



STATE OF TENNESSEE  
DEPARTMENT OF TRANSPORTATION  
ENVIRONMENTAL COMPLIANCE OFFICE  
SUITE 900 - JAMES K. POLK BUILDING  
505 DEADERICK STREET  
NASHVILLE, TENNESSEE 37243-0334

**TDOT STANDARD OPERATING PROCEDURE - ENVIRONMENTAL**

NO.  
006

Subject: **HIGHWAY MARKING OPERATIONS**

Reviewed and  
approved by:

05-02-17

Barry Brown, PE  
Facilities and MS4/TSCS Program Manager, TDOT Environmental Compliance Office

Date

5.5.17

Toks Omishakin  
Environmental Bureau Chief, TDOT Environmental Planning Bureau

Date

Status: Revised and re-approved with minor changes.

Version 4 – Replaces  
Version 3 dated April 2016

## 1.0 PURPOSE AND SCOPE

As part of its responsibility to maintain the State highway system, TDOT operates highway marking trucks, which are housed at selected facilities, to stripe new and/or resurfaced sections of road. To maintain these trucks in good working condition and help ensure high-quality striping, the paint guns and associated transfer lines must be cleaned on a regular basis. In the past, hazardous materials (e.g., toluene) were sometimes used to clean spray gun tips. **This practice is no longer allowed.**

Although operations across the state may vary to some degree, in general, after a striping event, the spray gun lines are cleaned by using water to blow out any remaining paint into a container or contained area. Spray gun blow-out shall not be discharged to the ground surface. The guns may be removed and allowed to soak in an appropriate solvent (e.g., soap solution). Before the next use, the guns are reinstalled (as applicable) and the lines are primed with paint, which displaces any remaining water in the lines. The wastewater generated by these line-purging activities, as well as that generated during periodic tank cleaning, must be captured and disposed of in some manner, as discharges of such wastes to the ground surface are prohibited by environmental regulations.

Some facilities are able to discharge this wastewater directly to the local sewer system; others must collect and drum the wastewater and manage it as Special Waste. Applicable procedures for each situation are provided below.

## **2.0 CLEANING OF SPRAY TIPS**

1. No hazardous materials are to be used in the cleaning of spray gun tips or any other system component employed in highway marking operations.
2. Actisol may be used if necessary, although the use of water or approved soap solutions is preferred.
3. The waste cleaning solution (whether water, soap, or actisol, or some combination) must be collected and either discharged to the local sewer system (if approved) or drummed as special waste.
4. Spray gun line blow-out shall not be directed to the ground surface, but collected for subsequent disposal as a special waste.

## **3.0 DIRECT SEWER DISCHARGE**

1. Approval from the local sewer authority must be obtained prior to discharging any wastewater generated in the course of highway marking operations to the local sewer system. This approval must be documented in writing, with a copy maintained in the facility Storm Water Pollution Prevention Plan. Note: Any changes in the original paint formulations or additives may require additional approval by the accepting Publicly Owned Treatment Works.
2. If a suitable collection system is available (e.g., grated pit), direct discharge of paint-laden wastewater from the spray guns and other system components to the local sewer provides a compliant disposal approach, improves operational efficiency, and reduces the likelihood of spills.
3. If a suitable collection system is unavailable, wastewater must be captured in some manner (e.g., elevated ramp, hoses) for transfer to a temporary container(s). The collected wastewater may then be emptied into an onsite sewer access location, or transported offsite to a designated sewer discharge point or to the waste water treatment plant (again, only with approval from the local sewer authority).
4. Under no circumstances should highway marking wastewaters be discharged onto a vehicle wash pad for processing through the oil-water separator (OWS). This practice is prohibited, even if the local sewer district has approved direct discharge to the sewer, as it may cause problems with the OWS system, which is not designed to handle such materials.

## **4.0 COLLECTION AND MANAGEMENT AS NON-HAZARDOUS LIQUID WASTE**

1. All wastewater generated in the course of paint truck maintenance (e.g., spray gun purging, tank cleaning) must be captured and placed in drums suitable for managing liquid wastes.
2. Drums must be labeled "Wastewater from Highway Marking" and managed as industrial liquid waste.
3. Care should be taken in collecting and transporting this waste to reduce the likelihood of spills.