

Joe Lombardo  
Governor

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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

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February 27, 2023

MEMORANDUM

To: Beatty File

From: Corey Creveling, Radiation Control Supervisor *CC*

Subject: Beatty Inspection Summary February 13, 2023

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An inspection of the Beatty Low-Level Radioactive Waste landfill (closed) was conducted on February 13, 2023, by Corey Creveling. 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 road 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 which blocked the road near the heavy equipment shop 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 with visible signs of fresh repairs and minor erosion most likely resulting from the rain event on January 9 and 10, 2023 which combined for a total of 1.04 inches of the total rainfall for January 2023.

**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: The erosion is located on the corner closest to the heavy equipment repair shop where the direction of the trenches change from roughly East/West to North/South, and on the North side of the cap approximately halfway between the East and West ends of the cap which has some minor impacts to the boundary fence and road due to runoff of cap materials.

Rain Since Last Inspection:

December – 0.33”, January – 1.36”, February – 0.01”

## **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: 18 – 27 µrem/hr

Value used for twice background: 54 µrem/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](mailto:jfollette@health.nv.gov)  
                  Corey Creveling:      775-687-7536, [ccreveling@health.nv.gov](mailto:ccreveling@health.nv.gov)

**Beatty 11SSE US Ecology Nevada**  
 Monthly Summary for  
**December, 2022**

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
<a href="#">1</a>	335	49	10.7	160	29.0	46	55	34	48	69	37	27	37	0.00
<a href="#">2</a>	336	22	5.1	308	15.8	48	57	39	53	78	33	31	40	0.00
<a href="#">3</a>	337	0	6.2	242	18.3	51	61	44	54	79	38	35	43	0.00
<a href="#">4</a>	338	2	12.7	140	28.6	55	65	48	52	68	36	37	45	0.00
<a href="#">5</a>	339	2	6.7	145	16.3	48	57	38	59	83	38	33	40	0.00
<a href="#">6</a>	340	12	3.9	278	14.1	44	57	33	56	77	35	29	37	0.00
<a href="#">7</a>	341	10	4.4	254	15.9	43	54	33	59	77	33	28	36	0.00
<a href="#">8</a>	342	38	4.3	241	14.0	41	53	29	55	81	33	25	34	0.00
<a href="#">9</a>	343	48	5.0	258	14.9	42	53	29	47	71	27	22	33	0.00
<a href="#">10</a>	344	182	12.5	157	44.8	45	56	29	43	68	26	23	35	0.00
<a href="#">11</a>	345	10	16.2	153	43.8	46	52	32	49	85	19	26	37	0.15
<a href="#">12</a>	346	61	4.0	274	12.3	37	48	28	60	83	34	24	32	0.00
<a href="#">13</a>	347	14	11.6	333	26.5	41	49	31	49	79	28	22	33	0.00
<a href="#">14</a>	348	177	9.7	308	23.4	41	51	33	42	62	20	18	32	0.00
<a href="#">15</a>	349	0	11.6	332	37.6	43	53	32	41	58	27	20	33	0.00
<a href="#">16</a>	350	27	4.1	166	14.6	39	52	29	42	62	20	17	30	0.00
<a href="#">17</a>	351	138	2.6	254	9.8	37	51	25	42	63	19	15	29	0.00
<a href="#">18</a>	352	48	3.6	282	10.8	37	54	25	41	63	19	15	29	0.00
<a href="#">19</a>	353	36	4.0	286	11.3	40	52	28	37	57	19	15	30	0.00
<a href="#">20</a>	354	23	4.7	287	20.2	45	58	34	34	52	15	16	34	0.00
<a href="#">21</a>	355	23	6.0	300	21.1	49	62	36	39	57	25	24	38	0.00
<a href="#">22</a>	356	12	6.0	290	21.7	50	63	40	43	61	22	27	39	0.00
<a href="#">23</a>	357	1	4.4	309	18.1	50	67	37	40	61	18	25	39	0.00
<a href="#">24</a>	358	1	4.2	301	21.8	53	70	42	37	52	19	27	41	0.00
<a href="#">25</a>	359	0	3.9	354	15.7	56	73	42	33	51	16	25	41	0.00
<a href="#">26</a>	360	9	3.3	269	11.8	53	66	40	41	60	26	30	42	0.00
<a href="#">27</a>	361	3	7.6	96	22.7	53	62	44	46	81	23	31	42	0.00
<a href="#">28</a>	362	15	11.5	336	34.6	49	57	35	44	89	14	23	38	0.00
<a href="#">29</a>	363	1	4.0	296	13.0	43	55	34	41	60	27	20	33	0.00
<a href="#">30</a>	364	14	5.3	292	17.1	44	51	33	71	87	53	35	40	0.00
<a href="#">31</a>	365	1	17.0	139	33.9	52	58	47	72	93	55	43	47	0.18

