



COMMONWEALTH of VIRGINIA

Molly Joseph Ward
Secretary of Natural Resources

DEPARTMENT OF ENVIRONMENTAL QUALITY

Blue Ridge Regional Office
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David K. Paylor
Director

Robert J. Weld
Regional Director

December 5, 2017

Mr. Clarke Gibson
Region 2000 Service Authority
361 Livestock Road
Rustburg, Virginia 24588

NO DEFICIENCY LETTER

Re: Region 2000 Livestock Road Regional Landfill - Campbell Co. VA – SWP610
Unannounced Compliance Inspection

Dear Mr. Gibson:

On November 8, 2017, staff from the Virginia Department of Environmental Quality's Blue Ridge Regional Office conducted a compliance inspection of the solid waste management facility operating under SWP610. During this inspection, the facility was evaluated for compliance with the Virginia Waste Management Act, Va. Code § 10.1-1400 *et seq.* ("Act"), the Virginia Solid Waste Management Regulations, 9 VAC 20-81-10 *et seq.* ("Regulations"), and SWP610.

During the inspection, no apparent violations of the Act, Regulations, or SWP610 were observed. A copy of the inspection checklist is enclosed.

If you have any questions, please contact me at (540) 524 - 8221 or Douglas.Foran@deq.virginia.gov.

Sincerely,

Doug Foran
BRRO Solid Waste Inspector

Copy: Robert Arthur, Region 2000
ECM – SWP610



Compliance Inspection Report

Inspection Summary

Facility: Region 2000 Regional Landfill - Livestock Rd Fac

Permit: SWP610

Region: Blue Ridge

Inspection Type: Compliance Evaluation Inspection

Facility Staff: Greeted by Clarke Gibson, Director of Solid Waste and Licensed Landfill Operator, and Robert Arthur, Environmental Compliance Coordinator and Licensed Landfill Operator. Inspection conducted with Mr. Arthur.

Other DEQ Staff: Gregory Adamson (Solid Waste Inspector), Priscilla Fisher (Compliance Coordinator)

Comments: DEQ inspector conducted inspections of both SWP610 Livestock Road SLF (active) and SWP558 Concord Turnpike SLF (post-closure care). Departed sites after completing both inspections at 4:10 pm.

Inspector: Douglas Foran

Inspection Date: 11/8/2017

Approximate Arrival Time: 9:15 am

Inspection Method: Unannounced

Exit Interview: Yes

Weather Conditions: Weather Rain – Wind 5 mph from NE – 41 F – 96% humidity – BP 30.17

The inspection report covers both Phase III, which has reached final elevation and is near capacity, and Phase IV, which began receiving waste on August 22, 2017.

Sanitary Landfill (Active)

Reference	Description	SL	Result
Compliance Area: Operator Information			
10.1-1408.1	Disclosure Statement	I	✓
10.1-1408.2	Operator Certification	II	✓
Compliance Area: Recordkeeping, Reporting & Permit			
20-81-80	Waste Assessment Program	II	
20-81-100.B	Compliance with the facility's permit	II	✓
20-81-100.E	Unauthorized waste program and inspection	II	✓
20-81-140.A.16	Facility self inspections	I	✓
20-81-140.A.17	Record maintained of waste received and processed	I	✓
20-81-485	Operations Manual	II	✓
20-81-530	Permittee recordkeeping and reporting	II	✓
Compliance Area: Design, Construction & Operation			
20-81-130	Facility design / construction	I	✓
20-81-140.A.1,4	Safety and fire control	II	✓
20-81-140.A.6	Pollutant discharge	III	✓
20-81-140.A.7	Stormwater control system maintenance	II	✓
20-81-140.A.8,14-15	Facility operation, maintenance, and training	II	✓
20-81-140.A.9-13	Hazard and nuisance control	I	✓
20-81-140.B	Compaction, cover & working face	I	✓
20-81-610-660	Special Waste	II	✓
Compliance Area: Closure & Post-Closure Care			
20-81-160	Closure requirements	II	
20-81-170	Post-closure care requirements	II	
Compliance Area: Decomposition Gas Control			
20-81-200.A,B,E	Decomposition gas concentrations, monitoring & recordkeeping	II	✓
20-81-200.C	Decomposition gas-remediation	III	
20-81-200.D	Decomposition gas-odor management	I	✓

Compliance Area: Leachate Control			
20-81-210	Leachate control	II	✓
Compliance Area: Groundwater Monitoring			
20-81-250	Groundwater monitoring program	II	
20-81-260	Corrective action program	II	
Compliance Area: Landfill Mining			
20-81-385 & 395	Landfill Mining	II	

SL = Severity Level ✓ = In Compliance X = Alleged Violation N/A = Not Applicable Blank = Not Inspected

