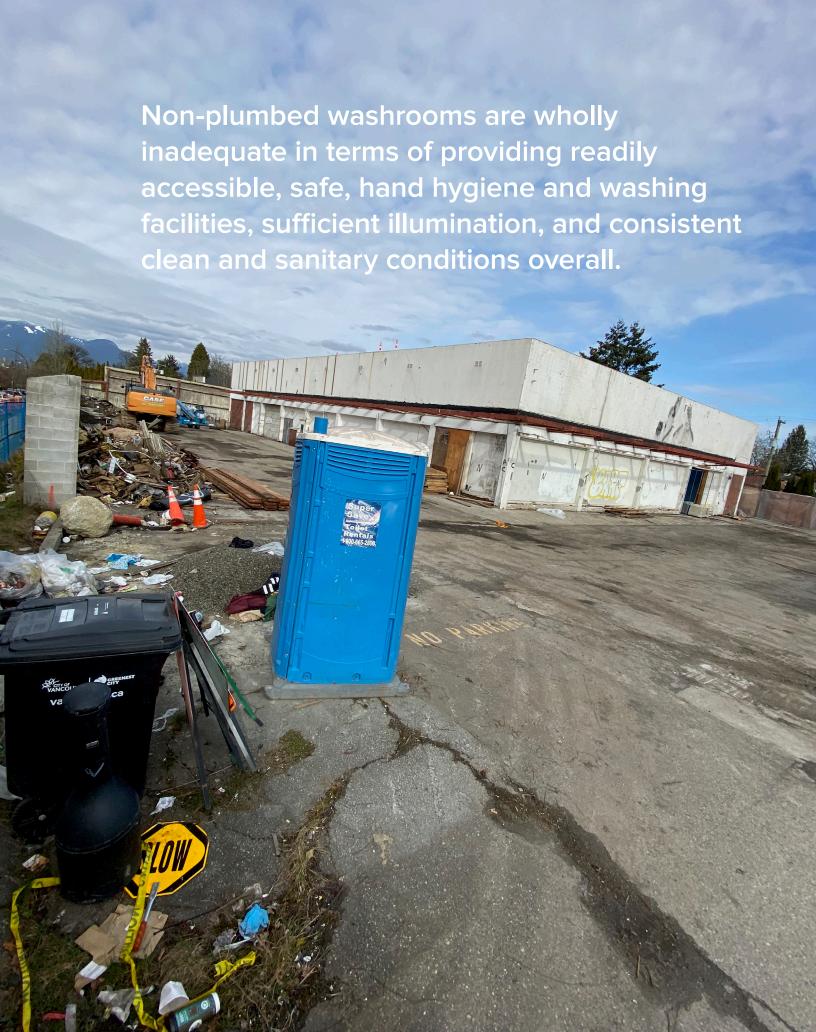
bcbuildingtrades.org







EXECUTI	VE SUMMARY	5
PART I	INTRODUCTION	7
PART II	LEGAL FRAMEWORK	8
	Workers Compensation Act	8
	OH&S Regulation	8
	WorkSafeBC OHS Guidelines	9
PART III	REVIEW OF THE CURRENT STATUS	11
	Current Practice	11
	Hand Hygiene	11
	Cleanliness	12
	Illumination	13
	Non-plumbed Unit Configuration and Location.	13
	Worker Experience	13
	Health and Safety Hazards	14
	COVID-19	14
	Other Biological Hazards	15
	Other Factors and Jurisdictions	15
	Women in Construction	15
	Other Jurisdictions	16
	United Kingdom	16
	Victoria, Australia	17
	International Labour Organization	18
PART IV	THE WAY FORWARD	19
	Plumbed Portable Washroom Facilities	19
	Regulatory Compliance	21
	Section 21—Workers Compensation Act	21
	Section 4.85 OHS Regulation	21
PART V	CONCLUSION	22



### **EXECUTIVE SUMMARY**

The time has come to question the prevailing practice in the construction industry regarding the provision of washrooms on constructions sites in B.C.

Construction sites rely on portable, nonplumbed washroom facilities, or "portapotties" in meeting this health and safety requirement. Non-plumbed washrooms are wholly inadequate in terms of providing readily accessible, safe, hand hygiene and washing facilities, sufficient illumination, and consistent clean and sanitary conditions overall.

There are recognized biological hazards associated with poor hygiene practices prevalent under the conditions these facilities afford. The dangers from such hazards are now exacerbated by the additional adverse health outcomes that can arise from contracting the COVID-19 virus.