**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	981												0.33
Ave.	32	7.0	271	21.1	45.7	57.2	35.0	47	70	28	25	37	
Max.	182	17.0		44.8	56	73	48	72	93	55	43	47	0.18
Min.	0	2.6		9.8	37	48	25	33	51	14	15	29	0.00

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

° 1 ly = 1 cal/cm<sup>2</sup> = 4.1855 J/cm<sup>2</sup> = 3.6855 BTU/ft<sup>2</sup> = .01163 KW-hr/m<sup>2</sup>

**Beatty 11SSE US Ecology Nevada**  
 Monthly Summary for  
**January, 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
<a href="#">1</a>	1	29	23.8	334	42.4	44	48	40	66	95	42	33	39	0.12
<a href="#">2</a>	2	1	12.8	353	39.2	41	48	37	43	68	30	20	33	0.00
<a href="#">3</a>	3	16	4.4	310	11.8	42	51	34	68	86	47	32	37	0.00
<a href="#">4</a>	4	0	10.4	108	29.3	44	50	36	77	87	66	37	40	0.03
<a href="#">5</a>	5	0	14.3	121	35.3	49	53	44	71	85	60	40	44	0.11
<a href="#">6</a>	6	29	5.3	306	16.9	43	54	33	66	92	27	31	37	0.00
<a href="#">7</a>	7	46	4.6	233	13.9	42	52	32	66	83	45	31	37	0.00
<a href="#">8</a>	8	6	5.3	292	19.4	44	56	35	62	85	35	31	38	0.00
<a href="#">9</a>	9	9	15.3	140	37.4	49	55	44	61	92	42	36	42	0.70
<a href="#">10</a>	10	32	11.1	136	31.7	47	54	38	69	92	40	37	42	0.34
<a href="#">11</a>	11	79	5.1	287	12.6	41	51	33	71	86	46	32	36	0.00
<a href="#">12</a>	12	5	3.6	291	12.3	44	59	33	65	86	32	32	38	0.00
<a href="#">13</a>	13	12	5.0	271	14.2	44	53	36	64	82	40	32	38	0.00
<a href="#">14</a>	14	0	9.7	138	26.3	43	49	37	77	94	53	36	40	0.04
<a href="#">15</a>	15	9	8.7	124	19.6	44	49	36	74	93	54	35	40	0.00
<a href="#">16</a>	16	22	13.4	168	32.7	46	56	39	65	95	26	33	40	0.02
<a href="#">17</a>	17	0	16.3	324	35.5	43	49	36	50	82	34	25	35	0.00
<a href="#">18</a>	18	53	8.8	300	35.2	41	51	33	42	72	25	19	32	0.00
<a href="#">19</a>	19	58	14.0	327	47.5	39	50	30	47	74	26	19	31	0.00
<a href="#">20</a>	20	0	20.5	322	40.8	40	47	35	37	46	28	16	31	0.00
<a href="#">21</a>	21	89	10.9	330	31.4	41	53	32	35	58	16	14	31	0.00
<a href="#">22</a>	22	325	22.8	336	62.0	39	48	26	37	75	19	14	30	0.00
<a href="#">23</a>	23	321	29.4	340	66.4	42	49	36	31	37	24	13	31	0.00
<a href="#">24</a>	24	315	23.6	333	46.0	46	57	36	26	37	16	13	34	0.00
<a href="#">25</a>	25	204	17.6	330	33.5	47	55	37	31	44	24	18	35	0.00
<a href="#">26</a>	26	16	14.8	329	37.8	47	57	39	35	49	20	20	36	0.00
<a href="#">27</a>	27	60	5.9	269	27.3	45	59	34	38	60	18	20	35	0.00
<a href="#">28</a>	28	56	7.1	351	27.3	48	60	34	34	62	17	20	36	0.00
<a href="#">29</a>	29	22	8.3	302	25.8	42	52	29	55	76	38	27	35	0.00
<a href="#">30</a>	30	2	25.7	316	41.0	36	43	31	47	90	26	17	29	0.00
<a href="#">31</a>	31	62	23.1	330	49.8	38	52	28	23	34	9	4	27	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	1876												1.36
Ave.	61	13.0	322	32.3	43.3	52.3	34.9	53	74	33	25	36	
Max.	325	29.4		66.4	49	60	44	77	95	66	40	44	0.70
Min.	0	3.6		11.8	36	43	26	23	34	9	4	27	0.00

