

An Overview of Scientific Diving Regulations in Canada

Washington State Department of Natural Resources
2014 Professional Dive Safety Conference

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CAUS



- Founded in 1983, the Canadian Association for Underwater Science (CAUS) is a non-profit, all volunteer organization with a mandate for promoting safe diving practices and developing peer-reviewed standards of practice for scientific diving by its members.
- It provides a national forum for information exchange and policy-making for scientific diving, and its goals are to:
 - To promote the development of underwater science.
 - To promote the safety and welfare of individual members and affiliates who engage in underwater science.
 - To advance the science and practice of scientific diving.
 - To develop and maintain a standard for scientific diving in Canada.
- Currently 18 members across Canada.
- caus.ca



Vancouver Aquarium



- Opened in 1956, it is Canada's largest aquarium, displaying over 50,000 animals to over 1 million visitors in 2013.
- Located in the heart of beautiful Stanley Park, in downtown Vancouver, British Columbia, Canada.
- 450 staff, including 41 who dive as part of their job, as well as 16 volunteer divers
- In 2013: 1332 dives and 29,200 minutes, or 65 full workdays – underwater.
- 7 departments, including the aquarium at YVR, which the VA operates on behalf of the Vancouver Airport Authority.
- vanaqua.org

Scientific Diving Regulations in Canada

It's complicated.



Jurisdiction

Each province and territory – 10 provinces, 3 territories – has jurisdiction over occupational (and therefore scientific) diving by workers in that province/territory.

And

Each province and territory has a different set of regulations.

And

The Federal government has its own, separate occupational diving regulation that applies to Federal employees, regardless of what province/territory in which they are working.



Development of Regulations

How are the regulations in each jurisdiction developed?

1. 'From scratch.'
2. By reference to the CSA Standards.
3. Some combination of 1 and 2.

What is the CSA?

The Canadian Standards Association is a not-for-profit, private-sector organization that develops of consensus standards in the areas of safety, quality and performance.



CSA Standards

The CSA has published a number of Standards relating to occupational diving, two of the most important being:

Z275.2 – Occupational safety code for diving operations

Z275.4 – Competency Standard for Diving Operations

The Standards “result from consensus among the Committee members, who represent a broad spectrum of interests.” (Preface, Z275.4-02)

These two Standards comprehensively detail (recommended) requirements for diving operations, equipment, minimum crew, medical evaluation, diver training and competency, etc.



CSA Standards, cont.

But, the Standards do not have the force of law unless they are mandated in legislation or referenced a regulations of the authority having jurisdiction over occupational diving.

We will come back to this...



Scientific Diving

In Canada, scientific diving is a type of occupational diving as long as the diver is a worker.

(As you might have guessed, the definition of “worker” varies from jurisdiction to jurisdiction, but for simplicity’s sake we will assume scientific divers are workers and therefore occupational divers.)

Therefore, scientific diving operations fall under the Occupational Health and Safety Regulation of the jurisdiction in which they are being carried out.



Scientific Diving and CSA Standards

Usefully (in some jurisdictions) the CSA Standards Z275.2 and Z275.4 specifically exempt scientific diving from their scope if it is:

“diving performed to collect specimens or data for scientific use, under the auspices of an educational or research institute operating in accordance with the Canadian Association of Underwater Science Standard of Practice for Scientific Diving.

Note: scientific diving does not include diving conducted for construction, including excavation, salvage, demolition, destruction, maintenance, repair, or inspection of underwater structures, nor collection of organisms for consumption or commercial use.”



Scientific Diving and CSA Standards, cont.

Therefore, if a jurisdiction references CSA Standards Z275.2 and Z275.4 in its OHS Regulation, the Standard becomes law, and scientific diving is legally exempted from the Regulation as long as the diving is undertaken by a CAUS member according to the CAUS Standard.

Exemption from the CSA Standards was a significant accomplishment for the scientific diving community in Canada, as it (theoretically) allowed scientific diving organization who are members of CAUS to train their own divers and follow well established scientific diving protocols as detailed in the CAUS *Standard of Practice for Scientific Diving*, but...



Jurisdictions and CSA Standards

... the impact is limited to those jurisdictions that reference the CSA Standards in their OHS Regulation. Currently:

- **Alberta, Manitoba, Prince Edward Island, Newfoundland and Labrador, Nunavut** and the **Northwest Territories** fully reference the CSA Standards – easy!
- **Ontario** references them, but then goes on to specifically exclude the scientific diving exemption.
- **British Columbia** references Z275.4 (competency), but not Z275.2 (operations).
- **Quebec** lets the employer decide between the provincial 'from scratch' Regulation and the CAUS Standard, but only if the employer is a "[provincial] government agency, educational institution, non-profit research institution or any other non-profit institution."
- **Nova Scotia** OHS Regulations do not apply to scientific divers as long as they are diving to the CAUS Standard.
- **Saskatchewan, New Brunswick, Yukon** and the **Federal government** do not reference the CSA Standards at all, and have 'from scratch' Regulations.



Practicalities

If you are planning to dive for work in Canada:

- It should go without saying, but make sure to check with the DSO of the organization with which you plan to dive well in advance of your trip. There may be unexpected hurdles that need clearing.
- It makes it much easier for DSOs to accommodate visiting divers if the DSO receives a complete and accurate copy of the visiting diver's paperwork in when requested.
- Try to familiarize yourself with the 'law of the land' prior to visiting that land.

Resources:

- A document itemizing each Canadian jurisdiction's regulations, with a web link to each, can be found on the CAUS website (caus.ca).
- The CAUS *Standard of Practice for Scientific Diving* can be found on the CAUS website too.
- Contact me.
- Contact info@caus.ca (also me, for now).



Final Words

To dive in Canada scientifically,
one needs a degree in bureaucracy.
Which Standard? Which Regulation?
Much hair-pulling. Much frustration.

Oh, how I long for thee,
OSHA 29 CFR Part 1910, Subpart T.

