

DEPARTMENT OF HEALTH AND HUMAN SERVICES

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Lisa Sherych Administrator

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

October 19, 2022

MEMORANDUM

To: Beatty File

From: Corey Creveling, Radiation Control Supervisor (IIC)

Subject: Beatty Inspection Summary September 27, 2022

An inspection of the Beatty Low-Level Radioactive Waste landfill (closed) was conducted on September 27, 2022 by Corey Creveling, Ron Woodburn, and Steve Matthews. 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 numbers 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. Dose rate readings on the cap remain about twice background,* as measured in the background location. Recent repairs following two rain events on August 5, 2022 and September 13, 2022 were verified no significant erosion remains. The sides of the cap were recently repaired with visible tread and dozer blade markings and, the top of the cap was recently repaired with visible tread and dozer blade markings for two passes along the perimeter of the outer edge of the cap top.

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: Yes

Site Boundary and Access Road Maintained: Yes

Erosion, Fissures, Water Pooling, or Subsidence Concerns:

No concerns identified.

Rain Since Last Inspection: September – 1.00", October – 0.47".

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: $20-25 \mu rem/hr$ Value used for twice background: $50 \mu rem/hr$

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, <u>ifollette@health.nv.gov</u>

Corey Creveling: 775-687-7536, ccreveling@health.nv.gov

Station Summary Beatty 11SSE US Ecology Nevada

Monthly Summary for August, 2022

Day	Day	Total	Wind			Air Temperature			Humidity			Dew Wet		Total
of	of		Ave.						Mean Max Min				Bulb	Precip.
	=		mph		mph	Deg. Fahrenheit		Percent						
1	213				41.7					87	31			0.00
2	214	0		268	22.1	87	101		40	76	21			0.00
3	215	0		245	23.5	93	106	=	26	41	16			0.00
4	216	0	10.1	139	31.9	86	96	71	38	83	25	56	66	0.16
<u>5</u>	217	0	5.0	273	21.2	74	84	67	75	95	52	65	68	0.63
<u>6</u>	218	0	4.2	250	14.5	84	99	70	44	85	12	55	65	0.00
<u>7</u>	219	41	5.1	256	22.7	89	104	71	33	62	14	52	65	0.00
<u>8</u>	220	0	8.0	209	29.5	91	102	78	30	48	18	54	66	0.00
9	221	11	12.2	131	34.7	88	101	80	35	58	20	57	67	0.09
<u>10</u>	222	0	10.8	139	24.1	89	101	77	34	58	18	56	67	0.00
<u>11</u>	223	0	8.9	167	22.4	91	103	77	29	55	13	52	65	0.00
<u>12</u>	224		12.1	153	31.7		105	75	27	49	9		65	0.00
<u>13</u>	225	0	9.0	129	25.0	85	97	78	38	57	22	56	65	0.00
<u>14</u>	226	0			24.0		104	73		50	13			0.00
<u>15</u>	227	1		129	38.5	89	102	74	33	70	18			0.08
<u>16</u>	228	0		252	33.5		104	=	27	47	13			0.00
<u>17</u>	229	0		207	38.2		105	=	26	43	16			0.00
<u>18</u>	230	10		299	29.8		104		30	46	16			0.04
<u>19</u>	231	0		229	22.6		104	76		52	12		63	0.00
<u>20</u>	232	0			21.2		105		20	33	11			0.00
<u>21</u>	233	0		160	21.2		106		19	34	8			0.00
<u>22</u>	234				21.9		107			24	9			0.00
<u>23</u>	235	0			19.4		108			29	9			
<u>24</u>	236		14.5		37.9		106		25	37	9			
<u>25</u>	237		10.7	113	49.0		102		31	47	20			0.00
<u>26</u>	238	0			16.4		102	=		47	15			0.00
<u>27</u>	239	0		173	22.2		103	==		38	7			0.00
	240				20.4			=		32	=			
<u>29</u>	=				25.1			=		42	=			
	242				25.0			=		34				
<u>31</u>	243	0	6.6	275	26.6					31	8	38	60	0.00
MONTHLY STATISTICS Total Wind Air Temperature Humidity Dew Wet												Total		
				Wind	N4 -	Air Temperature Mean Max Min				Dew	Wet	Total		
		Solar Rad.												Precip.
			mph	Deg	mph	υeg.	Fahrer	ineit	Pe	rcent		Deg. Fah	renneit	inches
Total		68					100							1.00
Ave.		2			27.0		102.4			51	=			
Max.			14.5		49.0					95	=			
Min.		0	4.2		14.5	74	84	67	16	24	7	37	59	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 = $4.1855 \text{ J/cm}^2 = 3.6855 \text{ BTU/ft}^2 = .01163 \text{ KW-hr/m}^2$

