

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

August 19, 2021

MEMORANDUM

To: Betty File

From: Haley Brown, Radiation Control Specialist *HB*

Subject: Betty Inspection Summary August 19, 2021

An inspection of the Beatty Low-Level Radioactive Waste landfill (closed) was conducted on August 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:

All of the postings along the interior boundary are adequate.

Site Boundary secured through front guard gate: Yes

Site Boundary, Access Road and Buffer Areas Maintained: Yes

Rain Since Last Inspection:

May – 0.00”, June – 0.11”, July – 0.01”, and August – 0.00” as of August 18, 2021.

Erosion, Fissures, Water Pooling or Substance Concerns:

None

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: 14 – 18 urem/hr

Value used for twice background: 36 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

← → ← →

Beatty 11SSE US Ecology Nevada

Monthly Summary for

May, 2021

Day of Month	Day Year	Total Solar Rad. ly.	Wind Ave. V. mph	Wind Dir. Deg	Air Temperature Max. mph	Air Temperature Mean Deg.	Air Temperature Max Fahrenheit	Air Temperature Min Fahrenheit	Humidity Mean	Humidity Max	Humidity Min	Dew Point Deg.	Wet Bulb Fahrenheit	Total Precip. inches
1	121	14	9.2	144	23.9	80	93	67	12	21	6	22	51	0.00
2	122	0	2.8	339	44.6	72	79	64	17	30	10	24	48	0.00
3	123	30	5.6	334	38.0	69	81	56	16	29	7	18	46	0.00
4	124	7	6.0	235	20.3	74	89	57	10	17	6	14	47	0.00
5	125	5	6.0	191	20.5	79	95	58	11	18	6	18	50	0.00
6	126	0	10.3	183	33.8	80	95	59	12	22	5	21	51	0.00
7	127	0	9.7	149	28.5	79	90	67	15	25	8	26	52	0.00
8	128	0	9.7	329	38.1	74	82	65	9	16	4	10	46	0.00
9	129	0	9.0	299	27.6	73	87	61	9	13	6	10	46	0.00
10	130	0	17.6	333	33.5	74	84	62	11	18	5	15	47	0.00
11	131	0	8.1	283	35.4	74	88	60	9	15	6	11	46	0.00
12	132	4	6.7	186	24.1	78	95	57	9	15	5	13	49	0.00
13	133	34	6.9	205	22.5	81	96	59	11	18	7	20	51	0.00
14	134	21	8.1	197	24.4	81	95	62	11	18	5	20	51	0.00
15	135	0	16.9	133	34.8	77	91	64	16	37	3	23	51	0.00
16	136	23	9.9	297	35.1	68	80	56	32	46	20	37	51	0.00
17	137	40	11.1	324	47.8	74	89	61	28	42	14	37	53	0.00
18	138	3	9.8	302	35.0	81	95	63	18	42	7	29	53	0.00
19	139	1	8.6	157	24.0	80	95	66	13	23	6	23	51	0.00
20	140	0	17.3	118	45.8	71	87	54	15	23	4	18	46	0.00
21	141	104	15.7	323	42.3	54	64	45	32	57	18	24	40	0.00
22	142	36	7.4	304	33.2	56	67	46	35	51	20	28	43	0.00
23	143	2	6.0	206	29.9	63	79	42	28	58	11	25	45	0.00
24	144	5	6.8	172	21.0	72	86	55	18	32	10	25	49	0.00
25	145	47	8.9	170	25.4	77	92	56	13	26	6	19	49	0.00
26	146	2	10.2	299	32.4	78	91	66	11	16	7	20	50	0.00
27	147	0	5.4	247	26.9	79	93	58	12	21	5	20	50	0.00
28	148	1	5.8	224	22.9	82	97	62	10	18	6	19	51	0.00
29	149	17	5.4	232	19.0	78	93	62	11	16	7	19	49	0.00
30	150	24	7.8	354	29.6	84	98	66	13	22	6	25	53	0.00
31	151	43	7.7	322	21.9	87	101	73	8	14	4	16	53	0.00

