

Steve Sisolak
Governor

Richard Whitley, MS
Director



**DEPARTMENT OF
HEALTH AND HUMAN SERVICES**
DIVISION OF PUBLIC AND BEHAVIORAL HEALTH
Helping people. It's who we are and what we do.



Lisa Sherych
Administrator

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

December 9, 2021

MEMORANDUM

To: Betty File

From: Haley Brown, Radiation Control Specialist *HB*

Subject: Betty Inspection Summary November 19, 2021

An inspection of the Beatty Low-Level Radioactive Waste landfill (closed) was conducted on November 19, 2021 by Haley Brown. The site completed construction on Phase II of the Low-Level Radioactive Waste Soil Cap placement to substantially increase the overall thickness of cover soils, increase mass buffer and mitigate poor perimeter drainage. In total, around 631,000 cubic yards of soil cover was added to the cap. The site has been properly secured with an outside perimeter fence which was 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 were added to this boundary to clearly mark the location of the low-level radioactive waste area. The radiological survey was performed by driving the BNC Model SAMpack-120 (BSN 120068) backpack around the site boundary access road and walking up to the top of the cap and then walking in a 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.

Status of Previous Inspection Items:

The markers for the trenches are not in place on the cap. They are still stacked off to the side of the cap, near the southwest corner.

Site Observations:

Radiological Postings Adequate:

Two radiological postings along the interior boundary fence require replacement. Both radiological postings have been reattached to the fence as of December 9, 2021.

Rain Since Last Inspection:

August – 0.00”, September – 0.00”, October – 0.10”, and November – 0.00” as of November 18, 2021.

Radiation Survey Results:

Instrument: BNC Model SAMpack-120 (BSN 120068) 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: 10 – 15 urem/hr

Value used for twice background: 30 urem/hr

Site Boundary Highest Measurement: Within twice background*

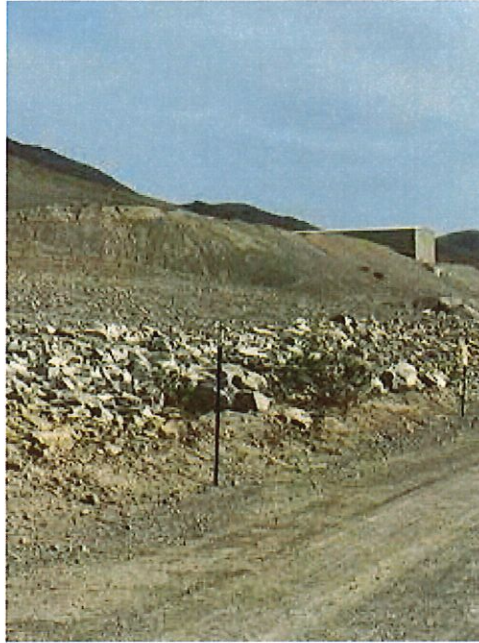
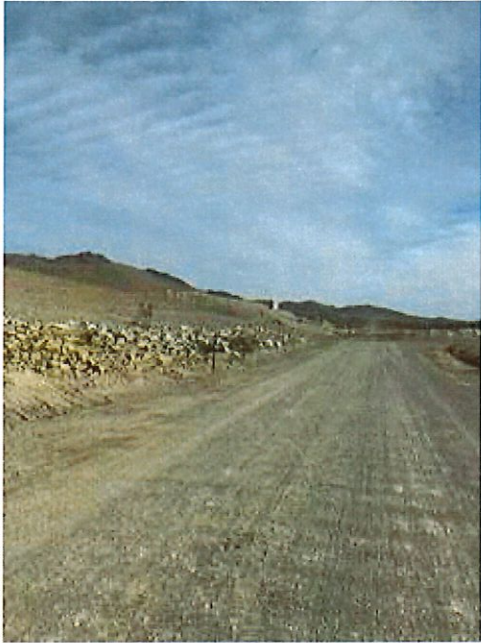
Cap Highest Measurement: Within twice background*

*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: Karen Beckley: 775-687-7540, kbeckley@health.nv.gov
 John Follette: 702-486-3017, jfollette@health.nv.gov
 Haley Brown: 702-486-3015, habrown@health.nv.gov

Caution Radioactive Materials Signs Missing from Boundary Fence.



