



October 25, 2013

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 Reports –  
3rd Quarter 2013**

Dear Compliance Coordinator:

The Nevada Environmental Response Trust (NERT or the Trust) maintains Groundwater Discharge Permit #NEV2001515 which covers the synthetically double-lined ponds GW-11 and AP-5. During 3<sup>rd</sup> quarter 2013, no water was discharged directly to a receiving water body from either GW-11 or AP-5 pond. Treated water from the perchlorate treatment system at the NERT site is discharged under the authority of NPDES permit NV0023060. ENVIRON notes that a transition in treatment plant operator from Veolia Water North America (Veolia) to Envirogen Technologies, Inc. (Envirogen) occurred on July 24, 2013.

On June 12, 2013, Veolia, the former treatment plant operator, began transferring water from GW-11 to the perchlorate treatment system at approximately 100 gallons per minute (gpm) to reduce the pond volume. In July 2013, a number of upsets and operational problems at the perchlorate treatment plant occurred which resulted in diversions to GW-11 in order to maintain compliance with the NPDES permit effluent limitations. An emergency response plan<sup>1</sup> was developed to reduce the GW-11 pond volume and to address the operational problems at the treatment plant.

Per Section I.A.8 of the permit, a minimum freeboard of 3.0 feet is required in ponds greater than one acre in area. As part of the emergency response plan, in a letter to NDEP on July 31, 2013, ENVIRON requested a temporary exceedance of the permit requirement to maintain three feet of freeboard in GW-11. NDEP granted temporary reduction of the minimum freeboard requirement from three feet to two feet in a letter dated August 9, 2013. In a subsequent letter dated October 7, 2013, NDEP indicated that the temporary allowance to operate GW-11 up to two feet of freeboard will end effective January 1, 2014.

Subsequently, ENVIRON reviewed the volume calculations for GW-11 to verify its capacity. Table 1 of the permit, "Holding Pond Limitations for AP-5 and GW-11," indicates that the maximum storage volume of GW-11 is 70,000,000 gallons; however, ENVIRON determined that the maximum storage volume is approximately 76,100,000 gallons. In a letter to NDEP on September 12, 2013, ENVIRON requested a minor modification of the permit to reflect the revised GW-11 maximum storage volume. In a letter dated October 7, 2013, NDEP concurred with the maximum volume of 76,100,000 gallons at zero feet of freeboard and indicated that the maximum volume corresponds to an operating volume of 62,400,000 gallons at three feet of freeboard. A modification to the permit based on the revised GW-11 volume calculations will be addressed during the permit renewal process in 2016.

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<sup>1</sup> Envirogen proposed the implementation of a modular ion exchange (IX) system to be installed at the Seep Well Field (SWF) for the treatment of extracted groundwater from the SWF on a temporary and emergency basis.

ENVIRON, on behalf of the Trust, is in the process of decommissioning AP-5 pond. Activities related to the decommissioning are ongoing under the purview of Nevada Division of Environmental Protection (NDEP) Bureau of Corrective Actions. All water was removed from the pond during 2<sup>nd</sup> quarter 2013. ENVIRON currently is in the process of evaluating disposal options for the solids, which remain in AP-5 pond.

Table 1 of the permit indicates that monitoring of the leak detection systems in both GW-11 and AP-5 is required twice per month. On August 5, 2013, approximately 420 gallons of water were detected between the primary and secondary liners in the southwest corner of GW-11. A sample of the leaked water was collected and analyzed for perchlorate, pH, and total dissolved solids (TDS). The leaked water was pumped back into GW-11. Leak detection monitoring was not conducted for the AP-5 pond in July, August, or September 2013. On October 16, 2013, approximately 25 gallons of water were detected between the primary and secondary liners of AP-5. A sample was collected for perchlorate, pH, and TDS analysis. The leaked water was pumped back into AP-5. Please note that AP-5 pond's top liner has a tear at the top edge of the pond. The pond is a synthetically double-lined pond and there is no evidence that the underlying liner has been compromised. The split top liner has been sandbagged to prevent a strong breeze from lifting the edges and the top liner tear will be closely monitored.

Attachment 1 includes the July, August, and September 2013 Discharge Monitoring Reports (DMRs). Attachment 2 includes the pond monitoring tables, which provide water balance and leak detection monitoring information.

Should you have any questions concerning this report, please contact Kimberly Kuwabara at (510) 420-2525 or [kkuwabara@environcorp.com](mailto:kkuwabara@environcorp.com). Thank you.

