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Our ref: 12576485-LTR-3

February 02, 2024

Mr. Brian Rath
Environmental Engineer Senior
Solid Waste and Contaminated Sites Section
MidAmerican Energy Company
502 E. 9th Street
Des Moines, Iowa 50319

2023 IDNR Template Tables
Neal South Energy Center CCR Monofill
Salix, Iowa
Permit 97-SDP-13-98C

Dear Brian,

As recently discussed, GHD has prepared Table 7 and Table 9 using the general format provided in the Iowa Department of Natural Resources' (IDNR's) *Annual Water Quality Report Template for Non-Municipal Landfills*. Table 7 and Table 9, provided in Attachment 1, are modified as approved in your January 31, 2024 email to Kevin Armstrong of GHD and Josh Love of MidAmerican Energy Company. Additionally, in Attachment 2, the 2023 groundwater monitoring results are compared to the Maximum Contaminant Level (MCL) or Health Advisory Lifetime (HAL) as described in 567 Iowa Administrative Code Chapter 103, paragraph 103.1(4)d.

Attachment 3 provides a crosswalk table to reference the items provided in the Annual Groundwater Monitoring and Corrective Action Report prepared under the Federal CCR rule with the IDNR's *Annual Water Quality Report Template for Non-Municipal Landfills*.

If you have any questions regarding these tables, please contact Kevin Armstrong.

Sincerely,

A handwritten signature in black ink that reads "Kevin J. Armstrong".

Kevin Armstrong
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KA/mg/LTR-3

A handwritten signature in black ink that reads "Michael Alowitz".

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Encl.

Copy to: Justin Terrell, MidAmerican Energy Company
Josh Love, MidAmerican Energy Company

Attachments

Attachment 1

IDNR Template Table 7 and Table 9

Table 7

**Summary of Ongoing and Newly Identified Control Limit Exceedances
2023 Annual Water Quality Report
Neal South Energy Center - CCR Monofill
Permit No. 97-SDP-13-98C**

Well	Constituent	Units	Most recent result	Background Standard	Groundwater Protection Standard 40 CFR §257.95(h)
MW-2	Boron	mg/L	0.315 J / 0.179 J	0.259	None
MW-4	None	--	None	None	None
MW-8	Boron	mg/L	0.965	0.259	None
	Molybdenum	mg/L	0.00514	0.0035	0.1
MW-10	Boron	mg/L	0.391	0.259	None
MW-11	Boron	mg/L	0.310	0.259	None
MW-12	Boron	mg/L	0.901	0.259	None
	Sulfate	mg/L	534	409	None
MW-13	Boron	mg/L	1.96	0.259	None
	Sulfate	mg/L	437	409	None
MW-14	Boron	mg/L	0.341	0.259	None
MW-15	Boron	mg/L	0.400	0.259	None
MW-16	None	--	None	None	None
MW-17	Chloride	mg/L	23.8	21.8	None
MW-18	None	--	None	None	None
MW-19	Chloride	mg/L	25.7	21.8	None
MW-20	Boron	mg/L	0.542	0.259	None
MW-21	Barium	mg/L	0.433	0.121-0.322	2
	Radium-226 & 228	pCi/L	2.88	2.01	5

Comments:
None.

**Historic Control Limit & GWPS Exceedances
2023 Annual Water Quality Report
Neal South Energy Center - CCR Monofill
Permit No. 97-SDP-13-98C**

