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**DEPARTMENT OF
HEALTH AND HUMAN SERVICES**

**NEVADA DIVISION of PUBLIC
and BEHAVIORAL HEALTH**




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June 21, 2024

MEMORANDUM

To: Beatty File

From: Hannah Hoffman, Radiation Specialist II 

Subject: Beatty Inspection Summary May 29, 2024

An inspection of the Beatty Low-Level Radioactive Waste landfill (closed) was conducted on May 29, 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 INOVISION Model 451P with serial number 0833. The survey was conducted by walking 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.

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:

March – 0.62”, April – 0.03”, May – 0.00”

Radiation Survey Results:

Instruments:

INOVISION Model 451P (SN 0833) Calibration date: November 9, 2023

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

Background measurement: 17 – 24 μ rem/hr

Value used for twice background: 48 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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 Hannah Hoffman: 702-486-3014, hhoffman@health.nv.gov

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

Day of Month	Day of Year	Total Solar Rad. ly.	Ave. Wind mph	V. Dir. Deg	Max. Wind 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	61	261	13.3	144	27.5	55	66	46	46	64	23	33	44	0.00
2	62	1	19.8	183	50.4	53	62	44	38	61	24	27	41	0.00
3	63	4	12.7	144	30.0	51	64	41	40	63	18	25	39	0.00
4	64	28	7.9	135	21.9	48	60	32	44	76	25	26	38	0.00
5	65	18	4.2	265	13.9	49	65	36	48	69	25	29	39	0.00
6	66	18	5.5	249	17.6	50	63	36	44	73	20	27	40	0.00
7	67	0	10.4	332	27.9	53	64	43	40	60	17	29	41	0.00
8	68	0	13.9	332	37.5	52	65	41	24	43	6	13	37	0.00
9	69	0	6.1	246	21.8	48	63	32	25	46	9	11	34	0.00
10	70	24	8.6	173	24.9	50	62	36	29	47	16	18	37	0.00
11	71	8	5.3	197	19.7	54	67	38	38	59	23	28	41	0.00
12	72	3	8.0	143	20.5	54	63	45	46	60	31	33	43	0.00
13	73	48	21.8	333	43.4	53	61	45	25	48	15	17	38	0.00
14	74	4	24.7	10	48.2	50	61	40	24	31	14	14	36	0.00
15	75	44	17.7	350	46.4	48	52	42	53	85	29	30	40	0.05
16	76	0	6.5	147	25.3	49	62	42	72	88	41	40	44	0.13
17	77	1	4.4	202	12.9	53	69	43	66	88	33	41	46	0.00
18	78	0	7.1	109	29.0	59	71	46	38	77	16	31	45	0.00
19	79	14	4.1	257	16.2	61	75	44	37	65	18	32	46	0.00
20	80	5	5.4	259	22.6	61	77	44	40	68	15	34	47	0.00
21	81	6	5.9	250	15.9	61	77	46	40	68	16	34	47	0.00
22	82	1	8.9	175	25.9	60	73	45	34	62	17	29	44	0.00
23	83	0	12.2	144	32.5	59	69	47	31	46	12	27	44	0.00
24	84	5	11.4	311	30.5	50	61	38	36	64	15	23	38	0.00
25	85	0	12.6	304	34.3	53	64	42	30	48	15	21	39	0.00
26	86	5	15.7	324	36.3	55	64	45	28	51	16	21	40	0.00
27	87	0	8.6	166	24.8	56	70	37	29	47	18	22	40	0.00
28	88	5	10.9	137	26.3	61	73	49	30	47	16	28	45	0.00
29	89	0	12.3	161	28.1	55	67	43	32	55	12	24	41	0.00
30	90	0	10.2	129	31.4	45	53	42	69	86	35	35	40	0.35
31	91	14	8.1	144	26.5	47	59	41	65	86	39	36	41	0.09

