Compliance Cheat Sheet: Use of Compressed Air for Cleaning Operations

Compressed air is readily available at many workplaces. And it's highly effective in cleaning off dusty surfaces, machinery and even clothing and PPE. The problem is that cleaning with compressed air is also highly dangerous. The high-pressure air jet can directly injure the eyes and face, as well as throw off dusts and debris that cause the same result. It can also generate respiratory hazards by stirring up materials that are extremely dangerous to breathe such as asbestos. That's why most jurisdictions ban or severely restrict use of compressed air for cleaning operations. (Click here for a chart showing what your province requires.)

The 4 Basic Approaches

As is typically the case, the rules governing use of compressed air for cleaning vary by jurisdiction. Note: PEI and Yukon are the only 2 jurisdictions that don't specifically address whether compressed air cleaning is allowed.

1. Total Ban on Compressed Air Cleaning

The rules are most straightforward in Newfoundland which makes it illegal to use compressed air to clean just about anything, including clothes, machinery, work benches and floors.

2. Total Ban on Compressed Cleaning of Asbestos

The other thing we know is that you can't use compressed air to clean asbestos or other hazardous substances that can cause serious health damage, fire or explosion when airborne. Even if the dusts being cleaned are harmless, the ban still pertains to sites and operations where such materials are or may be present. This prohibition is spelled out in 7 jurisdictions: FED, BC, MB, ON, QC, NT, NU; it's implied everywhere else.

3. Limited Use of Compressed Air Cleaning

Most jurisdictions allow for using compressed air for cleaning non-asbestos-containing materials, subject to restrictions. The rules typically differ depending on whether compressed air is being used for cleaning clothing and PPE

or for cleaning surfaces and equipment. The rules for cleaning clothing are typically stricter because cleaning clothes while workers are still wearing them poses more hazard of eye injury. Accordingly, Alberta and Qu□bec ban compressed air cleaning of clothing; 5 other jurisdictions’FED, MB, SK, NWT, NU’ban compressed air cleaning of clothing that is or may be contaminated with asbestos and other hazardous substances and allow it for cleaning non-hazardous materials.

3 Required Safety Measures for Compressed Air Cleaning

Where compressed air cleaning is allowed, the employer must take measures to guard against potential health and eye injury and fire and explosion risks.

i. PPE

Workers must use appropriate eye protection.

ii. Limit Maximum Air Pressure

Several jurisdictions require employers to ensure that safety nozzles or other measures are taken to keep compressed air pressure in the pipeline from exceeding a specific maximum:

- FED, NB: 69 kPa (10 psi) (in NB, the maximum pertains only to compressed air cleaning of a person);
- BC: 70 kPa gauge (10 psig); and
- QC: 200 kPa.

iii. Required Safety Standards for Device

Two jurisdictions regulate the kind of air compression equipment that must be used:

- NB: Blowpipe must be installed on end of the hose and a control valve must be part of the blowpipe; and
- NS: Device used to deliver the air must be either: i. commercially manufactured and approved in the manufacturer’s specifications; ii. certified by an engineer as adequate for the purpose of cleaning a surface or person with compressed air.

