



# COMMONWEALTH of VIRGINIA

Molly Joseph Ward  
Secretary of Natural Resources

## DEPARTMENT OF ENVIRONMENTAL QUALITY

Blue Ridge Regional Office  
3019 Peters Creek Road, Roanoke, VA 24019  
(540) 562-6700; Fax (540) 562-6725  
[www.deq.virginia.gov](http://www.deq.virginia.gov)

David K. Paylor  
Director

Robert J. Weld  
Regional Director

June 28, 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  
Solid Waste Permit - SWP610

Dear Mr. Gibson:

On May 31, 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.

The 120 day extension to the initial demonstration period for the application of Posi-Shell to control landfill odors has expired. The facility's evaluation of the Posi-Shell as alternate intermediate cover was received on June 19, 2017, and is under review.

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

Sincerely,

A handwritten signature in blue ink, appearing to read "Doug Foran".

Doug Foran  
BRRO Solid Waste Inspector

Copy: Robert Arthur, Region 2000  
ECM – SWP556



# Compliance Inspection Report

## Inspection Summary

**Facility:** Region 2000 Regional Landfill - Livestock Rd Fac

**Inspector:** Douglas Foran

**Permit:** SWP610

**Inspection Date:** 5/31/2017

**Inspection Type:** Compliance Evaluation Inspection

**Approximate Arrival Time:** 8:55 am

**Facility Staff:** Robert Arthur, Environmental Compliance Coordinator and Licensed Landfill Operator, Larry "Buzz" Hall, Operations Manager and Licensed Landfill Operator, and Kenneth "Jamie" Jarman, Licensed LF Operator

**Inspection Method:** Unannounced

**Exit Interview:** Yes

**Weather Conditions:** Sunny - 69 F - Winds NW 5 mph - BP 30.06 - The facility received approximately 3.7 inches of rainfall the week prior to the inspection.

**Other DEQ Staff:** Jenny Poland (Permit Writer), Stephanie Bowman (Stormwater Inspector)

**Comments:** A multi-media solid waste/stormwater inspection was conducted. Stephanie Bowman, DEQ Stormwater Inspector, conducted a stormwater inspection concurrent with Mr. Foran's solid waste management facility inspection.

Jenny Poland, BRRO Permit Writer, attended as part of the solid waste inspection team.

## Sanitary Landfill (Active)

Reference	Description	SL	Result
<b>Compliance Area: Operator Information</b>			
10.1-1408.1	Disclosure Statement	I	✓
10.1-1408.2	Operator Certification	II	✓
<b>Compliance Area: Recordkeeping, Reporting &amp; Permit</b>			
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	✓
<b>Compliance Area: Design, Construction &amp; Operation</b>			
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	✓
<b>Compliance Area: Closure &amp; Post-Closure Care</b>			
20-81-160	Closure requirements	II	
20-81-170	Post-closure care requirements	II	
<b>Compliance Area: Decomposition Gas Control</b>			
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	✓
<b>Compliance Area: Leachate Control</b>			
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	N/A

