



NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

FACT SHEET

(Pursuant to the Solid Waste Disposal Regulations of the Nevada Administrative Code [NAC] 444.641.3[b])

Permittee Name: Lander County

Facility Name: Battle Mountain Sanitary Landfill

Permit Number: SW0909801

Description of Proposed Permit Modification

None at this time

Location Information

The subject property for the landfill expansion area is a parcel approximately 100 acres in size located in the southeast portion of Section 35, Township 32 Range 44 East, Mount Diablo Base and Meridian (M.D.B.M. The legal description for the 160-acre parcel where the existing landfill property is Section 36, Township 32 North, Range 44 East, M.D.B.M. The site property is bounded by undeveloped Federal land managed by the Bureau of Land Management (BLM) and other land owned by Nevada Land Resources. The area consists of open range land.

Proposed Action

None at this time

Facility Summary

SITE LOCATION

The landfill site is located approximately 3.5 miles southwest of the town of Battle Mountain, Nevada, and can be accessed from Highway 305.

LAND OWNER/OPERATOR

Lander County is the owner and operator of the facility.

SITE ACCESS

Access can be achieved by traveling south on Highway 305 from its intersection with Interstate 80 for roughly 2.5 miles, and from there traveling east on the landfill access road.

FACILITY CLASSIFICATION

The amount of municipal solid waste to be accepted at the site is not anticipated to exceed 20 tons per day (tpd) during the active site life.

SERVICE AREA

The site will provide disposal capacity for northern Lander County.

WASTE CHARACTERIZATION

The proposed facility will accept municipal solid waste primarily consisting of household, commercial, and light industrial waste. Hazardous wastes and liquid wastes will not be accepted at the site. Special wastes that will be received at the site will include tires, medical wastes, and dead animals. Construction and demolition waste will be received at the site and managed in a unit separate from the municipal solid waste unit in order to maximize capacity for municipal solid waste.

SEISMIC IMPACT ZONES

The proposed site is within a seismic impact zone as determined by the United States Geological Survey, Open File Report 82-1033, "Probabilistic Estimates of Maximum Acceleration and Velocity in Rock in the



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Contiguous United States." The expected maximum horizontal acceleration in lithified earth material with 90 percent probability of not being exceeded in 250 years is approximately 0.46g (46 percent of gravity).

DESIGN

The final cover design, will cap the subsurface trenches with minimal increases in overall elevation. This, coupled with the relatively flat slopes at the site, precludes the need for an engineering analysis for stability. The run-off control detention basin has been designed with an engineered fill embankment with 5H: 1V side slopes. The maximum height of the embankment is approximately 5 feet.

OPERATING HOURS

The site will be manned and open for acceptance of municipal solid waste during times established by the county. The site will be locked after hours. A sign designating the hours of operation will be posted at the gate.

EQUIPMENT

At a minimum, a small track-loader with a multipurpose bucket will be dedicated for full-time site use and will be operated by the site attendant to perform daily cover operations. The equipment and vehicles used on-site will be maintained by the site operator. Periodically, other equipment may be brought to the site to construct cells, maintain the site, or construct improvements as needed. In case of an equipment breakdown or scheduled maintenance, backup equipment will be provided by the site operator or the county road department.

CONSTRUCTION AND DEMOLITION MATERIAL

Construction and demolition material will be accepted at the site providing the waste meets the definition established by the solid waste management authority and does not contain any liquid or hazardous wastes. Construction and demolition material will be disposed of within the existing municipal solid waste cell until the existing capacity of this cell is exhausted. Upon completion, construction and demolition waste disposed of in the existing municipal solid waste cell will be capped with an interim cover layer, low-permeability infiltration layer, and erosion layer. The construction and demolition material will not be allowed to intermix directly with municipal solid waste. If large quantities of construction and demolition wastes of a combustible nature are accepted, the wastes will be cross sectioned into cells using compacted cover material to reduce the risk of accidental fires (NAC 444.652).

After the existing municipal solid waste cell is filled with construction and demolition material, a new disposal location for construction and demolition material will be constructed within the limits of existing site disturbance, or in new areas as necessary.

SPECIAL WASTES

Tires

Tires will be accepted at the site for disposal or for storage and transfer to an appropriate end use. Small quantities of tires, defined as less than ten (10) tires per lift, can be disposed of with the municipal solid waste. If ten (10) or more tires are present, they will either be disposed of with the construction and demolition material, or be buried in the municipal waste disposal area in a single layer and covered with an equal thickness of soil.

Tire stockpiles, if present, will be located in a designated area until transferred. During wet weather conditions, tire stockpiles will be covered temporarily with a tarp to prevent water from accumulating inside the tires. This will minimize conditions capable of harboring breeding mosquitoes.

