



State of Oregon
Department of
Environmental
Quality

DEQ Solid Waste Program

LANDFILL INSPECTION REPORT

FACILITY:	Riverbend Landfill		
COUNTY:	Yamhill	PERMIT NO:	345
INSPECTOR(S):	Bob Schwarz	INSPECTION DATE:	Jan 14, 2014
	Start time:	8:30 am	End time: noon
Site Weather Conditions: Partly cloudy, 34 F			
Facility Representatives:	Tim Watson		
Inspection type:	Unannounced landfill inspection		
Facility Type:	MSW Landfill		

INSPECTION SUMMARY/KEY ITEMS:

Odors. During the last three miles driving south to the landfill on Highway 18, I kept the windows open to assess odors, as I usually do. I did not smell any while driving. I parked the car at the corner of Highway 18 and Masonville Road and walked around. Odors varied from none to moderate. The odors at their strongest were more noticeable than during previous site visits. Once on the site, the odors were quite strong. There was extensive relocating of waste along the north slope of the landfill. This was partly for construction of the north access road and partly to regrade the waste to conform to the design slopes associated with the MSE berm. This disturbance of waste is presumably a major cause of the increase in odors. This waste relocation (approximately 60,000 cubic yards) is expected to be done by Jan. 15.

Litter and birds. I drove north along Highway 18 from the landfill prior to entering the site to assess the amount of litter on and along the side of the road. I did see some litter most of the way. DEQ has received complaints recently of a large amount of roadside litter near the landfill. I then drove along back roads west of the landfill and observed litter there as well. This included blowable litter, such as plastic bags, which could have come from the landfill or trucks. I also observed steel cans and other debris, which presumably are not from the landfill. I then proceeded further north on Highway 18. North of the junction with 99, the roads had less litter because a litter pickup had been done recently. Bags of litter were placed along the roadway for pickup. Neighbor Ramsey McPhillips has complained recently of an increase in litter, birds and rats on his property. I did observe approximately 80 seagulls on that portion of his land that I could see from the highway. I did not see litter on his property. See photos 3, 4 and 5.

Gas flare. The landfill's enclosed flare has been down for repairs. Repair personnel were onsite today. The flare has a vertical wall that divides it into a large and small chamber, to enable it to work efficiently at large and small gas loading rates. This vertical wall appears to have been damaged, possibly due to heat. Pieces of this wall were removed during my observation. One member of the repair crew told me the problem could be that portions of the wall had fallen on some of the gas burners. Waste Management brought in a candlestick flare for use in the meantime. This is shown in photo 8. The landfill has received several complaints that the landfill is on fire. This is presumably because this replacement flare has an open flame, unlike the landfill's regular flare. The flame is very

visible at night.

Erosion and sediment controls. Highway 18 looked fairly clean (very little mud or stones). See photos 1,2, 6 and 7. This differs from observations of at least two neighbors, who recently complained of mud on the roads and dust kicked up by trucks driving over the mud. A neighbor complained of a large cloud of dust on the road during the same time that I was conducting this inspection. I did not observe dust clouds over the road.

I have observed mud on the road in the past and have discussed that with Waste Management and its contractors. Since my last inspection, ODOT has expressed concerns about track out of mud in the center and acceleration lane. This means that efforts must continue to keep the paved area within the landfill complex clean. Onsite efforts include use of a sweeper (tractor-mounted rotating brush), which I observed during my inspection today. In addition, the tire wash continues to operate. However, the road before and after it needs to be regraded to accommodate long vehicles. Design for this regrading is underway. I was also told that the water sprayer needs to be adjusted because some water sprays out of the unit rather than onto the truck.

ODOT does not want anyone sweeping the highway, due to safety concerns. Prevent is therefore all the more important.

The wattles (photo 11) used to collect sediment along the side of the Highway 18 are not working as well as intended. Some mud is passing under them. Contractor said today that these will be replaced with aggregate check dams.

MSE berm. Little work has been done on the MSE berm since my 12-17 inspection, because most efforts are focused on completing the waste relocation on the north slope. Waste Management intends to amend the clay by adding cement to reduce moisture content.

