

February 5, 2013

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 – Annual Report 2012

Dear State Engineer:

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

Item 7 of Attachment A (Permit Terms for the Construction of Tronox Aquifer Retention Pond Dam) of Permit #J-665 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." ENVIRON International Corporation (ENVIRON), on behalf of the Trust, is submitting this annual report to fulfill this requirement.

Item 6 of Attachment A of Permit #J-665 states the following: "Water may be impounded to a maximum elevation of 1747 feet above msl for an approved capacity of 114 acre-feet." During the subject time period (2012), the water elevation and corresponding pond capacity did not exceed 1747 feet above msl and 114 acre-feet, respectively. This information and other pond operational information are presented in Table 1. Veolia Water North America (Veolia), which operates the GW-11 pond and groundwater treatment systems, checks water levels between the liners in the four corners of the GW-11 pond twice per month. Any water in the space between the liners is pumped out through permanently-installed tubing. Water may be present in the interstitial space due to small tears in the uppermost liner. The results of leak detection monitoring are shown in Table 2.

Item 8 of Attachment A 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 during the subject time period (2012).

Should you have any questions concerning this report, please contact Kimberly Kuwabara at (510) 420-2525 or <u>kkuwabara@environcorp.com</u>. Thank you.

Sincerely,

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

Kinbely Kuwabara

Kimberly Kuwabara Manager

ec. Shannon Harbour, Bureau of Corrective Actions, NDEP Weiquan Dong, Bureau of Corrective Actions, NDEP Jay Steinberg, Nevada Environmental Response Trust Andy Steinberg, Nevada Environmental Response Trust Tanya O'Neil, Esq., Foley and Lardner Allan DeLorme, ENVIRON International Corporation

Attachments

Date	Flow Into Pond <sup>1</sup> (million gallons)	Pond Level <sup>2</sup> (feet)	Pond Elevation <sup>3</sup> (above msl)	Storage Volume (thousand gallons)	Storage Volume (acre-feet)	Water Balance <sup>4</sup> (million gallons)	Flow from Pond to On-site Treatment Plant (thousand gallons)
1-1-12	2.09	0.70	1732	2,520	7.73	0.76	2,160
1-16-12		1.16	1732	4,216	12.94		716
2-1-12	1.96	1.42	1732	5,120	15.71	0.54	17
2-15-12		1.53	1733	5,572	17.10		0.8
3-1-12	0.51	1.90	1733	6,815	20.91	-1.86	0
3-15-12		1.58	1733	5,685	17.45		<0.1
4-1-12	0.33	1.49	1732	5,346	16.41	-1.74	0
4-16-12		1.33	1732	4,781	14.67		0
5-1-12	1.74	1.17	1732	4,216	12.94	-1.04	0
5-15-12		0.82	1732	2,973	9.12		0
6-1-12	3.29	0.63	1732	2,295	7.04	0.51	0
6-15-12		0.25	1731	938	2.88		0
7-1-12	1.28	0.32	1731	1,164	3.57	-1.50	0
7-15-12		0.51	1732	1,843	5.66		0
8-1-12	8.70	0.25	1731	938	2.88	5.92	0
8-15-12		0.73	1732	2,634	8.08		0
9-1-12	1.81	3.16	1734	11,337	34.79	-0.97	0
9-15-12		3.10	1734	11,111	34.10		0
10-1-12	1.39	3.16	1734	11,337	34.79	-1.39	0
10-15-12		3.35	1734	12,015	36.87		0
11-1-12	2.47	3.45	1734	12,354	37.91	-0.31	0
11-15-12		3.95	1735	14,162	43.46		0
12-1-12	1.40	4.21	1735	15,007	46.05	-1.38	0
12-15-12		4.33	1735	15,519	47.63		0

Table 1 – GW-11 Pond Monitoring Information

 <sup>&</sup>lt;sup>1</sup> Total net monthly addition of water to GW-11 pond from various operations of treatment plant
<sup>2</sup> Height of water above bottom of pond
<sup>3</sup> Elevation of water above mean sea level
<sup>4</sup> Total net monthly addition of water less evaporation

	Fond Leak Delection Monito		
Date	Volume in Detection Well		
	(gallons)		
1-5-12	NW, NE, SW, SE – Dry		
1-19-12	NW, NE, SE – Dry		
	SW – 175		
2-2-12	NW, NE, SW, SE – Dry		
2-16-12	NW, NE, SW, SE – Dry		
3-1-12	NW, NE, SE – Dry		
	SW – 25		
3-15-12	NW, NE, SW, SE – Dry		
4-5-12	NW, NE, SW, SE – Dry		
4-19-12	NW, NE, SW, SE – Dry		
5-3-12	NW, NE, SW, SE – Dry		
5-17-12	NW, NE, SW, SE – Dry		
6-7-12	NW, NE, SW, SE – Dry		
6-21-12	NW, NE, SW, SE – Dry		
7-5-12	NW, NE, SW, SE – Dry		
7-19-12	NW, NE, SW, SE – Dry		
8-2-12	NW, NE, SW, SE – Dry		
8-16-12	NW, NE, SW, SE – Dry		
9-6-12	NW, NE, SW, SE – Dry		
9-20-12	NW, NE, SW, SE – Dry		
10-4-12	NW, NE, SW, SE – Dry		
10-16-12	NW, NE, SW, SE – Dry		
11-1-12	NW, NE, SW, SE – Dry		
11-15-12	NW, NE, SW, SE – Dry		
12-6-12	NW, NE, SW, SE – Dry		
12-20-12	NW, NE, SW, SE – Dry		

Table 2 – GW-11	ring	
Date	Volume in Detection Well	