The current view by the industry and WorkSafeBC is that the use of unplumbed toilets on construction sites complies with the *Workers Compensation Act*, the OHS Regulation and the OHS Guidelines pertaining to the occupational environment requirements. However, in view of viable alternatives to non-plumbed portable washrooms—such a view is outdated and needs to be examined more closely.

The Workers Compensation Act requires employers to ensure the health and safety of all workers, remedy any workplace conditions that are hazardous to the health and safety of workers and comply with the OHS Regulation.

The OHS Regulation provides that plumbed

washroom facilitates must be provided to all workers (and be kept clean and sanitary and be readily available). An exception to this may be considered only when a plumbed facility cannot be provided, "because of the nature of the workplace" (or it is not "practical" as per Guideline).

There are seldom any obstacles regarding "in the nature of the workplace" of a construction site that would demonstrably prohibit the use of portable plumbed units. Particularly on larger construction projects, the nature of the workplace is not a prohibition and it is practical to have portable and plumbed washrooms on site.

There are seldom any obstacles regarding "in the nature of the workplace" of a construction site that would demonstrably prohibit the use of portable plumbed units.

Portable trailered plumbed washrooms provide the following benefits for worker health and safety.

- Water-flushing toilets and hand hygiene facilities with hot and cold running water.
- Pumped, cleaned, disinfected and replenished regularly if used with a proper servicing agreement.
- During the pandemic, proper upkeep meets the directions from Health Canada, WorkSafeBC and the BCCDC for personal hygiene requirements as well as the cleaning and disinfecting of washrooms daily.
- Can be heated and illuminated, offering better conditions for use and effective cleaning and disinfection. Additionally, the efficacy of the disinfecting properties of most disinfectants is optimal in room temperature conditions.
- Conform with societally accepted and appropriate standards for personal hygiene.
- Align B.C. with other jurisdictions that take a modern-day and enlightened approach to worker hygiene on construction sites.

The use of illuminated, sanitary, well-maintained plumbed portable washrooms with hot and cold running water will assist in removing a variable that serves to impede women from actively considering construction trades as a vocation.

An industry and regulatory enforcement shift is called for in order to provide workers with the most basic element of workplace hygiene to help ensure both their personal dignity and their health and safety at work.

#### **RECOMMENDATIONS**

- Modernize practices on construction sites in the use of flush toilets to align with other jurisdictions that require the use of plumbed, portable washrooms on construction sites.
- Follow the current Health Canada, BCCDC, and WorkSafeBC COVID-19 protocols that recommend that any washroom facility be cleaned periodically throughout the workday, and again at the end of the workday.
- Comply with the requirements under section 4.85 of the OHS Regulation, including by:
  - supplying plumbed washroom facilities
  - providing access to hand-washing facilities in close proximity to washrooms
  - ensuring facilities are effectively cleaned and disinfected and are kept clean and sanitary, and
  - ensuring facilities are "readily available for workers," with the walking distance from a working area to a washroom no more than 60 metres (200 feet) away.
- Provide a daily toilet cleaning schedule and have it posted adjacent to the washroom.
- 5. Ensure washroom units have appropriate heating and illumination.



### **PART I**

### Introduction

The BC Building Trades Council has commissioned this Report to examine an important issue of worker health and safety that has been on the radar for decades but has now come to a head during the COVID-19 pandemic. This issue is the prevailing use of non-plumbed facilities or "porta-potties" for worker "hygiene use" on construction sites in B.C. Construction workers must endure a level of unsanitary and unhealthy conditions that would be regarded as completely unacceptable in any other workplace.

Unplumbed facilities already present biological hazards that can adversely affect the health of workers. With the additional hazard of the COVID-19 virus, the dangers of illness and disease from using these facilities is further compounded.

This Report was commissioned to examine the current law and practices regarding the provision of washroom facilities on construction sites. It provides an analysis of whether these practices are in keeping with societal expectations and norms for workplace hygiene, including during a pandemic, and more importantly, if current practices are compliant with occupational health and safety laws in view of available modern-day washroom alternatives.



Unplumbed facilities already present biological hazards that can adversely affect the health of workers. With the additional hazard of the COVID-19 virus, the dangers of illness and disease from using these facilities is further compounded.

#### **PART II**

## Legal Framework

The following sets out the requirements under B.C.'s Workers Compensation Act ("WCA") and Occupational Health and Safety Regulation ("OHS Regulation") regarding employers' responsibilities to provide washroom facilities to workers.

