Permittee Name: Carson City

Facility Name: Carson City Sanitary Landfill

Permit Number: SW001REV02

Description of Proposed Permit Modification
None at this time.

Location Information
The landfill is located on leased portions of BLM land, Assessor’s Parcel Numbers 008-521-20, 008-531-03 and 010-011-29. The landfill lies within portions of sections 1 and 12, Township 15 North, Range 20 East, and sections 6 and 7, Township 15 North, Range 21 East, (39 11’ 23”N latitude and 119 40’ 42” W Longitude).

Proposed Action
None at this time.

Facility Summary
Introduction
The Carson City Sanitary Landfill is located in Carson City, a consolidated municipality. The site lies at 7001 Hwy 50 East at the southern end of Flint Drive. The entire site presently consists of 172.27 acres of which 117 acres currently comprise the landfill, and 34.6 acres consists of the southern landfill subarea. The property is zoned for PR (Public Regional) and master planned as conservation reserve/public lands. The landfill is located on leased portions of BLM land, Assessor’s Parcel Numbers 008-521-20, 008-531-03 and 010-011-29. The landfill lies within portions of sections 1 and 12, Township 15 North, Range 20 East, and sections 6 and 7, Township 15 North, Range 21 East, (39 11’ 23”N latitude and 119 40’ 42” W Longitude). Adjacent properties are zoned public regional to the North, West, East, and South

Proposed Drainage System
The proposed drainage concept is to route all runoff from Areas A, B and C into a retention basin sized to contain a 24 hour, 100 year storm, at the south end of the site.

Fire Control Methods:
Burning of refuse at the CCSL is strictly prohibited. Smoking is prohibited on the landfill. However, fires can be created accidentally. All landfill employees are trained to recognize potential fire hazards and to report such to their supervisor. In the event of a fire, all landfill employees are responsible for evacuating and securing the scene. Immediate fire control measures are carried out by properly trained and equipped personnel

Special waste items accepted at the landfill and their disposal requirements are listed below:
Pesticide/Herbicide Containers (not product): Metal, plastic, or glass containers and paper and plastic sacks or bags used for pesticides/herbicides, which are empty, are suitable for disposal.

Dead Animals:
Dead animals are buried separate from the public disposal area, and are covered immediately with soil, to prevent animal scavenging.

Asbestos:
Asbestos is disposed in the Class III site. The ECA tracks all asbestos containing materials (ACM) related to building demolitions and renovations from the time of permit application to ultimate disposal, to ensure
compliance with the National Emissions Standards of Hazardous Air Pollutants (NESHAP) regulations and NAC 444.965 through 444.976. The NESHAP regulations require friable ACM to be removed by "wet method", properly contained (6 mil plastic), and labeled in accordance with EPA or OSHA requirements. These requirements in addition to NAC 444.971 (1) ensure that fibers will not be released during transport. The ECA requires all ACM (frangible or non-frangible) to be wrapped in plastic (minimum 6 mil.), and the shipment must be accompanied by a manifest issued by the ECA. Once the ACM abatement has been approved and completed, the ECA requires a minimum of 24 hours notice prior to disposal. ACM generated outside the corporate boundaries of Carson City is not manifested by the ECA and disposal at the CCSL is prohibited. The manifest contains the information listed in NAC 444.973.

**Tires:**
Tires that cannot be recycled are properly incorporated with other wastes and are placed on the ground surface or at the toe of the fill and covered with other wastes. In no case are waste tires allowed in the top four (4) feet of the final closure lift. However, waste tires are currently being segregated at the landfill gate. The collected tires are then transported by Ray's Tires to their facility in Sparks, Nevada, where they are shredded.

**Waste Engine Oils, Anti-freeze and Batteries:**
Recycling areas are provided at the landfill gate for free public disposal of waste engine oils, anti-freeze and vehicle batteries. Commercial wastes of this type are prohibited from disposal or recycling at the landfill. The used oil is picked up weekly by a licensed Oil Transporter. The landfill receives a limited amount of anti-freeze at the drop-off site and is removed on an as-needed basis. Batteries are removed from the landfill every two weeks.

**Industrial Waste:**
For the purpose of this plan, "Industrial Waste" means wastes resulting from any process of industry, manufacturing, trade or business, or from the development or recovery of any natural resource. Prior to the disposal of any industrial waste, it must first be inspected by the ECA. When applicable, the waste is sampled by the ECA. Samples are sent, under chain-of-custody, to a Nevada-certified laboratory and analyzed using the Toxicity Characteristic Leaching Procedure (TCLP) EPA Method 8240. The analytical data is then submitted to the ECA for determination as to whether the waste is acceptable. Suspect analytical data may require additional sampling.

