



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182

[denr.sd.gov](http://denr.sd.gov)

August 20, 2015

Ron Olson, Street and Sanitation Superintendent  
City of Mitchell  
612 North Main Street  
Mitchell, SD 57301

Re: Inspection of the Mitchell Solid Waste Facility

Dear Mr. Olson:

On July 28, 2015, I conducted an inspection of the Mitchell Solid Waste Facility (permit number 11-27) with your assistance. The purpose of this inspection was to review operation and maintenance of the facility and determine if the operation of the facility is in compliance with South Dakota solid waste disposal rules and the city of Mitchell's solid waste permit.

The inspection of the facility showed that the operation and maintenance of the site is acceptable and in compliance with South Dakota solid waste laws and rules and the permit conditions. If you have any questions, or if you would like to discuss the contents of the inspection report, please do not hesitate to contact me at (605) 773-3153.

Sincerely,

Steven Kropp, P.E.  
Waste Management Program

Enclosure

**SD DEPARTMENT OF ENVIRONMENT AND NATURAL RESOURCES**  
**Waste Management Program**  
**Solid Waste Facility Inspection Report**

Inspector/Region: Steven Kropp, Pierre  
Inspection Date: July 28, 2015  
Site Name: City of Mitchell Solid Waste Facility (Closed MSWLF & Permitted Restricted Use Facility)  
City: Mitchell  
County: Davison  
Directions to Site: 2 miles east of Mitchell  
Legal Description: Portions of Section 25 and Section 26, Township 103 North, Range 60 West  
Contact's Name and Title: Ron Olson, City of Mitchell Street and Sanitation Superintendent  
Jay Tollefson, City of Mitchell Landfill Manager  
Address: 612 North Main Street, Mitchell, SD 57301  
Phone Number: (605) 995-8465  
Permit Number: 11-27  
Expiration Date: October 26, 2016  
Date of Last Inspection: July 10, 2014  
Type: General / **Individual** Type IIB

---

General Description of Operation: The city of Mitchell's solid waste facility is permitted to accept trees, tree branches, and untreated wood for burning. Construction and demolition (C&D) debris and other non-putrescible wastes are accepted for disposal. Lime sludge from the city's water treatment plant may also be accepted for burial. The facility is permitted to accept up to 24,999 tons of solid waste per year.

Run-on/Run-off Controls: The topography of the site slopes to the north towards Dry Run Creek which flows along the north side of the permitted boundary of the facility. A 100-yr floodplain has been delineated through a portion of the permitted area of the facility. The operator cannot dispose of solid waste in this area and the operations of the facility cannot restrict the flow of a 100-yr flood event. The operator has berms around the disposal area to manage storm water run-on and runoff.

Burning Procedures/Frequency: The operator does not burn trees, tree branches, and untreated wood at the facility.

Access Controls: The facility is fenced on the west, south and east sides of the site. The north side of the site is boarded by Dry Run Creek which acts as a natural barrier. There are two lockable gates located on the east side of the site and on South Dakota Highway 38 that provide additional access control.

Posted Information at Site: This facility is not open to the public. The site is only open when the operator is actively using it; therefore minimal signage is needed to be posted at the facility. There is a sign posted at the gate along South Dakota Highway 38 that states that the landfill is closed, directions to the open Mitchell landfill and the telephone number for the Mitchell landfill.

Unauthorized Waste: No unauthorized wastes were observed at the facility at the time of the inspection.

Records: The operator maintains records on each load of material brought to the facility. The records state the date the materials were brought, quantity of material and city project's name. The operator disposed of 105 tons of wastes in 2014 and 150 tons so far this year. Mr. Olson provided documentation that showed that the wastes that are predominately disposed of at this facility are tree stumps and concrete waste from city projects. Mr. Olson said that Mr. Tollefson inspects the facility one to two times per month and documents those inspections in a logbook kept at the Mitchell landfill.

