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**DEPARTMENT OF
HEALTH AND HUMAN SERVICES**
 **NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH**



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September 12, 2024

MEMORANDUM

To: Beatty File

From: Hannah Hoffman, Radiation Specialist II **HH**

Subject: Beatty Inspection Summary August 30, 2024

An inspection of the Beatty Low-Level Radioactive Waste landfill (closed) was conducted on August 30, 2024, by Hannah Hoffman. 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 Berkeley Nucleonics Corp. (BNC) Model RD-120PRO, Serial Number BSN 120077. The survey was conducted by driving the survey meter around the site boundary access roads and by walking in a grid pattern across the cap to detect radiological anomalies. None were detected. Dose rate readings on the cap remain about twice background, * as measured in the background location. The cap was in good condition; however, the sides of the cap showed erosion following the rain event occurring February 1 – 9, 2024. The recent repairs, including the modification to the corners formed by the cap intersection of the East-West running trenches and the North-South running trenches to form a gentler curve, reduced the depth and flow of the cap materials during the rain event.

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 2025. They remain stacked off to the side of the cap, near the southwest corner. The erosion from February remains, but the North side has been repaired/filled in.

Site Observations:

Radiological Postings Adequate: Yes

Site Boundary and Access Road Maintained: Yes

Erosion, Fissures, Water Pooling, or Subsidence Concerns: Following the February 1 – 9, 2024 rain event. The sides of the cap show the worst of the erosion damage was where the dirt had formed flow routes on the cap leading to the sides. Plants continue to grow mostly broad leaf weeds and sparse grasses 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:

June – 0.00”, July – 0.02”, August – 0.00”

Radiation Survey Results:

Instruments:

BNC Model RD-120PRO (BSN 120077) 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 – 20 μ rem/hr

Value used for twice background: 40 μ rem/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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Station Summary
 Beatty 11SSE US Ecology Nevada
 Monthly Summary for
 June, 2024

Day	Day	Total	Wind			Air Temperature			Humidity			Dew	Wet	Total
of	of	Solar Rad.	Ave.	V. Dir.	Max.	Mean	Max	Min	Mean	Max	Min	Point	Bulb	Precip.
Month	Year	ly.	mph	Deg	mph	Deg. Fahrenheit			Percent			Deg. Fahrenheit		inches
1	153	0	7.4	187	21.9	84	97	62	13	27	6	26	54	0.00
2	154	1	7.9	178	22.7	84	97	64	14	24	9	30	55	0.00
3	155	4	8.3	242	35.7	86	97	70	17	25	12	35	57	0.00
4	156	0	15.1	308	36.6	87	102	76	21	30	12	40	59	0.00
5	157	0	5.2	210	22.0	93	107	73	15	27	8	36	59	0.00
6	158	0	7.0	207	26.2	93	108	72	14	25	8	36	59	0.00
7	159	0	9.3	181	52.3	95	107	77	17	28	11	42	62	0.00
8	160	0	7.4	178	25.8	91	104	73	20	47	10	42	61	0.00
9	161	0	12.5	131	29.4	87	100	77	16	26	6	33	57	0.00
10	162	4	5.2	240	19.4	86	101	63	12	25	4	24	54	0.00
11	163	0	4.9	241	24.8	89	106	66	9	18	5	21	54	0.00
12	164	0	8.0	189	25.5	90	106	68	9	16	5	22	55	0.00
13	165	0	10.1	143	32.1	88	100	67	10	21	5	23	54	0.00
14	166	0	5.5	204	23.5	89	104	65	11	17	7	27	55	0.00
15	167	0	5.7	182	22.6	90	103	72	11	19	5	26	56	0.00
16	168	0	6.6	190	25.1	88	101	70	10	15	6	23	54	0.00
17	169	0	15.7	358	50.6	81	98	68	11	23	3	20	52	0.00
18	170				29.5		70	69		6	5			
19	171				27.8		95	59		14	5			
20	172	0	6.2	238	24.0	84	100	64	13	20	9	27	54	0.00
21	173	0	5.4	239	19.0	87	103	67	13	23	7	28	55	0.00
22	174	0	7.1	224	24.3	91	106	68	11	19	5	26	56	0.00
23	175	0	7.4	174	24.9	94	108	75	11	21	8	32	59	0.00
24	176	0	8.7	227	24.2	96	108	77	19	31	9	46	64	0.00
25	177	0	7.3	231	24.5	96	110	78	19	28	13	47	64	0.00
26	178	0	9.3	158	26.2	96	107	80	20	33	11	46	64	0.00
27	179	0	9.5	154	24.1	93	107	78	16	28	5	38	61	0.00
28	180	0	7.8	143	22.4	89	103	70	12	17	8	29	56	0.00
29	181	0	12.4	148	27.6	91	105	79	13	22	5	30	58	0.00
30	182	0	8.2	163	24.2	91	105	70	11	20	4	28	57	0.00

