

## APPENDIX A-8 REQUIREMENTS FOR AGGREGATE QUALITY CONTROL LABORATORIES (TYPE C)

### **Aggregate Quality Control Laboratory**

This class of laboratory is involved in the standard quality control of aggregates to check compliance with specifications for MTO LS 600, 601, 602, 607, 608 and 621. The laboratory must have the necessary general equipment for sampling, transportation, testing and storage of samples. The laboratory must have the capability to support all the specific testing involved at the location that is requesting certification.

### **Staff**

The general testing services of an Aggregate Quality Control Laboratory shall be under the direction and control of a person charged with engineering-management responsibility. This designated person shall be qualified by education and experience and be a full-time management employee of the Owner of the aggregate laboratory.

The direct testing services of an Aggregate Quality Control Laboratory shall be supervised and reported by a supervisory laboratory technician with at least three years experience performing tests on construction materials. This designated person shall be able to demonstrate the ability to perform all tests required in the manner stipulated under various procedures. This person shall keep up with developments in aggregate technology and have CET designation or equivalent experience and training. This person shall also be certified as being proficient at aggregate testing.

Individuals lacking the three years experience required for a supervisory technician may apply to the Program Manager for consideration of past education and work experience. A written examination demonstrating proficiency in all areas of aggregate testing may be administered by the Program Manager in lieu of the completion of the three years work experience.

A supervisory technician may supervise more than one laboratory operation, and does not need to be physically on-site at all times. However, the supervisory technician must carry out frequent visits to the laboratory and shall review all test results before they are issued.

Technicians employed in the laboratory shall have the necessary training and experience to complete the required tests under the direct supervision of the supervisory laboratory technician. All technicians performing testing in a Type C laboratory shall be certified as proficient in performing the designated tests.

Temporary cards signifying technician certification shall be issued and dated by the inspector on-site at the time of certification. Subsequently, laminated cards shall be issued by the CCIL administration office and shall include an expiry date, which will be five years from the date of issue appearing on the temporary card. This card is the property of CCIL (i.e. to be retrieved by the company when the employee leaves that company on a

permanent basis). A new card will be issued by CCIL to the technician via the new company of employment. In the event of such changes the five-year duration of the certification starting from the initial date of certification will remain in effect. Responsibility for reporting such changes to CCIL resides with both the laboratories/companies and the technician involved in this process.

### **Equipment, Manuals and Reporting Procedures**

The Aggregate Quality Control Laboratory must have the necessary equipment, manuals and reporting procedures to perform aggregate testing, in accordance with current Ministry of Transportation of Ontario Laboratory Testing Manual (LS), and ASTM (C) Methods:

LS-600/C702	Dry Preparation of Aggregates for Determination of Physical Constants
LS-601/C117	Material Finer than 75 um Sieve in Mineral Aggregates by Washing
LS-602/C136	Sieve Analysis of Aggregates
LS-607	Determination of Percent Crushed Particles in Processed Coarse Aggregate
LS-608	Flat and Elongated Particles in Coarse Aggregate, Determination of
LS-621	Determination of the Amount of Asphalt Coated Particles in Coarse Aggregate

The laboratory must keep up with any changes to these methods and procedures.