Handling Procedures:

a. miscellaneous waste: C&D debris and tree stumps are buried on the east side of the facility in an area that was previously used as a borrow area. Lime sludge has been historically disposed of in an area between the previously closed C&D disposal area and the post-1993 municipal solid waste (MSW) disposal area.

b. closed landfill: The post-1993 MSW disposal area had an alternative final cover system installed on it in 2009. The MSW disposal area was certified closed on February 23, 2010 at which time the 30-yr postclosure care period began. The vegetative cover is well established over the former MSW disposal area. The grass was three to four feet tall at the time of the inspection. As part of the monthly inspections, the leachate level in the leachate manhole is measured. The operator provided documentation that showed that leachate was pumped out of the manhole on May 30, 2014, September 16, 2014 and June 9, 2015. The leachate was disposed of at the Mitchell wastewater treatment facility. The operator

maintains financial assurance to cover the postclosure care costs for the landfill. The calculated accrued liability for the remaining postclosure care period has been calculated as \$500,000 through the end of 2014. As of December 31, 2014 the operator had \$566,702.13 set aside in its postclosure care fund.

- c. methane gas monitoring: The operator has hired Leggette, Brashears & Graham (LBG), Inc. to perform the required quarterly methane gas monitoring at the closed landfill. LBG, Inc. performs methane gas monitoring in all of the ground water monitoring wells and structures. A review of the 2014 methane gas testing results showed that methane gas was not detected at any location during the 2014 sampling events.
- d. ground water monitoring: The operator has hired LBG, Inc. to perform the required ground water monitoring at the site. LBG, Inc. submitted the required 2014 annual report to this office on March 24, 2015. This office has not yet completed its review of this report.

Improvements Needed to Comply with Regulations: None at this time.

This Facility is Designed, Constructed and Operated in a Manner that is:  
**Acceptable** / conditionally acceptable / unacceptable

---

Signature  Date Aug 20, 2015

Inspection photos from the Mitchell Solid Waste Facility – July 28, 2015



This photo shows the primary access road leading to the site with an informational sign posted at the gate.



Close-up photo showing some of the C&D debris that's been disposed of at the facility in 2015.



Panoramic photo of the south end of the C&D disposal area looking north towards Dry Run Creek. No unauthorized wastes were observed during the inspection.



This photo shows a typical section of the vegetated final cap over the central part of the site. View is looking west across the site. The primary access road is visible in the left hand side of the photo.



This photo shows a portion of the capped post-1993 MSW disposal area. View is looking NW towards the storm water retention pond.



This photo shows the quartzite rip-rap lined storm water let down structure between the pre-1993 MSW disposal area (on left) and the post-1993 MSW disposal area (at right).



This photo shows the leachate loadout piping extending from the leachate manhole. The operator periodically pumps out the leachate and disposes it at the Mitchell wastewater treatment facility.



DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES

JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182

[denr.sd.gov](http://denr.sd.gov)

August 20, 2015

Ron Olson, Street and Sanitation Superintendent  
City of Mitchell  
612 North Main Street  
Mitchell, SD 57301

Re: Inspection of the Mitchell Municipal Solid Waste Landfill

Dear Mr. Olson:

On July 28, 2015, I conducted an inspection of the Mitchell Municipal Solid Waste Landfill (permit number 12-02) with the assistance of Jay Tollefson. The purpose of this inspection was to review operation and maintenance of the landfill, and determine if the operation of the landfill is in compliance with South Dakota solid waste disposal rules and the city of Mitchell's solid waste permit.

The inspection of the landfill showed that the operation and maintenance of the landfill is acceptable and in compliance with South Dakota solid waste laws and rules and the permit conditions. If you have any questions, or if you would like to discuss the contents of the inspection report, please do not hesitate to contact me at (605) 773-3153.

Sincerely,

A handwritten signature in blue ink that reads "Steven Kropp".

