



October 20, 2016

Compliance Coordinator
Nevada Division of Environmental Protection
Bureau of Water Pollution Control
901 South Stewart Street, Suite 4001
Carson City, Nevada 89701-5249

**Subject: Groundwater Discharge Permit NEV2001515
Discharge Monitoring Report – 3rd Quarter 2016**

Dear Compliance Coordinator:

The Nevada Environmental Response Trust (NERT or Trust) maintains Groundwater Discharge Permit #NEV2001515 (Permit), which covers the synthetically double-lined ponds GW-11 and AP-5 at the NERT site in Henderson, Nevada. During the 3rd quarter 2016, no water was discharged directly to a receiving water body from either GW-11 or AP-5. Treated water from a groundwater extraction and treatment system (GWETS) at the NERT Site, which treats extracted groundwater for perchlorate, is discharged to Las Vegas Wash pursuant to NPDES Permit #NV0023060. The GWETS is operated by Envirogen Technologies Inc. (ETI).

AP-5

The Trust is in the process of decommissioning the AP-5 Pond. Activities related to decommissioning are overseen by the Nevada Division of Environmental Protection (NDEP), Bureau of Industrial Site Cleanup. In the interim, water is periodically added to keep the pond solids moist (Table 1b). Liquid was detected in the pond's leak detection well during the 3rd quarter 2016 but did not exceed 125 gallons/acre/day during the reporting period.

GW-11

Liquid was detected in two of four GW-11 corner leak detection wells during the 3rd quarter 2016, specifically the northeast and northwest corner wells. The southeast and southwest wells detected no leakage during the quarter. The leakage rate for the pond did not exceed 125 gallons/acre/day during the reporting period.

Attachment 1 provides July, August, and September 2016 Discharge Monitoring Reports (DMRs). Attachment 2 provides pond monitoring tables with water balance and leak detection monitoring information.

Please contact me at (702) 966-8340 or kyle.hansen@tetratech.com for any questions regarding this report.

Sincerely,

Tetra Tech, Inc.



Kyle Hansen, CEM
Field Operations Manager/Geologist
CEM 2167, exp. 9/18/18
Overnight Mail

Attachments: Attachment 1: Discharge Monitoring Reports
Attachment 2: Pond Monitoring Results

cc: James Dotchin, Bureau of Corrective Actions, NDEP
Weiquan Dong, Bureau of Corrective Actions, NDEP
Nikita Lingenfelter, Bureau of Water Pollution Control, NDEP
Nevada Environmental Response Trust
Tanya O'Neill, Foley and Lardner LLP
Todd Webster, Envirogen Technologies, Inc.
Michael Delvecchio, Envirogen Technologies, Inc.
Allan J. DeLorme, Ramboll Environ
John Pekala, Ramboll Environ
Derek Amidon, Tetra Tech, Inc.

**Discharge Permit NEV2001515 – 3rd Quarter 2016 DMR
CEM Certification**

I hereby certify that I am responsible for the services described in this document and for the preparation of this document. The services described in this document have been provided in a manner consistent with the current standards of the profession and, to the best of my knowledge, comply with all applicable federal, state and local statutes, regulations and ordinances.



Kyle S. Hansen
CEM 2167, expires 9-18-18

ATTACHMENT 1

Discharge Monitoring Reports

July 2016

August 2016

September 2016

PERMITTEE NAME/ADDRESS:
NAME: Nevada Environmental Response Trust
ADDRESS: 510 Fourth Street
 Henderson, NV 89015


NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)
 NEV2001515 PERMIT NUMBER
 001 DISCHARGE NUMBER

FACILITY: Nevada Environmental Response Trust
LOCATION: Henderson, NV
ATTN: Kyle Hansen

MONITORING PERIOD
FROM: 16 | 07 | 01 **TO:** 16 | 07 | 31

NO DISCHARGE: X

NOTE: Read instructions before completing this form.

