



**DEPARTMENT of ENVIRONMENT  
and NATURAL RESOURCES**

PMB 2020  
JOE FOSS BUILDING  
523 EAST CAPITOL  
PIERRE, SOUTH DAKOTA 57501-3182

denr.sd.gov

July 11, 2013

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 June 26, 2013, I conducted an inspection of the Mitchell Municipal Solid Waste Landfill (permit number 12-02) with your assistance. 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: June 26, 2013  
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: Nov. 13, 2012 Permit #: 12-02 Type of Facility: IIA  
Tonnage received in 2012: 36,392 tons of MSW and 60 tons of C&D debris  
Tonnage received Jan. – May 2013: 12,163 tons of MSW and 16 tons of C&D debris  
Tipping Fee: \$39/ton MSW & Rubble; \$20/ton for trees

**Narrative**

On June 26, 2013, I met with Jay Tollefson and Ron Olson at the Mitchell landfill. Mr. Tollefson and Mr. Olson accompanied me during the inspection. We began the inspection by traveling around the landfill where we observed the various waste storage and disposal areas and discussing solid waste handling and disposal practices for these areas. We then went to the scale house where we further discussed solid waste operations and reviewed records and documentation required by the operator's solid waste permit. We also discussed the plans to construct cell #3 next year. 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. Mr. Olson 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 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. 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). At the time of the inspection there was about one foot of water in the pond. The previous inspection noted that the pond was dry.

### **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 certified the scale in October 2012.
2. The operator typically maintains a working face and unloading area that was 60 feet wide by 100 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.
3. The operator uses a spray-on alternative daily cover material 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 also uses petroleum contaminated soil (PCS) as an alternative daily cover material. 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 landfill to help control litter. There were a few pieces of litter noted in the shelter belt along the east side of the facility. No litter was noted outside of the permitted boundary of the site. The solid waste permit for the landfill requires the operator to perform at least daily litter pickup. Mr. 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 and 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. The operator has an agreement with Mueller Pallet to have them come to the landfill and grind the clean wood waste for recycling/reuse. Mueller Pallet arrived earlier in the

week and was in the process of grinding the landfill's clean wood waste. Mr. Olson said that oversized tree trunks that cannot be ground will be 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. Mr. Tollefson stated that the landfill receives very few pesticide containers anymore due to the SD Department of Agriculture's pesticide 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 asbestos for disposal. The asbestos 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 T.J.'s Oil Service, Sioux Falls, 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 refrigerant 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 operator accepts waste tires for temporary storage. The operator historically hauled the waste tires to New Deal Tire, Groton, SD, for processing. The operator's permit allows the landfill to dispose of quartered/shredded tires within the lined MSW disposal area. The operator had Standing Rock Sanitation come in January 2013 to chop up the landfill's stockpile of waste tires. The chopped waste tires were buried in the lined disposal area. The operator plans on having Standing Rock Sanitation come back this fall to process the landfill's waste tire stockpile. 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 uses a misting system on the edge of the storage pond to help reduce the amount of compost leachate being stored in the pond.

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. Mr. Olson is 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 2012 and the 2013 Jan. - May 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 1,056 tons of recyclable material in 2012. 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. 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 2012 showed that methane gas was not detected anywhere at the landfill.

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

The operator updated the closure and postclosure plans when the solid waste permit renewal application was submitted in 2011. 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 updated the closure and postclosure costs in 2011. The estimated total cost calculated for closure and postclosure was \$1,487,420. The accrued liability for the landfill through 2012

was calculated at \$233,317.65. As of December 31, 2012, the operator had set aside \$235,550 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 and Assessment Monitoring (ARSD 74:27:19 & 20)**

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 2012 ground water monitoring data for the landfill on March 28, 2013. This office has not yet reviewed the 2012 annual report. In anticipation of cell 3 construction and the future destruction of well MW-5s, the landfill's ground water monitoring plan was revised on January 24, 2013. Monitoring well MW-7s was added to the approved monitoring plan for the landfill as a replacement well for MW-5s.

### **FACILITY RATING**

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

Signature of Inspector:  Date: July 11, 2013

Inspection photos from the Mitchell landfill – June 26, 2013



Photo showing the main entrance leading to the landfill along with some of the informational signs posted.