#### **WORKERS COMPENSATION ACT**

#### Section 21—General Duties of Employers

- (1) Every employer must
  - (a) ensure the health and safety of
    - (i) all workers working for that employer, and
    - (ii) any other workers present at the workplace at which that employer's work is being carried out, and
  - (b) comply with this Part, the regulations and any applicable orders.
- (2) ... an employer must
  - (a) remedy any workplace conditions that are hazardous to the health or safety of the employer's workers...

#### **OH&S REGULATION**

#### Section 4.85

- (1) Except as provided by subsection (2), the employer must ensure that a sufficient number of plumbed washroom facilities are readily available for workers.
- (2) If plumbed washroom facilities cannot be provided because of the nature of the workplace or the nature of the work in which the worker is involved, the employer must
  - (a) provide access to portable washroom and hand-washing facilities, or
  - (b) make such other reasonable arrangements to accommodate workers as the circumstances allow, if access to portable washroom and hand-washing facilities cannot be provided.
- (3) If washroom facilities are provided, they must be:
  - (a) maintained in proper working order,
  - (b) kept clean and sanitary, and
  - (c) provided with the supplies necessary for their use.



#### **WORKSAFEBC OHS GUIDELINES**

Section 4.85 OHS Guidelines (Issued January 1, 2005)

G4.85(1)1 Washroom facilities — Sufficient facilities

In determining the number of facilities to provide, the calculations should be based on the anticipated largest number of workers on any shift at the workplace at one time; workers who spend more than 75% of their time away from the workplace may be excluded from the count.

Recommendations for sufficient plumbed washroom facilities include the following:

- Where there are more than 9 workers, separate washrooms clearly signed for male and female workers. However, if the total number of workers on shift is 9 or fewer, or if a work area with 9 or fewer workers is located more than 60 metres (200 feet) from other washroom facilities, a single washroom for use by both male and female workers is generally suitable, provided it has a lockable door.
- In each female or male washroom, one toilet for 9 or fewer workers, two toilets for 10 to 24 workers, plus one more toilet for each additional 25 workers. If more than one toilet is required in a washroom for male workers, urinals may be substituted for half the recommended number of toilets.
- In each male or female washroom, one wash basin connected to a source of hot and cold water in each washroom containing one or two toilets and/ or urinals, and at least one additional wash basin for each additional two such

fixtures. If a large circular pedestal wash basin is provided, 60 centimetres (2 feet) of the circumference is generally considered equivalent to one wash basin.

 Washrooms should be designed so as to provide privacy for workers using the facilities.

### G4.85(1)2 Washroom facilities — Readily available

Section 4.85(1) requires washroom facilities to be "readily available for workers." Generally, the walking distance from a working area to a washroom should not be more than 60 metres (200 feet). In multi-storied workplaces, washrooms should not be more than one floor above or below the working area.

In a workplace where the washroom facilities are not in a part of the building occupied by or under the control of the employer, the employer must ensure suitable facilities are available to workers.

If public-use washrooms are available within walking distance at the workplace, the employer may utilize these facilities for workers provided the facilities are kept clean and sanitary and are of sufficient number to accommodate the total number of users, including the anticipated number of workers and the public. A risk assessment under the workplace violence provisions of the Regulation (section 4.28) may also be required where workers will be sharing washrooms with non-workers.

### G4.85(2) Washroom facilities where no plumbing is available

Where access to or installation of plumbed facilities is not practical, portable toilets should be provided and maintained. The





number of portable facilities (toilets and hand-washing facilities) should be sufficient for the number of workers, and the facilities should be readily accessible to workers. See OHS Guidelines G4.85(1)-1 and G.4.85(1)-2 for recommendations on the number of facilities and their location. [Emphasis added]

In highly transient or short-term operations, where it is not practical to provide portable facilities, the needs of workers must be reasonably accommodated. Depending on the workplace location, workers may be given the opportunity to access alternative facilities such as those in parks or public buildings or be provided with other options appropriate to the workplace location.

#### G4.85(3) Maintenance of washroom facilities

The employer must ensure washroom facilities are maintained to meet the requirements of section 4.85(3). If the washroom facilities

are not under the employer's direct control, the employer should ensure that all facilities intended for use by workers are maintained to meet the requirements of section 4.85(3).

Each washroom should be provided with a suitable waste receptacle and with the supplies necessary for the use of the facilities, such as a supply of soap, toilet paper, and hand-drying towels or air dryers.

We note that these guidelines have not been updated since 2005 and so do not reflect the technological improvements that have been made to facilitate improved hygiene for workers on construction jobsites.