Sincerely,



Kimberly Kuwabara, MS  
Senior Manager  
CEM 2353, exp. 3/20/15

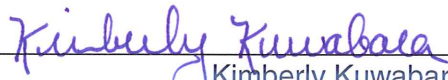
Overnight Mail  
Attachments

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

cc: Greg Lovato, Bureau of Corrective Actions, NDEP  
James Dotchin, Bureau of Corrective Actions, NDEP  
Weiquan Dong, Bureau of Corrective Actions, 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, ENVIRON International Corporation  
John Pekala, ENVIRON International Corporation

Discharge Permit NEV2001515 – 3<sup>rd</sup> Q 2013 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.



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Kimberly Kuwabara  
CEM 2353, expires 3-20-15

# ATTACHMENT 1

## Discharge Monitoring Reports



13-July DMR  
NEV2001515.xlsx

**July 2013**



13-Aug DMR  
NEV2001515.xlsx

**August 2013**



13- Sep DMR  
NEV2001515.xlsx

**September 2013**

PERMITTEE NAME/ADDRESS:

Nevada Environmental response Trust  
 c/o Envirogen 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: Kimberly Kuwabara

MONITORING PERIOD

FROM 13 | 07 | 01 TO 13 | 07 | 31

NO DISCHARGE

NOTE: Read instructions before completing this form.

PARAMETER	SAMPLE MEASUREMENT PERMIT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			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)				UNIT
<b>Flow</b> Influent	SAMPLE MEASUREMENT PERMIT REQUIREMENT	Please see attached Table 1			MGD	-----			0	Monthly	Flow Meter
	SAMPLE MEASUREMENT PERMIT REQUIREMENT	Monitor and Report				-----					
<b>Leak Detection Information</b>	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Please see attached Table 2			0	Bi-Monthly	Discrete
	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Monitor and Report					
<b>Pond Water Level</b>	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Please see attached Table 1			0	Bi-Monthly	Discrete
	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Monitor and Report					
<b>Storage Volume</b>	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Please see attached Table 1			0	Bi-Monthly	Calculation
	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Monitor and Report					
<b>Water Balance Information</b>	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Please see attached Table 1			0	Monthly	Calculation
	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Monitor and Report					
NAME / TITLE PRINCIPAL EXECUTIVE OFFICER		I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY PERSONAL SUPERVISION AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE OF THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.			TELEPHONE			DATE			
Kimberly Kuwabara		SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT			510-420-2525			13   10   25			
CEM 2353, exp 3-20-15		TYPED OR PRINTED			AREA CODE NUMBER			YEAR MO DAY			
					510-420-2525			13   10   25			

COMMENT AND EXPLANATION OF ANY VIOLATIONS  
 Ponds GW-11 and AP-5 (Reference all attachments here)

Forms by WinrowChem(707)984-0845;pm11090;v5.01;4/1996

PERMITTEE NAME/ADDRESS:

Nevada Environmental response Trust  
 c/o Envirogen 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: Kimberly Kuwabara

**MONITORING PERIOD**

FROM 13 | 08 | 01 TO 13 | 08 | 31

NO DISCHARGE

NOTE: Read instructions before completing this form.

PARAMETER	SAMPLE MEASUREMENT PERMIT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NO. EX	FREQUENCY OF ANALYSIS	SAMPLE TYPE
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<b>Leak Detection Information</b>	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----			Please see attached Table 2	-----	-----	0	Bi-Monthly	Discrete
	SAMPLE MEASUREMENT PERMIT REQUIREMENT				Monitor and Report					
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	SAMPLE MEASUREMENT PERMIT REQUIREMENT				Monitor and Report					
<b>Storage Volume</b>	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----			Please see attached Table 1	-----	-----	0	Bi-Monthly	Calculation
	SAMPLE MEASUREMENT PERMIT REQUIREMENT				Monitor and Report					
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	SAMPLE MEASUREMENT PERMIT REQUIREMENT				Monitor and Report					
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
	SAMPLE MEASUREMENT PERMIT REQUIREMENT									
<p>I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY PERSONAL SUPERVISION AND THAT THE INFORMATION CONTAINED HEREIN IS TRUE AND ACCURATE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AM AWARE THAT THE PENALTY FOR PROVIDING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.</p>										
<p>NAME / TITLE PRINCIPAL EXECUTIVE OFFICER  <b>Kimberly Kuwabara</b></p>										TELEPHONE
<p>CEM 2353, exp 3-20-15          TYPED OR PRINTED</p>										DATE
<p>COMMENT AND EXPLANATION OF ANY VIOLATIONS          Ponds GW-11 and AP-5</p>										510-420-2525
<p>(Reference all attachments here)</p>										AREA CODE NUMBER
										YEAR
										MO
										DAY
										13   10   25

Forms by WindowChem(707)864-0845;prn11090;v5.01;4/1/06

PERMITTEE NAME/ADDRESS:

Nevada Environmental response Trust  
 c/o Envirogen 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: Kimberly Kuwabara

MONITORING PERIOD

FROM 13 | 09 | 01 TO 13 | 09 | 30

NO DISCHARGE

NOTE: Read instructions before completing this form.

