

**OKLAHOMA DEPARTMENT OF TRANSPORTATION
SPECIAL PROVISIONS
FOR
WATER**

These Special Provisions revise, amend, and where in conflict, supersede applicable sections of the 1999 Standard Specifications for Highway Construction, English and Metric. Units of measurement are provided in the subsections in both English and Metric equivalents. The units for this project shall be those specified in the project plans.

(Replace with the following:)

701.04 Water

Water shall meet the requirements of AASHTO M 157, except as modified by these specifications. Water from public water supplies approved by the Oklahoma Department of Environmental Quality will not require testing. When using water from other sources, the concrete producer shall provide test reports showing compliance with M 157 and Table 1 before use.

Water that is a blend of concrete wash water and other acceptable water sources, certified by the concrete producer as complying with the requirements of M 157 and both Table 1 and Table 2, may be used as mix water. Testing is the responsibility of the concrete producer. Test the blended water weekly for 4 weeks for compliance with these specifications, or provide previous test reports. Then test every month for compliance. Provide water test results upon request.

Do not use mix water that has an adverse effect on the air-entraining agent, on any other chemical admixture, or on strength or time of set of the concrete.

**Table 1
Chemical Limits for Mix Water**

| Contaminant | Test Method | Maximum Concentration (ppm) |
|----------------------------------------------------------------------------------------------|------------------------------|--------------------------------------------|
| Chloride (Cl) Prestressed Concrete Bridge Decks & superstructure All other concrete | ASTM D 512 | 500 500 1000 |
| Sulfate (SO ₄) | ASTM D 516 | 1000 |
| Alkalies (NA ₂ O + 0.658K ₂ O) | ASTM D 4191 & ASTM D 4192 | 600 |
| Total Solids | AASHTO T 26 | 50000 |

Table 2
Acceptance Criteria for Questionable Water Supplies

| Property | Test Method | Limits |
|-----------------------------------------------|--------------------|-------------------------------|
| Compressive Strength, min % control at 7 days | AASHTO T106 | 90 |
| Time of set, deviation from control | AASHTO T131 | from 1:00 early to 1:30 later |