PARAMETER	SAMPLE MEASUREMENT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			UNIT	NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
		AVERAGE	MAXIMUM	UNITS	30 Day Ave (mg/l)	7 Day Ave (mg/l)	30 Day Ave (lb/day)				
Flow	PERMIT MEASUREMENT REQUIREMENT	See attached Tables 1a and b		MGD					0	Monthly	Flow Meter
Influent	PERMIT MEASUREMENT REQUIREMENT	Monitor and Report									
Leak Detection Information	PERMIT MEASUREMENT REQUIREMENT	See attached Tables 2a and b		gallons					0	Bi-Monthly	Discrete-Field Measurement
Pond Water Level	PERMIT MEASUREMENT REQUIREMENT	See attached Tables 1a and b		feet					0	Bi-Monthly	Discrete-Field Measurement
Storage Volume	PERMIT MEASUREMENT REQUIREMENT	See attached Tables 1a and b		gallons					0	Bi-Monthly	Calculation
Discharge to FBR	PERMIT MEASUREMENT REQUIREMENT	See attached Tables 1a and b		gallons							
	PERMIT MEASUREMENT REQUIREMENT	Monitor and Report									
Water Balance Information	PERMIT MEASUREMENT REQUIREMENT	See attached Tables 1a and b		gallons							
	PERMIT MEASUREMENT REQUIREMENT	Monitor and Report									
<small>I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PREPARED, REVIEWED, AND EVALUATED THE INFORMATION SUBMITTED. BASED ON MY KNOWLEDGE OF THE PERSON OR PERSONS WHO PREPARED, REVIEWED, AND EVALUATED THE INFORMATION SUBMITTED, THE INFORMATION IS TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPROVEMENT FOR KNOWING VIOLATIONS.</small>											
NAME / TITLE PRINCIPAL EXECUTIVE OFFICER Kyle Hansen CEM 2167, exp 9-18-18 TYPED OR PRINTED											
SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT  Kyle J. Hansen											
TELEPHONE 702-966-8340 DATE 16 10 24 AREA CODE NUMBER YEAR MO DAY											

COMMENT AND EXPLANATION OF ANY VIOLATIONS
 Ponds GW-11 and AP-5

(Reference all attachments here)


PERMITTEE NAME/ADDRESS:
Nevada Environmental Response Trust
 Nevada Environmental Technologies
 510 Fourth Street
 Henderson, NV 89015

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)
DISCHARGE MONITORING REPORT (DMR)
 NEV2001515 PERMIT NUMBER
 001 DISCHARGE NUMBER

FACILITY: Nevada Environmental Response Trust
 LOCATION: Henderson, NV
 ATTN: Kyle Hansen

MONITORING PERIOD
 FROM: 16 | 09 | 01 TO: 16 | 09 | 30

NO DISCHARGE: X
 NOTE: Read instructions before completing this form.

PARAMETER	MEASUREMENT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			UNIT	NO. EX OF ANALYSIS	FREQUENCY	SAMPLE TYPE		
		AVERAGE	MAXIMUM	UNITS	30 Day Ave (mg/l)	7 Day Ave (mg/l)	30 Day Ave (lb/day)						
Flow	SAMPLE MEASUREMENT	See attached Tables 1a and b		MGD					0	Monthly	Flow Meter		
	PERMIT REQUIREMENT	Monitor and Report											
	PERMIT MEASUREMENT	See attached Tables 2a and b		gallons					0	Bi-Monthly	Discrete-Field Measurement		
Leak Detection Information	PERMIT REQUIREMENT	Monitor and Report											
	SAMPLE MEASUREMENT	See attached Tables 1a and b		feet					0	Bi-Monthly	Discrete-Field Measurement		
	PERMIT REQUIREMENT	Monitor and Report											
Pond Water Level	PERMIT REQUIREMENT	Monitor and Report											
	SAMPLE MEASUREMENT	See attached Tables 1a and b		gallons					0	Bi-Monthly	Calculation		
	PERMIT REQUIREMENT	See attached Tables 1a and b		gallons									
Discharge to FBR	PERMIT REQUIREMENT	Monitor and Report											
	SAMPLE MEASUREMENT	See attached Tables 1a and b		gallons					0	Bi-Monthly	Flow Meter		
	PERMIT REQUIREMENT	Monitor and Report											
Water Balance Information	PERMIT REQUIREMENT	Monitor and Report											
	SAMPLE MEASUREMENT	See attached Tables 1a and b		gallons					0	Monthly	Calculation		
	PERMIT REQUIREMENT	Monitor and Report											
NAME / TITLE PRINCIPAL EXECUTIVE OFFICER Kyle Hansen I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL HAVE REVIEWED AND VERIFIED THE INFORMATION SUBMITTED. BASED ON MY KNOWLEDGE OF THE PERSON OR PERSONS WHO PREPARED THIS REPORT, I HAVE TAKEN THE NECESSARY STEPS TO ASSURE THE ACCURACY AND COMPLETENESS OF THE INFORMATION SUBMITTED. I AM AWARE THAT THERE ARE SEVERAL PENALTIES FOR SUBMITTING FALSE INFORMATION INCLUDING THE POSSIBILITY OF FINE AND IMPROVEMENT FOR KNOWING VIOLATIONS.													
CEM 2167, exp 9-18-18 TYPED OR PRINTED								SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT 		TELEPHONE 702-966-8340		DATE 16 10 24	
COMMENT AND EXPLANATION OF ANY VIOLATIONS Ponds GW-11 and AP-5 (Reference all attachments here)													