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

### General Comments

Reference	Comments												
20-81-80	Waste Assessment Program - The facility's 2016 SWIA report was submitted on March 14, 2017. DEQ accepted the report within the required time frame.												
20-81-100.B	<p>Compliance with the facility's permit - Item 1 – The Certificate to Operate for the Phase IV waste cell was issued on April 17, 2017.</p> <p>Item 2 - On December 13, 2016, the facility requested, and was granted, an additional 120 days to evaluate the effectiveness of the Posi-Shell application to side slopes of the Phase III waste cell to assist in controlling landfill gases and odors. The purpose of the application was to aid in preventing landfill gases from escaping through the intermediate cover of the waste cell and assist in directing the gases toward the active gas extraction system wells. DEQ approved the 120 day extension on January 11, 2017. At the time of the current inspection, the 120 extension had expired. The facility's engineering consultant submitted a report to DEQ reviewing the findings of the demonstration period on June 19, 2017. The report is titled Evaluation of Alternate Intermediate Cover Materials for Odor Mitigation, dated June 12, 2017.</p> <p>Item 3 - 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 February through April 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>Feb. ....</td> <td>601.88 .....</td> <td>14,445.14</td> </tr> <tr> <td>Mar. ....</td> <td>632.26 .....</td> <td>17,071.02</td> </tr> <tr> <td>Apr. ....</td> <td>627.84 .....</td> <td>15,695.79</td> </tr> </table>	Month.....	Daily average tonnage.....	Total monthly tonnage	Feb. ....	601.88 .....	14,445.14	Mar. ....	632.26 .....	17,071.02	Apr. ....	627.84 .....	15,695.79
Month.....	Daily average tonnage.....	Total monthly tonnage											
Feb. ....	601.88 .....	14,445.14											
Mar. ....	632.26 .....	17,071.02											
Apr. ....	627.84 .....	15,695.79											
20-81-100.E	<p>Unauthorized waste program and inspection - The facility posted its operating hours at the front gate. A sign identifying unauthorized wastes is posted prior to the scale house.</p> <p>Sufficient random load inspections were documented to meet the 1% requirement for February through April 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>Feb. ....</td> <td>43.....</td> <td>3196</td> </tr> <tr> <td>Mar. ....</td> <td>48 .....</td> <td>3716</td> </tr> <tr> <td>Apr. ....</td> <td>43.....</td> <td>3183</td> </tr> </table>	Month.....	Inspections conducted.....	Loads received	Feb. ....	43.....	3196	Mar. ....	48 .....	3716	Apr. ....	43.....	3183
Month.....	Inspections conducted.....	Loads received											
Feb. ....	43.....	3196											
Mar. ....	48 .....	3716											
Apr. ....	43.....	3183											
20-81-140.A.16	Facility self inspections - The facility performed monthly self-inspections on February 28, March 22, April 21, and May 26, 2017. A quarterly inspection was conducted on May 26, 2017 as well.												
20-81-140.A.17	Record maintained of waste received and processed - The facility creates tickets for individual waste loads and maintains monthly records of waste types and tonnages.												
20-81-530	<p>Permittee recordkeeping and reporting - All required records were maintained at the facility and available to the DEQ staff at the time of the inspection.</p> <p>As requested by DEQ on September 29, 2016, the facility is providing 24 hour and 5 day notifications for significant breakdowns of the components of the odor management system. On April 28, 2017, the facility provided a 24 hour verbal notification that the active gas extraction system blower/flare failed. A follow up notification was provided on May 2, 2017, (within 5 days) when repairs to the unit were complete. No additional notifications were made.</p>												
20-81-130	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.												
20-81-140.A.1.4	Safety and fire control - 140.A.1 – Safety meeting records for February 16, through May 25, 2017 were reviewed. Records included the materials presented, and sign-in sheets which listed the meeting's topic, date, instructor, location and attendees. 140.A.4 – No indication of open burning of waste was found.												
20-81-140.A.6	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. No surface water monitoring of the tributary is required in regard to the operation of SWP610. Surface water sampling is conducted for SWP285. The August 30, 2016 CASE Report (Revised) for SWP285, Appendix A.33, states: "No GPS exceedances were identified in the surface water samples for the current case period".												

