



January 27, 2014

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 –
4th Quarter 2013**

Dear Compliance Coordinator:

The Nevada Environmental Response Trust (NERT or the Trust) maintains Groundwater Discharge Permit #NEV2001515 (the "Permit"), which covers the synthetically double-lined ponds GW-11 and AP-5 at the NERT site in Henderson, Nevada. During 4th quarter 2013, no water was discharged directly to a receiving water body from either GW-11 or AP-5. Treated water from the perchlorate treatment system at the NERT site is discharged to Las Vegas Wash pursuant to NPDES permit NV0023060. The groundwater extraction and treatment system at the NERT site is operated by Envirogen Technologies, Inc. (Envirogen).

Per Part I.A.8 of the Permit, a minimum freeboard of 3.0 feet is required in ponds greater than one acre in area. In July 2013, a number of upsets and operational problems at the perchlorate treatment plant occurred and resulted in diversions to GW-11 in order to maintain compliance with the NPDES permit effluent limitations. An emergency response plan was developed to reduce the GW-11 pond volume and to address the operational problems at the perchlorate treatment plant. As part of the emergency response plan, in a letter to the Nevada Division of Environmental Protection (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 would end effective January 1, 2014. During 4th quarter 2013, three feet of freeboard was maintained at all times, in conformance with Part I.A.8 of the Permit.

During the 3rd quarter 2013, ENVIRON reviewed the volume calculations for GW-11 to verify its storage volume. 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 3.0 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.

ENVIRON, on behalf of the Trust, is in the process of decommissioning the AP-5 pond. Activities related to the decommissioning are ongoing under the purview of NDEP Bureau of Corrective Actions.

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. The results of the 4th quarter leak detection monitoring are provided in Attachment 2. Due to an oversight by the treatment plant operator, leak detection monitoring of AP-5 was only conducted once during the month of October 2013. Leak detection monitoring was performed twice per month in November and December 2013, as required.

Please note that the AP-5 pond's top liner has a tear at the top edge of the pond. The AP-5 pond is a synthetically double-lined pond. 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. Liquid was detected during each of the five leak detection monitoring events conducted in 4th quarter (Attachment 2). The source of the liquid is unknown. The detected liquid was returned to AP-5 on the four events between October 16 and December 8; on December 24, 2013, the liquid was transferred to GW-11. There is no evidence that the underlying liner has been compromised.

Attachment 1 includes the October, November, and December 2013 Discharge Monitoring Reports (DMRs). Attachment 2 includes the pond monitoring tables, which provide water balance and leak detection monitoring information. Attachment 3 includes photographs of ponds GW-11 and AP-5, as required (Part I.A.16 of the Permit).

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
CEM 2347, exp. 9/20/14

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

Discharge Permit NEV2001515 – 4th 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.



John M. Pekala
CEM 2347, expires 9-20-14

ATTACHMENT 1

Discharge Monitoring Reports



13- Oct DMR
NEV2001515.pdf

October 2013



13- Nov DMR
NEV2001515.pdf

November 2013



13- Dec DMR
NEV2001515.pdf

December 2013

PERMITTEE NAME/ADDRESS:
NAME: Nevada Environmental response Trust
ADDRESS: c/o Envirogen Technologies
 510 Fourth Street
 Henderson, NV 89015

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

FACILITY: Nevada Environmental Response Trust
 LOCATION: Henderson, NV
 ATTN: John Pekala

