

Joe Lombardo
Governor

Richard Whitley,
MS
Director



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



Cody Phinney,
MPH
Administrator

Ihsan Azzam,
Ph.D., M.D.
Chief Medical
Officer

December 8, 2023

MEMORANDUM

To: Beatty File

From: Corey Creveling, Radiation Control Supervisor *CRC*

Subject: Beatty Inspection Summary November 28, 2023

An inspection of the Beatty Low-Level Radioactive Waste landfill (closed) was conducted on November 28, 2023, by Corey Creveling and 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 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 cap was in good condition; and the sides of the cap showed signs of 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 which may reduce the depth of and flow of the cap materials during future rain events.

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.

Site Observations:

Radiological Postings Adequate: Yes

Site Boundary and Access Road Maintained: Yes

Erosion, Fissures, Water Pooling, or Subsidence Concerns: Repairs have taken place on the cap sides and road on the North side of the cap. 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:

September – 0.93”, October – 0.00”, November – 0.09”

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 – 22 μ rem/hr

Value used for twice background: 44 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.)

Contacts: John Follette: 702-486-3017, jfollette@health.nv.gov
 Corey Creveling: 775-687-7536, ccreveling@health.nv.gov

Station Summary
 Beatty 11SSE US Ecology Nevada
 Monthly Summary for
 September, 2023

Day of Month	Day of Year	Total Solar Rad. ly.	Ave. Wind mph	V. Dir. Deg	Max. Wind mph	Air Temperature Deg. Fahrenheit			Humidity Percent			Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip. inches
1	244	0	22.2	135	41.8	81	96	68	37	82	6	46	61	0.01
2	245	0	11.9	132	28.3	74	85	66	69	94	45	63	66	0.85
3	246	0	15.1	188	37.5	76	88	66	48	79	11	51	61	0.00
4	247	0	13.8	313	33.6	73	85	63	38	55	22	44	56	0.00
5	248	0	3.7	264	19.1	77	91	61	37	69	17	46	58	0.00
6	249	0	7.4	195	22.5	78	91	62	34	58	16	45	58	0.00
7	250	0	7.3	229	23.1	81	95	62	27	62	8	38	56	0.00
8	251	0	5.8	214	18.9	82	97	61	24	46	12	40	57	0.00
9	252	0	6.4	294	30.8	86	101	70	30	50	15	49	62	0.00
10	253	0	6.7	324	27.7	78	84	68	45	65	32	54	62	0.00
11	254	0	4.3	251	15.4	78	95	63	44	74	19	53	62	0.00
12	255	0	5.6	242	21.3	81	94	67	36	65	16	49	61	0.00
13	256	0	6.7	262	36.6	81	94	65	32	59	14	45	59	0.00
14	257	0	6.8	347	28.3	81	93	71	31	46	16	46	59	0.00
15	258	0	5.0	246	15.7	80	95	66	29	54	12	41	57	0.00
16	259	0	5.5	276	23.4	80	95	64	25	42	12	38	56	0.00
17	260	0	6.4	256	28.3	81	96	65	24	43	11	38	56	0.00
18	261	0	5.8	198	20.0	78	93	63	25	42	12	37	55	0.00
19	262	0	4.8	267	16.4	76	92	60	26	46	12	36	53	0.00
20	263	0	7.9	183	22.8	75	89	60	24	42	10	34	52	0.00
21	264	0	8.1	125	21.2	73	84	65	32	50	18	41	55	0.00
22	265	0	4.0	204	18.6	70	83	57	30	50	16	36	51	0.00
23	266	0	4.4	274	14.9	69	86	56	27	48	10	31	49	0.00
24	267	0	5.3	257	17.2	71	90	54	22	34	11	29	49	0.00
25	268	0	6.2	268	19.2	73	91	56	23	41	10	30	50	0.00
26	269	0	5.7	266	17.7	72	91	56	21	37	7	26	49	0.00
27	270	0	5.0	239	16.6	73	91	56	19	36	8	26	49	0.00
28	271	0	5.3	275	15.9	73	89	58	26	38	15	35	52	0.00
29	272	0	10.2	195	26.1	73	88	57	26	47	11	33	52	0.00
30	273	1	14.0	127	40.1	62	69	51	48	79	28	42	51	0.07