ATTACHMENT 2

Pond Monitoring Results

3rd Quarter 2016

Pond Monitoring Results

Table 1a – GW-11 Pond Level and Storage Volume

Date	Flow Into GW-11 ¹ (MGD)	Pond Water Level ² (vertical depth in feet)	Storage Volume (thousand gallons)	Discharge to FBRs (million gallons)	Water Balance ¹ (million gallons)
7/5/16	0.14	12.61	43,105	1.96 (07/01/16 - 07/16/16)	-1.8
7/19/16		12.05	40,779	0.00 (07/16/16 - 07/31/16)	
8/11/16	0.74	12.19	41,332	0.37 (08/01/16 - 08/16/16)	0.2
8/23/16		12.56	42,881	18.69 (08/16/16 - 08/31/16)	
9/6/16	0.69	13.40	46,469	15.08 (09/01/16 - 09/15/16)	5.2
9/27/16		13.79	48,172	0.22 (09/15/16 - 09/30/16)	

MGD = million gallons per day

FBR = fluidized bed reactor

¹The pond water levels and storage volumes represent discrete biweekly measurement and calculations. The water balance represents the aggregated monthly change.

²Due a Boatman bug outbreak in GW-11, extraction well flows bypassed GW-11 and were directed to the FBRs from July 3 to July 31; August 1 to August 14; and September 13 to September 30, 2016.

Table 1b – AP-5 Pond Level and Storage Volume

Date	Flow Into AP-5 ¹ (MGD)	Pond Water Level ² (vertical depth in feet and inches)	Storage Volume (thousand gallons)	Discharge to FBRs (gallons)	Water Balance (million gallons)
7/5/2016	0.06	4'0"	362.7	0	-0.01
7/20/2016		3'11"	350.3	0	
8/11/2016	0.15	3'8"	313.7	0	0.02
8/25/2016		3'10"	338.0	0	
9/7/2016	0.00	4'10"	490.8	0	-0.07
9/23/2016		4'5"	425.8	0	

¹The AP-5 pond is in the process of being decommissioned. There is no routine flow into or out of AP-5 except to keep the pond solids moist. The flow into AP-5 has been expressed as a rate, per the requirements of Table 1 of the permit.

²The depth includes pond solids and added water. The units in feet and inches reported here are specific to the AP-5 Pond and reflect the log and chart used to determine depth. Water added to the AP-5 Pond on August 26, 2016 is associated with the September 2016 pond water level increase.

Table 2a – GW-11 Pond Leak Detection Monitoring

Dates	Volume in Detection Wells (gallons) ¹
07/05/16 – 07/07/16	NW – 19
“	NE – 1124
“	SW – 0
“	SE – 0
07/20/16 – 07/22/16	NW – 0
“	NE – 919
“	SW – 0
“	SE – 0
08/11/16 – 08/13/16	NW – 309
“	NE – 2691
“	SW – 0
“	SE – 0
08/25/16 – 08/27/16	NW – 118
“	NE – 2634
“	SW – 0
“	SE – 0
09/07/16 – 09/09/16	NW – 5
“	NE – 1322
“	SW – 0
“	SE – 0
09/21/16 – 09/23/16	NW – 0
“	NE – 579
“	SW – 0
“	SE – 0

¹Twice monthly pumping activities occurred over a 3-day period to evaluate the leakage rates in GW-11, in accordance with procedures specified in a letter to NDEP-BWPC, dated May 28, 2015. The procedure is comprised of the following: days 1 and 2 consist of pumping the well contents dry. Day 3 provides the monitoring day for the gallons per day recharge rate. The value reported here represents the cumulative volume pumped during all 3 days. During the reporting period, the leakage rate did not exceed 125 gallons/acre/day.

Table 2b – AP-5 Pond Leak Detection Monitoring

Dates	Volume in Detection Well (gallons) ¹
07/05/16 – 07/07/16	190
07/20/16 – 07/22/16	214
08/11/16 – 08/13/16	230
08/25/16 – 08/27/16	124
09/07/16 – 09/09/16	257
09/21/16 – 09/23/16	20
<p>¹Twice monthly pumping activities occurred over a 3-day period to evaluate the leakage rates in AP-5. The 3-day evaluation is consistent with the method used for the GW-11 Pond: days 1 and 2 consist of pumping the well contents dry. Day 3 provides the monitoring day for the gallons per day recharge rate. The value reported here represents the cumulative volume pumped during all 3 days. During the reporting period, the leakage rate did not exceed 125 gallons/acre/day.</p>	