#### PART III

### **Review of the Current Status**

#### **CURRENT PRACTICE**

In B.C., the vast majority of construction sites now rely on portable, non-plumbed washroom facilities, or "porta-potties."

Both the industry and WorkSafeBC accept the proposition that this is an appropriate approach that complies with the OHS Regulation and Guidelines pertaining to the occupational environment requirements. The presumption is that plumbed toilets on a construction sites are only practical if there is existing infrastructure to support them. The corollary to this is that to develop such infrastructure primarily to furnish flush toilets would not be economically viable on most construction sites.

As will be seen, these notions need to be evaluated in view of the appalling conditions of many non-plumbed washrooms and the options for use of modern viable alternatives. In examining the current conditions of portable non-plumbed washrooms on construction sites, several factors must be considered, including hand hygiene and washing facilities, cleanliness, illumination, and the configuration of the washroom facility.

#### **Hand Hygiene**

The hand hygiene facilities associated with portable non-plumbed washrooms are typically inferior hand hygiene systems. It is common that hand sanitizers are the default hand hygiene



system utilized on construction sites for portable non-plumbed washrooms.

Although it's clear that hand sanitizing stations are appropriate in many circumstances to help prevent the spread of viruses, it is also recognized by the BC Centre for Disease Control (BCCDC) that **hand washing** is considered to be the preferred method for effective hand hygiene. [emphasis added] BCCDC states:

While alcohol-based hand rubs can be used to disinfect your hands, washing your hands with soap and hot water for the appropriate length of time is most



effective. This is because soap actively destroys the surface of the virus and really reduces how much of the virus is left on your skin. See: Hand Washing (bccdc.ca)

Portable plumbed washroom units commonly utilize plumbed hot and cold running water, which is available for effective hand hygiene.

#### **Cleanliness**

Most construction sites contract out the cleaning and servicing of the units, with the frequency of cleaning varying and inconsistent from one site to another. It is widely known that non-plumbed units are often pumped out

and washed down on a weekly basis, which is generally considered as under-serviced. Weekly servicing typically does not alone meet the required health and safety standards for cleanliness and hygiene as recommended by both WorkSafeBC and the BCCDC. Weekly maintenance of washrooms is common.

The process of servicing the portable nonplumbed washroom facility includes pumping out the holding tank by using a hose inserted into the tank from inside of the washroom. Upon completion of emptying the tank, the hose is removed and any residual waste from the hose may drip inside the facility. This residual waste is subsequently removed when the unit is sprayed down with a cleaner and then sprayed down again with water. The facility is left saturated with water until it evaporates, which in winter months may take several hours. The use of a water-saturated washroom facility is both uncomfortable and challenging for workers.

The frequency of cleaning and disinfecting the portable non-plumbed washroom is critical and directly impacts the health and safety of all washroom facility users. The impacts associated with poorly maintained washroom facilities on site are numerous and may include:

- Biological hazards (associated with viral infections)
- Physiological hazards (such as bladder infections commonly associated with not going to the washroom when needed, and
- Psychosocial issues (from inappropriate, harassing washroom graffiti not being removed in a timely manner).

WorkSafeBC notes that regular cleaning and disinfection of all common areas including washrooms is required as part of an integral program of controlling exposure risks to the SARS-CoV-2 virus—a process whereby documented regular cleaning of any washroom facility (1 to 2 times per day) needs to be in place, similar to the regular documented cleanings posted in many public washrooms.

The quality and frequency of washroom cleaning and disinfection on construction sites is seldom addressed on a consistent basis as part of the process for effective controlling of the risk to viral exposures. BCCDC recommends in domestic households that cleaning and disinfection of all washrooms be conducted at least daily. See: Cleaning and disinfecting (bccdc.ca)

WorkSafeBC further provides general guidance on the cleaning and disinfection of common areas in construction. See:

Construction—WorkSafeBC

The BC Construction Safety Alliance (BCCSA) has created and posted guidance literature for surface cleaning of common touch areas and washrooms that supports multiple daily assessments and enhanced cleaning. See: BCCSACOVID19ENHANCED cleaningAPR14th2020.pdf

#### Illumination

Portable non-plumbed washroom facilities are typically not electrically illuminated, instead reliant on natural lighting for illumination. The use of natural lighting is inadequate for construction workers who commonly commence or finish their shifts prior to sunrise or after sunset resulting in dark portable washrooms.



Use of the washroom facilities during non-daylight hours requires workers to use headlamps in the facility for adequate illumination. The problem of insufficient illumination is often further exacerbated when the portable non-plumbed washrooms are located in parkades.