Steven Kropp, P.E.  
Waste Management Program

Enclosure

**South Dakota Department of Environment and Natural Resources  
Waste Management Program  
Municipal Solid Waste Landfill Inspection Report**

Facility Owner: City of Mitchell Date of Inspection: July 28, 2015  
Address: 612 North Main Street, Mitchell, SD 57301 County: Davison  
Contact's Name, Title & Telephone #: Jay Tollefson, Landfill Manager, (605) 995-8448  
Ron Olson, Street & Sanitation Supt., (605) 995-8465  
Date of Last Inspection: July 28, 2015 Permit #: 12-02 Type of Facility: IIA  
Tonnage received in 2014: 29,288 tons of MSW and 64 tons of C&D debris  
Tonnage received Jan. – June 2015: 13,663 tons of MSW and 10 tons of C&D debris  
Tipping Fee: \$39/ton MSW & Rubble; \$20/ton for trees

**Narrative**

On July 28, 2014, I met with Jay Tollefson (Tollefson) and Ron Olson (Olson) at the Mitchell landfill. Tollefson accompanied me during the inspection. We began the inspection by reviewing solid waste operations and reviewing the records and documentation required by the operator's solid waste permit. We then traveled around the landfill where we observed the various waste storage and disposal areas and discussed solid waste handling and disposal practices for these areas. We returned to the scale house where we further discussed solid waste operations and permit requirements. Pictures were taken during the on-site inspection and are attached to this report.

**Design Standards (ARSD 74:27:12)**

1. South Dakota Highway 37 passes one and one-half miles west of the landfill. The primary access road (257<sup>th</sup> Street) to the landfill is a blacktop paved road that leads from the highway to the landfill. The operator maintains this road. The on-site roads at the landfill are well maintained. Tollefson stated that there are no problems with access to the lined municipal solid waste (MSW) disposal area during inclement weather conditions.
2. There are signs posted at the entrance to the landfill and at the scale house with the following information: name of the landfill, phone numbers for the landfill and street & sanitation department, days and hours of operation, emergency contact information, landfill tipping fees and the requirement that all incoming loads must be secured. There are signs posted around the landfill showing where the various waste disposal and storage areas are located.

3. Access to the landfill is controlled by the use of fencing, lockable gates at the main entrance to the landfill, and natural topography. The operator uses portable litter fences at the face of the MSW unloading area, fixed fencing around the MSW disposal area and around the perimeter of the landfill to help control litter.
4. The landfill has been designed to divert normal surface water flow and storm water runoff away from the active fill area. Surface water is directed away from the MSW disposal area by perimeter ditches and storm sewer piping along with natural topography. Surface water is stored in a storm water pond located in the southwestern corner of the site. The storm water pond has a culvert with a vertical slide gate so that the operator can manually drain the storm water pond into the constructed wetlands located south of the storm water pond. Tollefson stated that the landfill has not discharged any storm water from the pond so far this year. The landfill employees make periodic inspections of the water level in the storm water pond. The operator does have a storm water discharge permit for the storm water pond through the Surface Water Quality Program (SD00B408).

### **Facility Operation (ARSD 74:27:13)**

1. The landfill is only open when there are adequate supervisory and operational personnel at the landfill. The landfill employs four full-time employees. The landfill has an adequate scale that is located south of the scale house. The operator has the scale certified annually by the South Dakota Department of Public Safety – Weights and Measures Program. The Weights and Measures Program last certified the scale in September 2014.
2. Tollefson said that the landfill staff typically tries to maintain a working face that's 75 feet wide by 75 feet long. The operator spreads the waste in lifts that are no more than two feet in thickness. The compactor operator makes an average of three to five passes over the waste to ensure the waste is sufficiently compacted. Tollefson said that the landfill compactor has a Global Positioning System (GPS) installed in it. The GPS system is designed to help the compactor operator determine when the MSW is adequately compacted. Tollefson said the GPS system as of late has not been operating correctly.
3. The operator uses a spray-on alternative daily cover material (Posi-Shell) to cover the wastes at the end of the working day. The operator uses soil once per week as cover to meet a permit condition that requires soil to be used once per week as cover. The operator is permitted to use petroleum contaminated soil (PCS) as daily cover. No vector issues were noted at the time of the inspection.
4. The landfill uses 30 portable litter fences at the working face and fixed litter fences around the MSW disposal area and the perimeter of the landfill to help control litter. There were a few pieces of litter noted in the portable litter fences and outside of the MSW disposal area. No litter was observed outside of the permitted boundary. The solid waste permit for the landfill requires the operator to perform at least daily litter pickup. Tollefson stated that the landfill employees perform daily litter pickup at the landfill. In addition, the Mitchell Street and Sanitation Department's collection workers also help pick up litter. The operator also picks up litter along 257<sup>th</sup> Street to South Dakota Highway 37 to the edge of Mitchell city limits.

