

Sovereign Consulting Inc.  
16 Chestnut Street, Suite 520  
Foxborough, MA 02035

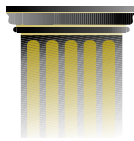
**ANNUAL LANDFILL INSPECTION**  
**Shepley's Hill Landfill**  
**Devens, Massachusetts**

**Date of Inspection:** 4 October 2013  
**Inspector/Company:** Thomas Hevner, LSP, P.E. / Jonathan Chaffee of Sovereign Consulting Inc.  
**Site Location:** Shepley's Hill Landfill, Devens, Massachusetts

**Weather Conditions:**  
Temperature: 60° F  
Weather: Sunny

**Type of Inspection:** ☒ Annual  
☐ Post-Major Weather Event  
☐ Re-Inspection of Deficiencies  
☐ Other

Landfill Attribute & Observations	Comments and Recommendations	SAT	UNSAT
<b>Cover Surface</b>			
1. The vegetation growth was normal and appeared to have no major stressed areas. The annual landfill mowing event was conducted on September 25-26, 2013. The portions of the landfill in the vicinity of the barrier wall were not mowed during the annual mowing event as the vegetative growth in this area was less than six inches in height.	Continue mowing on an annual basis.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. There are no new depressions on the cover surface	Continue monitoring for settlement that creates depressions.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. No tree or shrub growth was observed on the landfill surface during the inspection. Small tree and shrub growth on the margins of the landfill were removed during annual mowing event.	Continue monitoring for tree and shrub growth on cover surface. Remove tree/shrub growth as necessary.	<input checked="" type="checkbox"/>	<input type="checkbox"/>



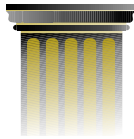
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# ANNUAL LANDFILL INSPECTION

## Shepley's Hill Landfill

### Devens, Massachusetts

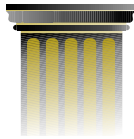
Landfill Attribute & Observations	Comments and Recommendations	SAT	UNSAT
4. The utility berm that was constructed through the middle of the landfill in 2004 provides utility service to the pumping station at the northeastern corner of the landfill. The vegetation atop the utility berm during the September 2013 mowing event. The berm is intact and no adverse effects to the berm were observed.	Continue monitoring the utility berm for negative impacts on the drainage patterns.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Vegetative Growth</b>			
1. During the construction activities associated with the dredging of Plow Shop Pond (Red Cove), portions of the eastern edge of the landfill were disturbed.	Upon completion of Red Cove construction activities, allow new vegetative growth to fill in and/or be re-seeded to prevent erosion of the slope.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Landfill Gas Vents &amp; Monitoring Wells</b>			
1. The landfill gas vents are in good condition. All pipes are in functional condition with screens installed on all vents.	Continue to monitor condition of gas vents.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. Monitoring wells and piezometers currently part of the LTMMP are all in good condition, with the exception of SHP-99-34A. The steel casing of SHP-99-34A was observed to have been damaged to the extent that gauging of the piezometer is unable to be completed.	Repair SHP-99-34A if deemed necessary during LTMMP Update.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
It was observed that the road boxes of flush-mounted wells, SHM-05-41A through C, have deteriorated to a condition in which the covers cannot be properly secured.	Replace road boxes of flush-mounted wells SHM-05-41A through C.		
It was also observed that the caps of the some stick-up wells currently in the LTMMP are in need of repair in order to properly secure the cover with a lock.	Repairs caps of the stick-up wells within the Revised LTMMP following the LTMMP Update.		
3. The landfill gas points are in good condition.	Continue to monitor the gas points.	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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<b>Drainage Swales</b>			
1. Most of the southern drainage swale exhibited vegetative growth. Large growth was removed during the September 2013 mowing activities. Small growth and wetland plant life were not disturbed, as they have become a natural retardant to erosive forces.	Continue to monitor and clear drainage swales of invasive vegetative growth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
2. The northern drainage swales in the vicinity of the ATP exhibited minor vegetative growth. Large growth was removed during the September 2013 mowing activities	Continue to monitor and clear drainage swales of invasive vegetative growth.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
3. Mowing is conducted to the edge of the swale	Continue mowing annually.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Settlement</b>			
1. No new depressions were observed within the landfill.	Continue to monitor for new depressions or settlement and repair as necessary.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Erosion</b>			
1. Overall, there was no erosion observed. However, due to Plow Shop Pond (Red Cove) construction activities, minimal erosion was observed due removal of vegetative growth in the vicinity of monitoring well SHL-4.	Upon completion of Red Cove construction activities, reseed slope and allow for vegetative growth to fill in preventing further erosion of the slope.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Access Roads</b>			
1. Erosion of the access road at the northern end of the landfill was observed. Erosion is assumed to be the result of a heavy precipitation event.	Make necessary repairs to the northern end of the access road to prevent continued erosion during heavy precipitation events.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
2. The southern area of the access road is in good condition.	Continue to monitor condition of road.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Culverts and Catch Basins</b>			
1. The culverts along the northern portion of the landfill were observed to be in good condition; some growth was removed from the culverts along the entrance road to the	Continue to monitor and remove growth as necessary.	<input checked="" type="checkbox"/>	<input type="checkbox"/>



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ATP during the September 2013 mowing event to ensure proper use.			
<b>Security/Fencing</b>			
1. Perimeter fencing is non-existent along much of the western boundary of the landfill (wooded area along Shepley's Hill), and along the southeastern boundary near the railroad tracks. However, no roads have open access to the landfill. Existing fence gates across roads that access the landfill are secured with chains and padlocks. A portion of the perimeter fencing was removed in the vicinity of Red Cove during construction activities.	Replace perimeter fencing following Plow Shop Pond (Red Cove) construction activities.  Continue maintain proper security measures including ensure lockage of all landfill fence gates.	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>Wetland Encroachment</b>			
1. Wetland encroachment was observed in the swales located in the southern portion of the landfill. Overall, the areas of encroachment are small and confined to the swales.	Continue to monitor wetland encroachment and continued mowing of the areas close to the existing growth will prevent the development of wide-spread wetland encroachment issues.	<input checked="" type="checkbox"/>	<input type="checkbox"/>
<b>Other Observations</b>			
1. No other outstanding issues were observed.		<input checked="" type="checkbox"/>	<input type="checkbox"/>

**Shepley's Hill Landfill  
Annual Inspection  
September 2013**



Description - Erosion of Eastern Slope during Plow Shop Pond Construction Activities



Description - Site Restoration of Eastern Slope and Fencing Following Plow Shop Pond Construction Activities



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Description - Northern Access Road Erosion



Description - Northern Access Road Repaired



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Description - Condition of Monitoring Well Road Boxes on Sculley Road



Description - Current Conditions of Northern Portion of Landfill



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Description - Current Condition of Western Portion of Landfill



Description - Current Condition of Souther Portion of Landfill



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Description - Northwestern Drainage Swale



Description - Northern Drainage Swale