MONTHLY STATISTICS

	Total Solar Rad. ly.	Ave. Wind mph	V. Dir. Deg	Max. Wind 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	520												0.62
Ave.	17	10.5	186	28.1	53.3	65.3	41.7	40	62	20	27	41	
Max.	261	24.7		50.4	61	77	49	72	88	41	41	47	0.35
Min.	0	4.1		12.9	45	52	32	24	31	6	11	34	0.00

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

$^{\circ} 1 \text{ ly} = 1 \text{ cal/cm}^2 = 4.1855 \text{ J/cm}^2 = 3.6855 \text{ BTU/ft}^2 = .01163 \text{ KW-hr/m}^2$

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

Day of Month	Day of Year	Total Solar Rad. ly.	Ave. Wind V. Dir. mph Deg	Wind 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	92	2	16.2	332	33.5	54	64	43	43	87	20	29	42	0.03
2	93	3	11.5	323	32.2	61	75	49	34	70	17	31	46	0.00
3	94	2	7.9	175	21.8	61	76	44	41	74	17	34	47	0.00
4	95	0	19.2	167	51.0	59	72	45	34	56	16	29	44	0.00
5	96	4	10.6	236	37.1	45	55	38	34	52	16	18	34	0.00
6	97	0	10.1	312	28.2	49	60	37	33	54	16	19	36	0.00
7	98	13	7.4	278	29.7	51	65	38	34	56	14	22	38	0.00
8	99	0	16.9	349	34.6	56	66	46	22	44	10	15	39	0.00
9	100	1	12.4	318	24.9	59	75	46	23	44	10	19	41	0.00
10	101	29	5.7	205	18.6	65	80	48	28	48	13	28	46	0.00
11	102	19	4.5	252	16.0	68	85	49	28	54	11	29	48	0.00
12	103	16	12.4	211	35.9	68	85	49	26	51	10	28	48	0.00
13	104	4	18.6	154	40.7	64	73	52	25	52	11	25	45	0.00
14	105	15	10.8	142	30.3	52	61	42	41	64	25	28	41	0.00
15	106	14	9.0	302	32.3	57	75	39	38	74	15	28	43	0.00
16	107	20	7.3	273	24.5	65	80	48	26	49	13	28	47	0.00
17	108	15	4.9	235	16.8	68	85	49	28	53	12	31	49	0.00
18	109	1	5.0	175	15.7	69	86	55	27	45	14	32	49	0.00
19	110	12	5.2	209	17.6	70	86	53	25	48	10	29	49	0.00
20	111	1	7.9	267	21.7	74	89	59	20	34	9	29	50	0.00
21	112	1	5.0	275	23.4	75	91	57	21	38	9	29	51	0.00
22	113	4	7.5	222	26.8	75	91	55	21	41	9	29	51	0.00
23	114	5	9.9	159	24.9	73	87	52	18	38	10	25	49	0.00
24	115	2	10.3	147	35.5	69	82	50	24	43	11	29	48	0.00
25	116	0	12.5	277	25.7	68	78	59	31	51	18	35	50	0.00
26	117	31	16.2	348	40.1	59	69	51	39	69	16	33	46	0.00
27	118	51	17.8	328	33.7	63	74	52	26	45	10	25	45	0.00
28	119	1	7.1	273	21.8	67	81	55	22	34	13	26	47	0.00
29	120	6	6.1	251	18.2	68	84	50	25	45	11	28	48	0.00
30	121	0	7.9	201	28.5	73	87	57	15	26	8	22	48	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Ave. Wind V. Dir. mph Deg	Wind 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	270											0.03	
Ave.	9	10.1	262	28.1	63.5	77.2	48.9	28	51	13	27	46	
Max.	51	19.2		51.0	75	91	59	43	87	25	35	51	0.03
Min.	0	4.5		15.7	45	55	37	15	26	8	15	34	0.00

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$1 \text{ ly} = 1 \text{ cal/cm}^2 = 4.1855 \text{ J/cm}^2 = 3.6855 \text{ BTU/ft}^2 = .01163 \text{ KW-hr/m}^2$