Key: gray =CL; black =GWPS		March	September	March	September	March	September	March	September
Well	Constituent	2020	2020	2021	2021	2022	2022	2023	2023
MW-2	Boron								
	Chloride								
	Arsenic								
MW-4 (Background)	Boron								
	Chloride								
MW-8	Boron								
	Sulfate								
	Molybdenum								
MW-10	Boron			ns					
	Arsenic			ns					
	Barium			ns					
	Radium-226 & 228			ns					
MW-11	Boron								
	Calcium								
	Chloride								
	Sulfate								
	Total Dissolved Solids (TDS)								
MW-12	Boron								
	Chloride								
	Sulfate								
	Total Dissolved Solids (TDS)								
	Cadmium								
	Cobalt								
	Lead								
	Lithium								
	Selenium								
MW-13	Boron								
	Calcium								
	Chloride								
	Sulfate								
	Total Dissolved Solids (TDS)								
MW-14	Boron								
	Calcium								
	Chloride								
	Sulfate								
	Total Dissolved Solids (TDS)								
	Lithium								
MW-15 (Background)	Boron								
	Chloride								
	Sulfate								
	Total Dissolved Solids (TDS)								
MW-16 (Background)	Boron								
	Barium								
MW-17 (Background)	Chloride								
	Molybdenum								
MW-18 (Background)	Sulfate								
	Total Dissolved Solids (TDS)								
	Arsenic								
	Lithium								
	Radium-226 & 228								
MW-19	Boron								
	Chloride								
	pH, lab								
	Cobalt								
	Lithium								
MW-20	Boron								
	Chloride								
MW-21	Barium								
	Radium-226 & 228								
	Thallium								

Comments:
 Groundwater Protection Standard (GWPS) established under 40 CFR §257.95(h).
 ns - No sample collected during this sampling event.
 na - Constituent not analyzed.

Attachment 2

MCL/HAL Comparison Table

2023 Monitoring Analytical Results Summary
MidAmerican Energy Company
Neal South CCR Monofill
Salix, Iowa

Sample Location:
Sample ID:
Sample Date:

Parameters	Units	MCL ^a	HAL ^b	SDWR ^c	MW-2	MW-2	MW-2	MW-2	MW-4	MW-4	MW-8	MW-8	MW-10	MW-10	MW-11	MW-11
					MW02-GW-0323 03/22/2023	DP01-GW-0323 03/22/2023 (Duplicate)	MW02-GW-0923 09/06/2023	DP01-GW-0923 09/06/2023 (Duplicate)	MW04-GW-0323 03/21/2023	MW04-GW-0923 09/07/2023	MW08-GW-0323 03/21/2023	MW08-GW-0923 09/06/2023	MW10-GW-0323 03/21/2023	MW10-GW-0923 09/06/2023	MW11-GW-0323 03/22/2023	MW11-GW-0923 09/07/2023
Boron	mg/L	--	6	--	0.503	0.526	0.315 J	0.179 J	0.243	0.228	1.53	0.965	0.299	0.391	0.269	0.310
Calcium	mg/L	--	--	--	155	154	170	189	134	123	165	177	133	116	184	206
Chloride	mg/L	--	--	250	15.6	15.3	6.73	7.07	7.80	26.9	<5.00	<5.00	7.48	7.33	13.1	12.6
Fluoride	mg/L	4.0	--	2.0	<0.500	<0.500	<1.00	<1.00	<0.500	<1.00	<0.500	<1.00	<0.500	<1.00	<0.500	<1.00
pH, lab	s.u.	--	--	6.5 - 8.5	7.3 J	7.3 J	7.5 J	7.7 J	7.2 J	7.6 J	7.3 J	7.7 J	7.3 J	7.8 J	7.1 J	7.5 J
Sulfate	mg/L	--	--	250	121	121	97.3	95.0	41.9	123	65.8	210	159	79.6	356	387
Total dissolved solids (TDS)	mg/L	--	--	500	690	668	684	698	702	696	948	970	752	672	990	1110