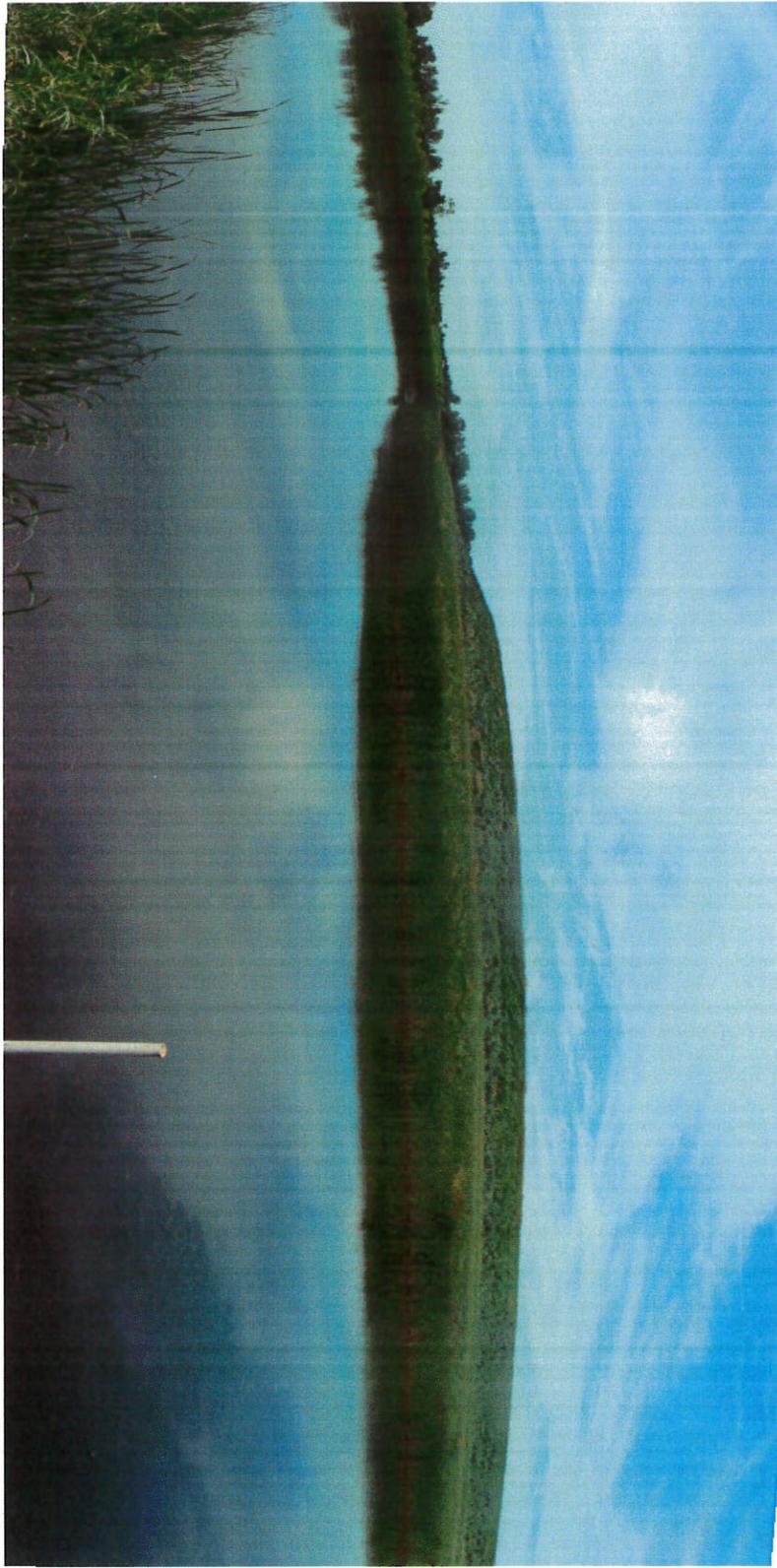
Photo of the white goods and salvageable metal storage area located north of the landfill's scale house/equipment building.