1 - Missing RAM sign on the South side.



2 - Missing RAM sign on the NE Corner.

Station Summary

Beatty 11SSE US Ecology Nevada

Monthly Summary for

August, 2021

Day of Month	Day Year	Total Solar Rad. ly.	Wind Ave. V. mph	Wind Dir. Deg	Air Temperature Max. Deg. Fahrenheit	Air Temperature Mean Deg. Fahrenheit	Air Temperature Min Deg. Fahrenheit	Humidity Mean Percent	Humidity Max Percent	Humidity Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb Precip. inches	Total Precip. inches	
1	213	0	8.3	247	24.0	90	102	78	26	44	13	49	64	0.00
2	214	0	5.9	255	22.5	91	106	74	18	36	8	38	60	0.00
3	215	3	5.3	248	21.5	93	109	74	13	20	8	33	59	0.00
4	216	3	6.3	216	23.5	96	111	75	12	20	5	33	59	0.00
5	217	0	11.9	204	42.2	96	110	75	11	19	4	30	59	0.00
6	218	0	11.7	297	29.3	89	100	78	6	12	4	12	53	0.00
7	219	11	4.6	233	21.6	88	105	69	9	17	4	19	53	0.00
8	220	4	7.9	192	21.6	88	107	67	9	14	4	21	54	0.00
9	221	1	6.6	213	20.9	89	105	68	11	20	5	26	55	0.00
10	222	0	6.8	245	23.1	89	105	71	14	27	7	31	57	0.00
11	223	0	8.8	124	29.8	92	105	79	26	45	10	50	65	0.00
12	224	0	9.3	144	25.3	93	107	77	23	41	10	47	64	0.00
13	225	0	8.7	139	20.0	94	105	80	19	28	12	44	63	0.00
14	226	0	8.6	155	23.2	96	108	82	19	27	11	46	64	0.00
15	227	0	5.5	227	20.2	96	111	79	18	29	11	44	63	0.00
16	228	0	6.9	175	21.0	95	111	78	19	27	10	46	64	0.00
17	229	0	15.7	146	28.6	94	105	82	21	29	12	46	63	0.00
18	230	0	14.8	136	45.5	84	96	75	24	39	12	41	58	0.00
19	231	0	12.7	298	32.0	81	93	71	12	17	8	24	52	0.00
20	232	5	6.3	154	22.0	82	95	67	15	21	11	30	54	0.00
21	233	0	13.8	154	39.4	85	97	75	23	38	13	41	59	0.00
22	234	4	9.9	143	33.2	85	98	65	16	35	4	29	55	0.00
23	235	7	9.8	164	27.2	84	99	64	13	18	6	27	54	0.00
24	236	0	10.6	151	25.9	87	100	68	10	19	4	20	53	0.00
25	237	0	7.9	170	30.7	88	103	67	10	16	6	24	54	0.00
26	238	0	5.3	279	17.1	85	102	68	11	22	4	20	53	0.00
27	239	2	5.8	254	18.4	85	104	65	6	12	2	10	51	0.00
28	240	0	5.5	260	18.9	88	106	67	8	14	6	20	53	0.00
29	241	0	5.2	250	22.0	91	108	71	12	19	6	31	57	0.00
30	242	13	8.5	184	26.6	92	107	73	17	34	8	39	60	0.00
31	243	0	10.8	152	29.3	88	101	73	26	49	12	46	62	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Wind Ave. V. mph	Wind Dir. Deg	Air Temperature Max. Deg. Fahrenheit	Air Temperature Mean Deg. Fahrenheit	Air Temperature Min Deg. Fahrenheit	Humidity Mean Percent	Humidity Max Percent	Humidity Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb Precip. inches	Total Precip. inches
Total	52											0.00
Ave.	2	8.6	189	26.0	89.4	103.8	72.7	15	26	8	33	58
Max.	13	15.7		45.5	96	111	82	26	49	13	50	65
Min.	0	4.6		17.1	81	93	64	6	12	2	10	51