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

Day of Month	Day of Year	Total Solar Rad. ly.	Ave. Wind mph	V. Dir. Deg	Max. Wind mph	Mean Air Temp. Deg.	Max Air Temp. Fahrenheit	Min Air Temp. Fahrenheit	Mean Humidity Percent	Max Humidity Percent	Min Humidity Percent	Dew Point Deg. Fahrenheit	Wet Bulb Fahrenheit	Total Precip. inches
1	122	0	21.5	332	39.1	70	79	62	9	16	4	7	44	0.00
2	123	8	6.3	199	29.9	69	85	51	11	22	6	10	44	0.00
3	124	1	6.9	278	26.6	72	87	57	18	32	10	25	49	0.00
4	125	17	17.0	159	38.5	68	81	54	28	55	11	32	49	0.00
5	126		14.1	337	41.3	56	66	48	28	62	8	17	40	0.00
6	127	6	9.6	286	28.2	61	76	49	22	36	11	21	43	0.00
7	128	17	14.2	331	47.1	66	81	46	17	38	8	16	44	0.00
8	129	16	15.0	349	38.4	62	72	49	14	24	8	11	41	0.00
9	130	2	13.6	3	29.8	65	77	52	21	31	13	23	45	0.00
10	131	5	9.0	320	36.0	64	75	52	29	47	17	30	47	0.00
11	132	9	8.0	325	29.7	70	85	53	23	46	10	27	48	0.00
12	133	5	5.6	255	24.7	75	91	53	17	33	9	25	50	0.00
13	134	0	6.2	239	23.3	77	94	56	17	29	8	27	51	0.00
14	135	0	6.9	277	37.2	78	93	59	17	30	9	28	52	0.00
15	136	0	12.1	331	30.4	81	93	66	14	31	6	24	52	0.00
16	137	0	7.9	319	24.7	81	94	66	12	22	6	23	52	0.00
17	138	0	5.1	221	21.7	82	98	60	14	23	6	26	53	0.00
18	139	0	9.3	148	27.4	80	92	65	18	30	9	32	54	0.00
19	140	0	7.1	173	24.0	79	92	60	21	39	12	34	54	0.00
20	141	0	10.5	318	34.0	75	87	62	16	29	9	24	50	0.00
21	142	0	11.6	316	26.1	70	82	58	12	20	6	13	45	0.00
22	143	4	6.5	192	23.8	74	90	51	11	18	7	16	47	0.00
23	144	0	9.6	324	30.9	75	89	60	15	25	9	24	49	0.00
24	145	1	8.3	142	23.2	74	88	62	20	30	13	30	51	0.00
25	146	7	8.0	158	23.6	73	86	55	25	42	13	33	51	0.00
26	147	0	5.5	179	18.3	77	91	57	18	34	10	29	51	0.00
27	148	0	5.6	214	25.1	79	95	59	15	25	9	26	51	0.00
28	149	0	7.7	193	23.5	80	95	61	16	27	6	27	52	0.00
29	150	0	9.1	239	27.4	83	96	61	15	29	8	28	54	0.00
30	151	0	7.7	249	32.0	85	98	69	12	21	6	25	54	0.00
31	152	0	5.6	209	26.0	85	99	68	11	18	5	23	53	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Ave. Wind mph	V. Dir. Deg	Max. Wind mph	Mean Air Temp. Deg.	Max Air Temp. Fahrenheit	Min Air Temp. Fahrenheit	Mean Humidity Percent	Max Humidity Percent	Min Humidity Percent	Dew Point Deg. Fahrenheit	Wet Bulb Fahrenheit	Total Precip. inches
Total	99												0.00
Ave.	3	9.4	291	29.4	73.7	87.4	57.4	17	31	9	24	49	
Max.	17	21.5		47.1	85	99	69	29	62	17	34	54	0.00
Min.	0	5.1		18.3	56	66	46	9	16	4	7	40	0.00

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