Joe Lombardo *Governor*

Richard Whitley, MS *Director*



DEPARTMENT OF HEALTH AND HUMAN SERVICES





Cody Phinney, MPH Administrator

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

December 19, 2024

MEMORANDUM

To: Beatty File From: Hannah Hoffman, Radiation Specialist II H

Subject: Beatty Inspection Summary November 26, 2024

An inspection of the Beatty Low-Level Radioactive Waste landfill (closed) was conducted on November 26, 2024, by Jaime Walters and Hannah Hoffman. The site is under construction to substantially increase the overall thickness of cover soils, increase mass buffer and improve perimeter drainage. As construction activities are ongoing at the facility, the site was not fully accessible due to safety restrictions for heavy equipment. The site is properly secured and requires a security escort to access the area. Escorted access to the top of the cap was obtained. 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, however, due to recent construction on the cap, the eastern boundary wires were cut in multiple locations and approximately 25% of the boundary wire was on the ground to allow ingress and egress of the machinery. Caution Radioactive Materials signs are posted at the boundary to clearly mark the location of the low-level radioactive waste area, several of the posts, on the west border have been displaced. 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 driving 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. The previous erosion on the sides of the cap has been repaired.

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 2032. The addition of material to the cap has started. The markers remain stacked off to the side of the cap, near the southwest corner. The erosion trenches have also been filled in.

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Site Observations:

Radiological Postings Adequate: Yes, though, due to construction activities some signs have fallen or been damaged they are soon to be replaced. The missing signs have left gaps in the radiological postings around the landfill, but the damaged/lost signs are spread out enough that the postings are still adequate.

Site Boundary and Access Road Maintained: Yes, the access road is being adequately maintained. The outer boundary is still fully intact, the inner boundary around the landfill has had its east barrier cut, resulting in easy access for the construction workers adding dirt to the top of the cap. This will be fixed once the work is completed.

Erosion, Fissures, Water Pooling, or Subsidence Concerns: The cap is free of Erosion and Fissures. 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 – 0.00", October – 0.00", November – 0.00"

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: $12 - 20.8 \mu$ rem/hr

Value used for twice background: 41.6 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, <u>jfollette@health.nv.gov</u>
	Corey Creveling:	775-687-7536, <u>ccreveling@health.nv.gov</u>
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	Hannah Hoffman:	702-486-3014, <u>hhoffman@health.nv.gov</u>

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ALL IN GOOD HEALTH.

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

Day Day	Total		Wind		Air Te	mpera	ature	Hur	nidity	/	Dew	Wet	Total
of of	Solar Rad.	Ave.	V. Dir.	Max.	Mean	Max	Min	Meanl	Max M	Min	Point	Bulb	Precip.
Month Year	ly.	mph	Deg	mph	Deg. F	ahrer	heit	Per	rcent		Deg. Fah	renheit	inches
<u>1</u> 245	0	5.8	216	22.8	88	103	70	18	30	10	37	58	0.00
<u>2</u> 246	0	8.2	247	28.6	89	104	71	16	25	10	37	58	0.00
<u>3</u> 247	0	5.5	230	26.9	90	103	71	17	28	10	39	59	0.00
<u>4</u> 248	4	5.5	255	18.5	90	105	73	15	26	9	34	58	0.00
<u>5</u> 249	2	4.6	267	15.6	90	107	72	12	21	7	30	57	0.00
<u>6</u> 250	0	5.4	258	16.4	89	107	71	11	18	6	27	56	0.00
<u>7</u> 251	0	8.4	185	36.6	91	107	71	13	23	7	31	58	0.00
<u>8</u> 252	0	9.4	138	24.5	91	104	78	19	27	9	42	61	0.00
<u>9</u> 253	0	6.9	254	26.2	88	103	70	18	34	8	35	58	0.00
<u>10</u> 254	0	7.5	201	22.6	86	101	67	14	23	7	30	55	0.00
<u>11</u> 255	0	9.9	142	24.2	84	97	64	12	25	5	24	53	0.00
<u>12</u> 256	0	14.4	319	33.4	79	89	69	12	21	7	20	50	0.00
<u>13</u> 257	0	4.7	192	22.0	79	96	61	11	17	7	19	50	0.00
<u>14</u> 258	0	8.6	161	25.5	80	96	62	16	35	10	29	53	0.00
<u>15</u> 259	0	14.3	149	30.8	82	93	70	20	36	10	35	55	0.00
<u>16</u> 260	3	14.5	199	32.0	70	78	61	25	41	11	31	50	0.00
<u>17</u> 261	4	5.1	236	19.9	67	80	53	28	49	14	31	48	0.00
<u>18</u> 262	0	4.8	242	20.0	72	85	58	22	40	12	29	49	0.00
<u>19</u> 263	0	6.3	235	22.4	72	86	58	19	31	11	26	49	0.00
<u>20</u> 264	0	7.7	340	32.4	74	85	59	24	36	15	33	52	0.00
<u>21</u> 265	0	6.0	231	27.0	76	91	58	24	40	13	35	53	0.00
<u>22</u> 266	0	5.8	263	19.4	79	94	64	19	30	11	32	53	0.00
<u>23</u> 267	0	7.4	306	24.3	83	99	67	11	19	7	22	52	0.00
<u>24</u> 268	0	4.3	256	14.8	82	99	64	11	18	7	21	51	0.00
<u>25</u> 269	0	6.1	260	26.7	81	99	62	13	20	7	24	52	0.00
<u>26</u> 270	0	5.9	264	18.9	80	98	62	12	21	7	22	51	0.00
<u>27</u> 271	0	5.3	295	19.2	83	103	64	11	16	6	21	52	0.00
<u>28</u> 272	0	5.4	252	27.7	83	102	63	11	19	6	22	52	0.00
<u>29</u> 273	0	5.7	273	16.1	79	98	61	10	18	4	15	49	0.00
<u>30</u> 274	0	5.2	290	14.7	81	103	61	9	14	4	17	50	0.00
MONTHLY	STATIST	ICS											
	Total		Wind		Air Te	mpera	ature	Hur	nidity	/	Dew	Wet	Total
	Solar Rad.	Ave.	V. Dir.	Max.	Mean	Max	Min	Meanl	Max I	Min	Point	Bulb	Precip.
	ly.	mph	Deg	mph	Deg. F	ahrer	heit	Per	rcent		Deg. Fah	renheit	inches
Total	14												0.00
Ave.	0	7.2	239	23.7	81.9	97.2	65.1	16	27	9	28	53	
Max.	4	14.5		36.6	91	107	78	28	49	15	42	61	0.00
Min.	0	4.3		14.7	67	78	53	9	14	4	15	48	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