MONITORING PERIOD
 FROM 13 | 10 | 01 TO 13 | 10 | 31 NO DISCHARGE

PARAMETER	QUANTITY OR LOADING			QUALITY OR CONCENTRATION			NOTE: Read instructions before completing this form.
	AVERAGE	MAXIMUM	UNITS	30 Day Ave (mg/l)	7 Day Ave (mg/l)	30 Day Ave (lb/day)	
Flow	SAMPLE MEASUREMENT Please see attached Table 1	PERMIT REQUIREMENT Monitor and Report	MGD	-----	-----	-----	0 Monthly Flow Meter
Influent	SAMPLE MEASUREMENT Please see attached Table 2a and 2b	PERMIT REQUIREMENT Monitor and Report	gallons	-----	-----	-----	0 Bi-Monthly Discrete - Field Measurement
Leak Detection Information	SAMPLE MEASUREMENT Please see attached Table 1	PERMIT REQUIREMENT Monitor and Report	feet	-----	-----	-----	0 Bi-Monthly Discrete - Field Measurement
Pond Water Level	SAMPLE MEASUREMENT Please see attached Table 1	PERMIT REQUIREMENT Monitor and Report	feet	-----	-----	-----	0 Bi-Monthly Calculation
Storage Volume	SAMPLE MEASUREMENT Please see attached Table 1	PERMIT REQUIREMENT -----	gallons	-----	-----	-----	0 Bi-Monthly Flow Meter
	SAMPLE MEASUREMENT Please see attached Table 1	PERMIT REQUIREMENT Monitor and Report	gallons	-----	-----	-----	0 Monthly Calculation
Discharge to FBR	SAMPLE MEASUREMENT Please see attached Table 1	PERMIT REQUIREMENT Monitor and Report	gallons	-----	-----	-----	0 Monthly Calculation
Water Balance Information	SAMPLE MEASUREMENT Please see attached Table 1	PERMIT REQUIREMENT Monitor and Report	gallons	-----	-----	-----	0 Monthly Calculation
NAME / TITLE PRINCIPAL EXECUTIVE OFFICER John M. Pekala CEM 2347, exp 9-20-14	TYPE OR PRINTED	TELEPHONE	DATE	YEAR	MO	DAY	602-734-7710 14 01 27
COMMENT AND EXPLANATION OF ANY VIOLATIONS Ponds GW-11 and AP-5							AREA CODE NUMBER Forms by WindowChem(707)364-0845;pm11090;v5.01;4/16/16
(Reference all attachments here)							00044/961223-1801

I CERTIFY UNDER PENALTY OF PERJURY THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR SUPERVISION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PERFORMED THE WORK AND THAT THE INFORMATION SUBMITTED IS BASED ON MY INQUIRY OF THE PERSON OR PERSONS WHO PROVIDED THE INFORMATION. I CERTIFY THAT THE INFORMATION IS TRUE AND CORRECT TO THE BEST OF MY KNOWLEDGE AND BELIEF AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

SIGNATURE OF PRINCIPAL EXECUTIVE
OFFICER OR AUTHORIZED AGENT

PERMITTEE NAME/ADDRESS:
 NAME: Nevada Environmental response Trust
 ADDRESS: c/o Envirogen Technologies
 510 Fourth Street
 Henderson, NV 89015

FACILITY: Nevada Environmental Response Trust
 LOCATION: Henderson, NV
 ATTN: John Pekala

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

MONITORING PERIOD										
FROM 13 11 01	TO 13 11 30									
NO DISCHARGE <input checked="" type="checkbox"/>										
NOTE: Read instructions before completing this form.										
PARAMETER		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)			
Flow	SAMPLE MEASUREMENT	Please see attached Table 1	MGD	-----	-----	-----	-----	0	Monthly	Flow Meter
	PERMIT REQUIREMENT	Monitor and Report	-----	-----	-----	-----	-----	0	Bi-Monthly	Discrete - Field Measurement
Influent	SAMPLE MEASUREMENT	Please see attached Table 2a and 2b	gallons	-----	-----	-----	-----	0	Bi-Monthly	Discrete - Field Measurement
	PERMIT REQUIREMENT	Monitor and Report	-----	-----	-----	-----	-----	0	Bi-Monthly	Discrete - Field Measurement
Leak Detection Information	SAMPLE MEASUREMENT	Please see attached Table 1	feet	-----	-----	-----	-----	0	Bi-Monthly	Discrete - Field Measurement
	PERMIT REQUIREMENT	Monitor and Report	-----	-----	-----	-----	-----	0	Bi-Monthly	Discrete - Field Measurement
Pond Water Level	SAMPLE MEASUREMENT	Please see attached Table 1	gallons	-----	-----	-----	-----	0	Bi-Monthly	Calculation
	PERMIT REQUIREMENT	Monitor and Report	-----	-----	-----	-----	-----	0	Bi-Monthly	Calculation
Storage Volume	SAMPLE MEASUREMENT	Please see attached Table 1	gallons	-----	-----	-----	-----	0	Bi-Monthly	Calculation
	PERMIT REQUIREMENT	GW-11 76,100,000 AP-5; 1,817,000	-----	-----	-----	-----	-----	0	Bi-Monthly	Calculation
Discharge to FBR	SAMPLE MEASUREMENT	Please see attached Table 1	gallons	-----	-----	-----	-----	0	Bi-Monthly	Flow Meter
	PERMIT REQUIREMENT	Monitor and Report	-----	-----	-----	-----	-----	0	Bi-Monthly	Flow Meter
Water Balance Information	SAMPLE MEASUREMENT	Please see attached Table 1	gallons	-----	-----	-----	-----	0	Monthly	Calculation
	PERMIT REQUIREMENT	Monitor and Report	-----	-----	-----	-----	-----	0	Monthly	Calculation
NAME / TITLE PRINCIPAL EXECUTIVE OFFICER										
John M. Pekala										
CEM 2347, exp 9-20-14										
TYPED OR PRINTED										
COMMENT AND EXPLANATION OF ANY VIOLATIONS										
Ponds GW-11 and AP-5										