5. In the past, the operator burned trees, tree branches, and untreated wood as needed. The operator now stockpiles the clean wood waste south of Cell #2. There's one large pile of trees and branches and another large pile of pallets and untreated wood. The operator has an agreement with Mueller Pallet to have them come to the landfill and grind the clean wood waste for recycling/reuse. Last year, Mueller Pallet ground and hauled away 1,655 tons of clean wood waste. Oversized tree trunks that cannot be ground are hauled to the Mitchell restricted use facility for disposal.
6. The operator accepts a number of special wastes for disposal or temporary storage and future recycling. The landfill will accept pesticide containers from the public for disposal. The operator requires the pesticide containers be triple rinsed and punctured prior to acceptance at the landfill for disposal. Tollefson stated that the landfill receives very few pesticide containers anymore due to the SD Department of Agriculture's pesticide container cleanup program. The operator does accept PCS for disposal. The operator's permit has a variance in it that allows the landfill to accept PCS for use as daily cover or direct disposal provided that the PCS is not a hazardous waste. The landfill does accept regulated asbestos containing wastes for disposal. The regulated asbestos containing waste is buried with MSW in the lined disposal area and its location and elevation is mapped by the operator's engineering department. The operator does accept dead animals for disposal at the landfill. The dead animals are mainly small household pets and small roadkill animals. The dead animals are disposed of directly in the active fill area and covered with MSW immediately.
7. The landfill accepts materials that could go to a restricted use facility for disposal. The landfill buries these materials with MSW in the lined disposal area. The landfill does accept lead-acid batteries from the public for temporary storage and future recycling. Batteries are picked up for recycling by German Auto, Dimock, SD. The landfill does not accept waste oil from the public. The landfill refers the public to local businesses that will accept waste oil from the public. The landfill stores the waste oil that it generates in a 260-gallon tank, and the tank is clearly labeled as waste oil. The operator has LubeTech Liquid Recycling from DeSmet, SD, pick up the waste oil for recycling.
8. The landfill accepts appliances that contain refrigerants for temporary storage and recycling. The landfill has staff that is certified to remove the refrigerants from the appliances. The operator temporarily stores the refrigerants on-site. The operator periodically takes the refrigerants to Johnstone Supply, Sioux Falls, SD, for recycling. The operator has H&R Salvage come to the landfill and they recycle the appliances, white goods, and other salvageable metal the landfill collects. The operator accepts waste tires for temporary storage. The operator has New Deal Tire, LLC of Groton, SD, pick up the waste tires for processing. New Deal Tire was most recently at the landfill in February to pick up waste tires. The operator's permit allows the landfill to dispose of quartered/shredded tires within the lined MSW disposal area. The landfill disposed of 83.6 tons of shredded tires in 2014 and 34 tons so far this year. The operator does accept yard waste from the public for composting. The composting area is located west of the scale house and has been constructed with a recycled asphalt/concrete base. The composting area has been designed to control surface water run-on and runoff. Surface water that comes into contact with yard waste is handled as leachate and is directed to a storage pond located west of the

composting area. The operator has the finished compost tested and registered with the SD Department of Agriculture.