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

September, 2021

Day of Month	Day Year	Total Solar Rad. ly.	Wind Ave. V. mph	Dir. Deg	Max. mph	Air Temperature Mean Deg. Fahrenheit	Max	Min	Humidity Mean Percent	Max	Min	Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip. inches
1	244	0	14.7	135	27.8	84	95	77	31	50	15	48	62	0.00
2	245	0	11.3	147	27.1	84	95	75	14	31	6	27	54	0.00
3	246	5	6.4	175	22.6	80	97	60	9	19	4	15	49	0.00
4	247	1	5.2	255	19.7	82	100	62	8	12	4	13	50	0.00
5	248	1	4.9	272	20.9	85	103	65	8	13	4	14	51	0.00
6	249	0	5.5	269	22.4	88	106	66	9	14	5	21	54	0.00
7	250	0	4.9	258	19.0	91	108	70	11	19	6	27	56	0.00
8	251	0	5.5	199	23.6	93	110	73	11	27	6	29	58	0.00
9	252	0	9.9	255	42.3	91	105	75	24	36	10	47	63	0.00
10	253	0	8.5	224	32.5	87	102	71	25	44	12	46	61	0.00
11	254	0	6.3	196	25.6	88	100	75	19	35	8	39	59	0.00
12	255	0	6.3	237	22.2	86	100	67	14	27	6	28	55	0.00
13	256	0	4.9	277	20.8	83	100	64	10	19	4	19	52	0.00
14	257	5	5.7	268	19.2	82	99	64	9	14	5	15	50	0.00
15	258	1	4.8	239	18.6	82	99	63	9	14	5	16	51	0.00
16	259	5	5.4	262	16.6	77	92	59	12	17	8	21	50	0.00
17	260	1	10.4	158	25.8	78	92	59	19	42	7	30	53	0.00
18	261	0	8.2	170	27.5	80	92	69	19	47	6	27	54	0.00
19	262	1	8.1	153	33.8	75	89	58	16	23	10	25	50	0.00
20	263	0	14.7	310	37.5	76	91	65	13	21	7	20	49	0.00
21	264	2	4.6	190	17.0	76	93	59	10	17	5	13	47	0.00
22	265	1	4.6	273	15.1	77	95	57	11	16	7	18	49	0.00
23	266	6	7.6	292	26.5	82	96	66	12	19	8	24	52	0.00
24	267	0	4.2	267	14.4	81	97	67	13	18	8	24	52	0.00
25	268	0	5.6	201	18.8	80	96	62	18	31	9	32	54	0.00
26	269	0	6.2	212	20.2	81	94	63	27	45	15	43	58	0.00
27	270	0	7.4	156	18.4	78	90	63	27	40	18	40	56	0.00
28	271	0	18.0	14	37.5	74	82	66	20	35	7	27	51	0.00
29	272	1	18.0	326	36.9	68	79	58	10	17	4	7	43	0.00
30	273	13	9.2	322	28.8	68	84	55	9	13	5	6	43	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Wind Ave. V. mph	Dir. Deg	Max. mph	Air Temperature Mean Deg. Fahrenheit	Max	Min	Humidity Mean Percent	Max	Min	Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip. inches
Total	44												0.00
Ave.	1	7.9	244	24.6	81.2	96.1	65.1	15	26	7	25	53	
Max.	13	18.0		42.3	93	110	77	31	50	18	48	63	0.00
Min.	0	4.2		14.4	68	79	55	8	12	4	6	43	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, 2021

