APP Authorization Criteria for Portland Cement Concrete



GENERAL

The Aggregate Prequalification Program (APP) prequalifies aggregate for use in Portland Cement Concrete (PCC).

The process begins when a supplier submits the 'Aggregate Prequalification Request Form to the APP Administrator at <u>APP.Admin@dot.ca.gov</u>. As the next step, an Independent Assurance (IA) certified CT 125 inspector will be assigned to witness sampling process for Quality Control (QC) and Quality Assurance (QA) testing.

QC testing shall be performed by a laboratory which is <u>AASHTO accredited</u> and <u>IA certified</u> for each test conducted. QA testing will be performed by one of the Caltrans APP laboratories.

Aggregates shall be tested for quality characteristics listed in Table 1 and Table 2.

The prequalification process can take up to two months.

APP REQUIRED TESTS FOR PCC

Table 1. Tests Required for Fine Aggregate for use in PCC.

Quality Characteristics	Test Method	Test Method on DIME
Gradation Analysis	CT 202	CTM 202-11-Nov
Sand Equivalent	CT 217	CTM 217-11-Jun
Organic Impurities	CT 213	CTM 213-12-Dec
Durability	CT 229	CTM 229-11-Jun
Sodium Soundness ¹	CT 214	CTM 214-10-Aug

¹Fine Aggregate must be tested for Sodium Soundness if Durability < 60.

Table 2. Tests required for Coarse Aggregate for use in PCC.

Quality Characteristics	Test Method	Test Method on DIME
Gradation Analysis	CT 202	CTM 202-11-Nov
Cleanness Value ¹	CT 227	CTM 227-14-Dec
Los Angeles Rattler	CT 211	CTM 211-10-May
Sodium Soundness	CT 214	CTM 214-10-Aug

¹When prompted during data entry, select 'All aggregate is the same size'.

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CALTRANS APP LABORATORIES

Caltrans Transportation Laboratory (Translab)

Attn: Aggregate Prequalification Program, Aggregate Lab

5900 Folsom Boulevard

Sacramento, CA 95819-4612

Caltrans South Regional Laboratory (SRL)

Attn: Aggregate Prequalification Program, Aggregate Lab

13970 Victoria Street

Fontana, CA 92336-0877

LIST OF WEBSITES

- <u>Aggregate Prequalification Program</u>
 https://dot.ca.gov/programs/engineering-services/aggregate-prequalification-program
- Aggregate Prequalification Program Prequalified Materials List
 https://mets.dot.ca.gov/aml/AggregatePrequalificationProgram.php?print=yes
- <u>Data Interchange Materials Engineering</u> https://dime.dot.ca.gov/index.php
- AASHTO Directory

http://aashtoresource.org/aap/accreditation-directory

• <u>Statewide Independent Assurance Database</u> <u>https://sia.dot.ca.gov/</u>

AGGREGATE SAMPLING

Aggregate sampling should be conducted as following:

- ➤ For each aggregate size, split aggregate into 3 samples of at least 50 pounds each. One sample should be tested by a qualified testing laboratory for QC testing. The other two samples should be sent to one of the Caltrans APP laboratories. One sample will be used for QA testing and the other to retain for dispute resolution.
- Submit samples in airtight containers marked with the following:
 - SMARA No.
 - Aggregate Size
 - Name of Supplier

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APP PROCEDURE

Follow the procedure below if you have an aggregate source not currently authorized under the APP.

- 1. Access DIME at https://dime.dot.ca.gov/index.php.
- 2. New users register for an account to access DIME on <u>Sign-In Webpage</u>.
 - When submitting a request with your contact information, you will be granted the role of 'Organization Manager'.
 - When prompted for Justification:
 - Project/Contract Number: 0019000052.
 - Reason for Request: Submittal of test results for a prequalification program
 - **Details, if any:** Aggregate Pregualification Program
- 3. Active users sign into your account.
 - To verify your role, hover the cursor over your name at the top right of the webpage. If your role is 'Data Editor', contact your Organization Manager to update your role to 'Data Administrator'.
- 4. To submit an aggregate source, select the 'New Sample' tab on the toolbar located on the top of the webpage.
- 5. Enter the required information:
 - Project Identifier: 0019000052
 - Material Type: Aggregate
 - > Sample Taken Date: Enter the date the sample was taken from the source, MM/DD/YYYY.

Select 'Next'.

- 6. Fill in the blank fields with the appropriate information. Enter the following information:
 - Sample Type: Aggregate Prequalification Program
 - Brief Description of the Sample: Enter Aggregate Size (i.e. 3/8" pea gravel, 1" x No. 4, WCS, etc.)
- 7. After all the required information has been filled out, select 'Create Sample'.

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- 8. If all information was entered correctly, you will be directed to the 'Sample Receipt' webpage.
 - The aggregate source information submitted will be tracked with a unique DIME Sample ID, which is located at the top of the page. Print this page for your records.
 - Each aggregate size must have its own unique DIME Sample ID number.
- 9. On the right side of the webpage, under 'Sample Operations', select 'Email Sample'.
 - At the bottom of the page, place a check mark in the box beside 'APP Administrator' under the list of project personnel. This will notify the APP Administrator that material is being submitted for prequalification.

Select 'Send Email'.

- 10. Once you have received a DIME Sample ID, you may proceed to enter QC test results of aggregate source.
 - On the right side of the webpage, under 'Sample Operations', select 'Submit New Test'.
 - From the drop-down menu, select the 'CTM 202-11-Nov: Method of Test for Determining Sieve Analysis of Fine and Coarse Aggregates'. Select 'Next'.
 - Fill in all required fields
 - If prompted for 'Input Value Type', select 'Input Calculated Values'. Select 'Next'.
 - Fill in all required fields. Once completed, select 'Save'.
- 11. Repeat step 10 for all QC tests as listed in Table 1 and Table 2.
- 12. After all required QC test results have been entered, under 'Sample Operations', select 'Publish All Tests' or 'Verify All Tests'.
 - Scroll to the bottom of the page and verify all tests entered are selected with a check mark. Select 'Verify All Selected Tests'.
 - Place a check mark in the box besides 'APP Administrator' under the list of project personnel. Select 'Send Notification'.
- 13. To enter QC test results for another aggregate size with the same aggregate source:
 - On the right side of the page, under 'Sample Operations', select 'Clone Sample'.

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- The page will look the same as the 'Submit New Sample' page, except that the fields will be pre-populated with the existing sample's information.
- Verify all information and make modifications as necessary.
- select 'Create Sample'.
- After a new DIME Sample ID has been created, continue submitting information starting at step 8 of this guideline.

Caltrans will perform Quality Assurance testing on the split sample to verify the supplier's data. After the QC test results have been reviewed and the Caltrans verification testing has been completed, Caltrans will issue an acceptance notification valid for up to 1 year or a rejection notification.

REAUTHORIZATION OF AN AGGREGATE SOURCE

The resubmittal process should begin 2 months before an aggregate source prequalification expires.

To maintain an existing product on the APP List, the supplier should perform all steps under 'APP Procedure' in this guideline and create a new DIME ID number for each aggregate size.

Questions

For any questions regarding the APP, please contact the APP Administrator at APP.Admin@dot.ca.gov.

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