MONTHLY STATISTICS

	Total Solar Rad. ly.	Ave. Wind mph	V. Dir. Deg	Max. Wind mph	Air Temperature Deg. Fahrenheit			Humidity Percent			Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip. inches
Total	2				76.2	90.5	61.9	32	54	15	41	56	0.93
Ave.	0	7.6	225	24.0	76.2	90.5	61.9	32	54	15	41	56	
Max.	1	22.2		41.8	86	101	71	69	94	45	63	66	0.85
Min.	0	3.7		14.9	62	69	51	19	34	6	26	49	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
October, 2023

Day of Month	Day of Year	Total Solar Rad. ly.	Ave. Wind mph	V. Dir. Deg	Max. Wind mph	Mean Air Temperature Deg. Fahrenheit	Max Air Temperature Fahrenheit	Min Air Temperature Fahrenheit	Mean Humidity Percent	Max Humidity Percent	Min Humidity Percent	Dew Point Deg. Fahrenheit	Wet Bulb Fahrenheit	Total Precip. inches
1	274	7	7.8	271	28.7	59	69	52	57	82	33	43	50	0.00
2	275	1	10.8	319	22.5	62	72	53	43	65	26	38	49	0.00
3	276	1	11.9	327	25.4	66	77	54	38	56	22	39	51	0.00
4	277	0	11.9	331	27.9	71	81	58	33	53	22	40	53	0.00
5	278	0	4.2	233	13.3	74	90	59	30	49	16	39	54	0.00
6	279	0	4.5	253	12.6	75	91	62	27	41	13	36	53	0.00
7	280	0	4.4	294	13.9	75	94	59	25	46	9	33	52	0.00
8	281	0	4.6	287	18.5	75	93	57	22	41	8	31	51	0.00
9	282	0	5.8	201	20.0	75	91	57	22	39	12	32	52	0.00
10	283	0	7.6	182	19.6	71	85	55	25	43	13	32	50	0.00
11	284	0	16.7	337	39.0	66	75	51	28	56	13	30	47	0.00
12	285	0	14.6	323	29.8	62	73	52	24	35	14	23	44	0.00
13	286	8	4.6	272	14.5	61	77	46	26	44	12	24	44	0.00
14	287	7	4.9	283	13.3	62	80	48	25	39	12	24	44	0.00
15	288	1	4.5	287	11.3	67	87	50	22	41	8	24	46	0.00
16	289	0	4.5	288	11.7	70	90	52	19	34	8	24	47	0.00
17	290	0	4.5	291	13.3	72	92	54	19	34	8	25	48	0.00
18	291	0	3.6	320	13.4	76	95	60	19	32	9	29	51	0.00
19	292	0	4.5	274	11.4	75	96	57	21	36	8	29	51	0.00
20	293	0	3.6	291	13.7	74	93	56	21	36	9	29	50	0.00
21	294	0	3.7	267	13.5	73	91	58	23	36	11	31	51	0.00
22	295	0	8.3	187	21.0	69	83	54	29	43	18	34	50	0.00
23	296	0	15.9	351	42.2	68	79	53	33	53	18	37	51	0.00
24	297	0	8.7	301	32.0	69	82	55	29	42	16	34	50	0.00
25	298	1	7.8	177	20.0	65	76	50	33	49	21	34	48	0.00
26	299	0	12.2	334	29.0	62	71	51	29	58	13	27	45	0.00
27	300	7	3.8	297	11.8	57	74	42	26	46	13	22	41	0.00
28	301	51	17.1	332	41.6	55	66	44	22	51	9	14	39	0.00
29	302	60	16.0	353	36.2	51	62	42	16	24	9	5	35	0.00
30	303	18	3.9	185	12.6	52	70	38	16	27	7	5	35	0.00
31	304	3	4.3	283	12.7	55	75	40	14	23	5	4	36	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Ave. Wind mph	V. Dir. Deg	Max. Wind mph	Mean Air Temperature Deg. Fahrenheit	Max Air Temperature Fahrenheit	Min Air Temperature Fahrenheit	Mean Humidity Percent	Max Humidity Percent	Min Humidity Percent	Dew Point Deg. Fahrenheit	Wet Bulb Fahrenheit	Total Precip. inches
Total	165												0.00
Ave.	5	7.8	306	20.9	66.6	81.6	52.3	26	44	13	28	47	
Max.	60	17.1		42.2	76	96	62	57	82	33	43	54	0.00
Min.	0	3.6		11.3	51	62	38	14	23	5	4	35	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
November, 2023

