

9-25 WATER**9-25.1 Water for Concrete**

Water for mortar or concrete shall be clear and apparently clean. If the water contains substances that cause discoloration, unusual or objectionable smell or taste, or other suspicious content, the Engineer may require the Contractor to provide test results documenting that the water meets the physical test requirements and chemical limits described in ASTM C94M Section 5.1.3, Tables 2 and 3.

Water from mixer washout operations may be used in concrete provided it meets or exceeds the above criteria as well as the following additional requirements:

1. Concrete with water from mixer washout operations shall not be used in bridge roadway deck slabs, flat slab bridge superstructures, modified concrete overlays, or prestressed concrete.
2. Specific Gravity shall not exceed 1.07.
3. Alkalies, expressed as $[\text{Na}_2\text{O}+0.658 \text{K}_2\text{O}]$, shall not exceed 600 ppm.
4. Shall be free of coloring agents.
5. If the wash water contains admixtures from different manufacturers, the Contractor shall provide evidence that the combination of admixtures are compatible and do not adversely affect the air void system of the hardened concrete as per Section 6-02.3(3).
6. All tests to verify that the physical and chemical requirements are met, shall be conducted on the following schedule:
 - a. The physical requirements shall be tested on weekly intervals for four weeks and thereafter on monthly intervals.
 - b. The chemical requirements shall be tested on monthly intervals.
 - c. The specific gravity shall be determined daily in accordance with ASTM D 1429, Test Method D.

The Contractor shall use the services of a Laboratory that has a equipment calibration/verification system, and a technician training and evaluation process per AASHTO R-18 to conduct all tests. The laboratory shall use testing equipment that has been calibrated/verified at least once within the past 12 months to meet the requirements of each test procedure in accordance with the appropriate section of AASHTO R-18. Documentation of tester qualifications and equipment verification records shall be maintained and available for review by the Contracting Agency upon request. Agency reviews of the laboratory facility, testing equipment, personnel, and all qualification, calibration, and verification records will be conducted at the Contracting Agency's discretion.

9-25.2 Water for Plants

Water for plants shall not contain dissolved or suspended matter which will be harmful to the plant material on which it is to be used.