Beatty 11SSE US Ecology Nevada Monthly Summary for October, 2024

Day Day Total	Wind			Air Temperature			Humidity			Dew	Wet	Total
of of Solar Rad.	Ave.	V. Dir.	Max.	Mean	Max	Min	Meanl	Maxl	Min	Point	Bulb	Precip
Month Year ly.	mph	Deg	mph	Deg. F	ahre	nheit	Per	rcent		Deg. Fah	renheit	inches
<u>1</u> 275 0			15.0			67		17	6	23	53	0.00
2 276 0	6.4	322	23.7	86	103	73	9	13	6	21	53	0.00
<u>3</u> 277 0	4.1	259	15.9	85	103	70	10	14	5	20	52	0.00
<u>4</u> 278 0	6.4	289	21.3	82	102	65	12	17	7	24	52	0.00
<u>5</u> 279 0	7.6	302	22.4	86	100	73	13	18	8	28	55	0.00
<u>6</u> 280 0	4.9	284	18.2	83	101	65	14	22	8	28	54	0.00
<u>7</u> 281 0	6.6	248	20.7	87	100	73	13	21	8	29	55	0.00
<u>8</u> 282 0	6.1	278	22.5	84	98	70	16	24	8	31	55	0.00
<u>9</u> 283 0	4.9	247	15.9	78	95	62	17	31	7	27	51	0.00
<u>10</u> 284 0	5.6	283	18.6	76	94	59	14	21	8	22	49	0.00
<u>11</u> 285 0	6.0	283	17.8	73	90	58	16	23	10	23	48	0.00
<u>12</u> 286 0	5.8	272	17.6	72	90	56	17	27	9	23	48	0.00
<u>13</u> 287 0	5.0	281	14.8	71	89	53	15	25	8	21	47	0.00
<u>14</u> 288 0	4.4	272	14.4	73	92	55	15	24	8	21	48	0.00
<u>15</u> 289 0	4.2	262	14.4	74	92	57	13	20	7	18	48	0.00
<u>16</u> 290 0	11.4	237	37.3	73	89	55	18	32	11	25	49	0.00
<u>17</u> 291 1	18.0	322	62.0	67	80	53	31	47	20	35	50	0.00
<u>18</u> 292	33.1	335	70.2	55	64	48	25	39	12	19	39	0.00
<u>19</u> 293 98	23.7	330	56.2	63	75	52	21	29	15	22	44	0.00
<u>20</u> 294 5	6.5	221	26.5	65	79	52	21	31	13	23	45	0.00
<u>21</u> 295 3	5.7	273	16.3	63	82	48	26	39	14	27	45	0.00
<u>22</u> 296 1	5.0	270	12.9	66	85	50	24	36	13	26	46	0.00
<u>23</u> 297 0	4.6	276	14.0	68	87	52	21	33	11	25	47	0.00
<u>24</u> 298 0	5.8	298	26.9	65	82	51	21	32	12	23	45	0.00
<u>25</u> 299 1	4.8	269	16.1	66	84	49	20	32	11	22	45	0.00
<u>26</u> 300 0	4.6	275	12.1	68	87	52	17	27	9	20	46	0.00
<u>27</u> 301 0	5.3	235	18.0	69	79	55	16	24	11	20	46	0.00
<u>28</u> 302 0	14.4	15	55.6	65	78	48	29	63	14	29	47	0.00
<u>29</u> 303 150	16.4	328	34.5	53	61	45	35	66	19	25	40	0.00
<u>30</u> 304 104	5.8	256	21.0	50	64	36	26	44	13	15	36	0.00
<u>31</u> 305 102	5.8	285	22.5	50	67	37	26	35	15	16	36	0.00
MONTHLY STATIST	TICS											
Total		Wind		Air Te	mper	ature	Hur	nidit	y	Dew	Wet	Total
Solar Rad.	Ave.	V. Dir.	Max.	Mean	Max	Min	Meanl	Maxl	Min	Point	Bulb	Precip.
ly.	mph	Deg	mph	Deg. F	ahre	nheit	Per	rcent		Deg. Fah	renheit	inches
Total 465												0.00
Ave. 16	8.2	293	25.0	71.1	86.9	56.1	19	30	10	23	48	
Max. 150	33.1		72:7	87	103	73	35	66	20	35	55	0.00
Min. 0	4.1			50	61	36	9	13	5	15	36	0.00