General Comments

Reference	Comments												
20-81-100.B	<p>Compliance with the facility's permit - Item 1 (Update to Item 1 on the August 11, 2017 inspection report) – The facility continues to maintain the Posi-Shell application to the northern and western side slopes of Phase III waste cell for odor control. Some minor rill erosion damage related to the recent installation of additional gas extraction wells was observed. Mr. Arthur explained the damage will be repaired and Posi-Shell will be reapplied to these areas.</p> <p>Item 2 - Permit Module II, Section II.C states that the landfill is limited to a daily disposal limit of 2,580 tons/day. The facility provided the following total monthly tonnage and daily average tonnages for August through October 2017.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: left;">Month.....</td> <td style="text-align: left;">Daily average tonnage</td> <td style="text-align: left;">Total monthly tonnage</td> </tr> <tr> <td>Aug.</td> <td>652.19</td> <td>17,608.19</td> </tr> <tr> <td>Sept.</td> <td>662.44</td> <td>17,223.34</td> </tr> <tr> <td>Oct.</td> <td>641.88</td> <td>16,688.71</td> </tr> </table>	Month.....	Daily average tonnage	Total monthly tonnage	Aug.	652.19	17,608.19	Sept.	662.44	17,223.34	Oct.	641.88	16,688.71
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20-81-100.E	<p>Unauthorized waste program and inspection - 100.E.1 - The facility posted its operating hours at the front gate. A sign identifying unauthorized wastes is posted prior to the scale house.</p> <p>100.E.5 - Sufficient random load inspections were documented to meet the 1% requirement for August through October 2017.</p> <table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: left;">Month.....</td> <td style="text-align: left;">Inspections conducted.....</td> <td style="text-align: left;">Loads received</td> </tr> <tr> <td>Aug.</td> <td>50.....</td> <td>3756</td> </tr> <tr> <td>Sept.</td> <td>47</td> <td>3490</td> </tr> <tr> <td>Oct.</td> <td>45.....</td> <td>3517</td> </tr> </table>	Month.....	Inspections conducted.....	Loads received	Aug.	50.....	3756	Sept.	47	3490	Oct.	45.....	3517
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20-81-140.A.16	<p>Facility self inspections - The facility performed monthly self-inspections for August, September, and October 2017. Inspection reports were reviewed and were complete.</p>												
20-81-485	<p>Operations Manual - The facility was reminded during the inspection that it must review, update (if necessary), and certify its Operations Manual on or before December 15, 2017. The previous certification statement was dated December 15, 2016 and signed by Clarke Gibson, P.E.</p>												
20-81-530	<p>Permittee recordkeeping and reporting - 530.B All required records were maintained at the facility and available to the DEQ staff at the time of the inspection.</p> <p>530.C.3 - As requested by DEQ on September 29, 2016, the facility provided 24 hour and 5 day notifications for significant breakdowns of the odor management system.</p> <p>On September 28, 2017, the facility provided a 24 hour verbal notification, and written notification by email, that the Odor Boss Canon (portable misting system) failed. The email detailed plans for repairs. The unit was returned to service on October 4, 2017.</p> <p>On August 29, 2017, the facility provided a 24 hour written notification by email that the Odor Boss Canon (portable misting system) was down. The unit was returned to service later that day.</p> <p>No additional notifications were made.</p>												
20-81-130	<p>Facility design / construction - 130.B – Unauthorized after-hours access to the facility is prevented by a gate (equipped with an electric motor and keypad), fencing and natural barriers.</p>												
20-81-140.A.1,4	<p>Safety and fire control - 140.A.1 – Safety meeting records for August 17, through November 2, 2017 were reviewed. Records included the materials presented, and sign-in sheets, which listed the meeting's topic, date, instructor, location and attendees.</p> <p>140.A.4 – No indication of open burning of waste was found.</p>												
20-81-140.A.6	<p>Pollutant discharge - An unnamed tributary of Tussocky Creek is located between the SWP610 Livestock Rd. SLF, owned by Region 2000, and SWP285 Campbell Co. Closed SLF, owned by Campbell County, VA. During the inspection, no indication of solid waste from SWP610 impacting the tributary was found.</p>												
20-81-140.A.7	<p>Stormwater control system maintenance - Stormwater controls were observed to be in place and in good repair. The facility completed excavating sediment buildup in the sediment basin prior to the underdrain. The main sediment basin for the facility, which receives flow from the underdrain and the stormwater system, appeared to have little sediment buildup. Ditch lines around the waste cell were generally clear of sediment and check dams to slow stormwater flow were installed. No indications of stormwater flow bypassing the stormwater system were found.</p>												