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**Beatty 11SSE US Ecology Nevada**  
 Monthly Summary for  
**February, 2023**

Day of Month	Day of Year	Total Solar Rad. ly.	Wind Ave. V. mph	Dir. Max. Deg	Air Temperature Mean Deg. Fahrenheit	Max Min	Humidity Mean Max Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip. inches
<a href="#">1</a>	32				15.7	59 31	53 16			
<a href="#">2</a>	33	91	4.2	269	14.2	45 60 31	39 64 18	19	35	0.00
<a href="#">3</a>	34	30	6.0	279	16.7	46 61 33	38 66 16	20	35	0.00
<a href="#">4</a>	35	29	5.8	182	16.8	48 60 33	35 60 18	19	36	0.00
<a href="#">5</a>	36	23	11.9	303	39.3	53 62 40	32 55 13	22	39	0.00
<a href="#">6</a>	37	135	20.5	329	45.3	47 54 41	33 43 23	20	36	0.00
<a href="#">7</a>	38	31	8.2	340	24.7	49 61 37	31 47 19	19	36	0.00
<a href="#">8</a>	39	5	9.3	336	35.4	54 68 37	27 56 7	16	38	0.00
<a href="#">9</a>	40	5	10.4	130	34.6	52 63 37	21 39 12	13	37	0.00
<a href="#">10</a>	41	43	5.7	214	20.6	46 59 33	26 48 12	10	33	0.00
<a href="#">11</a>	42	3	8.1	37	23.0	50 61 36	19 40 10	8	34	0.00
<a href="#">12</a>	43	0	13.2	342	32.5	54 64 37	19 35 10	12	37	0.00
<a href="#">13</a>	44	1	13.2	219	36.2	55 66 47	21 44 12	15	39	0.00
<a href="#">14</a>	45	200	23.1	336	62.3	40 49 32	29 58 6	6	30	0.00
<a href="#">15</a>	46	285	28.5	342	54.3	40 50 32	23 36 13	5	28	0.00
<a href="#">16</a>	47	71	5.6	252	32.4	38 52 27	22 37 8	2	27	0.00
<a href="#">17</a>	48	68	3.9	270	13.2	41 59 28	20 33 8	2	29	0.00
<a href="#">18</a>	49	57	4.6	261	13.2	44 62 28	22 39 9	5	31	0.00
<a href="#">19</a>	50	19	5.1	298	21.1	49 68 31	20 35 9	8	34	0.00
<a href="#">20</a>	51	22	8.3	319	27.7	55 69 38	24 35 15	18	39	0.00
<a href="#">21</a>	52	5	10.6	193	52.9	52 68 37	33 70 15	22	39	0.00
<a href="#">22</a>	53	44	16.3	355	43.2	40 48 34	31 43 13	10	30	0.00
<a href="#">23</a>	54	47	11.6	141	31.1	38 48 28	43 68 19	16	30	0.00
<a href="#">24</a>	55	15	20.7	128	43.6	40 48 31	58 71 38	26	34	0.01
<a href="#">25</a>	56				36.0	49 47	54 49			
<a href="#">26</a>	57									
<a href="#">27</a>	58									
<a href="#">28</a>	59									

MONTHLY STATISTICS

	Total Solar Rad. ly.	Wind Ave. V. mph	Dir. Max. Deg	Air Temperature Mean Deg. Fahrenheit	Max Min	Humidity Mean Max Min Percent	Dew Point Deg. Fahrenheit	Wet Bulb	Total Precip. inches
Total	1230								0.01
Ave.	53	11.1	314	31.4	46.8 58.7 34.7	29 49 15	14	34	
Max.	285	28.5		62.3	55 69 47	58 71 49	26	39	0.01
Min.	0	3.9		13.2	38 48 27	19 33 6	2	27	0.00

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