Appendix III

Antimony	mg/L	0.006	0.006	--	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200
Arsenic	mg/L	0.01	--	--	0.0135	0.0138	0.0170 J	0.0101 J	<0.00200	<0.00200	0.00344	0.00826	0.0318	0.0248	<0.00200	<0.00200
Barium	mg/L	2.0	--	--	0.153	0.151	0.217	0.229	0.0607	0.0639	0.0715	0.126	0.332	0.300	0.0378	0.0492
Beryllium	mg/L	0.004	--	--	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Cadmium	mg/L	0.005	0.005	--	<0.000100	<0.000100	<0.000200	<0.000200	0.000196	<0.000200	0.000290	<0.000200	<0.000100	<0.000200	0.000120	<0.000200
Chromium	mg/L	0.1	--	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Cobalt	mg/L	--	--	--	0.00325	0.00323	0.00301 J	0.00158 J	0.00282	0.00262	0.00195	0.00227	0.000687	<0.000500	0.00533	0.00705
Lead	mg/L	0.015 ^d	--	--	<0.000500	<0.000500	0.000513	<0.000500	<0.000500	<0.000500	0.000588	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Lithium	mg/L	--	--	--	0.0785	0.0848	0.0824	0.0971	0.0714	0.0555	0.120	0.109	0.0636	0.0957	0.0983	0.135
Mercury	mg/L	0.002	0.002	--	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Molybdenum	mg/L	--	0.04	--	<0.00200	<0.00200	0.00256	<0.00200	<0.00200	<0.00200	0.00986	0.00514	0.00254	0.00347	<0.00200	<0.00200
Radium-226 & 228	pCi/L	5	--	--	0.973	0.753	0.910	0.987	0.777	0.893	1.04	1.50	1.01	1.08	<-0.214	1.09
Selenium	mg/L	0.05	0.05	--	0.0202	0.0195	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Thallium	mg/L	0.002	--	--	<0.00100	<0.00100	<0.00100 J	<0.00100 J	<0.00100	<0.00100 J	<0.00100	<0.00100 J	<0.00100	<0.00100 J	<0.00100	<0.00100 J

2023 Monitoring Analytical Results Summary
MidAmerican Energy Company
Neal South CCR Monofill
Salix, Iowa

Sample Location:	MW-12	MW-12	MW-12	MW-12	MW-13	MW-13	MW-14	MW-14	MW-15	MW-15	MW-16	MW-16	MW-17	
Sample ID:	MW12-GW-0323	MW12-GW-0623	DP01-GW-0623	MW12-GW-0923	MW13-GW-0323	MW13-GW-0923	MW14-GW-0323	MW14-GW-0923	MW15-GW-0323	MW15-GW-0923	MW16-GW-0323	MW16-GW-0923	MW17-GW-0323	
Sample Date:	03/22/2023	06/05/2023	06/05/2023 (Duplicate)	09/06/2023	03/22/2023	09/06/2023	03/22/2023	09/07/2023	03/21/2023	09/07/2023	03/22/2023	09/05/2023	03/22/2023	
Parameters	Units													
Appendix III														
Boron	mg/L	1.47	--	--	0.901	1.50	1.96	0.261	0.341	0.465	0.400	0.161	0.220	0.242
Calcium	mg/L	260	--	--	228	165	178	188	183	135	112	120	130	159
Chloride	mg/L	48.6	--	--	8.56	11.1	11.3	5.72	<5.00	7.49	31.4	7.87	<5.00	23.7
Fluoride	mg/L	<0.500	--	--	<1.00	<0.500	<1.00	<0.500	<1.00	<0.500	<1.00	<0.500	<1.00	<0.500
pH, lab	s.u.	7.3 J	--	--	7.6 J	7.3 J	7.6 J	7.2 J	7.6 J	7.3 J	7.6 J	7.3 J	7.6 J	7.3 J
Sulfate	mg/L	609	--	--	534	459	437	218	169	51.0	163	21.3	46.5	83.6
Total dissolved solids (TDS)	mg/L	1390	--	--	1280	1160	1220	884	904	646	594	594	684	678

Appendix III														
Antimony	mg/L	<0.00200	--	--	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200
Arsenic	mg/L	<0.00200	--	--	<0.00200	0.00204	0.00550	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	0.0265
Barium	mg/L	0.0510	--	--	0.0440	0.0379	0.0443	0.0574	0.0574	0.0470	0.0413	0.262	0.342	0.106
Beryllium	mg/L	<0.00100	--	--	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100
Cadmium	mg/L	0.000250	--	--	<0.000200	<0.000100	<0.000200	0.000132	<0.000200	<0.000100	<0.000200	0.000187	<0.000200	<0.000100
Chromium	mg/L	<0.00500	--	--	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Cobalt	mg/L	<0.000500	--	--	0.000581	0.00145	0.000712	0.00317	0.00331	0.00207	0.00206	0.000872	0.00146	0.00193
Lead	mg/L	<0.000500	--	--	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500
Lithium	mg/L	0.154	--	--	0.140	0.0726	0.0944	0.106	0.136	0.0725	0.0781	0.0539	0.0640	0.0881
Mercury	mg/L	<0.000200	--	--	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200
Molybdenum	mg/L	<0.00200	--	--	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	0.00332
Radium-226 & 228	pCi/L	<0.189	--	--	0.532	0.759	0.913	0.889	0.800	0.598	1.59	1.74	1.45	1.19
Selenium	mg/L	1.17	0.00816	0.0107	0.00825	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500
Thallium	mg/L	<0.00100	--	--	<0.00100 J	<0.00100	<0.00100 J	<0.00100	<0.00100 J	<0.00100	<0.00100 J	<0.00100	<0.00100 J	<0.00100