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 COLLECTED AND GATHERED THE DATA AND EVALUATED THE INFORMATION ON MY INQUIRY OF THE PERSON OR PERSONS WHO PROVIDED THE INFORMATION. I CERTIFY THAT THE INFORMATION IS RELIABLE AND TRUE TO THE BEST OF MY KNOWLEDGE AND BELIEF. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

John M. Pekala
John M. Pekala
CEM 2347, exp 9-20-14
TYPED OR PRINTED

(Reference all attachments here)

SIGNATURE OF PRINCIPAL EXECUTIVE
 OFFICER OR AUTHORIZED AGENT

TELEPHONE DATE
 602-734-7710
 AREA CODE NUMBER YEAR NO. DAY
 14 | 01 | 27
 Forms by WinDowChem 7/07/864-pn110901v5.0 1/4/1996

PERMITTEE NAME/ADDRESS:

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

FACILITY:

Nevada Environmental Response Trust

LOCATION: Henderson, NV

ATTN:

John Pekala

NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM (NPDES)

DISCHARGE MONITORING REPORT (DMR)

NEV/200/1515

PERMIT NUMBER

001

DISCHARGE NUMBER

MONITORING PERIOD

FROM 13 | 12 | 01

TO 13 | 12 | 31

NO DISCHARGE

 NO DISCHARGE

NOTE: Read instructions before completing this form.

PARAMETER	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)			
Flow Influent	SAMPLE MEASUREMENT	Please see attached Table 1	MGD	-----	-----	-----	0	Monthly	Flow Meter
Leak Detection Information	SAMPLE MEASUREMENT	Please see attached Table 2a and 2b	gallons	-----	-----	-----	0	Bi-Monthly	Discrete -- Field Measurement
Pond Water Level	SAMPLE MEASUREMENT	Please see attached Table 1	feet	-----	-----	-----	0	Bi-Monthly	Discrete -- Field Measurement
Storage Volume	SAMPLE MEASUREMENT	Please see attached Table 1	gallons	-----	-----	-----	0	Bi-Monthly	Calculation
Discharge to FBR	SAMPLE MEASUREMENT	Please see attached Table 1	gallons	-----	-----	-----	0	Bi-Monthly	Flow Meter
Water Balance Information	SAMPLE MEASUREMENT	Please see attached Table 1	gallons	-----	-----	-----	0	Monthly	Calculation
NAME / TITLE PRINCIPAL EXECUTIVE OFFICER									
John M. Pekala									
CEM 2347, exp 9-20-14									
TYPED OR PRINTED									
COMMENT AND EXPLANATION OF ANY VIOLATIONS									
Ponds GW-11 and AP-5									
(Reference all attachments here)									

