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DEPARTMENT OF TRANSPORTATION
ENVIRONMENTAL COMPLIANCE OFFICE
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NASHVILLE, TENNESSEE 37243-0334

TDOT STANDARD OPERATING PROCEDURE - *ENVIRONMENTAL*

NO. 21	**Subject:** ***Release of Captured Storm water from Secondary Containment***

Reviewed and approved by:

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Status: Revised and re-approved with no significant changes.	Version 3 – Replaces Version 2 dated April 2016

1.0 PURPOSE AND SCOPE

This Standard Operating Procedure (SOP) is intended to define the circumstances and procedures for draining accumulated storm water that is captured by open secondary containment structures, including temporary dikes and berms, around aboveground storage tanks and other containers at TDOT facilities. This procedure applies to any situation where storm water is captured and potentially exposed to any contaminant, including petroleum, commercial chemical products, salt brine, and other liquid de-icers (e.g., beet juice). This procedure also applies to secondary containment pallets and drip pans that are left outside and inadvertently accumulate storm water.

2.0 DEFINITIONS

Aboveground Storage Tank — A metal or plastic container that is more than 90% above the surface of the ground and used for the storage of petroleum, commercial chemical products, salt brine, and other liquid de-icers (e.g., beet juice).

Commercial Chemical Product — A material that is purchased and used by TDOT primarily for its chemical rather than structural properties. Examples include lubricants, coolants, paints and other surface coatings, chemicals (including salt), soaps, detergents, herbicides, solvents (other than water), and cleaners. Commercial chemical products may be hazardous chemicals, non-hazardous chemicals, or petroleum products.

Conveyance — A means or route of transporting fluids such as oil, fuel, or liquid de-icers.

Dike/berm — A type of secondary containment structure that is an embankment or enclosure designed to contain a liquid.

Petroleum — Any petroleum-based product or waste, including but not limited to, gasoline, diesel, motor oil, hydraulic oil, kerosene, used oil, and emulsified asphalt.

Secondary Containment — An impermeable barrier placed around or underneath a storage container(s) that will hold a minimum of 110% of the volume of the largest container within the barrier's perimeter.

Storm Water Pollution Prevention Plan — The TDOT Municipal Separate Storm Sewer System Permit No. TNS077585 required TDOT to produce SWPPPs for all applicable TDOT-owned/operated facilities.

TDOT-Owned/Operated Facilities — Includes Region Headquarters facilities, District Headquarters facilities, County Garages, aeronautics facilities, truck weigh stations, welcome centers, rest areas, Floating Maintenance facilities, remote salt storage facilities, remote HELP truck facilities, and other facilities owned/operated by TDOT. ***Note:*** Remote facilities are those that are separate from TDOT Region Headquarters facilities, District facilities, and County Garages and are normally unmanned.

3.0 PROCEDURE FOR RELEASE OF CAPTURED STORM WATER FROM SECONDARY CONTAINMENT

3.1 As specified in TDOT Facility SOP #1, *Spill Prevention and Response at TDOT Facilities*, TDOT personnel will be proactive in attempting to prevent any unplanned and/or unapproved release of petroleum, salt brine/de-icing agents or commercial chemical products, and/or wastes onto the ground surface.

3.2 If any containment is released to the ground, the procedures of TDOT Facility SOP #1, *Spill Prevention and Response at TDOT Facilities*, must be implemented.

3.3. The drain valve or plug on a secondary containment structure or container (when such structure is present) must remain closed and sealed at all times, except when the system is being drained in a manner compliant with this procedure. The Primary/Alternate SWPPP Inspector will perform this inspection on a weekly basis.

3.4 The Primary/Alternate SWPPP Inspector will perform periodic dry inspections prior to rainfall events to verify that contaminants, trash, sediment, or other materials are not present in the dry containment structure that would come in contact with any captured storm water during a rainfall event.

3.5 Following significant storm events (i.e., greater than 0.1 inch in 24 hours), the Primary/Alternate SWPPP Inspector will inspect the secondary containment structure for storm water accumulation and overflow within 24 hours of the end of the storm event or the next business day.

3.6 If storm water has accumulated in the secondary containment, the Primary/Alternate SWPPP Inspector will visually inspect the water. The type of inspection depends on the contents of the container or tank:

(1) If the tank/container contains a petroleum-based product, the secondary containment will be visually inspected for the presence of a sheen or discoloration in the captured storm water. Under no circumstances should storm water with a visible oily sheen be released from the containment area to the ground. If the facility has an operational oil-water separator (OWS), the petroleum-contaminated storm water can be pumped directly to the OWS or transported to the OWS by drum or mobile tank. If the facility does not have an operational OWS, contact the Environmental Compliance Office to obtain guidance and/or coordinate the implementation of corrective actions.

(2) If the tank/container contains salt brine and/or other liquid de-icers, the secondary containment system will be visually inspected for the presence of salt crystals and/or discoloration that would indicate salt/de-icer contamination. Any salt/de-icer-contaminated storm water should be retained as brine makeup water (if practical), returned to the brine tanks, or sprayed onto the back of the salt pile.

(3) If the captured storm water was potentially exposed to commercial chemical products, contact the Environmental Compliance Office to obtain guidance and/or coordinate the implementation of corrective actions.

3.7 Only captured storm water that has been found to be completely free of any potential contamination per Section 3.6 (above) shall be released directly to the ground. Sediment, dirt, floating debris, trash, foam, or any other material that is not storm water shall not be released from the secondary containment to the ground.

3.8 All storm water discharged from a secondary containment structure must be noted on the form found in Appendix 14 of the facility SWPPP. The entries in the log should correspond to the rain gauge log located in Appendix 7 of the SWPPP.

3.9 If a significant rainfall event occurs that causes storm water to overflow or be discharged from the secondary containment structure, the Primary/Alternate SWPPP Inspector or the District Maintenance Supervisor must contact the Environmental Compliance Office to obtain guidance and/or coordinate the implementation of corrective actions.

4.0 TRAINING

Personnel at TDOT facilities subject to this SOP will be initially trained by TDOT Environmental Compliance Office personnel or designated TDOT contractor personnel regarding their SOP responsibilities, including spill prevention and response. Annual refresher training of such personnel will subsequently be provided by the TDOT Facility Supervisor or his designated representative. A record of the attendees will be maintained within the SWPPP (Appendix 9). This refresher training will be conducted to ensure understanding of the SWPPP and this SOP. **Personnel who have not been specifically trained in the implementation of this SOP should not attempt to inspect or drain a secondary containment structure.**