Day of Month	Day of Year	Total Solar Rad. ly.	Ave. Wind mph	V. Dir. Deg	Max. Wind mph	Mean Air Temperature Deg. Fahrenheit	Max Air Temperature Fahrenheit	Min Air Temperature Fahrenheit	Mean Humidity Percent	Max Humidity Percent	Min Humidity Percent	Dew Point Deg. Fahrenheit	Wet Bulb Fahrenheit	Total Precip. inches
1	305	1	3.6	268	9.8	57	77	40	14	24	5	5	38	0.00
2	306	0	4.4	255	11.9	58	77	41	15	26	7	9	39	0.00
3	307	0	4.5	262	13.5	60	80	45	16	26	8	12	40	0.00
4	308	0	5.0	263	12.6	61	77	45	16	27	7	12	41	0.00
5	309	0	5.8	279	13.2	59	74	46	18	30	10	15	40	0.00
6	310	0	6.2	240	21.4	63	80	44	29	49	16	28	45	0.00
7	311	0	14.0	334	38.0	60	67	51	36	62	18	31	46	0.00
8	312	25	17.2	335	33.3	55	63	47	25	38	12	18	39	0.00
9	313	0	9.6	310	25.9	52	65	40	19	31	9	10	36	0.00
10	314	5	4.0	282	12.2	50	70	33	17	32	7	5	34	0.00
11	315	7	3.7	276	12.0	53	73	36	15	26	6	4	35	0.00
12	316	1	4.9	273	16.4	54	71	38	17	29	8	8	36	0.00
13	317	2	5.2	273	20.4	54	70	38	22	40	12	15	38	0.00
14	318	0	6.0	284	14.8	54	71	39	31	51	15	22	39	0.00
15	319	0	4.6	312	11.8	53	67	41	40	81	22	28	41	0.09
16	320	1	4.7	240	12.0	54	63	45	74	91	51	45	49	0.00
17	321	0	5.5	228	25.0	53	65	41	66	90	41	41	47	0.00
18	322	0	4.5	212	14.4	56	67	44	61	89	36	42	48	0.00
19	323	136	24.4	334	51.0	51	59	41	41	89	21	25	40	0.00
20	324	23	19.7	334	47.2	49	59	41	24	34	15	13	35	0.00
21	325	15	3.3	256	12.6	50	68	38	28	41	14	17	36	0.00
22	326	4	3.2	255	9.8	50	69	36	30	46	13	18	37	0.00
23	327	11	10.1	293	37.8	53	65	40	30	43	16	21	39	0.00
24	328	120	19.4	334	39.3	48	54	41	29	39	23	17	36	0.00
25	329	14	16.4	327	29.9	44	52	36	34	45	24	17	33	0.00
26	330	113	3.3	268	14.4	43	56	32	34	52	21	16	32	0.00
27	331	73	3.8	305	15.5	44	61	31	27	47	11	10	31	0.00
28	332	13	4.5	287	14.0	45	61	32	25	41	13	10	32	0.00
29	333	1	4.1	300	12.6	45	62	32	36	53	20	19	34	0.00
30	334	34	5.6	313	20.5	45	59	35	37	52	21	19	34	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Ave. Wind mph	V. Dir. Deg	Max. Wind mph	Mean Air Temperature Deg. Fahrenheit	Max Air Temperature Fahrenheit	Min Air Temperature Fahrenheit	Mean Humidity Percent	Max Humidity Percent	Min Humidity Percent	Dew Point Deg. Fahrenheit	Wet Bulb Fahrenheit	Total Precip. inches
Total	597												0.09
Ave.	20	7.7	303	20.8	52.4	66.8	39.6	30	47	17	18	38	
Max.	136	24.4		51.0	63	80	51	74	91	51	45	49	0.09
Min.	0	3.2		9.8	43	52	31	14	24	5	4	31	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