The installation of LED lighting in portable non-plumbed washrooms is entirely practicable where these types of facilities are considered to be the only viable option for the provision of washroom(s). The installation of this simple lighting system would also meet the requirements of OHS Regulation section 4.65 and associated subsections. See: Illumination Levels: WorkSafeBC

The use of plumbed portable washrooms eliminates the issue of insufficient illumination entirely during non-daylight hours as those units are commonly electrically powered.

### Non-plumbed Unit Configuration and Location

Due to the limited size of a portable nonplumbed unit, the location of the urinal in direct proximity to the toilet seat often results in urine spilling on both the floor and toilet seat areas. Once again, this issue underscores the importance of frequent inspections, cleaning, and disinfection of these units.

It is also noted that on construction sites the portable non-plumbed washrooms are commonly not located with access, egress, and facility stability as a priority. Workers note that the facilities are often placed on wood pallets on soft ground resulting in stability issues. Facilities are commonly located a distance from active working locations and as

noted, seldom in proximity to proper handwashing facilities.

#### **Worker Experience**

When BC construction workers are asked about their experiences and the process for using portable non-plumbed washrooms it is common to hear the following:

- The cleanliness of the washrooms often degrades, quickly making them undesirable to use.
- The unsanitary conditions of on-site portable non-plumbed washrooms coupled with a lack of hot and cold running water makes the use of public, plumbed washroom facilities off of the construction site a preferable option when available.
- The option of refraining from the use of an unsanitary portable washroom is commonly exercised by workers and they will delay washroom use until a clean offsite facility is available.
- Workers may relieve themselves without using any washroom facility while on site as opposed to walking extended distances only to use an unsanitary washroom facility.

It is noted that for larger construction sites, supervisory personnel often have access to an on-site portable plumbed washroom facility. These same portable plumbed facilities are not available to most of the site workers, creating an inequity for plumbed washroom availability for this most basic of human needs.

The problems associated with the use of portable non-plumbed washroom facilities (especially if they are in an unsanitary



"Clean women's washrooms on site may not seem like a major hurdle to most people, but when you're a woman or someone who has experience as a woman, things can be a little different. Many people have experienced having nowhere to properly wash their hands prior to playing bathroom Jenga in a washroom with human waste on the ground."—Ashley, Insulator

condition) are further exacerbated in seasonal weather extremes. An unsanitary facility can be almost unusable during temperatures above 30 degrees C, and exceedingly uncomfortable to use in temperatures below freezing. Furthermore, the efficacy of the disinfecting properties of most disinfectants is optimal at room temperature.

#### **HEALTH AND SAFETY HAZARDS**

#### COVID-19

The BC Centre for Disease Control (BCCDC) current COVID-19 protocols recommend that any washroom facility should be cleaned and disinfected at least daily to control the risk of COVID-19. See: Cleaning and disinfecting (bccdc.ca)

The BC Ministry of Health supports these cleaning and disinfecting requirements and further elaborates on them suggesting two cleanings daily in their publication (p. 7 and 8) titled, "Protecting Industrial Camp Workers, Contractors, and Employers Working in the Agricultural, Forestry, and Natural Resource Sectors During the COVID-19 Pandemic,"

July 28, 2020. See: All-sector-work-camps-guidance.pdf (bccdc.ca)

WorkSafeBC has also recognized the importance of the regular cleaning and disinfection of washrooms and wash facilities in construction as a significant component of controlling the risk of COVID-19 transmission in a COVID-19 safety plan. See: Construction—WorkSafeBC

The US Center for Disease Control (CDC) has indicated that the SARS-CoV-2 virus has been found in the feces of both symptomatic and asymptomatic patients with COVID-19. Although the risk of fecal-oral viral spread is currently considered as low, this research is still evolving and does not include data from recent coronavirus variants with greater infectivity. See: Coronavirus (COVID-19) frequently asked questions | CDC and National Wastewater Surveillance System (NWSS)—a new public health tool to understand COVID-19 spread in a community I CDC

The importance of locating appropriate hand hygiene facilities in the direct proximity to the washroom is also of paramount importance to mitigate the spread of COVID-19.

The BCCDC has also indicated that the worker-to-worker transmission of the SARS-CoV-2 virus (Risk Group 3 virus as identified by the Health Canada ePathogen Database), which is capable of causing COVID-19, may also occur through contact with fecal matter and common touch points in the washroom.