2023 Monitoring Analytical Results Summary
MidAmerican Energy Company
Neal South CCR Monofill
Salix, Iowa

Sample Location:	MW-17	MW-18	MW-18	MW-19	MW-19	MW-20	MW-20	MW-21	MW-21	MW-26	MW-26	MW-28	MW-28	MW-30
Sample ID:	MW17-GW-0923	MW18-GW-0323	MW18-GW-0923	MW19-GW-0323	MW19-GW-0923	MW20-GW-0323	MW20-GW-0923	MW21-GW-0323	MW21-GW-0923	MW26-GW-0323	MW26-GW-0923	MW28-GW-0423	MW28-GW-0923	MW30-GW-0323
Sample Date:	09/06/2023	03/21/2023	09/06/2023	03/20/2023	09/06/2023	03/20/2023	09/06/2023	03/22/2023	09/06/2023	3/23/2023	9/5/2023	4/4/2023	9/6/2023	3/24/2023

Parameters	Units													
Appendix III														
Boron	mg/L	0.245	0.233	0.259	0.370	0.209	0.745	0.542	0.158	0.118	--	--	--	--
Calcium	mg/L	173	188	196	239	236	138	193	122	135	180	161	144	172
Chloride	mg/L	23.8	<5.00	<5.00	47.2	25.7	19.5	63.4	8.12	7.57	--	--	--	--
Fluoride	mg/L	<1.00	<0.500	<1.00	<0.500	<1.00	<0.500	<1.00	<0.500	<1.00	--	--	--	--
pH, lab	s.u.	7.7 J	7.1 J	7.6 J	7.0 J	7.5 J	7.2 J	7.6 J	7.2 J	7.6 J	--	--	--	--
Sulfate	mg/L	80.4	32.7	98.0	239	254	104	176	<5.00	10.2	192	63.9	24.8	102
Total dissolved solids (TDS)	mg/L	682	850	818	1080	<50.0	610	854	442	468	--	--	--	--

Appendix III														
Antimony	mg/L	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	<0.00200	--	--	--	--
Arsenic	mg/L	0.0143	0.0206	0.0207	<0.00200	<0.00200	0.0133	0.0114	0.00235	<0.00200	<0.00200	0.0169	0.0179	0.0732
Barium	mg/L	0.121	0.109	0.113	0.155	0.133	0.121	0.155	0.474	0.433	--	--	--	--
Beryllium	mg/L	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	<0.00100	--	--	--	--
Cadmium	mg/L	0.000222	<0.000100	<0.000200	0.000102	<0.000200	<0.000100	<0.000200	0.000128	<0.000200	--	--	--	--
Chromium	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	--	--	--	--
Cobalt	mg/L	0.00165	0.00239	0.00274	0.00955	0.00388	0.00142	0.000623	0.00491	0.00330	--	--	--	--
Lead	mg/L	0.000782	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	<0.000500	--	--	--	--
Lithium	mg/L	0.0837	0.149	0.133	0.151	0.146	0.0794	0.0990	0.0648	0.0716	--	--	--	--
Mercury	mg/L	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	<0.000200	--	--	--	--
Molybdenum	mg/L	0.00484	0.00237	0.00266	<0.00200	<0.00200	<0.00200	<0.00200	0.00223	<0.00200	--	--	--	--
Radium-226 & 228	pCi/L	1.40	<0.817	0.599	1.09	1.04	0.921	0.993	2.24	2.88	--	--	--	--
Selenium	mg/L	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	<0.00500	--	--	--	--
Thallium	mg/L	<0.00100	<0.00100	<0.00100 J	<0.00100	<0.00100 J	<0.00100	<0.00100 J	0.00154	<0.00100 J	--	--	--	--

