
General

The Innocuous Aggregate Prequalification Program establishes procedures to ensure that aggregate meets the requirement of Section 90-1.02C (Aggregate) in Caltrans' Standard Specifications, that both the fine and coarse aggregate must be on the Authorized Materials List (AML) for the aggregate used in concrete to be considered innocuous.

Reference Documents

- Caltrans Standard Specification Section 90-1.02C: "Aggregate"
- ASTM C1293- Standard Test Method for Determination of Length Change of Concrete Due to Alkali-Silica Reaction
- ASTM C1260- Standard Test Method for Potential Alkali Reactivity of Aggregates (Mortar-Bar Method)
- ASTM D75- Stand Practice for Sampling Aggregate
- California Test 201-Method of Test for Soil and Aggregate Sample Preparation

Application Procedures and Materials Requirements

1. Request for registration number

Before the aggregate is sampled for testing, the aggregate shall be registered with the Department. A registration number can be obtained by contacting Francisco Romero at Francisco.Romero@dot.ca.gov, and that registration number shall be used as the identification for the aggregate sample in correspondence with the Department.

The Supplier shall provide the following information to Caltrans when applying for the registration number:

- a. Name, Address, and contact information of the supplier
- b. Name, Address, and contact information of the pit
- c. The pit's SMARA number (or the longitude and latitude coordinates for pits outside of California)
- d. The name, address, and contact of the Independent Testing Facility (this facility must be CCRL/AASHTO certified for the applicable test)
- e. The type of test to be performed (ASTM C1260 or C1293)
- f. The sizes and types of aggregates to be tested

2. Sampling requirements

The supplier shall follow the procedures in below for sampling aggregate in alkali silica reactivity tests:

- a. Collect samples of aggregate from stockpiles of finished product at the source of production in accordance with ASTM D75/D75M. Do not collect samples from a ready-mix plant or a construction job site unless that is the source of production and material finishing.
- b. The amount of aggregate collected shall be four times the amount sufficient to perform the test or tests one time or four times the amount indicated in Table 1 of ASTM D75/D75M, whichever is more.
- c. Divide the sample into four equal parts by the procedures of California Test 201, Section I.
- d. Place the portions not used for testing into separate containers or sets of containers. Clearly label each container with identification of the source of material, the laboratory sample identification number and the test number.

3. Send the split sample

Upon request, a split of each tested sample should be sent to the following address:

**Transportation Laboratory
Attention: Francisco Romero,
Innocuous Aggregate AML Program
5900 Folsom Blvd, Sacramento, CA, 95819-4612**

All submittals to the Department are required to include a label with the registration number, pit name, and size of the aggregate. It is mandatory to notify Caltrans of any changed ownership, or any other changes occurring with your SMARA number, within 30 days of the change.

4. Materials requirements and independent testing lab qualification

Authorization of aggregate will depend upon compliance with the specifications, based on the test results from an accredited testing laboratory, and the results of any verification testing the Department may elect to perform. Authorization will expire in 5 years from the collection date of the most recent authorized sample from the source.

Innocuous aggregates shall conform to one of the following:

- a. When the aggregate is tested in conformance with the requirements of ASTM Designation: C 1293, the average expansion at 1 year shall be less than 0.04 percent;
- b. When the aggregate is tested in conformance with the requirements of ASTM Designation: C 1260, the average of the expansion at 16 days shall be less than or equal to 0.15 percent.

Qualified testing laboratories performing ASTM C1293 or ASTM C1260 for aggregates shall conform to the following requirement:

- a. Laboratories performing ASTM Designation: C 1293 shall participate in the Cement and Concrete Reference Laboratory (CCRL) Concrete Proficiency Sample Program and have received a score of 3 or better on each test of the previous 2 sets of concrete samples,
OR
Have a current AASHTO accreditation for ASTM C1293.
- b. Laboratories performing ASTM Designation: C 1260 shall participate in the Cement and Concrete Reference Laboratory (CCRL) ASTM C1260 Proficiency Sample Program and have received a score of 3 or better on the previous 2 sets of samples,
OR
Have a current AASHTO accreditation for ASTM C1260.

Note: Effective July 1ST, 2020, Caltrans will only accept test results from AASHTO accredited labs certified for the test performed for the Innocuous Aggregate AML Program.

Department Acceptance

The Department may inspect, sample, and test materials for compliance with the Contract at any time. Allow the Department to record, including photograph and video, to ensure a material is produced to comply with the Contract. You may examine the records and reports of tests the Department performs. Schedule work to allow time for the Department's inspection, sampling, and testing. The Department deducts testing costs for work that does not comply with the Contract. The Department may retest material previously tested and authorized for use. If the Department notifies you of a retest, furnish resources for retesting. Additionally, the supplier needs to notify the independent lab that



Caltrans may contact them regarding any information about the ASR testing which they have performed.