



July 25, 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 – 2nd 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 2nd 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).

NERT suspended access on the AP-5 Pond liner and berm during the 1st quarter 2016 due to potential safety concerns, as reported in the 1st quarter DMR. Pond water level measurements resumed on April 4, 2016, following clearance to access the berm portion of the pond. During the reporting period, the leakage rate exceeded 125 gallons/acre/day during three monitoring events (Table 2b). The NDEP-BWPC confirmed on June 3, 2016 that the planned solids removal and closure of the AP-5 Pond is sufficient to meet agency requirements for leakage rate reporting and response activities.

GW-11

Liquid was detected in one of four GW-11 corner leak detection wells during the 2nd quarter 2016, specifically the northeast corner well. The northwest, southwest, and southeast corner 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 April, May, and June 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. 9/18/16
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 – 2nd 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 9-18-16

ATTACHMENT 1

Discharge Monitoring Reports

April 2016

May 2016

June 2016

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: Kyle Hansen

MONITORING PERIOD

FROM: 16 | 04 | 01 TO: 16 | 04 | 30

NO DISCHARGE: X

NOTE: Read instructions before completing this form.

| PARAMETER | QUANTITY OR LOADING | | UNITS | QUALITY OR CONCENTRATION | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|--|---------------------|--------------------------------------|--|--------------------------|------------------|---------------------|--------|-----------------------|----------------------------|
| | AVERAGE | MAXIMUM | | 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 | | | | | | | |
| Influent | SAMPLE MEASUREMENT | See attached Tables 2a and b | gallons | --- | --- | --- | 0 | Bi-Monthly | Discrete-Field Measurement |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Pond Water Level | SAMPLE MEASUREMENT | See attached Tables 1a and b | feet | --- | --- | --- | 0 | Bi-Monthly | Discrete-Field Measurement |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Storage Volume | SAMPLE MEASUREMENT | See attached Tables 1a and b | gallons | --- | --- | --- | 0 | Bi-Monthly | Calculation |
| | PERMIT REQUIREMENT | GW-11: 78,000,000 AP-5: 1,817,000 | | | | | | | |
| Discharge to FBR | SAMPLE MEASUREMENT | See attached Tables 1a and b | gallons | --- | --- | --- | 0 | Bi-Monthly | Flow Meter |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Water Balance Information | SAMPLE MEASUREMENT | See attached Tables 1a and b | gallons | --- | --- | --- | 0 | Monthly | Calculation |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| | SAMPLE MEASUREMENT | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | |
| NAME / TITLE PRINCIPAL EXECUTIVE OFFICER | | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | | | TELEPHONE | | DATE | |
| Kyle Hansen | | | <i>Kyle Hansen</i> | | | 702-966-8340 | | 16 07 22 | |
| CEM 2167, exp 9-18-16 | | | OFFICER OR AUTHORIZED AGENT | | | AREA CODE NUMBER | | YEAR MO DAY | |
| TYPED OR PRINTED | | | | | | 802 | | 16 07 22 | |

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 ARE RESPONSIBLE FOR THE COLLECTION, ANALYSIS, AND REPORTING OF MONITORING DATA. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPRISONMENT FOR KNOWING VIOLATIONS.

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

(Reference all attachments here)

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: Kyle Hansen

MONITORING PERIOD

FROM: 16 | 05 | 01 TO: 16 | 05 | 31

NO DISCHARGE: X

NOTE: Read instructions before completing this form.