Day of Month	Day of Year	Total Solar Rad. ly.	Ave. V. mph	Dir. Deg	Max. mph	Mean Deg.	Max Fahrenheit	Min Fahrenheit	Mean	Max	Min	Humidity Percent	Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip. inches
1	274	11	4.9	283	13.9	68	87	51	9	15	5	7	43	0.00	
2	275	8	5.2	271	16.7	71	89	51	11	17	7	14	46	0.00	
3	276	5	4.0	281	17.9	74	92	57	14	20	8	21	48	0.00	
4	277	6	5.7	265	16.6	73	89	59	19	27	11	27	49	0.00	
5	278	0	7.3	177	25.4	68	81	57	34	57	24	39	52	0.00	
6	279	0	7.6	193	20.3	69	83	57	37	56	19	41	53	0.00	
7	280	0	11.5	161	31.2	70	82	58	33	45	21	40	53	0.00	
8	281	0	10.0	178	32.5	67	77	60	35	50	21	38	51	0.00	
9	282	6	14.8	324	31.3	63	72	55	26	46	10	26	46	0.00	
10	283	2	8.8	279	25.4	64	79	52	20	36	9	19	44	0.00	
11	284	53	22.2	335	67.6	53	68	45	29	57	17	20	39	0.00	
12	285	170	25.9	327	53.6	52	61	45	26	36	16	17	37	0.00	
13	286	29	7.3	227	28.3	53	68	40	20	36	9	11	37	0.00	
14	287	41	9.4	329	32.0	58	71	43	19	29	13	16	40	0.00	
15	288	11	3.9	281	12.0	59	76	45	18	31	8	14	40	0.00	
16	289	0	6.2	239	20.5	63	80	49	12	17	6	8	41	0.00	
17	290	0	10.4	193	29.0	63	80	45	13	22	7	11	41	0.00	
18	291	24	13.5	353	41.7	57	66	49	26	59	12	21	41	0.00	
19	292	28	6.6	203	20.7	56	70	44	29	46	17	23	41	0.00	
20	293	6	5.8	295	16.1	58	72	42	24	38	14	20	41	0.00	
21	294	2	4.4	245	13.0	63	79	49	20	29	12	20	43	0.00	
22	295	0	8.7	179	24.7	64	80	45	22	47	8	22	45	0.00	
23	296	0	7.7	136	18.9	65	75	55	42	55	27	40	51	0.00	
24	297	0	12.8	130	26.9	63	71	54	41	51	31	39	49	0.00	
25	298	26	20.1	178	51.2	59	69	43	57	98	39	43	50	0.10	
26	299	0	12.7	318	25.9	54	65	43	44	66	23	31	42	0.00	
27	300	9	9.9	315	29.0	61	76	44	43	67	25	37	48	0.00	
28	301	0	6.0	258	29.2	67	83	55	35	55	18	37	51	0.00	
29	302	0	3.8	261	13.0	65	83	50	36	60	18	36	49	0.00	
30	303	0	5.0	158	15.0	66	80	50	34	54	20	35	49	0.00	
31	304	0	6.4	183	20.9	64	78	51	34	51	21	35	49	0.00	

MONTHLY STATISTICS

	Total Solar Rad. ly.	Ave. V. mph	Dir. Deg	Max. mph	Mean Deg.	Max Fahrenheit	Min Fahrenheit	Mean	Max	Min	Humidity Percent	Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip. inches
Total	437													0.10
Ave.	14	9.3	270	26.5	63.0	76.9	49.7	28	44	16	26	45		
Max.	170	25.9		67.6	74	92	60	57	98	39	43	53	0.10	
Min.	0	3.8	12.0	52	61	40	9	15	5	7	37	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, 2021

