

January 30, 2014

Nevada State Engineer
Nevada Department of Conservation and Natural Resources
Division of Water Resources
901 South Stewart Street, Suite 2002
Carson City, Nevada 89701

Subject: Dam Permit #J-665 – 2013 Annual Report

Dear State Engineer:

The Nevada Environmental Response Trust (NERT or the Trust) maintains Permit #J-665 (the Permit), which was issued on August 23, 2012. The Permit is for the approximately 11-acre synthetically double-lined aquifer retention basin (the GW-11 pond), which is used for the temporary storage of groundwater that has been extracted and treated to remove contaminants. The treated groundwater is discharged to the Las Vegas Wash under the authority of NPDES permit NV0023060.

ENVIRON, on behalf of the Trust, is submitting the 2013 Annual Report of seep collection and detection results from the GW-11 pond. Below is a summary of the Trust's compliance with Permit conditions in Attachment "A". Items 1 through 5 relate to application documents and Items 9 and 10 relate to lack of agency liability and potential need for other environmental permits; these items are not discussed herein.

Because calculations of maximum pond capacity were revised in 2013 by ENVIRON and approved by the Nevada Division of Water Resources (NDWR), a discussion of Item 6 is presented below.

Item 6: Pond Maximum Elevation and Approved Capacity (modified by NDWR letter dated September 17, 2013)

Item 6 states the following: "Water may be impounded to a maximum elevation of 1747 feet above mean sea level (msl) for an approved capacity of 114 acre-feet." On September 5, 2013, ENVIRON provided the results of a recent review of the GW-11 volume calculations to verify the pond capacity. The review indicated that an elevation of 1747 feet above msl did not correspond to a capacity of 114 acre-feet, as stated in the Permit. The revised volume calculation indicated that an elevation of 1747 feet above msl actually corresponds to a capacity of approximately 192 acre-feet. A minor modification to Item 6 was requested to reflect the revised GW-11 volume calculations. This revised calculation was accepted by the NDWR in a letter dated September 17, 2013. ENVIRON notes the water elevation and corresponding pond capacity did not exceed 1747 feet above msl and 192 acre-feet, respectively, during 2013; this and other pond operational parameters are presented in Table 1.

Item 7: Annual Report of Seep Collection and Detection Results

Item 7 states the following: "The owner, operator, assigns or successors in interest shall make annual report to the State Engineer of seep collection and detection results from this pond until

such a time as the State Engineer may modify this requirement.” The liquid level between the liners in the four corners of the GW-11 pond is checked twice per month. Any detected liquid is pumped out through permanently-installed tubing. Liquid may be present beneath the primary liner due to small tears in the primary liner. The results of leak detection monitoring are shown in Table 2.

Item 8: Property Improvements that May Alter Hazard Classification

Item 8 states the following: “Property improvements below or in the vicinity of the structure may alter its hazard classification.” No property improvements or alterations that would alter the dam’s hazard classification were made in 2013.

Additional Inspection Requirements

On July 31, 2013, ENVIRON, on behalf of the Trust, submitted a request for temporary freeboard reduction from 1747 feet above msl to 1748 feet above msl in the GW-11 pond during implementation of an emergency fluidized bed reactor (FBR) refurbishment plan at the site. In a letter from Michael Anderson of NDWR dated August 21, 2013, NDWR authorized the Trust to temporarily impound extracted groundwater to a maximum elevation of 1748 feet above msl, which corresponds to two feet of freeboard.

In a NDWR letter dated September 17, 2013 temporary authorization to encroach upon the three foot freeboard requirement was extended, provided that periodic inspections of the GW-11 structure were conducted and slumps, sloughs, cracking or other unanticipated conditions were reported. Periodic inspections of the GW-11 pond conducted between October 4, 2013 and December 20, 2013 have not indicated the presence of any such conditions.

Should you have any questions concerning this report, please contact John Pekala at (602) 734-7710 or jpekala@environcorp.com. Thank you.

