

OHS Requirements for Construction Work Done in Compressed Air



Tunneling, caisson and other work operations performed in a compressed air environment pose significant health hazards that require special measures to control, including decompression, communication, fire prevention, work durations and medical surveillance. Here's a quick overview of the compressed air work requirements in each jurisdiction for work other than diving, which is addressed in separate OHS regulations.

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Jurisdiction	OHS Rules (if any)
Federal	Not specifically addressed
Alberta	Not specifically addressed
British Columbia	<u>Employer duties for work at air pressure >7 kPa (1 psi) above atmospheric pressure:</u> *Ensure workers are examined by a physician knowledgeable in hyperbaric medicine *Ensure work processes + equipment meet CSA CAN/CSA-Z275.3-M86, <i>Occupational Safety Code for Construction Work in Compressed Air</i> (OHS Reg., Secs. 20.122 + 20.123)
Manitoba	<u>Employer duties:</u> * Implement safe work procedures *Train workers in + ensure they comply with safe work procedures * Notify govt. at least 30 days before starting compressed air work *Have prof engineer develop + approve compressed air work program that meets CSA Z275.3-09 (R2014), <i>Occupational safety code for work in compressed air environments</i> (WSH Reg., Sec. 27)
New Brunswick	Employer must ensure work meets CSA CAN/CSA-Z275.3 M-86, <i>Occupational Safety Code for Construction Work in Compressed Air</i> (OHS Regs, Sec. 90)
Newfoundland	Not specifically addressed

Jurisdiction	OHS Rules (if any)
Nova Scotia	Employer must ensure work meets most recent version of CSA-Z275.3, <i>Occupational Safety Code for Work in Compressed Air Environments</i> (Occ Safety Gen Regs, Sec. 156)
Ontario	<p><u>Employer duties:</u></p> <ul style="list-style-type: none"> *Notify MOL 14 days before compressed air work begins *Appoint a superintendent for the project *Ensure workers wear appropriate badges *Deploy a phone + electronic buzzer or bell communications system *Implement specific fire prevention measures *Hire at least one project physician to perform medical exams on workers *Pay for workers' medical exams + credit time as payable service *Ensure there are medical locks with required dimensions, equipment, etc. *Ensure air compressors + air locks meet regulatory requirements *Implement work limits + rest periods for workers *Ensure lock tenders are in place *Ensure required compression + decompression procedures are followed *Ensure required records are kept (O. Reg 213/91, <i>Const. Projects</i>, Secs. 332 to 397)
Prince Edward Island	Employer must ensure work meets CSA-Z275.3, <i>Occupational Safety Code for Work in Compressed Air</i> (OHS Regs, Sec. 47.1)
Qu ^é bec	Not specifically addressed
Saskatchewan	<p><u>Employer duties:</u></p> <ul style="list-style-type: none"> *Notify govt. + provide prof. engineer certificates at least 30 days before compressed air work begins *Ensure work complies with conditions set out in engineer's certification *Ensure emergency + decompression procedures are implemented *Ensure workers are monitored by competent physician *Ensure competent supervisor appointed with authority + resources necessary to protect the health + safety of workers in working chamber *Ensure supplied air meets CSA CAN3-Z180.1-M85 <i>Compressed Breathing Air and Systems</i> *Ensure air compressors meet required standards + locate air intake for compressor plant away from exhaust gases, gasoline fumes or other contaminants *Implement work limits + rest periods for workers *Ensure required compression + decompression procedures are followed *Ensure air pressure in a working chamber doesn't exceed 350 kilopascals for more than 5 minutes except if necessary for safety of workers in an emergency (OHS Reg, Part XIX)

Jurisdiction	OHS Rules (if any)
Northwest Territories & Nunavut	<p><u>Employer duties:</u></p> <ul style="list-style-type: none"> *Notify govt. + provide certifs. from a prof. engineer + physician competent in hyperbaric or hypobaric medicine at least 30 days before work begins *Ensure work complies with conditions set out in engineer's certification *Ensure emergency + decompression procedures are implemented *Ensure workers are monitored by competent physician *Ensure competent supervisor appointed with authority + resources necessary to protect the health + safety of workers in working chamber *Ensure supplied air meets CSA CAN/CSA-Z180.1-00 (R2010), <i>Compressed Breathing Air and Systems</i> *Ensure air compressors meet required standards + locate air intake for compressor plant away from exhaust gases, gasoline fumes or other contaminants *Implement work limits + rest periods for workers *Ensure required compression + decompression procedures are followed *Ensure air pressure in a working chamber: (a) doesn't exceed 350 kPa for more than 5 minutes; + (b) doesn't fall below 30 kPa, except in either case, if necessary for safety of workers in an emergency <p>(OHS Regs, Part 19)</p>
Yukon	Not specifically addressed