MONTHLY STATISTICS

	Total	Wind			Air Temperature			Humidity			Dew	Wet	Total
	Solar Rad.	Ave.	V. Dir.	Max.	Mean	Max	Min	Mean	Max	Min	Point	Bulb	Precip.
	ly.	mph	Deg	mph	Deg. Fahrenheit			Percent			Deg. Fahrenheit		inches
Total	8												0.00
Ave.	0	8.3	188	27.3	89.6	102.1	70.5	14	23	7	31	57	
Max.	4	15.7		52.3	96	110	80	21	47	13	47	64	0.00
Min.	0	4.9		19.0	81	70	59	9	6	3	20	52	0.00

Data are subject to further review and editing. Please refer any questions to the Western Regional Climate Center.

° 1 ly = 1 cal/cm² = 4.1855 J/cm² = 3.6855 BTU/ft² = .01163 KW-hr/m²

Station Summary
 Beatty 11SSE US Ecology Nevada
 Monthly Summary for
 July, 2024

Day of Month	Day of Year	Total Solar Rad. ly.	Wind Ave. V. mph	Wind Dir. Deg	Wind Max. mph	Air Temperature Mean Deg. Fahrenheit	Air Temperature Max Fahrenheit	Air Temperature Min Fahrenheit	Humidity Mean Percent	Humidity Max Percent	Humidity Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb Fahrenheit	Total Precip. inches
1	183	0	6.7	181	18.4	89	104	70	14	22	8	33	57	0.00
2	184	0	9.7	284	26.3	94	106	81	10	16	6	28	57	0.00
3	185				30.1		110	79		14	4			
4	186	0	9.7	315	25.7	98	111	82	7	10	5	21	57	0.00
5	187	6	7.3	304	23.3	97	111	78	5	8	3	13	56	0.00
6	188	0	9.9	323	27.5	99	113	83	5	7	3	14	57	0.00
7	189	0	13.1	314	29.7	101	115	85	5	7	4	18	58	0.00
8	190	0	6.4	214	22.7	100	116	80	5	8	3	16	57	0.00
9	191	0	6.4	237	22.0	100	115	79	6	13	3	21	58	0.00
10	192	0	6.3	255	28.9	99	115	75	6	11	3	19	57	0.00
11	193	0	7.0	280	25.7	99	116	77	6	11	3	20	58	0.00
12	194	0	9.8	227	31.1	102	116	85	7	14	4	26	60	0.00
13	195	18	10.5	142	52.5	94	108	78	22	39	11	48	64	0.00
14	196	0	8.7	238	28.5	91	107	72	24	41	9	47	63	0.00
15	197	0	6.8	277	23.4	93	106	77	20	36	10	43	62	0.00
16	198	17	5.5	242	31.4	94	109	76	16	26	9	39	61	0.00
17	199	0	5.9	234	24.7	94	109	75	14	23	10	37	60	0.00
18	200	0	7.1	167	26.9	95	108	79	17	33	11	42	62	0.00
19	201	0	6.7	224	23.3	97	109	78	18	33	11	45	64	0.00
20	202	0	5.5	239	22.5	97	110	79	17	30	9	43	63	0.00
21	203	0	6.5	246	22.1	98	111	79	16	27	10	42	63	0.00
22	204	0	8.6	180	36.8	97	111	81	23	59	11	50	66	0.00
23	205	0	8.3	226	27.5	95	110	76	28	60	13	53	67	0.00
24	206	0	10.5	254	32.0	93	108	78	33	71	16	57	68	0.02
25	207	0	8.7	205	26.7	96	109	78	23	45	11	49	65	0.00
26	208	0	8.6	176	24.7	95	108	78	18	32	10	42	62	0.00
27	209	0	10.6	171	29.5	90	105	72	10	21	4	24	56	0.00
28	210	0	10.1	133	23.2	87	101	76	13	21	7	29	56	0.00
29	211	0	7.8	147	19.1	87	102	68	13	24	4	27	55	0.00
30	212	0	6.1	264	18.6	85	101	65	11	20	5	23	53	0.00
31	213	0	5.9	248	24.2	88	105	67	9	17	4	20	54	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Wind Ave. V. mph	Wind Dir. Deg	Wind Max. mph	Air Temperature Mean Deg. Fahrenheit	Air Temperature Max Fahrenheit	Air Temperature Min Fahrenheit	Humidity Mean Percent	Humidity Max Percent	Humidity Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb Fahrenheit	Total Precip. inches
Total	41												0.02
Ave.	1	8.0	245	26.8	94.8	109.2	76.9	14	26	7	33	60	
Max.	18	13.1		52.5	102	116	85	33	71	16	57	68	0.02
Min.	0	5.5		18.4	85	101	65	5	7	3	13	53	0.00