**Other Biological Hazards** 

Risk-assessed biological hazards that may be present in poorly maintained portable washrooms include both Hepatitis A and Hepatitis B virus (these are Risk Group 2 viruses as identified by the Health Canada ePathogen Database). See: ePATHogen—Risk Group Database (canada. ca)

It is documented by the BCCDC that fecal matter contributes to the transmission of Hepatitis A and that Hepatitis B is bloodborne. There may be worker-to-worker transmission of these viruses if washrooms are not effectively surface-cleaned and disinfected on at least a regular (daily) basis. See: Hepatitis (bccdc.ca)

### OTHER FACTORS AND JURISDICTIONS

#### **Women in Construction**

The promotion and encouragement of women to enter construction trades in B.C. has never been greater. Women represent less than five per cent of skilled trades workers. Although proper washroom servicing affects both male and female construction workers, it is particularly detrimental to female workers given the practicalities of how they use the facilities. As previously noted, non-plumbed portable washrooms are commonly unsanitary, serviced less frequently than recommended,





and frequently serve as a tablet for inappropriate workplace remarks that remain in place between cleanings. Thus, the use of portable, non-plumbed washroom facilities may serve as another detriment to women finding their place in the typically maledominated construction environment.

The Occupational Safety and Health Administration in the United States (OSHA) has documented the following regarding women in trades:

Access to sanitary facilities can be challenging on some construction sites. Temporary facilities are usually unisex, and often not very well maintained or overused. As a result, women report that they avoid drinking water on the job, risking heat stress and other health problems because of the lack of appropriate facilities available to them.

Scientific literature indicates that holding urine in the bladder for more than one hour, after experiencing the urge to urinate, leads to a higher incidence of urinary tract infections. Thus, due to the lack of available sanitary facilities, female workers experience a higher incidence of bladder and kidney infections. Inadequate facilities can result not only in urinary tract infections but may also result in other diseases from unavoidable contact with a contaminated toilet seat. If you find yourself in this predicament, inform your supervisor or employer.

Some possible solutions include requesting additional toilet facilities, sex designated facilities, and facilities with internal and external locking systems. Do not feel embarrassed by this issue. Many men complain about this problem as well. Your action will benefit both genders.

See: Women in Construction—Sanitary
Facilities at the Construction Site
| Occupational Safety and Health
Administration (osha.gov)

OSHA's Sanitation standard, 29 CFR 1926.51 requires employers to provide accessible sanitary facilities for all personnel and to ensure that these facilities are maintained in an appropriately, clean and sanitary condition.

#### **Other Jurisdictions**

#### **United Kingdom**

The use of portable plumbed washrooms is common in other workplace jurisdictions such as the United Kingdom (UK). The UK Health and Safety Executive (HSE) has extensive guidelines regarding the requirements for use of plumbed portable washrooms on construction sites. The guidance regarding provision of toilets includes the following:

- FLUSHING TOILETS provide these where possible. Connect them to mains water and drainage systems where available.
   Otherwise, use toilets with a built-in water supply and drainage tanks.
- toilets (also known as plastics) are acceptable where flush toilets cannot be provided. They may be the only achievable way of providing toilet facilities at the start and/or end of some projects. They are more common on temporary and smaller sites or in addition to permanent facilities on more remote parts of larger sites. See: Construction welfare—Toilets and washing—Managing occupational health risks in construction (hse.gov.uk)



Further HSE Publications pertaining to the provision of "Welfare Facilities" during construction work note the following:

So far as is reasonably practicable you need to provide flushing toilets and running water, connected to mains water and drainage systems. If this is not possible, facilities with a built-in water supply and drainage tanks should be used. Portable chemical toilets are acceptable only if it is not reasonably practicable to make other adequate provision. Toilets must be adequately ventilated, lit, and maintained in a clean condition. The frequency of cleaning will depend on usage. Basic daily cleaning may not always be sufficient. See: Provision of welfare facilities during construction work (hse.gov.uk)

#### This publication further indicates:

Construction workers need adequate toilet and washing facilities, a place to warm up and eat their food and somewhere to store clothing. However, these basic requirements are often neglected. A cold water tap and chemical toilet on their own are not adequate facilities. Good facilities can positively benefit health and well-being and can help to prevent dermatitis.

#### Victoria, Australia

WorkSafe Victoria in Australia also requires the use of flush type washroom facilities in construction. See: ISBN-Compliancecode-facilities-in-construction-2018-03.pdf (worksafe.vic.gov.au).

More specifically, Toilets Section 43 states:

Employees need to have access to clean and hygienic toilets at all times while on site.