Compressed Air Use Restrictions Across Canada

Jurisdiction	Rules for Cleaning with Compressed Air
Federal	*No use of compressed air, gas or steam for blowing dust or other substances from structures, machinery or materials if: (a) person may be directly exposed to the jet; (b) a fire, explosion, injury or health hazard is likely to result; or (c) use would cause unsafe concentration of an airborne chemical agent (*COHS Regs.,* Sec. 10.21) *No use of compressed air to clean clothing contaminated with (a) asbestos; (b) an airborne substance above ACGIH TLV exposure limit; or (c) a hazardous substance with exposure limit lower than 1 mg/m3 (Sec. 10.22(1)) *If compressed air used to clean contaminated clothing: (a) appropriate eye protection required; and (b) compressed air pressure in pipeline can't exceed 69 kPa (10 psi) or use of a safety nozzle limiting air pressure to 69kPa (10 psi) is required (Sec. 10.22(2)) *No use of compressed air to dry-remove friction material dust from automotive assemblies for automotive servicing if worker may be exposed to asbestos (Sec. 10.26.3)
Alberta	No use of compressed air to blow dust or other substances from clothing (*OHS Code,* Sec. 171(8)(d))
British Columbia	*No use of compressed air or steam for blowing dust, chips or other substances from equipment, materials and structures if person may be exposed to the jet or material it expelled or propelled and likely cause an injury or health hazard due to fire, explosion or other cause (*OHS Reg.,* Sec. 4.42(1)) *No use of compressed air for blowing harmful or hazardous dusts or other harmful substances from workers' clothing except in specially designated areas, provided that: (a) the exposure limit of the substances is greater than 1.0 mg/m3; (b) appropriate respirators and eye protection are worn; and (c) compressed air supply pressure is limited to 70 kPa gauge (10 psig), or a safety nozzle with same pressure limiting effect is used (Sec. 4.42(2)+(4)) *No use of compressed air for cleaning up or removing asbestos dust or debris, or dry sweeping or dry mopping of asbestos waste (Sec. 6.9(4)) *No use of compressed air to dry-remove friction material dust from automotive assemblies for automotive servicing if worker may be exposed to asbestos (Sec. 6.24) *No use of compressed air, blowers, compressed gas or dry sweeping cleaning methods in areas where lead processes are conducted (Sec. 6.65) *No use of compressed air, blowers, dry sweeping or dry mopping to clean up or remove "RCS dust," i.e., respirable crystalline silica, à-quartz or cristobalite (Sec. 6.112.6)
Manitoba	No use of compressed air to clean up asbestos-containing material (*WSH Reg.,* Sec. 37.9(1))

Jurisdiction	Rules for Cleaning with Compressed Air
New Brunswick	*OK to use compressed air to clean surfaces, provided that: (a) a blowpipe is installed on end of the hose; (b) a control valve is part of the blowpipe; and (c) employee using compressed air wears appropriate protective equipment (*OHS Gen. Reg.*, Sec. 254(1)) *OK to use compressed air to blow dust and other substances from employees' clothing, provided that: (a) employee uses appropriate eye protection equipment; and (b) either: (i) the compressed air supply is limited to 69 kPa; or (ii) safety nozzles having the same pressure limiting effect are used (Sec. 254(2))
Newfoundland & Labrador	No use of compressed air to clean clothes, machinery, work benches or floors (*OHS Regs.*, Sec. 37)
Nova Scotia	OK to use compressed air (defined as air at absolute pressure greater than 275 kPa) to clean a surface or person, provided that device used to deliver the air is (a) commercially manufactured + approved in manufacturer's specifications for purpose of cleaning a surface or person with compressed air; or (b) certified by an engineer as adequate for purpose of cleaning a surface or person with compressed air (*OHS Regs.,* Sec. 101)
Ontario	No use of compressed air to clean up and remove dust from any surface at any project, building or work subject* to OHS Reg. *Designated Subst.'Asbestos on Const. Projects and in Building and Repair Ops*. (Sec. 10)
Prince Edward Island	Not specifically addressed
Qu□bec	*No use of compressed air to clean a person (*OHS Regs.*, Sec. 325) *OK to use compressed air to clean a machine or piece of equipment, provided that pressure of air is less than 200 kPa (unless the cleaning is carried out in an enclosure specially designed for abrasive air blasting and equipped with a vacuum system) (Sec. 326) *No use of compressed air in a work area of construction site where work is liable to produce asbestos dust emissions (*Safety Code for Const.*, Sec. 3.23.5)
Saskatchewan	No use of compressed air directed towards a worker for cleaning worker's clothing or PPE or for any other purpose if use of compressed air may disperse harmful contaminants into the air (*OHS Regs.*, Sec. 27)
Northwest Territories and Nunavut	No use of compressed air directed towards a worker for cleaning worker's clothing or PPE or for any other purpose if use of compressed air may disperse harmful contaminants into the air (*OHS Regs.*, Sec. 26)
Yukon	Not specifically addressed

Notes:

*The Ontario *Designated Subst.'Asbestos on Const. Projects and in Building and Repair Ops*. covers: (a) every project, its owner, and every constructor, employer and worker engaged in or on the project; (b) the repair, alteration or maintenance of a building, the owner of the building, and every employer and worker engaged in the repair, alteration or maintenance; (c) every building in which material that may be asbestos-containing material has been used, and the owner of the building; (d) the demolition of machinery, equipment, aircraft, ships, locomotives, railway cars and vehicles, and every employer and worker engaged in the demolition; and (e) subject to subsection (3), (i) work described in subsection (2) in which asbestos-containing material is likely to be handled, dealt with, disturbed or removed, and (ii) every employer and worker engaged in the work