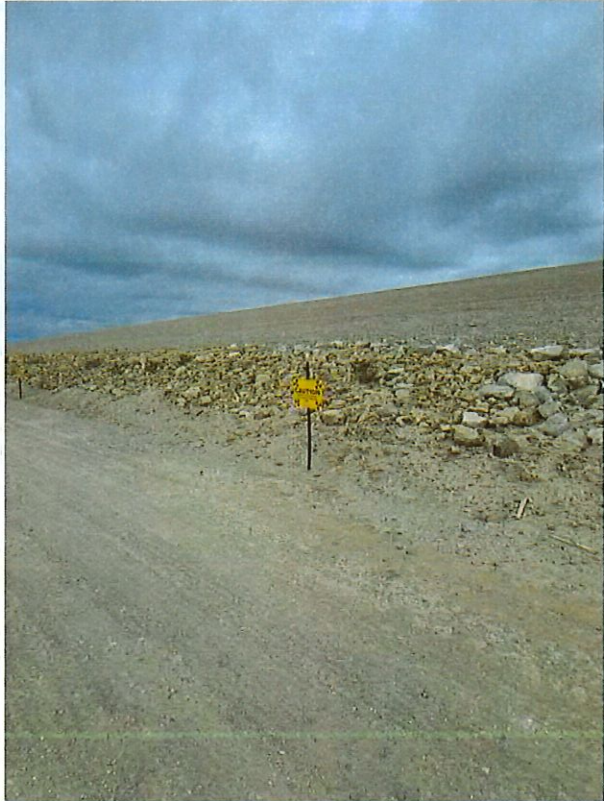
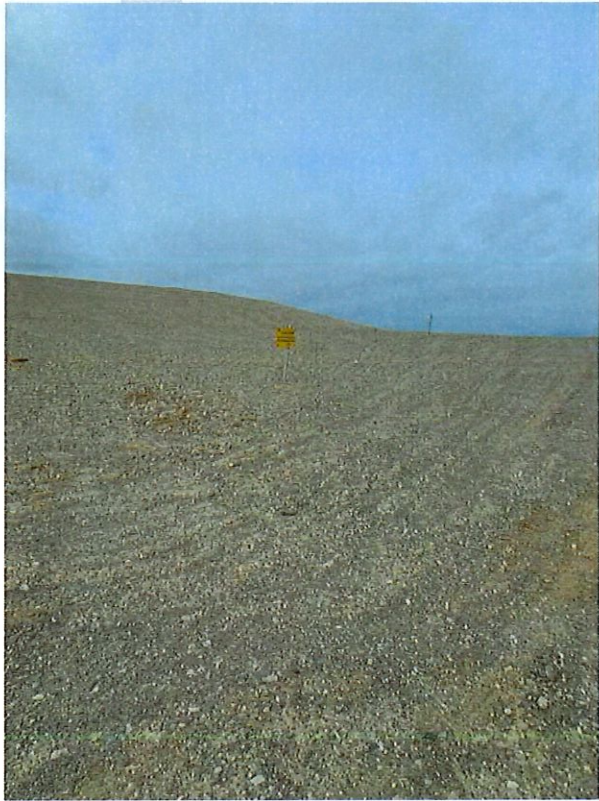
Day of Month	Day of Year	Total Solar Rad. ly.	Ave. V. mph	Wind Dir. Deg	Max. mph	Air Temperature Mean Deg. Fahrenheit	Max Min	Humidity Mean Max Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip. inches
1	305	16	5.5	269	17.7	59	70 48	38 60 21	32	46	0.00
2	306	0	4.2	296	11.1	61	78 47	32 49 15	29	45	0.00
3	307	0	3.7	274	12.4	65	81 51	27 41 14	28	46	0.00
4	308	0	6.1	265	15.3	63	79 48	30 45 17	29	46	0.00
5	309	0	4.3	296	13.1	64	79 49	28 44 16	29	46	0.00
6	310	0	5.7	343	14.9	64	80 46	23 49 8	21	44	0.00
7	311	0	5.2	304	18.1	62	77 45	19 35 13	19	43	0.00
8	312	5	5.2	181	20.6	60	72 45	29 50 17	27	44	0.00
9	313	4	7.6	127	18.7	61	71 50	26 47 17	25	44	0.00
10	314	2	9.9	323	28.1	63	77 47	33 53 16	32	47	0.00
11	315	0	12.0	337	37.8	66	78 57	31 43 19	35	49	0.00
12	316	0	3.9	251	12.3	64	81 51	32 50 17	32	47	0.00
13	317	0	4.4	270	12.2	64	84 46	26 47 12	26	45	0.00
14	318	0	5.0	267	11.7	64	83 50	22 34 10	22	44	0.00
15	319	1	4.9	285	14.1	62	77 47	21 31 13	21	43	0.00
16	320	0	4.9	305	19.2	63	79 52	20 29 11	20	44	0.00
17	321	0	7.9	303	34.3	61	73 45	22 36 13	21	42	0.00
18	322	51	4.7	269	12.6	54	67 40	21 30 13	14	38	0.00
19	323			14.0		70	43	32 15			
20	324										
21	325										
22	326										
23	327										
24	328										
25	329										
26	330										
27	331										
28	332										
29	333										
30	334										

MONTHLY STATISTICS

	Total Solar Rad. ly.	Ave. V. mph	Wind Dir. Deg	Max. mph	Air Temperature Mean Deg. Fahrenheit	Max Min	Humidity Mean Max Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip. inches
Total	80									0.00
Ave.	4	5.8	293	17.8	62.3	76.6 47.8	27 42 15	26	45	
Max.	51	12.0		37.8	66	84 57	38 60 21	35	49	0.00
Min.	0	3.7		11.1	54	67 40	19 29 8	14	38	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



Caution Radioactive Materials Signage was reposted 12/9/21.