Liquid Wastes

Liquid wastes will not be accepted at the site. Any hauler attempting to dispose of liquid wastes will be



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informed that liquid wastes are not accepted. Liquid wastes are defined as wastes determined to contain free-liquid as defined in NAC 444.692, subsection 4. Information will be available at the site describing acceptable disposal locations and/or practices for liquid wastes.

Used Oil

Used oil will be accepted at the Battle Mountain Landfill Expansion site under a Lander County used oil recycling program. Using grant money provided by the NDEP, Lander County will purchase appropriate used oil storage tanks, secondary containment, and miscellaneous facilities to properly store used oil. The site operator will manage the facility and will contract with an appropriate used oil hauler/used oil disposal facility to dispose of accumulated used oil.

Acceptable used oil must be free of solvents and other unrelated contaminants. The attendant will be present to inspect, test, and receive used oil. The used oil storage tanks will otherwise remain locked to prevent unauthorized disposal of used oil.

Contaminated Soil

Contaminated soil will not be accepted at the site. Any hauler attempting to dispose of contaminated soil will be informed that it is not accepted.

White Goods and Bulky Items

White goods and bulky items (e.g., large appliances, furniture, and mattresses) will be accepted at the site and will be disposed of in the construction and demolition area.

Refrigerators

Refrigerators with Freon and other Freon-containing devices will not be accepted at the site. If a refrigerator has been certified for the appropriate removal of Freon, it may be disposed with other white goods.

Dead Animals

Dead animal carcasses will be accepted at the site. A separate dead animal pit will be maintained at the site at all times. When dead animals are brought into the site, the attendant will immediately bury the animals to prevent transmission of disease.

Medical Wastes

Medical wastes will be accepted and disposed of in a cell that is separate from the currently active municipal solid waste cell. A separate portion of each municipal solid waste trench will be reserved for disposal of medical wastes. The county requests NDEP approval of disposal of medical waste. A minimum of 36 inches of cover soil will be placed immediately after disposal.

Septage and Sludge

Septage and sludge wastes will be mixed by preparing a loose soil layer bed, applying the septage or sludge waste to the bed material, mixing the solid and waste materials (to obtain a moisture limit below that for liquid waste), and incorporating the soil/waste mixture into a municipal solid waste cell or trench as a non-liquid waste. A completed disposal area will be covered with a minimum of 36 inches of compacted cover soil.

Asbestos

Asbestos-containing waste is considered a hazardous waste when friable, finely divided, or powdered. Friable means that the material can be reduced to a powder or dust under hand pressure when dry. Non-friable asbestos-containing waste will be accepted for disposal. Non-friable asbestos-containing wastes will be disposed of in a separate trench as required by NAC 444.976. The site attendant will inspect all asbestos-



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containing waste prior to disposal and will cover the waste with at least 6 inches of soil within 24 hours after disposal.

Friable asbestos-containing waste will be accepted at the Battle Mountain Landfill Expansion if properly bagged. The bags will be disposed of in the asbestos trench and covered with 6 inches of soil within 24 hours after disposal. Information will be available at the site describing acceptable practices for friable asbestos-containing waste.

SURFACE WATER RUN-ON/RUN-OFF CONTROL

The design shown on the engineering drawings in Appendix A provides control measures for surface water run-on around the perimeter of the site. The perimeter drainage system is capable of handling peak flows from the 25-year storm intensity. Run-off from the active operations area of the landfill will be contained in the on-site run-off control basin. The run-off control basin (shown on the engineering drawings included in Appendix A) is sized to accommodate the anticipated volume from the 25-year, 24-hour storm event.

The site operator will maintain all drainage features on an annual or as-needed basis. The site attendant will inspect all drainage control features after each significant storm. Should conditions warrant, the county road department will be called on-site to repair any damage to the storm drain system.

LANDFILL GAS MONITORING

Monitoring Approach

Due to arid conditions at the site it may take several years for measurable quantities of methane gas to be generated within the landfill expansion. Therefore, a phased approach to landfill gas monitoring is proposed. This approach will include in-waste monitoring to detect methane generation and, after detection of methane, implementation of perimeter monitoring.

Perimeter Monitoring

If the presence of methane gas generation is established, permanent gas monitoring wells will be installed by Lander County, around the perimeter of the site. The gas monitoring wells will be made from perforated 1-inch steel or PVC pipes. The monitoring wells will be capped at the bottom and installed in borings to a depth equal to refuse in the area adjacent to the well. The borehole annulus will be filled with gravel and the well will be extended above the ground surface. Gas flow inside the wells will be controlled by mounting a ball valve at the top of the well pipe. A typical gas monitoring well detail is shown in Figure 4.