I.	OPERATIONS	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
1.	Ownership. Facility ownership up to date?			x	
	Notes:				
2.	Waste Acceptance. Permittee accepts authorized waste only?			X	
3.	Special Waste Management. SWMP up to date?			X	
	Notes:				

I.	OPERATIONS	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
4.	Prohibited Waste. Permittee accepts no prohibited waste? a) hazardous waste b) liquid wastes, lead acid batteries, used oil, vehicles, waste tires c) source separated recyclables d) asbestos e) infectious waste f) large metal jacketed appliances g) explosives	X			
	Notes:				
5.	Prohibited Waste Discovery. Permittee complies with prohibited waste discovery and reporting requirements?			X	
	Notes:				
6.	Open Burning. Does it occur?	X			
	Notes:				
7.	Operational Methods. Operations comply with approved operations plan?	X			
	Notes: No operational problems noted.				
8.	Operations Plan. Operations plan up-to-date and DEQ-approved?	X			
	Notes:				
9.	Permittee Self-Reporting. Permittee reports and corrects non-compliance conditions?	X			
	Notes:				
10.	Permit. Copy of Permit displayed and accessible to facility personnel?			X	
	Notes:				
11.	Visual Screening. Landfill screened from public view?	X			
	Notes: Landfill extends above the perimeter trees. In any event, landfill is visible from higher elevations, and is a significant issue for neighbors. However, this is not prohibited in permit.				
12.	Waste Unloading. Signs, fences, barriers clearly define waste unloading areas?	x			
	Notes:				

I.	OPERATIONS	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
13.	Litter. Litter controlled and picked up?	x			
	Notes: Some litter was observed on the road, though the amount of litter along this portion of the road is similar to what I found elsewhere in the vicinity. I will continue to monitor for litter on the highway near the landfill.				
14.	Vector control. Active landfill area has minimal birds, insects, rodents?	x			
	Notes: I saw approx. 80 seagulls on the McPhillips property. I did observe birds on the landfill, though a smaller amount than in the fall. The falconer was onsite today.				
15.	Air Quality, Noise. Dust, odors and noise controlled?	x			
	Notes: Dust. Neighbors have recently complained about dust due to mud on the highway. I did not observe that during this inspection. Noise. Noise level was higher than during past visits along the north slope. This is associated with dozers moving waste as part of construction of the north access road and regrading prior to construction of the northern portion of the MSE berm. I did not measure the noise level. Odors. I observed odors to range from none to moderate off the landfill property, and quite strong on the landfill property. Disturbance of waste ended Jan 15. Need to reevaluate during next inspection. (Note – We have received many complaints indicating that my observation does not conform to those of some others.)				
16.	Access. Entry roads are safe, provide all weather access and are well maintained?	x			
	Notes: Raining is increasing the amount of mud on the paved areas near the office.				
17.	Entrance Signs. Entrance signs indicate facility name, emergency phone #, schedule, acceptable and prohibited wastes, and restrict site access?	x			
	Notes:				
18.	Public Access. Adequate security, prevents unauthorized entry and dumping?			X	
	Notes:				
19.	Cover Methods. Cover (including ADC) complies with DEQ- approved operations plan?			X	
	Notes: Alternative daily cover (ADC) recently being used on waste exposed as a result of construction of the north access road. More may be needed to better control odors.				
20.	Records. Permittee keeps records and reports of waste types and amounts of recyclables received and types reported to DEQ			X	
	Notes: Record provided electronically to DEQ.				

I.	OPERATIONS	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
21.	Records retention. Permittee keeps all records for at least 5 years?			X	
	Notes:				
22.	Tire Storage. Permittee stores no more than 100 whole tires on site? No more than 2000 tires with continuous contract with removal contractor?			X	
	Notes:				
23.	Fire Protection. Permittee provides adequate on-site fire control measures? Has arranged for assistance from local Fire Department if needed?			X	
	Notes:				
24.	DEQ Fees. Permittee pays annual per-ton fees to DEQ?			X	
	Notes:				

II.	SITE DESIGN AND DEVELOPMENT	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
25.	Site Development. Landfill development meets DEQ-approved site development plan?			x	
	Notes:				
26.	Engineering Plans. Permittee submitted engineering plans for DEQ review and approval at least 6-months before constructing new cells, final closure features, environmental control systems or ancillary facilities?	x			
	Notes:				

III	FACILITY CONSTRUCTION	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
27.	Design Conformance. All landfill facility construction conforms to DEQ-approved plans and specifications?	x			
	Notes:				

III	FACILITY CONSTRUCTION	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
28.	Construction CQA. Facility Construction complies with DEQ-approved CQA plan?	x			
	Notes:				
29.	Construction Certification. Permittee submitted construction certification reports to DEQ for review and approval after constructing new facilities?			X	
	Notes:				
30.	New Approved Disposal Units. DEQ approved placement of waste in new cell?			X	
	Notes:				