20-81-140.A.8,14-15	<p>Facility operation, maintenance, and training - 140.A.15 – Sufficient equipment and trained operators were present at the facility. A Cat D-6 dozer and an Aljohn compactor were in operation at the active working face. A second Aljohn compactor was available for use. Operators were stockpiling soil from the on-site borrow area at the working face using an off-road dump truck and a Cat 973 track loader. The facility's excavator and a Cat 963 track loader were down for repairs and service. The facility's service truck was available for use. The Posi-Shell sprayer was at the working face. The facility's water truck was available for use.</p>
20-81-140.A.9-13	<p>Hazard and nuisance control - 140.A.9 - Weekly litter cleanup was documented for August, September, and October 2017. The facility has purchased and is assembling new portable litter fencing which can be moved from place to place at the facility.</p> <p>140.A.10 - Odors and vectors – No vector issues were noted.</p> <p>In addition to the odor management systems and practices in place, the facility completed the final lift on Phase III. The western section of the Phase III cell, nearest Poplar Ridge sub-division is at final elevation. The facility moved the active working face to Phase IV. (See additional comments under 20-81-140.B.1.a - Compaction, cover & working face.)</p> <p>The following ongoing odor control mechanisms and procedures were observed:</p> <p>1 - Active gas extraction system (Initiated August 2, 2016) - The high capacity blower/flare was in operation at the time of the inspection. Six additional gas extraction wells were added to Phase III after the waste cell reached capacity. Mr. Arthur informed the inspector that the new wells are in operation and being adjusted to balance the entire gas extraction system.</p> <p>2 - Posi-Shell/Interim odor control/ Daily Cover (Initial application June 16, 2016) –Facility employees continue maintenance and reapplication of the material as needed. The Posi-Shell cover over the intermediate cover did need reapplication in one area following the installation of additional gas extraction wells on the Phase III waste cell.</p> <p>3 - Odor Boss Canon (Portable misting unit - Initiated March 25, 2016) - The portable unit was in operation and located near the active working face in Phase IV. Facility staff notified DEQ on November 1, 2017, that they intend to winterize the unit (drain and take out of service) to prevent damage during the winter months. The unit will be brought back into service when freezing temperatures end in the spring of 2018.</p> <p>4 - Byers Vapor System (Stationary perimeter system - Initiated March 16, 2016) - The system was operational along the western (Poplar Ridge) and southern (facing Colonial Highway) cell slopes. An extension to this system to cover approximately 800 feet of the boundary of Phase IV is planned to be installed in late 2017.</p> <p>5 - Leachate Cleanout Landfill Gas System/Flare (Initiated June 15, 2015) - The system, which draws LF gases from the leachate collection system and burns them off through the facility's updated blower/flare system, was in operation. Piping and connections to the leachate collection system were intact.</p> <p>6 - WWTP Sludge (Initiated June 18, 2015) - The practice of elevating the pH level of WWTP sludge received by the facility has continued. Sludge loads are sprayed with a deodorizer before being placed in the active working face. WWTP sludge generated by the City of Lynchburg is divided between the Region 2000 SLF, the Amelia SLF, and permitted land applications. The facility plans to temporarily discontinue spraying the sludge with the water based deodorizing spray during the winter months, due to the equipment's tendency to freeze and burst lines. The practice will resume in the spring of 2018.</p> <p>140.A.13 - Internal roads were well maintained and allowed access to all active areas of the facility.</p>
20-81-140.B	<p>Compaction, cover & working face - The inspector discussed maintaining a three day soil stock pile near to, or easily accessible to, the active working face to address after-hours fire control with Mr. Arthur. The facility already maintains a soil stockpile near the working face for daily cover and was in process of hauling additional soil from the on-site borrow area to the stockpile at the time of the inspection. The facility appears to maintain a stockpile that addresses this concern.</p> <p>140.B.1.a – The working face was located along the northern edge of Phase IV. Phase III is complete, with very limited space left facing Phase IV. This remaining area on Phase III is on the eastern section, which is the greatest distance from the Poplar Ridge sub-division. Waste, in the Phase IV active cell, was spread into a thin layer and lightly compacted into place with track equipment. Compaction was minimal due to this being the first lift of waste placed in the cell (fluff layer) to protect the gravel drainage layer, leachate collection system, and liner.</p> <p>140.B.1.b – The Phase IV fluff layer lift appeared to be approximately 6-8 feet thick.</p> <p>140.B.1.c – Soil and Posi-Shell are used for daily cover. A soil cover was applied over the area where waste was placed in Phase IV, with the exception of the active working face and toe of the waste which sets on the gravel drainage layer. Soil only daily cover continues to be applied over the weekend. Some exposed waste was observed along the toe of the fluff layer where it meets the gravel drainage layer. Further discussion with facility staff indicates approximately 18 inches of waste is not covered with soil in areas where the soil would spill over onto the gravel drainage layer. This is to prevent clay soil particles or the bentonite component of Posi-Shell from clogging the gravel drainage layer which could prevent leachate from reaching the leachate collection system.</p> <p>140.B.1.d – Intermediate cover was in process of being completed on Phase III. This included removing and covering flagging waste. The installation of the six additional gas extraction wells on the side slopes of Phase III disrupted some cover and seeding. Mr. Arthur explained that the application of intermediate cover and seeding were ongoing and would be completed now that work in the area was finished.</p> <p>140.B.2 – The active working face was reasonably sized for the volume of waste received.</p> <p>140.B.4 – No unauthorized waste was observed in the working face.</p> <p>140.B.5 – No white goods were observed in the working face.</p>
20-81-610-660	<p>Special Waste - 620 - Asbestos containing material (ACM) - Region 2000 Special Waste Disposal Request forms for receiving ACMs and other special waste were reviewed for August, September, and October 2017.</p> <p>640 - Tire management - No tires were hauled since the load documented on April 7, 2017. The facility contacted DEQ in regard to utilizing tires to hold down a rain covering for the Phase IV waste cell prior to construction of the waste cell. With Phase IV in</p>

