

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

Facility Owner: Brown County Date of Inspection: April 16, 2008
Address: P.O. Box 2137, Aberdeen, SD 57402 County: Brown
Contact's Name, Title & Telephone #: Mike Scott, Landfill Manager, (605) 626-4019
Date of Last Inspection: Sept. 13, 2007 Permit #: 02-19A (permit in renewal) Type of Facility: IIA
Tonnage received in 2007: 40,651 tons MSW & 25,262 tons rubble
Tipping Fees: \$36 / ton MSW & \$12 or \$18 per ton rubble

Narrative

On April 16, 2008, I met with Mike Scott, landfill manager for the Brown County landfill at the landfill. Mr. Scott accompanied me during the inspection. We began the inspection by reviewing the records and documentation required by the operator's solid waste permit. We then traveled around the landfill where we observed the various temporary storage and waste disposal areas and discussed the solid waste handling and disposal practices of these areas. We then went to the west half of the site to observe the additional geotechnical and hydrological work that's being done to complete the site characterization for this area to determine if it can be used for municipal solid waste (MSW) disposal. We returned to the landfill office where we further discussed solid waste operations, leachate management, and wetland mitigation. Pictures were taken during the on-site inspection and are attached to this report.

Design Standards (ARSD 74:27:12)

1. There is a blacktop road leading from the entrance of the landfill south to US Highway 12. This is the primary access road to the landfill. The on-site roads at the landfill are well maintained and are suitable for all-weather travel by vehicle traffic. The operator has provided roll-off boxes near the scale house that can be used by the public during inclement weather conditions. Landfill employees transport the roll-off boxes to the active fill area where the waste is unloaded. The operator also has a hoop-barn structure for commercial haulers to use during inclement or windy weather conditions. The hoop-barn structure is located west of the MSW fill area and it can hold three days worth of MSW.
2. There are signs posted at the entrance to the landfill with the following information: name of the landfill, name and phone number of the manager, days and hours of operation, and other required information. Information about the tipping fees charged at the landfill is available at the scale house. There are signs posted around the landfill for the various temporary waste storage and waste disposal areas. Access to the landfill is controlled by the use of fencing and a lockable gate at the main entrance. The main gate is locked when the facility is closed.

3. The operator uses portable litter fences at the face of the MSW unloading area to help control litter. Also, there are semi-fixed litter fences within the MSW disposal area, as well as fixed litter fences around the lined MSW disposal area and the perimeter of the landfill.
4. The operator has an area south of the scale house that is well organized to temporarily store various wastes for future recycling. The operator has temporary storage areas for yard waste, waste tires, white goods and salvageable metals, used oil, paint, batteries, propane tanks and antifreeze. The landfill has the required personnel facilities and equipment located in the landfill maintenance building and at the scale house.
5. Surface water is diverted around the active fill area by a series of open earthen ditches and culverts to a storm water pond located south of the active fill area. There is another storm water pond located in the south central portion of the permitted area that also collects storm water runoff. The operator has obtained a storm water discharge permit (SDR00B097) through the Surface Water Quality Program in the event that a discharge is necessary from the storm water pond.

Facility Operation (ARSD 74:27:13)

1. The landfill employs five full-time employees. The landfill is only open when there are adequate supervisory and operational personnel at the landfill. The landfill has an adequate scale that is located south of the scale house. The landfill has the scale certified annually by the South Dakota Department of Public Safety – Weights and Measures Program. The South Dakota Department of Public Safety – Weights and Measures Program last certified the scale on October 11, 2007.
2. The operator typically maintains a MSW working area that is approximately 100 feet long by 75 feet wide. The operator spreads the waste with a bulldozer in lifts that are no more than two feet in thickness. The MSW compactor operator typically makes five to seven passes over the MSW to ensure the waste is sufficiently compacted.
3. The operator uses a spray-on alternative daily cover material, petroleum-contaminated soil (PCS) or a wood chip and soil mixture to cover the MSW at the end of the working day. The operator uses soil as cover at least weekly to meet a permit requirement that requires soil to be used once per week as cover. The operator uses soil more frequently as daily cover during inclement weather conditions.
4. The operator uses propane powered gas cannons, screamers, and bangers as the primary means of discouraging seagulls. The landfill also uses an electronic distress call system near the working face to discourage the presence of starlings and seagulls away from the working face. There were quite a number of seagulls present at the landfill at the time of the inspection. No other vectors were noted at the landfill at the time of the inspection.
5. The operator's solid waste permit requires that the operator perform at least daily litter pickup at the landfill. Mr. Scott stated the landfill employees perform daily litter pickup at the landfill. Mr. Scott said that the landfill also uses inmates from the Brown County jail to help pick up litter at the landfill on an as needed, as available basis. The landfill

employees also use a Mad Vac to help pick up litter at the landfill. The landfill uses about 30 portable litter fences at and around the working face, semi-fixed litter fences within the MSW disposal area and fixed litter fences around the permitted area of the landfill and the lined MSW disposal area to help control litter at the landfill. The area had high winds the day before and the day of the inspection. There was litter noted outside of the lined MSW disposal area and along the north side of the permitted area of the landfill. Mr. Scott stated that four inmates from the Brown County jail were assisting the landfill staff in picking up the litter at the landfill at the time of the inspection.