Sincerely,



John M. Pekala, PG
Senior Manager
Nevada CEM 2347, exp. 9/20/2014

cc. Greg Lovato, Bureau of Corrective Actions, NDEP
James Dotchin, Bureau of Corrective Actions, NDEP
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Tables

Table 1 – GW-11 Pond Monitoring Information

Date	Flow Into Pond ¹ (million gallons)	Pond Level ² (feet)	Pond Elevation ³ (above msl)	Storage Volume (thousand gallons)	Storage Volume (acre-feet)	Water Balance ⁴ (million gallons)	Flow from Pond to On-site Treatment Plant (thousand gallons)
1/1/13	13.58	6.6	1737	19,184	59	12.48	0
1/15/13		8.2	1738	25,271	78		
2/1/13	1.01	11.1	1741	36,964	113	-0.35	0
2/15/13		11.2	1741	37,181	114		
3/1/13	3.99	11.1	1741	36,856	113	1.69	0
3/15/13		12.0	1742	40,558	124		
4/1/13	2.55	12.0	1742	40,669	125	-0.61	0
4/15/13		12.3	1742	41,884	129		
5/1/13	1.27	12.1	1742	41,111	126	-3.08	0
5/15/13		12.1	1742	41,000	126		
6/1/13	2.27	12.6	1743	42,881	132	-2.73	2,724
6/15/13		13.4	1743	46,357	142		
7/1/13	13.60	12.9	1743	44,444	136	10.42	3,381
7/12/13		15.5	1745	55,574	171		
8/1/13	2.02	15.6	1746	56,164	172	-3.54	4,493
8/15/13		15.3	1745	54,931	169		
9/1/13	0.87	14.8	1745	52,540	161	-3.99	5,569
9/15/13		14.5	1745	51,323	158		
10/1/13	0.47	13.8	1744	48,400	149	-3.84	5,593
10/15/13		13.5	1743	46,695	143		
11/1/13	2.34	13.0	1743	44,556	137	2.59	82
11/15/13		13.4	1743	46,582	143		
12/1/13	0.29	13.6	1744	47,148	145	-0.32	1,620
12/15/13		13.6	1744	47,319	145		

¹ Total net monthly addition of water to GW-11 pond from various operations of treatment plant

² Vertical water level height above elevation of 1730 feet above mean sea level

³ Elevation of water above mean sea level

⁴ Total net monthly addition of water less evaporation and water removed to the on-site treatment plant

Table 2 – GW-11 Pond Leak Detection Monitoring

Date	Volume in Detection Well (gallons)
1-3-13	NW, NE, SW, SE – Dry
1-17-13	NW, NE, SW, SE – Dry
2-7-13	NW, NE, SW, SE – Dry
2-21-13	NW, NE, SW, SE – Dry
3-7-13	NW, NE, SW, SE – Dry
3-21-13	NW, NE, SW, SE – Dry
4-4-13	NW, NE, SW, SE – Dry
4-22-13	NW, NE, SE – Dry SW – 840
5-9-13	NW, NE, SE – Dry SW – 75
5-23-13	NW, NE, SW, SE – Dry
6-6-13	NW, NE, SW, SE – Dry
6-20-13	NW, NE, SW, SE – Dry
7-5-13	NW, NE, SW, SE – Dry
7-19-13	NW, NE, SW, SE – Dry
8-5-13	NW, NE, SE – Dry SW – 450
8-15-13	NW, NE, SW, SE – Dry
9-1-13	NW, NE, SW, SE – Dry
9-15-13	NW, NE, SW, SE – Dry
10-1-13	NW, NE, SW, SE – Dry
10-15-13	NW, NE, SW, SE – Dry
11-1-13	NW, NE, SW, SE – Dry
11-15-13	NW, NE, SW, SE – Dry
12-1-13	NW, NE, SW, SE – Dry
12-15-13	NW, NE, SW, SE – Dry