PARAMETER	SAMPLE MEASUREMENT PERMIT REQUIREMENT	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			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)				UNIT
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<b>Leak Detection Information</b>	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Please see attached Table 2			0	Bi-Monthly	Discrete
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<b>Pond Water Level</b>	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Please see attached Table 1			0	Bi-Monthly	Discrete
	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Monitor and Report					
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	SAMPLE MEASUREMENT PERMIT REQUIREMENT	-----				Monitor and Report					
<b>Water Balance Information</b>	SAMPLE MEASUREMENT PERMIT REQUIREMENT					Please see attached Table 1			0	Monthly	Calculation
	SAMPLE MEASUREMENT PERMIT REQUIREMENT					Monitor and Report					
	SAMPLE MEASUREMENT PERMIT REQUIREMENT										
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<p>NAME / TITLE PRINCIPAL EXECUTIVE OFFICER  <b>Kimberly Kuwabara</b>            CEM 2353, exp 3-20-15            TYPED OR PRINTED</p>											
<p>I CERTIFY UNDER PENALTY OF LAW THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY PERSONAL SUPERVISION AND CONTROL AND TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE INFORMATION. I AM NOT PROVIDING ANY INFORMATION THAT I AM NOT PERMITTED TO DISCLOSE OR THAT I AM PROVIDING IN VIOLATION OF ANY APPLICABLE LAWS, REGULATIONS, OR CONTRACTS. I AM NOT PROVIDING ANY INFORMATION THAT I AM NOT PERMITTED TO DISCLOSE OR THAT I AM PROVIDING IN VIOLATION OF ANY APPLICABLE LAWS, REGULATIONS, OR CONTRACTS. I AM NOT PROVIDING ANY INFORMATION THAT I AM NOT PERMITTED TO DISCLOSE OR THAT I AM PROVIDING IN VIOLATION OF ANY APPLICABLE LAWS, REGULATIONS, OR CONTRACTS.</p>											
								TELEPHONE		DATE	
								510-420-2525		13   10   25	
								AREA CODE NUMBER		YEAR MO DAY	
								OFFICER OR AUTHORIZED AGENT			
								SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER			
								 OFFICER OR AUTHORIZED AGENT			

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

(Reference all attachments here)

Forms by WindowChem(707)864-0845.pmt1090.v5.01:1/1/196

## ATTACHMENT 2

### Pond Monitoring Results



GW-11 Pond Volume    current pond liner  
Model Version 1.xlsm    gallons - 3rd Q 13.xls

#### **GW-11 Pond Data**



GW-11 Water  
Balance - 3rd Q 13.xls

#### **GW-11 Water Balance**



O&M Manual -    OnM Manual for NEV  
NEV2001515 - 11-9-12001516 - Sept 2006

#### **Operations and Maintenance Manuals**



## ATTACHMENT 2

### Pond Monitoring Results

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

Date	Flow Into GW-11 (MGD)	Pond Water Level (vertical depth in feet)	Storage Volume (thousand gallons)	Flow from GW-11 to FBRs (million gallons)	Water Balance (million gallons)
7-1-13	0.439	12.92	44,444	1.53	10.42
7-12-13		15.48	55,574	1.85	
8-1-13	0.065	15.61	56,023	1.79	-3.54
8-15-13		15.35	54,809	2.70	
9-1-13	0.029	14.80	52,364	2.60	-3.99
9-15-13		14.51	51,145	2.97	

**Table 2a – GW-11 Pond Leak Detection Monitoring**

Date	Volume in Detection Wells (gallons)
7-5-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry
7-19-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry
8-5-13	NW – Dry
“	NE – Dry
“	SW – 420
“	SE – Dry
8-15-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry
9-5-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry
9-19-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry

**Table 2b – AP-5 Pond Leak Detection Monitoring**

Date	Volume in Detection Well (gallons)
7-1-13 to 9-30-13	Not monitored
10-16-13	25