2023 Monitoring Analytical Results Summary
 MidAmerican Energy Company
 Neal South CCR Monofill
 Salix, Iowa

Sample Location:	MW-30	MW-32	MW-32	MW-33	MW-33	MW-34	MW-34	MW-36	MW-36	MW-43	MW-43	MW-49	MW-49	MW-50	
Sample ID:	MW30-GW-0923	MW32-GW-0423	MW32-GW-0923	MW33-GW-0423	MW33-GW-0923	MW34-GW-0323	MW34-GW-0923	MW36-GW-0323	MW36-GW-0923	MW43-GW-0323	MW43-GW-0923	MW49-GW-0323	MW49-GW-0923	MW50-GW-0323	
Sample Date:	9/5/2023	4/4/2023	9/5/2023	4/4/2023	9/5/2023	3/24/2023	9/5/2023	3/24/2023	9/5/2023	3/20/2023	9/6/2023	3/20/2023	9/6/2023	3/21/2023	
Parameters	Units														
Appendix III															
Boron	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Calcium	mg/L	156	162	159	197	160	185	158	153	144	156	147	115	73.7	161
Chloride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Fluoride	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
pH, lab	s.u.	--	--	--	--	--	--	--	--	--	--	--	--	--	
Sulfate	mg/L	47.7	79.6	85.4	249	157	227	170	104	146	155	68.1	127	62.5	352
Total dissolved solids (TDS)	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Appendix III															
Antimony	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Arsenic	mg/L	0.0446	0.047	0.0333	0.00739	0.0136	0.0327	0.0293	0.0454	0.0221	0.0798	0.0893	0.0468	0.0327	0.0295
Barium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Beryllium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Cadmium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Chromium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Cobalt	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Lead	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Lithium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Mercury	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Molybdenum	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Radium-226 & 228	pCi/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Selenium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	
Thallium	mg/L	--	--	--	--	--	--	--	--	--	--	--	--	--	

2023 Monitoring Analytical Results Summary
MidAmerican Energy Company
Neal South CCR Monofill
Salix, Iowa

Sample Location:	MW-50	MW-50	MW-50	MW-51	MW-51	MW-52	MW-52	MW-53	MW-53
Sample ID:	DP02-GW-0323	MW50-GW-0923	DP02-GW-0923	MW51-GW-0323	MW51-GW-0923	MW52-GW-0323	MW52-GW-0923	MW53-GW-0323	MW53-GW-0923
Sample Date:	3/21/2023 (Duplicate)	9/6/2023	9/6/2023 (Duplicate)	3/20/2023	9/6/2023	3/21/2023	9/6/2023	3/21/2023	9/6/2023
Parameters	Units								
Appendix III									
Boron	mg/L	--	--	--	--	--	--	--	--
Calcium	mg/L	160	145	146	161	147	158	150	65.6
Chloride	mg/L	--	--	--	--	--	--	--	--
Fluoride	mg/L	--	--	--	--	--	--	--	--
pH, lab	s.u.	--	--	--	--	--	--	--	--
Sulfate	mg/L	353	351	349	184	132	254	291	43.4
Total dissolved solids (TDS)	mg/L	--	--	--	--	--	--	--	--
Appendix III									
Antimony	mg/L	--	--	--	--	--	--	--	--
Arsenic	mg/L	0.0296	0.0234	0.0228	0.0739	0.0641	0.00335	0.00223	<0.00200
Barium	mg/L	--	--	--	--	--	--	--	--
Beryllium	mg/L	--	--	--	--	--	--	--	--
Cadmium	mg/L	--	--	--	--	--	--	--	--
Chromium	mg/L	--	--	--	--	--	--	--	--
Cobalt	mg/L	--	--	--	--	--	--	--	--
Lead	mg/L	--	--	--	--	--	--	--	--
Lithium	mg/L	--	--	--	--	--	--	--	--
Mercury	mg/L	--	--	--	--	--	--	--	--
Molybdenum	mg/L	--	--	--	--	--	--	--	--
Radium-226 & 228	pCi/L	--	--	--	--	--	--	--	--
Selenium	mg/L	--	--	--	--	--	--	--	--
Thallium	mg/L	--	--	--	--	--	--	--	--

Notes:

^a Maximum contaminant level (MCL) established under 40 CFR 257.95(h)(1).