	<p>operation, tires are beginning to be pulled from the rain cover which over time will create a significant number of tires onsite for disposal. The facility should keep the number of tires onsite below its permitted limit once the tires are no longer in use on the rain cover.</p> <p>650 - White goods management – No metals were hauled since the June 20, 2017 load.</p>
20-81-200.A,B,E	<p>Decomposition gas concentrations, monitoring & recordkeeping - 200.A – Fourth quarter 2017 landfill gas (LFG) monitoring was conducted on October 17, 2017. No exceedances of the lower explosive limit (LEL) or levels reaching the 80% action level for methane were reported at gas boundary probes. No methane gas levels were reported requiring action at the facility's scale house or maintenance building.</p> <p>200.B - The gas monitoring network was observed on August 11, 2017.</p> <p>200.E – The fourth quarter monitoring report was reviewed at the facility's office. All required information was included.</p>
20-81-200.D	<p>Decomposition gas-odor management - 200.D.1 – The facility follows the updated Odor Management and Control Plan (OMCP), dated June 17, 2016. The updated OCMP replaces the previous November 10, 2011 plan. Odor control strategies are given in Section 3.0 through 3.9 – Strategies for Controlling Odors.</p> <p>200.D.2 – Section 5.0 of the updated OMCP states that documentation of odor complaints will be maintained and will be available for authorized officials. During the inspection, DEQ staff reviewed the facility's odor complaint log for August, September, and October 2017.</p> <p>Month ... Number of complaints Aug 15 Sept. 9 Oct. 6</p> <p>The facility continues to follow up on odor complaints. The complaints documented by the facility closely match the complaints received and logged by DEQ.</p>
20-81-210	<p>Leachate control - The facility provided the Leachate Flow Meter Readings chart for December 2016 to October 31, 2017.</p> <p>No leachate outbreaks were observed at the active waste cell or in the area around the leachate tank and pumping station.</p> <p>Leachate is hard piped through a pumping station from the leachate holding tank to the Campbell County Utility Service Authority sewer system to the City of Lynchburg Regional WWTP.</p>

Disclosure Statement Details

Key Personnel	Title
Clarke W. Gibson	Director of Solid Waste
Dianne D. Dodd	Region 2000
Elliott L. Inge	Environmental Technician
Felicia D. West	Region 2000
Gary Christie	Region 2000
Kenneth Jarman	Working Field Supervisor
Larry P. Hall	Operations Manager
Robert Arthur	Environmental Compliance and Safety Manager

Disclosure Statement Last Updated: 7/17/2017

Waste Management Facility Operators

Licensed Operator	License #	Expiration Date
Clarke Gibson	4605003027	11/30/2017
Diane Dodd	4605002034	8/31/2018
Elliott Inge	4605002580	7/31/2019
Kenneth Jarman	4605002635	11/30/2017
Larry P. Hall	46050020133	12/31/2018
Robert Arthur	4605002613	3/31/2018

PLEASE advise the Regional Office within 10 calendar days if any information noted in this report is incorrect, if you have taken appropriate action to meet compliance, or if there is other information that the department should consider regarding any alleged violations.

PLEASE be advised that this report is not an agency proceeding or determination which may be considered a case decision under the Administrative Process Act (VA Code 2.2-4000 et seq). If informal discussions do not lead to a satisfactory conclusion on the contents of this report, you may request in writing that DEQ take all necessary steps to issue a final decision or fact finding under the APA on whether or not a violation has occurred.