CERTIFY UNDER PENALTY OF PERJURY THAT THIS DOCUMENT AND ALL ATTACHMENTS WERE PREPARED UNDER MY DIRECTION OR ON MY SUBMISSION IN ACCORDANCE WITH A SYSTEM DESIGNED TO ASSURE THAT QUALIFIED PERSONNEL PROPERLY AND ACCURATELY COLLECT AND PROCESS DATA FOR THE SYSTEM. I AM RESPONSIBLE FOR THE PERSONNEL WHO MANAGE THE SYSTEM, OR THOSE PERSONS DIRECTLY RESPONSIBLE FOR THE PREPARATION OF THE INFORMATION SUBMITTED. THE INFORMATION SUBMITTED IS, TO THE BEST OF MY KNOWLEDGE AND BELIEF, TRUE, ACCURATE, AND COMPLETE. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND APROPRIEMENT FOR KNOWING VIOLATIONS.

SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT

TELEPHONE DATE
 AREA CODE NUMBER YEAR MO DAY
 Forms by WindowChem(707)564-0845/fm110805.v5.01/4/95

602-734-7710

14 | 01 | 27

YEAR MO DAY

602-734-7710

14 | 01 | 27

YEAR MO DAY

602-734-7710

14 | 01 | 27

YEAR MO DAY

00044/961223-1801

PAGE 1 OF 1

ATTACHMENT 2

Pond Monitoring Results



GW-11 Pond Volume GW-11 current pond
Model Version 1.2 20:liner gallons (010141:

GW-11 Pond Data



GW-11 Water

Balance_4th Q 2013_

GW-11 Water Balance



AP-5 Pond Data
040113.xls

AP-5 Pond Data



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

Operations and Maintenance Manuals

ATTACHMENT 2

Pond Monitoring Results

Table 1 – GW-11 Pond Level and Storage Volume

Date	Flow Into GW-11 (MGD)	Pond Water Level (vertical depth in feet)	Storage Volume (thousand gallons)	Discharge to FBRs (million gallons)	Water Balance (million gallons)
10-1-13	0.015	13.85	48,400	2.71	-3.84
10-15-13		13.45	46,695	2.88	
11-1-13	0.078	12.95	44,556	0.08	2.59
11-15-13		13.42	46,582	0.00	
12-1-13	0.009	13.56	47,148	0.00	-0.32
12-15-13		13.60	47,319	1.62	

Table 2a – GW-11 Pond Leak Detection Monitoring

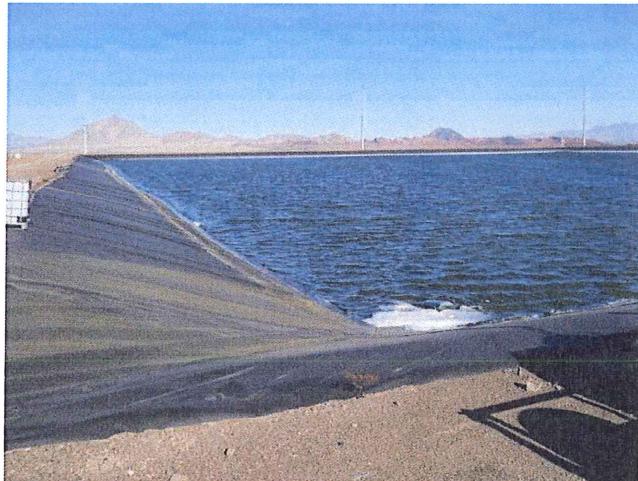
Date	Volume in Detection Wells (gallons)
10-1-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry
10-15-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry
11-1-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry
11-15-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry
12-1-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry
12-15-13	NW – Dry
“	NE – Dry
“	SW – Dry
“	SE – Dry

Table 2b – AP-5 Pond Leak Detection Monitoring

Date	Volume in Detection Well (gallons)
10-16-13	25
11-8-13	25
11-22-13	25
12-8-13	2
12-24-13	30.5

ATTACHMENT 3

Annual Pond Photographs



GW-11 from south side looking north and northeast, respectively
December 2013



AP-5 from NW looking SE
November 2013