**Liquid wastes that are found to be acceptable are handled and disposed of in the following manner:**
(1) The liquid waste hauler is directed to the designated disposal area, which is the soil borrow area in use at that time.
(2) The soil in the borrow area is scarified to a depth of 24 inches.
(3) The liquid waste is absorbed by the loosened soil as it is spread across the area.
(4) The area is then mixed with a bulldozer, adding dry soils, rendering a solid waste which is then transported to the working face and used for cover material, in combination with the alternative daily cover system.
(5) At this point the processes are repeated.

**Medical/Infectious Waste (MIW):**
For the purpose of this plan, "Medical/Infectious Waste" means waste materials derived from cultures and stocks of infectious agents and associated biological materials; pathological wastes; contaminated animal carcasses and body parts; all sharps; human blood and blood products; and by-product wastes such as, but not limited to, dressings, bedding, swabs, pads and gloves, and invasive, disposable equipment which have been, or may have been, in contact with known infectious materials. Prior to MIW being transported to the Class I landfill, the generator is required by Carson City Municipal Code Chapter 12.12.070 (Exhibit D, 1995 Landfill Operating Permit Application) to properly containerize and label the waste.
Petroleum-Contaminated Soil:
Petroleum-contaminated soil is not accepted at the CCSL if it exceeds the NDEP reportable quantity of three cubic yards, unless it is below 100 mg/kg TPH.

Dry Sludge from Wastewater Reclamation Plant (WWRP):
Dry sludge (approximately 23% solids) from the Carson City WWRP will be disposed at the CCSL Class I site by one or both of the following methods:
(1). The sludge will be deposited in the soil borrow area in use at that time, and mixed with the material being excavated. This mix will then be used as daily cover; or
(2) The sludge will be co-disposed with the municipal solid waste in the commercial disposal area. This will eliminate the general public's exposure during the initial off-loading of sludge.
(3) Any run-on storm water that would impact the soil borrow area would either be confined to that area and subsequently mixed with the borrow material or it will run-off to the established run-on/run-off retention basins.

Inert Waste Disposal:
The ECA and Capital Sanitation will monitor disposal practices at construction sites to ensure that proper source separation is achieved. An education campaign has been implemented in an effort to minimize noncompliance. In addition to inspections at the point of generation, the CCSL monitors and controls the disposal of inert wastes at the landfill, in the same manner as the commercial and public working faces. This type of waste does not contribute to a leachate problem and therefore a liner system is unnecessary. This solid waste management practice has and will dramatically extend the active life of Carson City's landfill.

In order to prevent odors, windblown material, disease vectors, scavenging and fires, the working faces (Class I and Class III) are kept at a maximum width of 150 feet, with the exception of "Free Dump Days" (6 days/year) when the Class I public face is enlarged to 250 feet to accommodate the increased traffic flow. Liquid septic waste is accepted at the Carson City WWRP and is prohibited from disposal at the landfill. The handling of other liquid wastes is described in Section IV-G, Water Monitoring Plan, 1995 Landfill Operating Permit Application.

Access to the landfill is controlled by City employees during operating hours and a night watchman during non-operating hours. All access roads are maintained to provide continuous use to the public during inclement weather. Dust is controlled with the use of a 3,000 gallon water truck, which is operated on an as-needed basis. This is complimented by the application of asphalt grindings to main haul roads on an on-going basis, as the grindings become available.

The employee facility (gate house) provides sanitary accommodations, heating and air-conditioning. CCMC 12.12, Exhibit D, 1995 Landfill Operating Permit Application, provides regulations for the operation of the landfill which are enforced by Carson City Development Services (CCDS). In particular, Chapter 12.12.100, "Operation and Maintenance," prohibits scavenging, salvaging, hazardous waste, and the control of windblown material. CCDS provides the NDEP with quarterly reports, identifying the types, sources, and quantities of solid waste received at the landfill, including Class III material. The Public Works Operations maintains the Landfill Operating Record. The Record contains information such as inspection results, water and explosive gas monitoring results, training, notification procedures, closure/post-closure plans and financial assurance.