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Beatty 11SSE US Ecology Nevada Monthly Summary for November, 2024

Day	Day	Total		Wind		Air Te	mper	ature	Hur	nidit	y	Dew	Wet	Total
of	of	Solar Rad.	Ave.	V. Dir.	Max.	Mean	Max	Min	Mean	Max I	Min	Point	Bulb	Precip
Month	Year	ly.	mph	Deg	mph	Deg. I	Fahrei	nheit	Per	rcent		Deg. Fah	renheit	inches
<u>1</u>	306	6			12.8	54		38	26	39	16	19	39	0.00
<u>2</u>	307	3	5.4	172	15.5	56	67	46	28	37	18	23	41	0.00
<u>3</u>	308	225	24.4	341	49.0	56	64	50	29	40	16	23	41	0.00
<u>4</u>	309	156	14.2	331	33.2	54	66	43	27	44	14	19	39	0.00
<u>5</u>	310	3	14.2	336	44.0	56	68	39	21	37	6	14	39	0.00
<u>6</u>	311		15.6	344	36.7	49	58	42	18	27	10	7	34	0.00
<u>7</u>	312	91	12.0	324	33.2	50	64	39	16	25	7	4	34	0.00
<u>8</u>	313	1	9.1	338	25.1	55	69	41	17	28	11	11	38	0.00
<u>9</u>	314	0	5.5	250	13.0	51	69	36	22	36	12	12	36	0.00
<u>10</u>	315	0	5.3	292	13.4	53	70	38	21	32	12	13	37	0.00
<u>11</u>	316	0	12.5	242	46.5	56	70	39	22	35	11	16	39	0.00
<u>12</u>	317	176	17.3	330	44.0	52	60	42	25	33	15	16	37	0.00
<u>13</u>	318				15.1		63	34		39	14			
<u>14</u>	319	35	5.5	303	15.6	48	64	34	24	34	14	12	34	0.00
<u>15</u>	320	124	9.4	332	33.3	48	60	36	36	58	24	21	36	0.00
<u>16</u>	321	98	19.8	333	35.8	48	55	42	34	53	19	20	36	0.00
<u>17</u>	322				33.3		47	37		37	23			
<u>18</u>	323	95	10.2	323	30.3	47	62	29	21	34	12	9	33	0.00
<u>19</u>	324	114	7.1	272	19.8	44	55	34	20	30	10	4	30	0.00
<u>20</u>	325	173	5.2	288	18.1	45	63	28	16	25	9	1	31	0.00
<u>21</u>	326	23	5.8	284	14.7	48	63	33	18	28	9	4	32	0.00
<u>22</u>	327	33	7.3	162	22.5	53	66	36	12	21	7	1	35	0.00
<u>23</u>	328	43	10.8	141	23.6	61	72	51	26	55	8	22	44	0.00
<u>24</u>	329	21	5.2	259	16.6	50	61	38	49	68	33	30	40	0.00
<u>25</u>	330	13	7.5	170	20.2	47	55	34	51	69	35	30	39	0.00
<u>26</u>	331	3	8.8	61	33.7	57	68	52	51	64	30	39	47	0.00
<u>27</u>	332				38.9		54	44		38	24			
<u>28</u>	333													
<u>29</u>	334													
<u>30</u>	335													
MONT	THLY	STATIST	ICS											
		Total		Wind		Air Te	mper	ature	Hur	nidit	y	Dew	Wet	Total
		Solar Rad.	Ave.	V. Dir.	Max.	Mean	Max	Min	Meanl	Max I	Min	Point	Bulb	Precip.
		ly.	mph	Deg	mph	Deg. I	Fahrei	nheit	Per	rcent		Deg. Fah	renheit	inches
	Total	1436												0.00
	Ave.	62	10.1	320	27.3	51.5	63.0	39.1	26	39	16	15	37	
		225	~		10.0	C1			- 1	60	~ -	20		0 0 0

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

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° 1 ly = 1 cal/cm² = 4.1855 J/cm² = 3.6855 BTU/ft² = .01163 KW-hr/m²

225 24.4

0 3.8

Max.

Min.