PURPOSE

To provide guidance for inspection, maintenance and repair of the Stage I and Stage II recovery system equipment connected to MassDOT Highway Division gasoline underground Storage Tanks (USTs), as required under the Massachusetts Clean Air Regulations [310 CMR 7.24(6)] for all facilities dispensing gasoline.

RESPONSIBILITY

It is the responsibility of the District Maintenance Engineer (DME) or their designee to ensure that this SOP is adhered to. Completed inspection checklists and repair records shall be stored at the facility or at District headquarters at the discretion of the DME and Environmental Management System Compliance Coordinator (ECC).

The ECC may also request a copy of these records.

The ECC will report findings from their facility inspection to the DME.

DEFINITION

The Stage I recovery system consists of the components necessary to recover gasoline and return vapors to the tanker truck during dispensing of gasoline to MassDOT, Highway Division underground storage tanks. The stage I recovery system consist of the spill containment bucket, a valve and an access port equipped with a vapor break to return vapors to the tanker truck. In the absence of the access port with a vapor break, a coaxial fill tube may be used to return vapors to the tanker truck.

The stage II vapor recovery system consists of the components necessary to return gasoline vapors to the gasoline UST during vehicle refueling. These components are the fueling nozzle with vapor recovery boot, the delivery hose and breakaway valve.

INSPECTION

The designated personnel shall perform the recovery systems inspection once a week using the attached checklist. Once a deficiency has been identified a copy of the completed checklist shall be submitted to the designated Structures Maintenance personnel for repair. Repairs and/or corrective actions are to be implemented by the District Structures Maintenance office and completed within two weeks of discovery. If a discrepancy is discovered which warrants the system be taken out of service (according to the checklist), the DME will immediately by notified and will authorize the shutting down of the system until corrective actions are completed.

TRAINING

The designated district personnel will receive training to accomplish the weekly inspection. Refresher training will be provided at the Annual Environmental Awareness training held at each District or at the request of the District. The ECC will maintain records of training certification.

PROCEDURE FOR INSPECTION OF THE STAGE I RECOVERY SYSTEM

- The containment bucket cover should fit securely on the containment bucket to prevent the entry of surface water.
- The containment bucket should be free of foreign material such as leaves and sand.
- The containment bucket should have no cracks.
- The drain or pump to remove liquid from the containment bucket should remain unclogged and free to permit liquids to either drain to the UST or pump the liquids to a secondary container.
- The caps on the UST access ports should not be cracked and fit snuggly
- The vapor break must seal properly

PROCEDURE FOR INSPECTION OF THE STAGE II VAPOR RECOVERY SYSTEM

- Nozzles boots must not be torn, slit or loose and must not be compressed when hanging from the pump.
- Nozzles must not leak gasoline.
- Hoses must not be flattened, kinked, cracked or repaired with tape.
- Hoses must not be resting on the ground or on the dispenser island.
- The loop made between the nozzle and hose cannot exceed 10 inches in diameter.
- The hose assembly cannot leak gasoline. This includes the hose, the breakaway valves and all connections.
- The Retractor Cable must allow the hose to retract to the bottom of the retractor bar.
- The Breakaway valve must be installed between the nozzle and the retractor bar and must be installed in the proper direction to function.
- Rain caps or PV valves must be installed on the top of gasoline UST Vent Lines

Repair

The designated facility personnel will notify the appropriate DME or their designee of the need to perform repairs on the system. If District personnel cannot complete repairs, the Boston Operations Division shall be contacted for assistance to contract out repair work.

RECORD KEEPING

The completed Inspection checklists and repair/maintenance record shall be filed at the Facility. At the discretion of the DME, a copy of the completed checklist shall be submitted to the designated Structures Maintenance personnel at the District Headquarters. Inspection checklists and repair/maintenance records will be kept on file for a period of one year.

WEEKLY STAGE I/II INSPECTION CHECKLIST

FACILITY_____
WEEK OF_____

Component	Issue	Yes or No
1. NOZZLES	**1a. Are the nozzle boots torn, slit or loose?**	
	1b. Are the nozzles leaking gasoline?	
	1c. Are the nozzle boots compressed when hanging from the pump?	
2. HOSES	**2a. Are the hoses flattened, kinked, cracked or taped?**	
	2b. Are the hoses resting on the ground or the island?	
	2c. Does the hose loop exceed 10 inches?	
	2d. Does the hose assembly leak gasoline?	
3. Retractor Cable	3a. Does the hose retract to the bottom of the retractor bar?	
4. Hose Breakaways	4a. Is the hose breakaway between the nozzle and retractor bar?	
	4b. Are the hose breakaway installed in the proper direction?	
5. Tank Vent Line	5a. Are there rain caps or PV valves installed on the top of the vent line?	
6a. Stage I Vapor Recovery	6a Do both the fill and vapor recovery ports have caps?	
	6b. Are the caps and gaskets in good condition?	
	6c. Does the vapor break seal properly?	
	6d. Are the containment sumps clean and in good condition?	

If the component is in need of repair, please list the problem and date corrected in the following page/table. If you answer yes to **Nozzle** or **Hose** question (**Section 1 or 2 above**) the system must be taken out of service until repairs are complete.

Note on the table below any repairs as a result of this inspection.

Date of inspection	**Components in need of repair**	**Date of Repair**	**Inspector signature**

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Print Name_____ Sign Name_____ Date_____

You must have received Stage I/II Vapor Recovery System inspection training to complete this inspection form.