9. The operator conducts random inspections of incoming waste loads to ensure no unauthorized wastes are being disposed of at the landfill. Landfill personnel are also trained to recognize hazardous or suspicious wastes. The load inspection sheet includes information as to the date of the inspection, vehicle identification, materials noted in the load, whether any additional action was taken and locations for the landfill employee and hauler to sign the inspection sheet. Two landfill employees are Manager of Landfill Operations certified through the Solid Waste Association of North America. The landfill employees periodically have personnel and safety training with other city of Mitchell employees as well as attending SD Solid Waste Management Association meetings where additional training opportunities exist. All newly hired employees are trained on landfill operations.
10. The operator maintains computerized tonnage reports. A copy of the 2014 and the 2015 Jan. - June tonnage reports were provided by the operator and are attached to this inspection report. Dependable Sanitation, Aberdeen, SD, offers recycling services to the city of Mitchell. Dependable Sanitation collected approximately 1,061 tons of recyclable material in 2014. The Mitchell Street Department recycles asphalt and concrete. Other recycling and reduction efforts are done at the county and local levels. The operator updated the Source Reduction and Recycling Plan for the landfill as part of the 2011 permit renewal application.
11. The operator's engineering department performs fill progression survey calculations at the landfill. The operator maintains copies of past permit applications, permits, plans and specifications and other required information at the scale house and the Mitchell Street and Sanitation Department.
12. Leachate from the lined MSW disposal is collected in a subsurface collection system which pipes the leachate to the Mitchell wastewater treatment facility for disposal. The treatment facility is adjacent to the landfill on the north side of the permitted boundary of the landfill. During the first six months of this year, the landfill has sent 944,192 gallons of leachate to the Mitchell wastewater treatment facility. Last year the landfill sent 1,935,336 gallons of leachate. The operator has the leachate tested twice per year as part of the landfill's monitoring plan. In addition, the wastewater treatment facility tests the landfill leachate twice per year.
13. The operator has hired Leggette, Brashears and Graham (LBG), Inc., to perform ground water monitoring and methane gas testing at the landfill. A review of the quarterly methane gas testing results for 2014 showed that methane gas was not detected anywhere at the landfill.

### **Closure and Postclosure (ARSD 74:27:15)**

The operator reviews and updates the closure and postclosure plans every year. A review of the closure and postclosure plans showed that the plans were adequate and in compliance with state rules.

**Financial Assurance (ARSD 74:27:16)**

There is a written estimate for closure and postclosure costs in the file. The operator updates the closure and postclosure costs every year. The estimated total cost calculated for closure and postclosure is \$1,756,185. The accrued liability for the landfill through 2014 was calculated as \$338,081.87. As of December 31, 2014, the operator had set aside \$349,522.69 for closure and postclosure costs. The financial assurance mechanism for the closure and postclosure accounts is adequate and in compliance with the rules.

**Transportation (ARSD 74:27:17)**

There is a sign at the entrance to the landfill referencing a city ordinance (City Ordinance #1981, Section 30-23) that requires all incoming loads to the landfill must be secured to prevent littering. The transporter of an unsecured load is fined \$10.

**Ground Water Monitoring (ARSD 74:27:19)**

The operator has hired LBG, Inc., to perform ground water monitoring for the landfill. LBG submitted the required annual report of statistical analysis for the 2014 ground water monitoring data for the landfill on March 3, 2015. This office has not yet reviewed the 2014 annual report.

**FACILITY RATING**

Operations at the Mitchell Municipal Solid Waste Landfill are deemed: **Acceptable**

Signature of Inspector: Steven Koff Date: Aug. 20, 2015

Inspection photos from the Mitchell Landfill – July 28, 2015



This photo shows the main gate and signage posted at the entrance to the landfill.



This photo shows the roll-off container used to temporarily store white goods and other recyclable metals. The container is located just north of the scale house.



This photo shows the landfill's waste tire stockpile. The operator has New Deal Tire, LLC come periodically to the landfill to pick up the waste tires.



This photo shows the yard waste composting area. The operator had a number of windrows of yard waste in various stages of maturity. The large windrow in the right hand side of the photo is a pile of finished and screened compost.



This photo shows the landfill's storm water detention pond located in the southwestern part of the site. The operator can manually drain the pond into the constructed wetlands located south of the pond.



This photo shows the landfill's stockpile of wood pallets. The operator stockpiles pallets separately from other clean wood waste. Mueller Pallet comes periodically to grind the wood waste for recycling.



This photo shows the untreated wood waste stockpile. Untreated wood waste is stockpiled west of the wooden pallet stockpile area.



This photo shows the compactor operator spreading and compacting MSW in the lined disposal area. The operator has placed the portable litter fences downwind of the working face.