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DEPARTMENT OF HEALTH AND HUMAN SERVICES





Cody Phinney, MPH Administrator

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September 7, 2023

MEMORANDUM

To: Beatty File

From: Corey Creveling, Radiation Control Supervisor (A)

Subject: Beatty Inspection Summary August 28, 2023

An inspection of the Beatty Low-Level Radioactive Waste landfill (closed) was conducted on August 28, 2023, by Corey Creveling. The site is properly secured with an outside perimeter fence placed on the western and southern sides of the site. An interior boundary has been established around the entire area surrounding the cap. Caution Radioactive Materials signs are posted at the boundary to clearly mark the location of the low-level radioactive waste area. The radiological survey was performed using BNC Model SAMpack-120 with serial number BSN 120069. The survey was conducted by driving the backpack around the site boundary access roads and by walking in a grid pattern across the cap to detect radiological anomalies. None were detected. Site vehicles undergoing repair were parked in the northeast corner of the heavy equipment shop area which blocked the road preventing driving around the full perimeter but back tracking and driving to the other side of the perimeter allowed full survey completion by vehicle. Dose rate readings on the cap remain about twice background,* as measured in the background location. The top of cap was in good condition; however, the sides of the cap showed erosion following the rain event occurring August 19 – 21, 2023.

Status of Previous Inspection Items:

The markers for the trenches are not in place on the cap and will not be replaced until the completion of the next addition of material to the cap tentatively scheduled for 2027. They remain stacked off to the side of the cap, near the southwest corner. The markers were not affected by any of the erosion flow of cap materials from the rain event in August.

Site Observations:

Radiological Postings Adequate: Yes

Site Boundary and Access Road Maintained: Yes

Erosion, Fissures, Water Pooling, or Subsidence Concerns: Following the August 19 – 21, 2023 rain event. The sides of the cap show the worst of the erosion damage at the location where the East-West trenches would intersect with the North-South running trenches creating corners. The erosion flow has displaced enough material along the interior perimeter fence line running along the northern boundary, that the top of the "T" post adjacent to the formed corner is approximately 2 feet above the new ground level. Repairs are currently in the planning stage, but another rain event taking place outside of this inspection period on September 2, 2023, may impact the planned repairs. There is no indication of pooling or fissures in the top of the cap, some weeds have sprouted on the top of the cap but have not done damage to the cap and are unlikely to create a flow path for rainwater to sink into the cap more deeply.

Rain Since Last Inspection:

May - 0.00", June - 0.00", July - 0.00", August - 2.85"

Radiation Survey Results:

Instruments:

BNC Model SAMpack-120 (BSN 120069) Calibration date: Daily by self-calibration

Background Location: Between US 95 and the site, at the south-east side of the site entrance gate.

Background measurement: 14 – 26 μrem/hr Value used for twice background: 52 μrem/hr

Site Boundary Highest Measurement: Within twice background*

Cap Highest Measurement: Within twice background*

*If sustained radiation measurements are above twice background, record the measurement and identify the location. Otherwise, indicate all measurements were within twice background.

For any reading above 0.5 mrem/hr contact a supervisor or the State of Nevada Radiation Control Program Manager. (Site Stabilization and Closure Plan Closure Plan for Low-Level Radioactive Waste Management Facility US Ecology, Inc. Beatty, Nevada, submittal date December 1988.)

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