

April 9, 2020

# CCIL Guide to Quality Testing During the COVID-19 Period of Restrictions

To All CCIL Certified Laboratories,

I wrote to all CCIL Certified Laboratories on March 23, 2020 to advise you of measures that the Certification Office had taken to deal with the COVID-19 infection. At that time, I informed you that the decision had been made to temporarily suspend all laboratory visits until at least April 30, 2020, and all technician certifications that expire in March, April, and May 2020 will be extended for 3-months from the current expiry date. The situation has changed rapidly over the past two weeks and laboratory visits will now be suspended indefinitely. Technician certifications which expire will be extended for 3 months (more than once if necessary) until normal operations resumes.

It has been brought to our attention that a number of certified laboratories may not be able to meet the CSA A283-19, ASTM, AASHTO and or LS requirements due to the restrictions imposed by the federal and provincial governments dealing with COVID-19. The unknown duration of this unprecedented situation also prevents some laboratories from being able to correct these deficiencies within the allowable timeframe. Examples are that the calibration companies are not travelling to calibrate compression machines within the 13-month allowable time period and some Supervising Professionals are not able to visit the laboratories during operation on a monthly basis.

CCIL has created the guidance which follows this letter to assist laboratories maintain the quality of testing during this time. Each Supervising Professional and each Project Owner or designated representative may have additional ideas and requirements that laboratories must address on a case by case basis.

We hope that this list helps you make the appropriate measured decisions during this difficult time to maintain the quality of testing and standards of the testing industry. If you have any concerns or other ideas or solutions to add to this list, please email Emily Worden-Kwok at <u>ewordenkwok@ccil.com</u> for CCIL's considerations and the latest list will be posted on your CCIL lab portal and on the CCIL website <u>http://ccil.com/certification</u>

If your laboratory will cease operations during this time, we would ask that you document your last day of testing and then your first day of testing once reopened. All requirements are waived during non-operation.

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We wish to take this opportunity to once again reassure you that your CCIL Laboratory Certificate remains valid, and you are to continue to follow the applicable Standards whenever possible when your laboratory is in operation. CCIL inspectors have been instructed to take the COVID-19 infection restrictions into account when inspecting laboratories in future. Inspectors will be looking for records of actions taken to mitigate the impact of these unavoidable non compliances and will review what steps each laboratory took to maintain quality using alternative checks and balances.

Regards,

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# Guide to CCIL Certified Laboratories During COVID-19 Restrictions Period

The following list has been prepared to offer guidance to CCIL certified laboratories when personnel are unable to visit laboratories due to Corona virus restrictions.

# CALIBRATION

Relevant CSA A283 Clauses:

**5.2.2.2** g) The supervising professional shall ... ensure all equipment is within tolerance requirements and properly calibrated.

**5.3.3** Calibration and verification of equipment shall be carried out in accordance with the requirements of Table 1. The laboratory shall maintain records adequate to demonstrate that such calibration has been carried out, including the date of calibration and name/signature of personnel performing the calibration. As a minimum, calibration of equipment shall comply with Table 1 and shall be carried out when stationary testing equipment is moved to a new location.

**5.3.4** In addition to the requirements of Clause 5.3.3, all strength-testing machines shall be calibrated at intervals of not more than 13 months and a certificate of calibration shall be issued by the machine manufacturer or an independent calibration firm. The certificate or a copy of it, together with proof of

adjustment (where required), shall be made available for review by the CO upon request. The calibration of proving devices employed in calibrating compression/tensile test machines shall be traceable to the appropriate division of the National Research Council Canada or the National Institute of Science and Technology.

Table 1 compression testing machine - calibration - every 13 monthsTable 1 balances and scales - calibration - yearlyTable 1 adhesion tensile test apparatus calibration - yearlyTable 1 calibration of pull out device - yearly

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# SUGGESTIONS FOR POSSIBLE MITIGATION

- Comparison testing with another certified laboratory may be feasible in some areas.
- Maintaining records that calibration companies were contacted and could not provide calibration services.
- In house calibration using traceable calibrated equipment (load cells and standard weights) from a reliable source will be accepted during this time.
- Records of inhouse maintenance, cleaning, and all other dimension check records are maintained.

# **INSPECTIONS**

Relevant CSA A283 Clauses:

**8.2.1** The laboratory shall be required to demonstrate compliance with all the requirements of this Standard prior to certification. Thereafter, the laboratory shall be required to demonstrate continuing compliance with all the requirements of this Standard by undergoing follow-up audits by the CO at least once per year to maintain its certification.

#### SUGGESTIONS FOR POSSIBLE MITIGATION

- Records are to be kept from the 2019 audit until the inspector is able to audit the laboratory.
- CCIL will develop a schedule for the audit of laboratories when normal operations resume. The 2020 audits may be extended into 2021.
- CCIL is looking into virtual audits which may be available in future.

#### **NON-CONFORMANCES**

Relevant CSA A283 Clauses:

**5.2.2.2 l)** The supervising professional shall ... ensure that any non-compliances related to the operation of the laboratory, identified through the above reviews and investigation, or through any other means, are effectively addressed and impacted parties advised, in a timely manner.

**8.4.2** The laboratory shall have a maximum period of 30 calendar days to take corrective measures and rectify all nonconformances.

**8.4.3** If the laboratory fails to comply with the requirements of Clauses 8.4.1 and 8.4.2, the laboratory's certification is subject to suspension by the CO until such time as the laboratory demonstrates that all nonconformances have been corrected.

#### SUGGESTIONS FOR POSSIBLE MITIGATION

• Planned corrective actions should be documented within 30 days of identifying the non compliance and implemented as soon as possible.

• Documented mitigation or alternative methods to best comply with the Standards.

• If noncompliance leads to suspected inaccurate results the clients affected must be informed and records kept.

# SUPERVISING PROFESSIONAL VISITS

Relevant CSA A283 Clauses:

**5.2.2.2 d)** The supervising professional shall ... if not present in the laboratory on a full time basis, visit the laboratory at a minimum frequency of at least once every 30 days (for seasonal laboratories, at least once every 30 days during the period of operation) and maintain other means of communication with the laboratory between visits;

**5.2.2.2 n)** The supervising professional shall ... complete a documented monthly sign-off, confirming the responsibilities in Items a) to m) have been carried out.

#### SUGGESTIONS FOR POSSIBLE MITIGATION

- Record of virtual visit will be accepted during this time.
- documenting with explanation when an item was unable to be fulfilled will be acceptable during this time.

# **TECHNICIAN CERTIFICATION**

#### Relevant CSA A283 Clauses:

**5.2.2.2 e)** The supervising professional shall ... ensure all employees of the laboratory are adequately trained and certified in good standing. 8.2.2 To be eligible for certification, personnel shall be required to successfully complete written examinations and demonstrate through practical testing the ability to test concrete and related materials.

**8.3.2** paragraph 1 The laboratory shall be required to ensure that personnel obtain individual verification by the CO of the ability of the individual to perform field testing of concrete. To obtain such verification, laboratory personnel shall be required to successfully complete a written examination demonstrating the ability to carry out field testing of concrete and shall demonstrate through practical testing the ability to completely perform, as a minimum, the field tests associated with basic concrete certification. (See Clause 6.1.2.)

**8.3.2** paragraph 3 Personnel shall be required to demonstrate their ongoing compliance at least once every five years, at which time they shall obtain updated verification of compliance.

#### SUGGESTIONS FOR POSSIBLE MITIGATION

- Technician certification will be extended beyond 5-year period during this time.
- CCIL is looking into online exams which may be possible in the future.

• Increase the level of in house training, including records of written examinations and practical demonstrations.