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° 1 ly = 1 cal/cm² = 4.1855 J/cm² = 3.6855 BTU/ft² = .01163 KW-hr/m²

Station Summary
 Beatty 11SSE US Ecology Nevada
 Monthly Summary for
 August, 2024

Day of Month	Day of Year	Total Solar Rad. ly.	Wind Ave. V. mph	Dir. Deg	Max. mph	Air Temperature Mean Deg. Fahrenheit	Max Fahrenheit	Min Fahrenheit	Humidity Mean Percent	Max Percent	Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb Fahrenheit	Total Precip. inches
1	214	0	6.1	196	21.5	92	108	71	13	28	7	32	58	0.00
2	215	0	8.1	155	21.6	92	102	82	26	34	18	52	65	0.00
3	216	0	6.0	215	25.2	93	106	76	21	38	10	45	63	0.00
4	217	0	5.6	198	22.0	94	108	75	15	30	7	37	60	0.00
5	218	0	7.2	210	25.1	94	110	74	13	22	8	35	60	0.00
6	219	0	6.4	250	23.5	95	111	76	12	22	5	34	59	0.00
7	220	0	6.7	171	20.0	94	109	77	14	26	8	36	60	0.00
8	221	0	6.9	181	22.2	95	109	76	16	28	9	40	61	0.00
9	222				24.2		108	83		32	11			
10	223				23.9		109	83		32	9			
11	224	0	13.7	152	28.4	95	107	86	15	34	7	38	61	0.00
12	225	0	13.4	145	27.1	92	104	82	17	25	10	40	61	0.00
13	226	0	7.7	147	22.5	89	102	75	15	24	8	33	58	0.00
14	227	0	7.7	146	19.4	85	101	65	13	23	8	28	54	0.00
15	228	0	5.8	209	19.6	85	102	64	12	22	6	25	54	0.00
16	229	0	8.8	212	30.6	87	104	66	11	18	3	23	54	0.00
17	230	0	14.8	158	31.1	91	102	80	12	20	6	31	58	0.00
18	231	0	11.9	158	31.2	89	100	75	14	22	6	31	57	0.00
19	232	0	7.4	198	24.2	89	104	70	9	21	3	19	54	0.00
20	233	0	8.3	199	29.8	88	106	65	6	11	2	12	52	0.00
21	234	0	8.1	208	30.0	88	104	64	7	14	2	13	52	0.00
22	235				31.3		98	75		18	3			
23	236				35.3		94	69		28	5			
24	237				38.6		90	66		32	8			
25	238	0	16.9	315	36.7	73	85	64	20	34	10	28	50	0.00
26	239	0	6.5	249	24.4	80	96	64	15	27	7	26	52	0.00
27	240	0	4.6	263	18.6	82	99	61	11	20	5	21	52	0.00
28	241	0	5.4	253	23.7	84	102	64	11	16	7	22	52	0.00
29	242	0	5.7	267	20.6	85	102	67	12	18	6	24	53	0.00
30	243	0	5.0	250	24.1	87	104	69	13	19	9	29	55	0.00
31	244	0	7.1	237	25.8	88	104	70	15	22	10	34	57	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Wind Ave. V. mph	Dir. Deg	Max. mph	Air Temperature Mean Deg. Fahrenheit	Max Fahrenheit	Min Fahrenheit	Humidity Mean Percent	Max Percent	Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb Fahrenheit	Total Precip. inches
Total	0												0.00
Ave.	0	8.1	195	25.9	88.8	102.9	72.1	14	25	7	30	57	
Max.	0	16.9		38.6	95	111	86	26	38	18	52	65	0.00
Min.	0	4.6		18.6	73	85	61	6	11	2	12	50	0.00

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