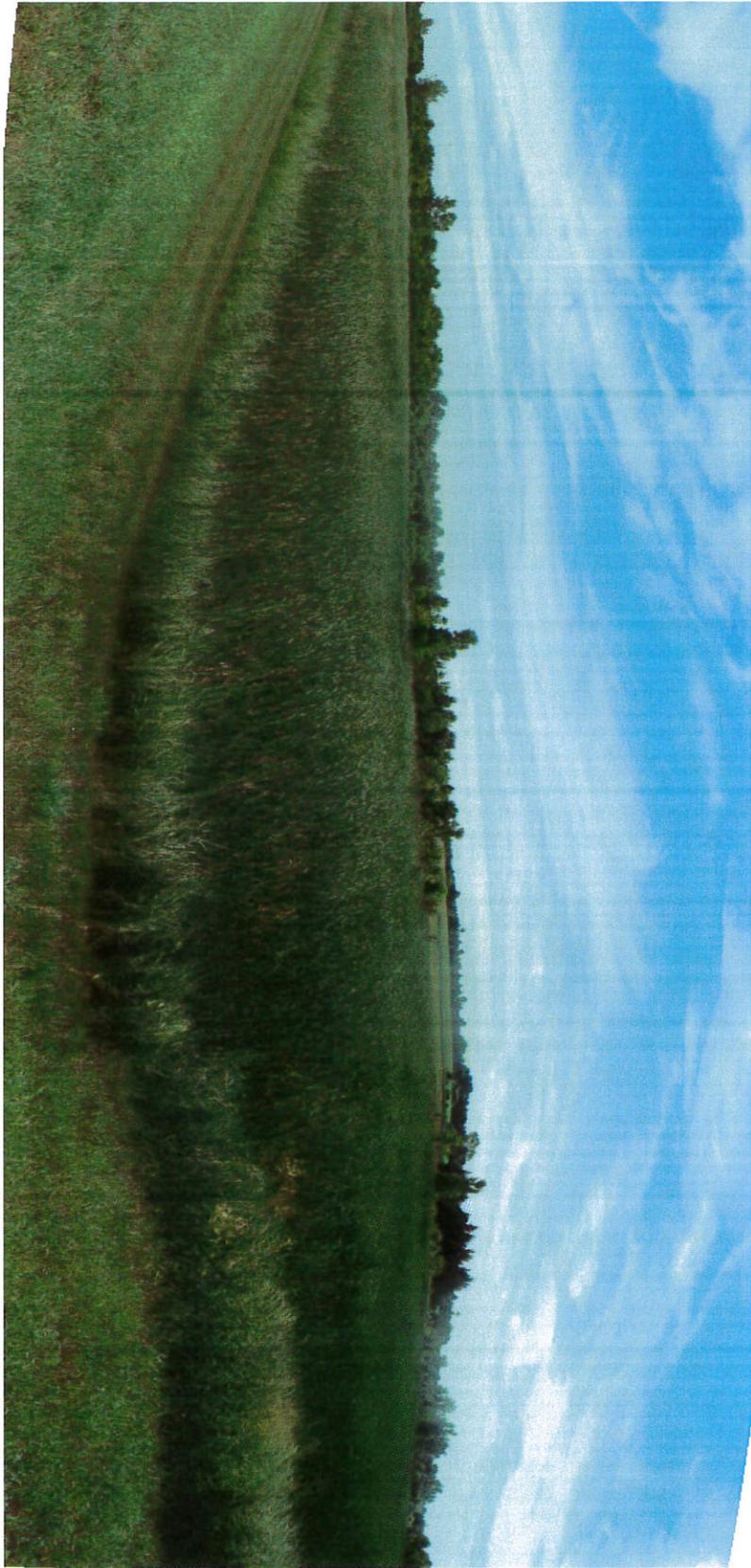
Photo of the landfill's waste tire stockpile located west of the landfill scale house. The operator had Standing Rock Sanitation come earlier this year to the landfill to chop the landfill's waste tires. The shredded tires were disposed at the landfill.



Photo of the yard waste composting operation at the landfill. The composting area is located west of the waste tire storage area.



Panoramic photo showing the landfill's storm water pond located in the southwestern portion of the site.



Panoramic photo of the constructed wetlands located south of the storm water pond.



Photo showing Mueller Pallet grinding trees and branches at the landfill.



Photo of the landfill's stockpile of pallets waiting to be ground by Mueller Pallet.



Photo showing the landfill's lift station and pumping equipment located north of the lined MSW disposal area. The landfill leachate is pumped to the Mitchell wastewater treatment facility for disposal.



Photo of the active unloading area and working face at the landfill. The operator has arranged portable litter fences downwind of the working face to help control windblown litter.

Date 06/27/13  
Time 07:35:04

City of Mitchell, SD

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### Material Analysis Report by Material

Inbound materials only for the period 01/01/2012 - 12/31/2012  
Summary Report for Sites: 1, 2, 3

Accounts 0 - 999999 Customer Types - Z Materials - ZZZZZZZZZZ Material Types - Z

Date	Material	Type	Customer	Type	Tickets	Count	Est. vol.	Act. Vol.	Est. Wt.	Actual Wt.	Charge
		Total			1	0	0	0	0.00	0.00	0.00
		Average				0	0	0	0.00	0.00	0.00
	LATE CHG	Total			42	0	0	0	0.00	0.00	917.19
		Average				0	0	0	0.00	0.00	21.84
	ADJ	Total			21	0	0	0	0.00	0.00	6,735.47
		Average				0	0	0	0.00	0.00	320.74
	ASB	Total			3	0	25	25	0.01	0.00	348.40
		Average				0	8	8	0.00	0.00	116.13
	C&D	Total			22	0	119500	0	59.75	59.75	2,353.01
		Average				0	5432	0	2.72	2.72	106.96
	C-COUPON	Total			3226	0	0	0	0.00	0.00	-28,864.59
		Average				0	0	0	0.00	0.00	-8.95
	COMPOST	Total			1536	0	2726540	0	1363.27	1363.27	0.00
		Average				0	1775	0	0.89	0.89	0.00
	CSOIL	Total			13	0	578620	0	289.31	289.31	3,181.37
		Average				0	44509	0	22.25	22.25	244.72
	D-COUPON	Total			170	3	0	0	0.00	0.00	-1,522.77
		Average				0	0	0	0.00	0.00	-8.96
	METAL	Total			53	0	20520	0	10.26	10.26	382.20
		Average				0	387	0	0.19	0.19	7.21
	MSW	Total			14293	0	72783140	0	36391.57	36391.57	1,280,328.28
		Average				0	5092	0	2.55	2.55	89.58
	SLUDGE-DRY	Total			56	0	0	0	496.90	496.90	0.00
		Average				0	0	0	8.87	8.87	0.00
	TIRES/BULK	Total			73	1	82360	0	41.18	41.18	7,704.08
		Average				0	1128	0	0.56	0.56	105.54
	TIRES/PASS	Total			120	371	6600	0	3.30	3.30	1,156.40
		Average				3	55	0	0.03	0.03	9.64