#### Design of toilets Section 46 states:

The toilet facilities need to, so far as is reasonably practicable, be connected to a sewerage system. Where it is not reasonably practicable to connect to the sewerage system, self-contained fresh water flushing type toilets (for example, portable water seal toilets) or an equivalent need to be provided. Pan type closets or straight drop toilets do not meet hygiene requirements.

#### Design of toilets Section 48 states:

Each toilet needs to include hand washing facilities (general washing facilities may be used if it is located adjacent to the toilet facility).

WorkSafe Victoria has also published the following guidance documentation relating to compliant facilities for medium-sized construction workplaces. The facilities must be self-contained and use fresh water-flushing portable toilets, specifically noting:

#### **Toilets**

A conveniently located toilet with hand washing facilities should be provided from the start of the construction work for health and hygiene purposes. Additional toilets should be added as the workforce increases. These may be portable type toilets, toilets available within an existing building, toilets that become available within the new building under construction or a combination of these. The number of toilets on a MRD site should be provided at a ratio of one male closet per 10 male persons and one female closet per 10



female persons who normally work at the site. One unisex closet may be provided where:

- the total number of persons who normally work at the site is 10 or fewer, and
- there are two or fewer persons of one gender. Where toilets are not connected to a sewerage system, they should be self-contained and fresh water flushing portable toilets or similar. Recirculating flush type toilets should not be used." [emphasis added]

See WorkSafe Victoria publication:
"Workplace facilities on medium sized
residential construction developments"
: Information about: Workplace facilities
on medium sized residential construction
developments (worksafe.vic.gov.au)

#### **International Labour Organization**

Further to these comparable jurisdictional requirements for worker health and safety, the International Labour Office (ILO) has long advocated for plumbed washroom facilities in construction.

The **1972** ILO document "Safety and health in building and civil engineering work": Section 37.4 'Hygiene and Welfare—Toilet Facilities' (p.337) states in part:

37.4.3. When practicable, water flush toilets connected to public sewage systems should be provided.

37.4.5. If a public sewage system is not available, a temporary sewage system should be provided in accordance with

the requirements of the competent health authority.

37.4.10. Adequate washing facilities should be provided as near as practicable to toilet facilities.

See ILO link: wcms\_107898.pdf (ilo.org)

In the ILO document "Safety, health and welfare on construction sites—A Training Manual" published in 1995, Section 13.2 'Welfare facilities—Sanitary facilities' (p. 90) states in part:

National laws usually prescribe the type, number and standard of sanitary facilities which should be provided, but as a general guide the following should be regarded as a practical minimum:

- a sufficient number of water flushtype lavatories for men when this is practicable, including sufficient urinal accommodation; chemical lavatories may be used otherwise;
- a sufficient number of separate water flush-type lavatories for women when this is practicable; again, chemical lavatories may be an alternative;
- effective natural and/or artificial lighting and ventilation;—at least 30 m from any well;—constructed for easy maintenance and cleaned out at least daily. See: Safety, health and welfare on construction sites (ilo.org)

In reference to these requirements, it is clear that (at a minimum) the regulatory intent is for chemical toilets to be used when flush toilets are not practicable. Further to this, in British Columbia the determination of "practical" has frequently and inappropriately been misinterpreted for situations where flush lavatories are distinctly practical.



### **PART IV**

### The Way Forward

### PLUMBED PORTABLE WASHROOM FACILITIES

In recent years, the prevalence of companies in B.C. that can affordably deliver clean and sanitary portable trailered plumbed washrooms directly to construction sites has increased substantially. There are now numerus companies that lease and transport trailered washroom units that are capable of providing water-flushing toilets and hand hygiene facilities with hot and cold running water. These units are typically pumped (emptied), cleaned, disinfected and replenished on a frequency determined by contracted servicing agreement, the costs of which are based on a per unit basis and usage.

The BC Building Trades sought three quotes from portable trailer providers and requested the cost for providing these facilities to a site with 100 construction workers over a sixmonth build. Table 1 sets out a breakdown of the costs quoted.

Many plumbed portable washroom units are heated and illuminated, offering better conditions for effective cleaning and disinfection of the units. There is a greater likelihood of a more thorough cleaning and disinfection of surfaces in a heated, illuminated facility where details are easier to distinguish as opposed to the cleaning and disinfection of outdoor, non-heated, non-illuminated non-plumbed portable washrooms.

These plumbed amenities clearly conform more closely with societally accepted and appropriate standards for personal hygiene. In this day and age, all workers should be able to reasonably access washroom facilities that are both clean and sanitary. The importance of this has also never been more relevant than now during the current pandemic. With the increased emphasis on the importance of hand hygiene, running water becomes an even more critical element of hand hygiene protocols.