6. The operator accepts a number of special wastes for disposal or temporary storage and future recycling. The operator does accept PCS for treatment and disposal. The operator's permit was amended in 2007 to allow the landfill the option of using PCS as daily cover or directly disposing of PCS into the lined MSW disposal area regardless of contamination level provided the PCS is not a hazardous waste. Mr. Scott said that the landfill has been using the PCS that it receives as daily cover on the interior slopes of the landfill.
7. The landfill does accept asbestos for disposal. The operator disposes of the asbestos in a separate bermed area. The operator accepted 281 bags of asbestos for disposal in 2007. The operator does accept dead animals for disposal at the landfill. The dead animals mainly come from a local fur and trapping company. The dead animals are disposed of in the MSW disposal area.
8. The landfill accepts materials that could go to a restricted use facility for disposal. The landfill operates a separate disposal area that is located southwest of the MSW disposal area. The only types of materials allowed to be disposed of in this area are small loads of concrete, brick, asphaltic concrete, painted and stained wood, attached insulation and similar wastes. The operator periodically uses the landfill compactor to compact these wastes. The operator tracks the loads of restricted use type materials mixed with MSW. These loads are disposed of in the lined MSW disposal area. The landfill accepts lead-acid batteries from the public for temporary storage and future recycling. The batteries are stored in a plastic containment basin. The containment basin offers protection in the event a lead-acid battery leaks. The operator has Mardian's in Aberdeen come to the landfill to pick up the lead-acid batteries for recycling. Mardian's hauled 12 tons of batteries from the landfill in 2007. The landfill also accepts waste oil from the public. The waste oil is stored in three 400-gallon tanks and the tanks are labeled as waste oil. The Brown County Highway Department periodically comes to the landfill to pump out the waste oil. The Brown County Highway Department burns the waste oil at the county maintenance shop as a source of fuel.
9. The landfill accepts appliances and white goods that contain refrigerants for temporary storage and recycling. The operator has Brick's TV & Appliance Repair come to the landfill to remove the refrigerants from the white goods. The operator has Mardian's of Aberdeen come to the landfill to pick up the white goods and other salvageable metal for recycling.
10. The operator accepts yard waste from the public for composting. The composting area has berms built to control storm water run-on and runoff. The operator places the yard waste in windrows and adds moisture to yard waste to promote composting. The finished compost is registered with the SD Department of Agriculture as a soil

amendment. Mr. Scott said that the finished compost is currently being stockpiled for use in closing the MSW disposal area. The landfill also accepts waste tires from the public for temporary storage and future recycling. The designated waste tire storage area is located near the scale house. Mr. Scott stated that the landfill hauls the waste tires to New Deal Tire in Groton, SD.

11. The operator conducts random inspections of incoming waste loads to ensure no unauthorized wastes are being disposed of at the landfill. Landfill personnel are trained to recognize hazardous or suspicious wastes. The scale operator makes random inspections at the scale house. The operator has a mobile platform set up at the scale house so that the scale operator can make an inspection on large loads of wastes that are brought to the landfill. The scale operator makes a notation on the scale ticket that an inspection had been performed. The operator maintains a logbook on all of the waste inspections that are performed.
12. The operator conducts safety and landfill operations training meetings for all landfill employees. Mr. Scott stated that he sends the landfill employees to various SD Solid Waste Management Association meetings where additional training opportunities exist. Two of the landfill employees are SWANA certified.
13. The operator has hired Helms and Associates of Aberdeen, SD, to perform 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, Helms and Associates, and the Brown County courthouse.
14. Leachate from the lined MSW disposal area is collected in a subsurface collection system and routed to a 10,000-gallon tank. The operator periodically pumps out the leachate and recirculates the leachate over the lined MSW disposal area. The landfill recirculated approximately 380,000 gallons of leachate last year. Last week, the landfill had Superior Jetting come to the landfill to clean out the leachate collection pipes.
15. The operator hired Minnesota Valley Testing Laboratory (MVTL) of New Ulm, MN, to perform ground water monitoring and methane gas testing at the landfill in 2007. A review of the methane gas testing results for 2007 showed that methane gas was not detected at any of the monitoring locations except for the leachate pump house.

Closure and Postclosure (ARSD 74:27:15)

The operator updated the closure and postclosure plans when the operator submitted its solid waste permit renewal application in 2007. A review of the closure and postclosure plans showed that the plans were adequate and in compliance with state rules. It is anticipated that closure of the existing MSW disposal area will occur in the next few years.

Financial Assurance (ARSD 74:27:16)

There is a written estimate for closure and postclosure costs in the file. The estimated amount is \$1,563,210. As of December 31, 2007, the operator had deposited \$987,169 in certificates of deposit for closure and postclosure costs. The operator also has \$187,513 in restricted assets to fund future closure and postclosure costs. While not required by this department, the operator has also voluntarily restricted \$240,000 for potential remedial action.

Transportation (ARSD 74:27:17)

Brown County has an ordinance that requires all loads to be covered and secured. The transporter of an unsecured load is given a warning ticket for the first offense. For a second offense, the violator is turned over to the state's attorney for prosecution.

Ground Water Monitoring (ARSD 74:27:19)

The operator hired MVTL to perform ground water monitoring at the landfill in 2007. Earth Tech Inc., of Minneapolis, MN, prepared the required 2007 Annual Ground Water Monitoring Report and submitted the report to this department on April 1, 2008. This department has not yet reviewed the annual report.

FACILITY RATING

Operations at the Brown County municipal solid waste landfill are deemed: **Acceptable**

Signature of Inspector: _____ Date: _____