^b Drink Water Health Advisories - Life-time established in the 2018 Edition of the Drinking Water Standards and Health Advisories (EPA 822-F-18-001).

^c Secondary Drinking Water Regulation.

^d Action level for lead (treatment technique).

1.00 Value exceeds the MCL, or HAL where MCL not established.

J - Estimated concentration.

< - Not detected at the associated reporting limit.

J- - Estimated concentration, result may be biased low

J+ - Estimated concentration, result may be biased high.

Attachment 3

**IDNR Template to AGWMCAR Cross
Reference Table**

IDNR Template to AGWMCAR Cross Reference Table

Neal South Energy Center - CCR Monofill
Permit No. 97-SDP-13-98C

Annual Water Quality Report Template for Non-Municipal Landfills	Annual Groundwater Monitoring and Corrective Action Report	Notes
Table 1 Monitoring Program Summary	Table 2.1 Groundwater Monitoring Well Network	Lists all wells in monitoring network.
	Table 2.6 Summary of Groundwater Monitoring Events	Lists total number of samples from monitoring programs since December 2015.
	Table 4.5 Inter-Well Comparisons for Assessment Monitoring Data vs. Upgradient Background UTLs	Compares current reporting period's groundwater data to the pooled background data (control limit).
	Section 1 Introduction	States the current monitoring program.
	Section 2.1 Groundwater Monitoring Network	Describes the aquifer characteristics.
	Section 6.4 Recommendations	Provides recommended changes, if any, to the monitoring network.
Table 2 Monitoring Program Implementation Schedule	Table 2.6 Summary of Groundwater Monitoring Events	Provides summary of all sampling events since December 2015.
Table 3 Monitoring Well Maintenance and Performance Reevaluation Schedule	Section 2.2 Monitoring Well Inspection	States the frequency of total depth measurements (annually).
Table 4 Monitoring Well Maintenance and Performance Summary	Table 2.2 Well Construction Details	Provides well coordinates and elevations for TOC, original total depth, ground surface, top of screen, and bottom of screen.
	Table 2.3 Monitoring Well Screen Occlusion Evaluation	Provides TOC elevation, original total depth below TOC, screen length, annual total depth measurements, and percent of screen occluded.
	Table 3.1 Groundwater Elevation Data	Provides all groundwater elevation data, past elevations through elevations during the current reporting period.
Table 5 Background Summary	Table 4.3 Inter-Well Comparison Values	Summary of inter-well evaluation from pooled background well data. Provides the baseline 95/95 UTL (background level).
Table 6 Summary of Well/Detected Constituent Pairs With No Immediately Preceding Control Limit Exceedances	Table 4.5 Inter-Well Comparisons for Assessment Monitoring Data vs. Upgradient Background UTLs	Compares current reporting period's groundwater data to the pooled background data (control limit).
Table 7 Summary of Ongoing and Newly Identified Control Limit Exceedances	--	Table 7 is provided to IDNR.
Table 8 Analytical Data Summary	Table 4.1 Baseline Period Groundwater Monitoring Data	Provides all groundwater analytical data from the baseline period at the CCR Monofill.
	Table 4.2 Monitoring Analytical Results Summary	Provides all groundwater analytical data for the current reporting period at the CCR Monofill.
Table 9 Historic Control Limit & GWPS Exceedances	--	Table 9 is provided to IDNR.
Table 10 Groundwater Quality Assessment Plan Trend Analysis	Section 4 Groundwater Monitoring	Section 4 discusses trends in groundwater data, during baseline monitoring and current reporting period.
Table 11 Leachate Management Summary	Annual Leachate Report	The Annual Leachate Report documents the leachate management activities for the current reporting period. Provides analytical data, leachate head, and leachate volume measurements.
Table 12 Gas Monitoring Summary	NA	Not applicable since the CCR Monofill holds CCR and does not generate gas.