20-81-140.A.7	Stormwater control system maintenance - A DEQ stormwater inspection was conducted concurrently with the solid waste inspection. Comments regarding the facility's stormwater system will be addressed in a separate report filed by DEQ's stormwater section.
20-81-140.A.8,14-15	Facility operation, maintenance, and training - 140.A.15 – Sufficient equipment and trained operators were present at the working face. A 963 Cat track loader, off-road dump truck, and the facility's excavator were applying additional soil daily cover to the rainy day area at the eastern end of the waste cell. The active working face was located at the west end of the waste cell. An Aljohn compactor and an additional track loader were in operation at the active working face. A rubber tired loader with the Posi-Shell sprayer attached was also at the working face in addition to a service truck.
20-81-140.A.9-13	<p>Hazard and nuisance control - 140.A.9 - Weekly litter cleanup was documented for February, March, April and May 2017.</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 had moved to bring the western section of the LF cell, nearest Poplar Ridge sub-division, to final elevation and continue proceeding east across the Phase III waste cell away from the sub-division. (See additional comments under 20-81-140.B.1.a - Compaction, cover &amp; working face.)</p> <p>The following ongoing odor control mechanisms and procedures were observed:</p> <p>Active gas extraction system (Initiated August 2, 2016) - The high capacity blower/flare was in operation at the time of the inspection. The facility notified DEQ by email on November 21, 2016, that the new system was in operation. This system collects gases through a series of gas collection wells drilled into the waste cell on the northern and southern slopes of the cell and collects gas through the Leachate Cleanout Landfill Gas System. Pumps to extract water from the gas extraction wells were also installed.</p> <p>Posi-Shell/Interim odor control/ Daily Cover (Initial application June 16, 2016) – The reapplication of Posi-Shell to the north and west slopes of Cell 3, that was completed on November 22, 2016, appeared to be holding up better than the previous initial application. Facility employees have taken over maintenance and reapplication of the material as needed. (See additional inspection report comments regarding the demonstration period under 20-81-100.B - Compliance with facility's permit.)</p> <p>Portable misting canon (Initiated March 25, 2016) - The large portable unit was in operation and located at the SW corner of the LF at the time of the inspection. This location directs deodorizing spray toward Poplar Ridge sub-division and Calohan Rd.</p> <p>Perimeter vapor system (Initiated March 16, 2016) - The system was operational along the western (Poplar Ridge) and southern (facing Rt. 24 - Colonial Highway) cell slopes. The inspector checked for vapor discharge at the beginning and end of the pipeline. The vapor was discharging at both locations. The housing containing the reservoir for the liquid vapor agent and the blower system were replaced on beginning April 28, 2017 and went back into operation the following day. The facility notified DEQ of the completion of the replacement on March 29, 2017. The unit was off-line less than 24 hours.</p> <p>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. The gases the system collects are burned through the active gas extraction system flare.</p> <p>WWTP Sludge (Initiated June 18, 2015) - The practice of elevating the pH level of WWTP sludge received by the facility has continued. This process was initiated to assist in controlling odor. Received 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.</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 &amp; working face - 140.B.1.a – The working face was located on the top lift of the western portion of Phase III. The current lift will bring the waste to its final elevation. The lift will move east away from the Poplar Ridge sub-division and Calohan Rd. The facility had used the rainy day area the week prior to the inspection due to heavy rainfall. Waste was spread into a thin layer over the active working face and compacted into place.</p> <p>140.B.1.b – Lifts appeared to be approximately 10 feet in height. The facility's LF compactor is equipped with GPS equipment to provide constant monitoring of the waste cell's elevation.</p> <p>140.B.1.c – Soil and Posi-Shell are used for daily cover. A soil only daily cover is applied over the weekend. Posi-Shell has a deodorizing agent included.</p> <p>140.B.1.d – Intermediate cover had been applied to slopes of the waste cell.</p> <p>140.B.2 – The active working face appeared to be 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 – One refrigerator was recovered from a load at the time of the inspection. The refrigerator was not placed in the working face. The unit was set off to the side of the working face area until operators could determine if it still contained refrigerant.</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 February, March and April 2017.</p> <p>640 - Tire management - As noted in previous inspection reports, tires had been stockpiled on site for use as anchors for the rain covering for the Phase IV cell. At the time of the current inspection, these tires were placed in a grid pattern on the Phase IV rain cover for that purpose.</p> <p>Six loads of tires were hauled to Emanuel Tire from April 5 to April 7, 2017. The total tonnage for the six loads was 32.35 tons.</p> <p>650 - White goods management – No metal was hauled for recycling since October 5, 2016. Most metal appears to be brought to the Campbell Co. Convenience Center that operates at the gate of the LF which is operated by the County.</p>
20-81-200.A,B,E	<p>Decomposition gas concentrations, monitoring &amp; recordkeeping - 200.A – Second quarter 2017 landfill gas (LFG) monitoring was conducted on May 9, 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.E – The second 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.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 February through May 2017.</p> <p>Month ... Number of complaints  Feb . . . . . 5  Mar . . . . . 5  Apr . . . . . 12  May . . . . . 3</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 April 30, 2017.</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> <p>No leachate outbreaks were observed at the active waste cell or in the area around the leachate tank and pumping station.</p>
20-81-250	<p>Groundwater monitoring program - During the inspection, new groundwater monitoring wells (MW)-12 (upgradient), MW-19 (downgradient) and MW-22 (downgradient) were observed. According to Permit Module X – Detection Groundwater Monitoring - these wells were to be installed prior to Phase IV accepting waste. Permit Module X was last reviewed as part of Permit Modification No. 2, approved October 26, 2015.</p> <p>MW-12, 19 and 22 were observed to be stable, with each having an intact concrete apron pad, and secured with a lock. Identification numbers had not been applied to the monitoring wells at the time of the inspection. However, Mr. Arthur forwarded pictures of the newly numbered wells on June 2, 2017, showing identification numbers were added to each new monitoring well.</p>

**Disclosure Statement Details**

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

Disclosure Statement Last Updated: 3/31/2017

**Waste Management Facility Operators**

Licensed Operator	License #	Expiration Date
Clarke Gibson	4605003027	11/30/2017
Diane Dodd	4605002034	8/31/2018
Elliott Inge	4605002580	7/31/2017
Kenneth Jarman	4605002635	11/30/2017
Larry P. Hall	46050020133	12/31/2016
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.