Explosive Gas Control:
To ensure that methane gas will be detected prior to any threat to human health and safety, the following steps will be taken: Gas monitoring probes placed around facility boundary and monitored, on a quarterly basis. Gas monitoring devices placed in facility structures for continuous monitoring; and If methane gas is detected in
If excess of 25% of the LEL, the following measures will be taken:

- Take necessary steps to protect human health;
- Notify NDEP;
- Within seven (7) days of the detection, document detected levels and measures taken to protect human health, and place documentation in the operating record; and;
- Within sixty (60) days of detection, implement remediation plan, place plan in operating record and notify NDEP. The plan will describe the nature and extent of the problem and the proposed remedy.

**Description of Final Cover:**
The final cover will have a permeability less than or equal to the permeability on any bottom liner, that may be used, or natural sub soils present, or a permeability no greater than 1 x 10⁻⁵ cm/sec, whichever is less. This will be accomplished by an 18" infiltration layer. Soil for this layer will have to be imported. A sufficient layer of the imported material will be applied, that when compacted to a depth of 18" or greater, it will achieve the required permeability.

**Largest Area of the Municipal Solid Waste Landfill to Require Cover:**
The design study indicates that the largest area of the Carson City Sanitary Landfill to require cover is approximately 129 acres.

**An Estimate of the Maximum Inventory of Wastes Ever On Site over the Active Life of the Landfill Facility:**
The design study estimates the total volume of refuse at 20,640,660 compacted cubic yards.

**Identification of Equipment and Structure Removal, Decommissioning and Decontamination:**
Currently the two structures that exist at the Carson City Sanitary Landfill are a gatehouse, refuse scales and a storage shed. It is anticipated by Carson City Solid Waste Management staff that the landfill site at closure will serve as a site for a transfer station. Therefore, all equipment and structures can remain on site.

**Schedule For Completing All Closure Construction Activities Necessary To Satisfy Closure Requirements And A Description Of Steps Necessary To Close All Municipal Solid Waste Landfill Units:**
As each landfill unit is closed the following procedure will be implemented:
I. 15 days prior to closure the solid waste management authority will be notified of the unit closure and operations will submit a design.
II. Within 30 days after the landfill unit has received its final receipt of wastes, closure activities regarding final cover will begin. III. Complete closure of the unit will be completed within 180 days.
IV. After closure of the unit is completed Carson City will notify the Solid Waste Management Authority that a certificate, signed by an independent and registered professional Engineer in the State of Nevada and approved by the Solid Waste Authority verifying that closure has been completed in accordance with the Carson City Closure Plan and the notification of closure will be placed in the operating record.
V. Following closure of all landfill units, Carson City will record a notation on the deed to the facility property and notify the Solid Waste Authority that the notation has been recorded and a copy is present in the operating record.

**Post-Closure Plan Carson City Sanitary Landfill Inspection Of Landfill:**
Weekly inspections will be conducted at the landfill to determine the need for repairs. Daily inspections may be performed in the case of severe storms which may have an immediate impact on the final cover or any monitoring devices. Post-closure care will continue for a thirty-year period, beginning at the completion of closure.
Maintenance of Final Cover:
The integrity and effectiveness of the final cover will be maintained, including any repairs necessary to correct the effects of settlement, subsidence, erosion, or other events. Any repairs that are made will bring the final cover back to its original state by utilizing the proper materials to achieve the required permeability. Maintenance and repair activities will be documented and placed in the operating record. Run-on and run-off will be controlled to prevent the erosion or damaging of the final cover. This will be accomplished by a system of diversion, collection and retention, designed by a registered P.E. The design plan for this system will be submitted to the NDEP and a copy placed in the operating record.

Maintenance and Operation of Leachate Collection System:
The maintenance and operation of a leachate collection system will be performed in accordance with 258.40, if and when it becomes applicable to the Carson City Sanitary Landfill. At any time a leachate collection system becomes necessary, Carson City will submit an engineered design and operational plan to the NDEP.

Groundwater Monitoring:
Groundwater monitoring wells have been installed at the Carson City Sanitary Landfill. Carson City has implemented "detection monitoring" as set forth in 258.54, on a semiannual basis. At any time there is a statistically significant increase detected for one or more of the constituents listed in Appendix I, "assessment monitoring" will be implemented. The groundwater monitoring program will be performed in accordance with the Application to operate the Landfill.

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.
Nevada Division of Environmental Protection
Bureau of Waste Management
901 S. Stewart St., Suite 4001
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Phone: (775) 687-9477; fax: (775) 687-5856; e-mail: PEckert@ndep.nv.gov; or web: http://dev.ndep.nv.gov/posts

The Division’s Notice of Intent to approve the modified Permit for the Carson City Sanitary Landfill, subject to the conditions contained in the Permit, will be published in one or more of the local newspaper/s. 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