IV	<u>LEACHATE MANAGEMENT</u>	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
31.	Leachate Prevention. Permittee effectively minimizes leachate generation in active and inactive cells through systematic use of daily cover, intermediate (plastic) cover and phased final closure (close-as-you-go) strategies?			x	
	Notes:				
32.	Leachate Seeps. No leachate seeps present beyond lined cell footprints?			x	
	Notes:				
33.	Leachate collection system (LCS). Permittee maintains 1-foot or less hydraulic head in primary leachate collection system and continuously removes leachate from collection systems? All LCS systems and equipment in good condition and well maintained?			x	
	Notes: Daily sump level readings are provided quarterly.				
34.	Leak Detection system (LDS). No leachate or other fluids detected in LDS? Permittee reports to DEQ any incidents of leakage through the primary liner system? LDS Systems well maintained?			X	
	Notes: This is evaluated in the annual report.				

<u>IV</u>	<u>LEACHATE MANAGEMENT</u>	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
35.	Leachate Storage/Treatment Ponds. Permittee maintains at least 3-feet of pond-dike freeboard above liquid surface? Access restricted by fencing and locked gates? Signs posted indicating pond contents and “no trespassing”? Ponds well maintained, structurally stable, no significant soil erosion, slope failures leaks or seeps? Odor control measures effective?			x	
	Notes:				
36.	Leachate Treatment/Disposal. Leachate treatment methods comply with DEQ-approved leachate management plan? Existing facilities adequate or plans in development to address long-term leachate treatment and disposal? Treatment systems well maintained and functional?			x	
	Notes:				

<u>V</u>	<u>STORMWATER MANAGEMENT</u>	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
37.	Stormwater Pollution Control Plan (SPCP). Up-to-date SPCP maintained in the Operating Record. Plan reflects site-specific conditions at the landfill?	x			
	Notes: Mud from trucks is cleaned using a sweeper on landfill roads. A contractor sweeps Highway 18 twice daily.				
38.	Stormwater Drainage Structures. Pipes, culverts, ditches, swales, berms, dikes, straw bales, erosion control matting, riprap, and other structures are well maintained, constructed per DEQ-approved design plans and specifications?	x			
	Notes: Some mud is getting under wattles placed in drainage swale along highway. Contractor noted that they will replace these with gravel check dams.				
39.	Flood Control Structures. Perimeter flood control dikes are well maintained, structurally sound, in good condition?			x	
	Notes:				

VI	<u>LANDFILL GAS MANAGEMENT</u>	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
40.	Landfill Gas Extraction System. Vertical wells and horizontal collectors are well maintained and sufficient in number to prevent excessive odors and subsurface gas migration? Header pipes, valves and associated equipment are functional and well maintained? Landfill-wide odors not excessive?			x	
	Notes:				
41.	Condensate Collection/Disposal. Condensate collection system well maintained, functional? Condensate sumps and storage tank(s) well maintained, no fluid leaks, odors not excessive? Permittee has records of condensate volumes and its chemical characteristics? Permittee routinely tests underground condensate sumps for subsurface leakage?			x	
	Notes:				
42.	Landfill Gas Blower/Flare station. Blower/flare station equipment functional and well maintained? Equipment installed reflects DEQ-approved design? No fluid leaks from condensate knockout tanks or other sources, no excessive odors?			X	
	Notes:				
43.	Equipment safety. Landfill gas system test equipment and ancillary structures are intrinsically safe (no confined spaces susceptible to landfill gas accumulation)?			x	
	Notes:				
44.	On-site, buildings offices. On-site structures setback adequately from the landfill or have engineering controls and monitoring to prevent and detect landfill gas intrusion and explosion hazards?			x	
	Notes:				
45.	Landfill Gas to Energy Facilities. Facilities are well maintained, no excessive odors, no fluid leaks from pipes or other equipment?			x	
	Notes:				