Station Summary Beatty 11SSE US Ecology Nevada Monthly Summary for September, 2022

Day	Day	Total	Wind			Air Temperature			Humidity			Dew	Wet	Total
of	of	Solar Rad.	Ave.	V. Dir.	Max.	Mean	Max	Min	Mean Max Min		Point	Bulb	Precip.	
Month	Year	ly.	mph	Deg	mph	Deg.	Fahrer	Fahrenheit		Percent		Deg. Fahi	renheit	inches
<u>1</u>	244	0	6.2	286	27.0	94	110	76	13	23	7	33	59	0.00
<u>2</u> <u>3</u>	245	5	5.2	190	24.7	96	114	76	13	22	6	34	60	0.00
<u>3</u>	246	0	6.6	179	34.0	94	109	77	21	31	12	47	64	0.00
<u>4</u>	247	0	5.6	271	21.1	94	109	77	23	37	13	48	64	0.00
<u>5</u>	248	0	6.2	226	19.2	95	109	78	21	34	11	47	64	0.00
<u>6</u>	249	0	5.5	223	23.3	96	113	78	15	29	6	38	61	0.00
5 6 7 8 9	250	0	7.3	158	23.6	96	110	80	18	32	10	45	64	0.00
<u>8</u>	251	0	7.5	254	34.7	93	107	76	19	32	9	44	62	0.00
<u>9</u>	252	0	8.4	190	26.8	88	102	76	29	47	16	50	63	0.00
<u>10</u>	253	0	10.6	132	26.3	80	90	72	51	66	33	60	66	0.00
<u>11</u>	254	0	6.4	236	26.2	82	95	68	41	73	16	53	63	0.00
<u>12</u>	255	3	8.5	127	25.7	78	87	72	44	64	34	54	62	0.00
<u>13</u>	256	0	7.4	159	28.0	76	85	67	52	73	37	56	63	0.47
<u>14</u>	257	0	6.9	163	19.9	75	88	63	45	85	14	47	58	0.00
<u>15</u>	258	1	6.6	195	24.3	75	89	60	30	62	13	39	54	0.00
<u>16</u>	259	0	5.2	226	19.8	75	90	59	26	45	12	35	53	0.00
<u>17</u>	260	0	12.4	174	31.7	75	90	60	23	45	8	32	52	0.00
<u>18</u>	261	0	14.1	155	36.3	75	87	65	22	40	8	32	52	0.00
<u>19</u>	262	0	11.0	141	27.2	75	88	65	20	34	8	29	51	0.00
<u>20</u>	263	5	12.1	157	35.1	75	87	61	19	35	9	29	51	0.00
<u>21</u>	264	0	8.8	163	25.8	74	86	61	20	45	6	27	51	0.00
<u>22</u>	265	0	4.7	230	15.6	71	87	57	20	33	9	27	49	0.00
<u>23</u>	266	0	4.8	243	14.4	75	92	59	16	29	5	23	49	0.00
<u>24</u>	267	0	4.8	260	17.5	79	97	58	17	27	7	29	52	0.00
<u>25</u>	268	0	5.1	256	20.5	81	99	63	17	33	7	29	53	0.00
<u>26</u>	269	0	5.1	260	18.0	81	98	62	12	20	6	21	51	0.00
<u>27</u>	270	0	5.1	259	22.8	81	98	63	14	22	8	25	52	0.00
<u>28</u>	271	0	11.8	136	26.8	83	98	67	23	29	11	40	58	0.00
<u>29</u>	272	0	8.3	212	23.0	83	96	68	22	46	8	36	56	0.00
<u>30</u>	273	0	5.2	259	18.1	78	93	61	17	29	8	28	52	0.00
MONTHLY STATISTICS														
		Total		Wind		Air Temperature		Humidity			Dew	Wet	Total	
		Solar Rad.	Ave.	V. Dir.	Max.	Mean Max Min		Mean Max Min			Point	Bulb	Precip.	
		ly.	mph	Deg	mph	Deg. Fahrenheit		Percent			Deg. Fahrenheit		inches	
	Total	15												0.47
	Ave.	0	7.4	194	24.6	82.3	96.7	67.4	24	41	12	38	57	
	Max.	5	14.1		36.3	96	114	80	52	85		60	66	0.47
	Min.	0	4.7		14.4	71	85	57	12	20	5	21	49	0.00

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

 $^{^{\}circ}$ 1 ly = 1 cal/cm² = 4.1855 J/cm² = 3.6855 BTU/ft² = .01163 KW-hr/m²