Sampling Asphalt Emulsions

TDOT Standard Operating Procedures for the Sampling and Testing, and Acceptance of Materials and Products (SOP 1-1) state that Emulsions for prime coats, tack coats, and sealers (fog seals) AND Emulsions for Surface Treatment, Microsurfacing, Slurry sealing and related similar processes should be Sampled by the project inspector and once per week thereafter.

Proper sampling of these materials should include the following:

- All samples should be taken by contractor personnel, observed by TDOT employee, either from the contractor’s storage tank or directly from the distributor.
- All samples should be taken from the sample valve, and a MINIMUM of 1-gallon of material should be run through the sample valve and wasted prior to collecting the sample.
- Samples should NOT be taken from distributor spray bars. This can cause contaminated samples.
- All emulsion samples should be collected in wide-mouth jars or bottles made of plastic or wide-mouth plastic-lined cans with lined screw caps. (Sample containers can be obtained from Regional or HQ M&T)
- Containers should be completely filled to eliminate possible crusting or condensation in the container.
- Samples shall be not exposed to direct sunlight for long periods of time and not allowed to freeze.
- Per TDOT M&T SOP 1-1, samples should be received at the TDOT central laboratory in Nashville as soon as reasonably possible. Samples taken more than two weeks after sampling are considered expired and will be discarded.
- Samples should be properly labeled, accompanied by a completed T-2 form for identification.

Example diagram of emulsion sample valves (AASHTO T-40)