MONTHLY STATISTICS

	Total Solar Rad. ly.	Wind Ave. V. mph	Wind Dir. Deg	Air Temperature Max. mph	Air Temperature Mean Deg.	Air Temperature Max Fahrenheit	Air Temperature Min Fahrenheit	Humidity Mean	Humidity Max	Humidity Min	Dew Point Deg.	Wet Bulb Fahrenheit	Total Precip. inches
Total	400												0.00
Ave.	13	10.2	273	30.4	75.2	88.7	59.7	15	26	8	21	49	
Max.	104	22.8		47.8	87	101	73	35	58	20	37	53	0.00
Min.	0	5.4		19.0	54	64	42	8	13	3	10	40	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

prev month **Station Summary** next month

Beatty 11SSE US Ecology Nevada

Monthly Summary for

June, 2021

Day of Month	Day of 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	
<u>1</u>	152	46	5.8	206	24.4	88	103	67	8	13	5	17	53	0.00
<u>2</u>	153	16	5.8	238	25.6	90	106	68	10	14	6	24	55	0.00
<u>3</u>	154	0	6.8	227	23.4	93	108	72	11	18	7	29	57	0.00
<u>4</u>	155	4	8.1	195	27.7	95	108	80	11	18	6	30	58	0.00
<u>5</u>	156	0	8.4	165	26.1	92	106	75	12	23	4	28	57	0.00
<u>6</u>	157	8	13.4	150	31.8	88	102	68	13	23	6	30	56	0.00
<u>7</u>	158	0	14.6	143	28.4	80	91	71	16	24	8	29	53	0.00
<u>8</u>	159	26	15.1	141	31.8	75	92	62	23	39	7	32	52	0.00
<u>9</u>	160	0	8.0	172	47.6	77	90	65	17	29	8	27	51	0.00
<u>10</u>	161	12	9.7	321	30.3	71	83	55	10	27	3	4	44	0.00
<u>11</u>	162	5	4.4	234	18.5	76	93	53	4	7	2	-6	45	0.00
<u>12</u>	163	13	4.8	226	20.9	85	102	62	6	10	4	9	50	0.00
<u>13</u>	164	64	9.8	189	30.7	87	104	65	8	13	4	17	53	0.00
<u>14</u>	165	40	10.8	170	29.3	91	107	72	11	22	3	24	56	0.00
<u>15</u>	166	28	8.6	170	24.2	94	110	68	8	16	4	22	56	0.00
<u>16</u>	167	87	6.1	272	21.6	97	114	75	7	12	4	23	58	0.00
<u>17</u>	168	24	8.0	202	35.6	99	113	81	9	14	5	29	60	0.00
<u>18</u>	169	0	2.2	312	37.8	98	110	85	11	15	8	35	61	0.00
<u>19</u>	170	0	7.6	281	29.8	99	112	85	10	16	6	33	61	0.00
<u>20</u>	171	2	7.1	202	24.6	98	111	78	10	17	6	31	60	0.00
<u>21</u>	172	12	11.4	157	29.9	93	107	73	10	17	5	27	57	0.00
<u>22</u>	173	4	9.2	193	31.6	90	104	71	9	17	4	23	55	0.00
<u>23</u>	174	2	16.1	138	41.6	85	95	76	19	34	9	36	57	0.00
<u>24</u>	175	61	7.6	206	27.8	84	98	64	20	44	5	33	56	0.00
<u>25</u>	176	0	5.7	266	24.4	86	101	67	11	21	6	25	54	0.00
<u>26</u>	177	0	9.7	360	34.5	92	104	74	12	18	9	31	58	0.00
<u>27</u>	178	0	8.3	326	28.1	96	109	78	12	22	8	35	60	0.00
<u>28</u>	179	1	9.7	136	31.2	98	110	81	12	19	8	35	61	0.00
<u>29</u>	180	1	13.1	120	46.4	92	108	78	21	65	10	44	62	0.11
<u>30</u>	181	1	8.8	290	48.2	85	101	73	36	64	17	53	64	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	455											0.11
Ave.	15	9.5	190	30.4	89.1	103.4	71.3	13	23	6	27	56
Max.	87	18.0		48.2	99	114	85	36	65	17	53	64
Min.	0	4.4		18.5	71	83	53	4	7	2	-6	44