Landfill gas monitoring will be conducted on a quarterly basis in accordance with NAC 444.667. A log book of landfill gas monitoring inspections will be kept in the gate house at all times.

Gate House Monitoring

A battery-powered methane gas detection device will be placed in the gate house to warn the attendant of methane gas accumulation. The device will be inspected and batteries checked frequently for proper operation.

LANDFILL CLOSURE DESIGN

The closure design for the Battle Mountain Landfill Expansion site has been prepared to address the requirements set forth in Nevada Administrative Codes (NAC) 444.705, 444.6891, 444.6892, 444.6893, and 444.6895. The closure has been designed by a registered professional engineer to be compatible with the site design, local topography and surface drainage, local climatology, and the planned postclosure land use of the site. Drawing 96283-04, in Appendix A, shows the preliminary closure design. The closure design also incorporates the following design objectives:



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FINAL COVER

The final cover design and construction as well as the construction and demolition pits and dead animal pits will be covered as described below upon completion of operations.

- Interim Cover Layer:

A compacted soil layer over refuse, placed during site operations, will serve as a foundation layer;

- Low Permeability Infiltration Layer:

An 18-inch minimum thickness of compacted soil overlying the interim cover layer with a maximum permeability of 1×10^{-5} centimeters per second (cm/sec); and

- Erosion Control Layer:

A 6-inch minimum thickness of soil suitable to support vegetative growth overlying the low permeability layer. During construction and development of the landfill site, approximately 8 inches of topsoil will be stripped from all affected areas and stockpiled. This material will be utilized in the erosion control layer during construction of the final landfill cover. The erosion control layer will be capable of sustaining native plant growth with minimal vegetative pre-establishment irrigation. The surface will be reseeded with a shallow-rooting native seed mix. Specifications for the type of plants and method of revegetation applied on the erosion control layer will be identified prior to closure construction.

DRAINAGE CONTROLS

The planned drainage improvements, constructed to control peak run-on flows and run-off volumes resulting from a 24-hour, 25-year storm event, will be utilized in the final closure design for the site.

SLOPE PROTECTION AND EROSION

Slope Protection

Upon completion of the final closure cap, the site will be reseeded. It is currently estimated that approximately 13.9 acres of capped expansion area will be reseeded. Any additional area disturbed by excavating the borrow source will also be reseeded after closure construction. A seed mix of native plants and grasses supplemented with non-native drought-tolerant species will be applied along with mulch and fertilizer. Irrigation to provide germination of seed and initial propagation of plant life may be necessary during the initial revegetation period. After the initial propagation of final cover vegetation, irrigation should not be necessary for the continued growth of native plants and grasses.

CLOSURE MANAGEMENT

Closure of the landfill site will be conducted in accordance with an approved final closure plan. No closure activities will proceed until the closure plan is approved by the solid waste management authority. Modifications to the closure activities described in this report or other significant changes which may impact the performance of the closure design will not be implemented without prior approval of the solid waste management authority. Closure management for the Battle Mountain Landfill will be administered by Lander County, and will be performed under the supervision of a registered engineer. Activities for closure of the landfill will be initiated no later than 30 days after the receipt of the final waste materials. Initial closure activities can include planning, design, field studies, etc. Initiation of closure construction will commence at the beginning of the dry season following receipt of the final waste at the site.

POSTCLOSURE PLAN



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A postclosure program will be implemented after closure of the landfill site to maintain and to monitor the site conditions during the period of postclosure. Periodic site inspections will be made to assess the integrity and effectiveness of the final cover. These inspections will be conducted on a quarterly basis during the initial year following completion of closure activities, and thereafter, on a yearly basis.

Document Availability

The ADMINISTRATIVE RECORD, which includes the DRAFT PERMIT, and correspondence are available for public review by appointment between 8:00 AM and 5:00 PM, Monday through Friday, at the Division offices located at: 901 S. Stewart St., Suite 4001, Carson City, NV 89701-5249.

Contact: Paul Eckert at (775) 687-9477, or by e-mail at: PEckert@ndep.nv.gov

Procedure for Public Review

Questions or comments may be submitted on or before the end of the public comment period.

In writing: Paul Eckert, P.E.
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web: [News and Public Notices](#)

The Division's Notice of Intent to approve the modified Permit for this facility, subject to the conditions contained in the Permit, will be published in a local newspaper. Additionally, the Public Notice will be mailed to interested persons on our mailing list. The Division will accept written comments on the proposed draft permit from all interested persons until the end of the public comment period.

Will there be a public hearing?

N/A

When does the comment period end?

N/A