| PARAMETER | QUANTITY OR LOADING | | UNITS | QUALITY OR CONCENTRATION | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|--|---------------------|--------------------------------------|---------|---|------------------|---------------------|------------------|-----------------------|----------------------------|
| | AVERAGE | MAXIMUM | | 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 | | | | | | | |
| Influent | SAMPLE MEASUREMENT | See attached Tables 2a and b | gallons | --- | --- | --- | 0 | Bi-Monthly | Discrete-Field Measurement |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Pond Water Level | SAMPLE MEASUREMENT | See attached Tables 1a and b | feet | --- | --- | --- | 0 | Bi-Monthly | Discrete-Field Measurement |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Storage Volume | SAMPLE MEASUREMENT | See attached Tables 1a and b | gallons | --- | --- | --- | 0 | Bi-Monthly | Calculation |
| | PERMIT REQUIREMENT | GW-11: 75,000,000 AP-5: 1,817,000 | | | | | | | |
| Discharge to FBR | SAMPLE MEASUREMENT | See attached Tables 1a and b | gallons | --- | --- | --- | 0 | Bi-Monthly | Flow Meter |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Water Balance Information | SAMPLE MEASUREMENT | See attached Tables 1a and b | gallons | --- | --- | --- | 0 | Monthly | Calculation |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| NAME / TITLE PRINCIPAL EXECUTIVE OFFICER | SAMPLE MEASUREMENT | | | | | | | | |
| | PERMIT REQUIREMENT | | | | | | | | |
| Kyle Hansen | | | |  | | | TELEPHONE | DATE | |
| CEM 2167, exp 9-18-16 | | | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | | | 702-966-8340 | 16 07 22 | |
| TYPED OR PRINTED | | | | | | | AREA CODE NUMBER | YEAR MO DAY | |

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 OPERATED THE MONITORING SYSTEMS BASED ON MY INSPECTION OF THE PERSON OR PERSONS WHO MANAGE THE FACILITY FOR THE MONITORING PERIOD. I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPROBATION FOR KNOWING VIOLATIONS.

(Reference all attachments here)

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

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: Kyle Hansen

MONITORING PERIOD

FROM: 16 | 06 | 01 TO: 16 | 06 | 30

NO DISCHARGE: X

NOTE: Read instructions before completing this form.

| PARAMETER | QUANTITY OR LOADING | | UNITS | QUALITY OR CONCENTRATION | | | NO. EX | FREQUENCY OF ANALYSIS | SAMPLE TYPE |
|--|---------------------|---|---------|--------------------------|------------------|---------------------|--------------|-----------------------|----------------------------|
| | AVERAGE | MAXIMUM | | 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 | | | | | | | |
| Influent | SAMPLE MEASUREMENT | See attached Tables 2a and b | gallons | --- | --- | --- | 0 | Bi-Monthly | Discrete-Field Measurement |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Leak Detection Information | SAMPLE MEASUREMENT | See attached Tables 1a and b | feet | --- | --- | --- | 0 | Bi-Monthly | Discrete-Field Measurement |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Pond Water Level | SAMPLE MEASUREMENT | See attached Tables 1a and b | gallons | --- | --- | --- | 0 | Bi-Monthly | Calculation |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Storage Volume | SAMPLE MEASUREMENT | See attached Tables 1a and b | gallons | --- | --- | --- | 0 | Bi-Monthly | Flow Meter |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Discharge to FBR | SAMPLE MEASUREMENT | See attached Tables 1a and b | gallons | --- | --- | --- | 0 | Monthly | Calculation |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| Water Balance Information | SAMPLE MEASUREMENT | See attached Tables 1a and b | gallons | --- | --- | --- | 0 | Monthly | Calculation |
| | PERMIT REQUIREMENT | Monitor and Report | | | | | | | |
| <p>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 OPERATE AND MAINTAIN THE SYSTEM, AND THAT I AM AWARE THAT THERE ARE SIGNIFICANT PENALTIES FOR SUBMITTING FALSE INFORMATION, INCLUDING THE POSSIBILITY OF FINE AND IMPROBATION FOR KNOWING VIOLATIONS.</p> | | | | | | | | | |
| NAME / TITLE PRINCIPAL EXECUTIVE OFFICER | | SIGNATURE OF PRINCIPAL EXECUTIVE OFFICER OR AUTHORIZED AGENT | | | TELEPHONE | | DATE | | |
| Kyle Hansen | |  | | | 702-966-8340 | | 16 07 22 | | |
| CEM 2167, exp 9-18-16 | | OFFICER OR AUTHORIZED AGENT | | | AREA CODE NUMBER | | YEAR MO DAY | | |
| TYPED OR PRINTED | | | | | 702-966-8340 | | 16 07 22 | | |