<u>VII</u>	<u>ENVIRONMENTAL MONITORING</u>	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
46.	Groundwater Monitoring Program. Permittee conducts groundwater monitoring program in accordance with the DEQ-approved EMP? a) EMP updated to incorporate new or replacement monitoring wells? b) Site characterization reports for new disposal cells submitted for DEQ review and approval? c) Permit specific concentration limits established for the site? d) Annual Environmental Monitoring Reports (AEMR) submitted to DEQ on schedule?			x	
	Notes:				
47.	Groundwater Sampling Program. Sampling techniques comply with DEQ-approved EMP? a) DEQ notified at least 10 working days before scheduled sampling event? b) DEQ lab notified at least 45 days before split-sampling event? c) DEQ Lab split-sampling report supports permittee's results?			x	
	Notes:				
48.	Groundwater Monitoring Well Network. All DEQ-approved detection and compliance wells are properly constructed, functional, and well maintained? a) Well casings vertical, in good condition and stable? b) Concrete pads in good condition, sealed to casings, and stable? c) Well caps on and locked? d) Wells properly identified and labeled? e) Any evidence of surface water ponding or erosion around well locations? f) Any damage to wells? Was it reported appropriately to DEQ within 14 days? g) Any unused wells are properly decommissioned?			x	
	Notes:				
49.	Stormwater Monitoring Program. Established stormwater monitoring stations have identifiable field markings, and are maintained for repeat monitoring events per NPDES stormwater permit requirements and DEQ-approved EMP?			x	
	Notes:				
50.	Leak detection System. Access risers and collection sumps and pumps are functional and well maintained? No fluids present in the leak detection system? Permittee has reported to DEQ and investigated the source of any seepage into the leak detection system?			x	
	Notes:				

<u>VII</u>	<u>ENVIRONMENTAL MONITORING</u>	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
51.	Surface Water Monitoring. Designated monitoring stations established and maintained for streams, ponds, lakes or other water bodies of interest per the DEQ-approved EMP?			x	
	Notes:				
52.	Landfill Gas Monitoring Program. Methane gas monitored in accordance with DEQ approved EMP? a) Monitoring results reported in AEMR and maintained in facility operating record? b) Probes are adequately placed and designed to monitor gas migration toward onsite and off-site structures and confined spaces? c) Permittee has inventoried susceptible confined spaces on and near the landfill, identified their locations on a site map, described their characteristics, and monitored for methane at these locations. d) Permittee monitors for landfill gas in liner leak detection system?			x	
	Notes:				
53.	Landfill Gas Monitoring Probes or Devices. All gas monitoring probes or sensors are properly constructed, labeled and maintained? a) Probes casings are vertical, in good condition, have locked security caps? b) Gas testing meter is properly calibrated before each monitoring event and maintained by manufacturer. c) Gas monitoring procedures conform to DEQ-approved EMP?			x	
	Notes:				

<u>VIII</u>	<u>LANDFILL CLOSURE</u>	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
54.	Closure Process. Permittee has DEQ-approved closure plan and implements plan appropriately and effectively? Phased closure conforms to DEQ approved plans and schedule?			x	
	Notes:				

55.	Final Landfill Cover. Final cover system constructed in conformance with DEQ-approved plans and specs? a) Cover system in good condition and well maintained? b) Maintenance procedures consistent with DEQ approved O&M manual? c) Surface contours promote efficient drainage, prevent storm-water ponding?			X	
	Notes:				

<u>IX</u>	<u>FINANCIAL ASSURANCE</u>	In Compliance	Not in Compliance	N/A for this Inspection	Follow-up required
56.	Financial Assurance Plan. Has permittee updated the FA plan and documented the update in the facility operating record?			X	
	Notes:				
57.	Annual Certification. Has permittee submitted annual update certification to DEQ by the annual review date?			X	
	Notes:				
58.	Financial Assurance Expenditures. FA funds used only for closure, post-closure and corrective action?			X	
	Notes:				
59.	Continuous Financial Assurance. Permittee maintains continuous FA for the landfill?			X	
	Notes:				

Bob Schwarz

January 15, 2014

DEQ Representative

Date

PHOTOS



1. Highway 18 viewed from Masonville Road, looking northeast.



2. Highway 18 and eastern drainage swale, looking northeast from point near northern extent of Waste Management property.



3. View of field on McPhillips property, from Highway 18.



4. View of field on McPhillips property, from Highway 18.



5. View of field on McPhillips property, from Highway 18.



6. Highway 18 and eastern drainage swale, looking northeast from point adjacent to McPhillips property.



7. View of Highway and Masonville Road, looking southwest.



8. Candlestick flare brought to the site because the site's enclosed flare is down for maintenance. The flame is somewhat visible above the unit.



9. Relocation of waste along north slope. This is being done partly for construction of the north access road and partly to accommodate the revised grades associated with the northern portion of the MSE berm.



10. Another view of north slope of landfill.



11. Wattle (netting filled with mulch) to block sediment and reduce velocity of stormwater. As shown, some sediment is passing under the wattles. The contractor plans to replace these with aggregate (rock) check dams. These will therefore be replaced with aggregate (rock) check dams.