On many construction projects, it is asserted that the use of portable, plumbed washrooms is practical and needs to be given preferred consideration in light of the availability of portable plumbed washroom units.



Company	Portable non-plumbed toilet	Washroom trailer
Company A	N/A	Deluxe 10x20 Washcar  Includes men's side—3 toilets, 2 urinals, 3 sinks & women's side—2 toilets & 1 sink, delivery, pickup, flushing toilets, toilet paper \$2,933/month + GST six-month minimum contract
Company B	Single Unit Includes weekly cleaning, toilet paper, unit cleaning \$200 first month + GST each \$150 each month after	2 Station Trailer  Includes women's side & men's side, delivery, pickup, flushing toilets, urinal on men's side, toilet paper, paper towel & soap. Pumping prices are extra and negotiated with rental \$2,500/month + GST or \$2,200 month for 3 months +
Company C	Single Unit Includes weekly cleaning, toilet paper, unit cleaning \$150 first month + GST \$100 each month after	2 Station Trailer Includes delivery, pickup, power cable, hose, flushing toilets, toilet paper, paper towel, soap & one pump out per month \$2,400/month + GST

The current practice of relying on infrequently serviced, unplumbed washrooms should be questioned as both hygienically unacceptable and potentially not in alignment with regulatory requirements.

#### **REGULATORY COMPLIANCE**

In light of the availability and affordability of portable plumbed washrooms to construction sites, the current practice of relying on infrequently serviced, unplumbed washrooms should be questioned as both hygienically unacceptable and potentially not in alignment with regulatory requirements.

#### **Section 21—Workers Compensation Act**

- Ensure the health and safety of all workers
- Remedy any workplace conditions that are hazardous to the health and safety of workers
- Comply with the OHS Regulation.

Under this general duty section of the WCA, employers must demonstrate due diligence in meeting their responsibilities. The failure to consider practical alternatives to unplumbed facilities that may be available should be considered failure to meet the requirements of this section.

#### **Section 4.85 OHS Regulation**

- Alternatives may be used when plumbed facility cannot be provided "because of the nature of the workplace."
- Washrooms must be kept clean and sanitary.

As noted, portable plumbed washrooms have become more widely available and offer a practical solution for the provision of multiple washroom facilities to workers on larger construction sites. The standard approach of providing portable non-plumbed washrooms on construction sites should be questioned as to whether this meets the intent of OHS Regulation Section 4.85 when a viable plumbed alternative is available. There is seldom anything "in the nature of the workplace" that would be demonstratable as prohibiting the use of portable plumbed units.

The cleanliness of the washroom facility (regardless of the type of facility) is directly contingent on the regular, effective cleaning and maintenance program for the washroom facility. Based on information from Health Canada, WorkSafeBC and the BCCDC, the cleaning and disinfecting of any washroom facility must be completed at least daily in order to meet the intent of Section 4.85 of the OHS Regulation regarding maintenance.

A plumbed washroom with heating, lighting, and ventilation, operated using a regular cleaning, disinfection, and servicing schedule helps to ensure the health and safety of workers. A plumbed, portable facility should be considered as a practicable, compliant approach to the provision of washroom(s) on construction sites. A secondary focus would be on regularly cleaned, disinfected, and serviced non-plumbed portable washroom facilities.

#### **PART V**

### Conclusion

Currently, construction employers attempt to meet their legal responsibilities to provide clean and sanitary washrooms through the provision of portable non-plumbed washrooms.

The provision of appropriate and compliant washrooms on construction sites has been allowed to degrade in the province of B.C. and it is time to question the current approach. There are many situations whereby the provision of non-plumbed portable washrooms on construction sites may no longer be compliant with the law. The current interpretation of the OHS Regulation can be viewed as too restrictive in many situations and no longer appropriate in consideration of other viable and practical solutions for providing construction workers with portable plumbed washroom facilities.



A change to the practice of using portable plumbed washrooms or other practical alternatives would afford a significant improvement in construction site hygiene. It would also align B.C. with other jurisdictions that take a modern-day and enlightened approach to washrooms, and to worker hygiene generally, on construction sites. An industry and regulatory enforcement shift to provide workers with alternatives to the unplumbed port-a-potty is urgently justified.

Construction workers should be afforded this most basic element of workplace hygiene to help ensure both their personal dignity and their health and safety at work.

A change to the practice of using portable plumbed washrooms or other practical alternatives would afford a significant improvement in construction site hygiene.