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

(Reference all attachments here)

ATTACHMENT 2

Pond Monitoring Results

2nd Quarter 2016

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) | Discharge to FBRs (million gallons) | Water Balance ¹ (million gallons) |
|---------|-----------------------|---|-----------------------------------|-------------------------------------|--|
| 4/05/16 | 0.53 ² | 12.63 | 43,216 | 0.00 (04/01/16 - 04/15/16) | -0.3 |
| 4/19/16 | | 12.85 | 44,109 | 14.21 (04/15/16 - 04/30/16) | |
| 5/10/16 | 1.25 | 13.03 | 44,892 | 18.92 (05/01/16 - 05/16/16) | 0.7 |
| 5/25/16 | | 12.79 | 43,886 | 19.06 (05/16/16 - 05/31/16) | |
| 6/07/16 | 0.97 ² | 12.87 | 44,221 | 18.30 (06/01/16 - 06/15/16) | -0.7 |
| 6/21/16 | | 12.61 | 43,105 | 9.46 (06/15/16 - 06/30/16) | |

MGD = million gallons per day

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 on GW-11, extraction well flows bypassed GW-11 and were directed to the fluidized bed reactors, beginning March 2, 2016. GW-11 bypass ceased and normal operations resumed on April 19, 2016. GW-11 was again bypassed due to a Boatman bug outbreak from June 15, 2016 to June 23, 2016.

Table 1b – AP-5 Pond Monitoring Information

| Date | Flow Into Pond ¹ (MGD) | Pond Water Level ² (vertical depth in feet and inches) | Storage Volume (thousand gallons) | Discharge to FBRs (gallons) | Water Balance (million gallons) |
|----------|-----------------------------------|---|-----------------------------------|-----------------------------|---------------------------------|
| 04/08/16 | 0.04 | 4'5" | 425.8 | 0 | -0.01 |
| 04/21/16 | | 4'4" | 413.0 | 0 | |
| 05/11/16 | 0.02 | 4'3" | 400.3 | 0 | 0.01 |
| 05/26/16 | | 4'4" | 413.0 | 0 | |
| 06/07/16 | 0.15 | 4'2" | 382.9 | 0 | -0.07 |
| 06/21/16 | | 3'8" | 313.7 | 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 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.

Table 2a – GW-11 Pond Leak Detection Monitoring

| Dates | Volume in Detection Wells (gallons) ¹ |
|---------------------|---|
| 04/05/16 – 04/07/16 | NW – 0 |
| “ | NE – 405 |
| “ | SW – 0 |
| “ | SE – 0 |
| 04/20/16 – 04/22/16 | NW – 0 |
| “ | NE – 299 |
| “ | SW – 0 |
| “ | SE – 0 |
| 05/11/16 – 05/13/16 | NW – 0 |
| “ | NE – 529 |
| “ | SW – 0 |
| “ | SE – 0 |
| 05/25/16 – 05/27/16 | NW – 0 |
| “ | NE – 1163 |
| “ | SW – 0 |
| “ | SE – 0 |
| 06/07/16 – 06/09/16 | NW – 0 |
| “ | NE – 1707 |
| “ | SW – 0 |
| “ | SE – 0 |
| 06/22/16 – 06/24/16 | NW – 0 |
| “ | NE – 2215 |
| “ | 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

| Date | Volume in Detection Well (gallons) ¹ |
|---------------------|--|
| 04/06/16 – 04/08/16 | 386 |
| 04/20/16 – 04/22/16 | 333 |
| 05/11/16 – 05/13/16 | 177 |
| 05/26/16 – 05/28/16 | 173 |
| 06/07/16 – 06/09/16 | 232 |
| 06/23/16 – 06/25/16 | 223 |

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 exceeded 125 gallons/acre/day on the following days: 4/8/16 (133 gallons/acre/day); 4/22/16 (130 gallons/acre/day); and 6/9/16 (128 gallons/acre/day). NDEP-BWPC confirmed on June 3, 2016 that the planned solids removal and closure of the AP-5 Pond is sufficient to meet agency requirements for leakage rate reporting and response activities.