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, 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 Deg. Fahrenheit	Total Precip. inches	
<u>1</u>	182	5	5.9	232	25.6	89	104	72	22	48	6	39	60	0.00
<u>2</u>	183	0	6.7	190	26.7	90	105	70	13	29	6	30	57	0.00
<u>3</u>	184	1	8.4	156	29.8	85	97	72	22	38	10	40	58	0.00
<u>4</u>	185	0	6.1	190	24.1	89	105	72	21	43	8	39	60	0.00
<u>5</u>	186	0	5.8	271	21.6	93	106	73	11	18	6	29	57	0.00
<u>6</u>	187	0	5.6	251	20.1	95	110	72	12	19	7	32	59	0.00
<u>7</u>	188	0	6.9	203	24.9	97	112	77	13	22	8	38	62	0.00
<u>8</u>	189	0	7.6	174	23.2	99	113	78	15	24	8	41	63	0.00
<u>9</u>	190	3	8.0	258	26.9	100	114	80	14	24	7	41	64	0.00
<u>10</u>	191	83	12.1	306	32.4	106	118	95	10	15	6	37	64	0.00
<u>11</u>	192	8	12.8	290	41.2	104	117	92	11	17	7	39	64	0.00
<u>12</u>	193	0	12.1	273	45.2	101	115	84	14	24	8	42	64	0.00
<u>13</u>	194	0	10.5	184	27.5	97	109	84	20	33	12	49	66	0.00
<u>14</u>	195	0	10.7	143	27.6	96	107	86	19	35	11	46	64	0.00
<u>15</u>	196	5	13.6	148	29.5	94	107	82	22	45	11	47	64	0.00
<u>16</u>	197	0	11.1	147	22.7	93	106	82	16	24	9	40	61	0.00
<u>17</u>	198	0	11.4	140	25.6	95	107	83	16	23	10	40	61	0.00
<u>18</u>	199	0	9.7	123	27.5	93	104	87	25	37	17	52	66	0.00
<u>19</u>	200	15	11.6	92	40.7	87	98	78	41	67	24	59	67	0.01
<u>20</u>	201	0	5.3	220	27.5	90	105	72	28	55	12	49	63	0.00
<u>21</u>	202	0	6.0	152	20.6	88	99	77	25	38	20	48	62	0.00
<u>22</u>	203	0	10.1	179	30.1	93	107	78	24	36	14	50	65	0.00
<u>23</u>	204	0	9.6	156	25.4	94	105	85	22	32	15	49	64	0.00
<u>24</u>	205	0	9.7	173	32.5	93	105	77	22	35	11	46	63	0.00
<u>25</u>	206	0	9.5	142	40.8	92	107	78	27	62	13	50	65	0.00
<u>26</u>	207	29	9.2	145	46.9	77	91	69	58	84	36	61	66	0.00
<u>27</u>	208	4	6.9	202	20.5	85	99	68	40	76	14	55	65	0.00
<u>28</u>	209	0	9.9	267	34.1	91	105	75	24	37	10	47	63	0.00
<u>29</u>	210	0	10.2	157	38.1	91	105	77	26	46	15	50	64	0.00
<u>30</u>	211	0	7.1	202	27.4	85	94	78	37	52	26	55	65	0.00
<u>31</u>	212	0	7.0	264	30.5	85	96	78	35	46	22	53	64	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 Deg. Fahrenheit	Total Precip. inches
Total	152											0.01
Ave.	5	8.9	180	29.6	92.5	105.6	78.4	23	38	13	45	63
Max.	83	13.6		46.9	106	118	95	58	84	36	61	67
Min.	0	5.3		20.1	77	91	68	10	15	6	29	57

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

← → next

Station Summary

Beatty 11SSE US Ecology Nevada

Monthly Summary for

August, 2021

Day of Month	Day of 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	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				32.0		93	71		17	8			
20	232													
21	233													
22	234													
23	235													
24	236													
25	237													
26	238													
27	239													
28	240													
29	241													
30	242													
31	243													

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	Total Precip. inches
Total	22											0.00
Ave.	1	8.5	192	26.1	91.8	105.3	75.4	17	27	8	37	60
Max.	11	15.7		45.5	96	111	82	26	45	13	50	65
Min.	0	4.6		20.0	84	93	67	6	12	4	12	53

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