

April 8, 2014

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

Re: Report of Spill of Untreated Groundwater from Well Pipeline NPDES Permit NV0023060
Groundwater Discharge Permit NEV2001515

Dear Compliance Coordinator:

The Nevada Environmental Response Trust ("NERT" or the "Trust") maintains a National Pollutant Discharge Elimination System (NPDES) Permit NV0023060 (the "NPDES Permit") and a Groundwater Discharge Permit NEV2001515 (the "Groundwater Discharge Permit") for discharge of treated water to the Las Vegas Wash and for operation of two synthetically double-lined ponds, respectively, as part of their on-going effort to capture and treat groundwater containing perchlorate and other contaminants of concern at the NERT site in Henderson, Nevada (the "site"). ENVIRON International Corporation (ENVIRON), on behalf of the Trust, is providing this report on the following incidents related to a construction project to replace a septic holding tank at the Site:

- April 2, 2014 A spill of untreated groundwater from an Interceptor Well Field (IWF) pipeline occurred. ENVIRON informed Mr. Weiquan Dong, Mr. James Dotchin, and Mr. Greg Lovato of the Bureau of Corrective Actions via e-mail on April 2, 2014 of the incident. The incident was also reported via telephone on April 2, 2014 to the NDEP Spill Notification Line (report taken by Mr. Michael Friend of NDEP and assigned Spill Report No. 140402-02). In response, the IWF was immediately shut down. The spilled groundwater was primarily contained in a septic holding tank in the area where the release occurred. The source of the spill was temporarily repaired on the afternoon of April 2, 2014 and the IWF was re-started.
- April 3, 2014 The IWF system was temporarily shut down to cap the I-AR pipeline during installation of a new septic holding tank. Flow from the IWF (except well I-AR) to the treatment plant was restarted at 11:40am.
- April 4, 2014 Following permanent repair of the source of the April 2, 2014 spill on the
  morning of April 4, 2014, a contractor backfilling the area noted that the IWF pipeline had
  separated due to an improper prior repair in a different location approximately 15 feet north of
  the initial release/repair location and untreated groundwater flowed from the ground surface.
  In response, the IWF was immediately shut down, the line was capped, and the area was
  excavated. As of April 4, 2014, the line was properly repaired in this location.

This correspondence serves as written notification of the IWF pipeline spill, which is detailed below.

Per Section II.A.3 of the NPDES permit and Section II.A.4 of the Groundwater Discharge Permit, a written report shall include the following information:

# i. Time and date of discharge

April 2, 2014 – Untreated groundwater was released from the IWF pipeline from approximately 9:15am to 9:30am on Wednesday, April 2, 2014 (initial location). In response, the IWF was shut down at approximately 9:30 am. Following temporary repair of the pipeline, the IWF was re-started at approximately 12:40pm.

April 4, 2014 – The IWF was taken off-line at approximately 6:10am to permanently repair the line after the April 2, 2014 release. The repair was completed at approximately 7:15am, at which time the IWF (including extraction well I-AR) was re-started. Untreated groundwater was also released from the IWF pipeline approximately 15 feet north of the initial location; this release occurred sometime after 7:15am on Friday, April 4, 2014 (the time at which the IWF was re-started after repairing the line after the April 2, 2014 release) to approximately 10:20am on Friday, April 4, 2014 (the time at which the IWF was down after identification of the separated pipeline).

## ii. Exact location and estimated amount of discharge

April 2, 2014 – The release of untreated groundwater occurred at the NERT site to the east of the D-1 building and west of the office trailer (approximate discharge location: latitude: 36.048239°, longitude: -115.003850°). On April 2, 2014, an estimated 200 gallons of untreated groundwater was released; however, the majority of the release was captured in an existing septic holding tank that was being replaced when the incident occurred.

April 4, 2014 – The volume of water discharged to the ground surface on April 4, 2014 is unknown but is estimated at approximately 240 gallons based on average flow rates and timing of the discharge.

## iii. Flow path and any bodies of water which the discharge reached

April 2, 2014 – The release of untreated groundwater was localized around the location where the IWF pipeline was breached, wetting the soil beneath the pipeline and flowing into the existing septic holding tank at the spill location. Less than 60 gallons of the estimated 200 gallons of untreated groundwater infiltrated into the ground surface at the spill location.

April 4, 2014 – Untreated groundwater was observed on the ground surface. The release did not flow onto any roadway or into any body of water.

The soils impacted by the released groundwater on both April 2 and 4, 2014 were excavated and placed on visqueen plastic sheeting at the site, as detailed below.

## iv. The specific cause of the discharge

April 2, 2013 – ENVIRON's subcontractor was in the process of excavating an area near the extraction well I-AR pipeline in order to remove and replace a belowground sanitary septic tank when the initial release occurred. Adequate subsurface utility clearing was not performed by ENVIRON prior to performance of the sanitary septic tank replacement activities, which resulted in the contractor hitting the I-AR pipeline.

April 4, 2014 – During backfilling activities around the pipeline, the I-AR pipeline separated in a location approximately 15 feet north of the initial break. The pipeline separation was identified as an area of the I-AR pipeline that had been previously (unknown date prior to April 2, 2014) cut and repaired with a fitting that was not designed to handle the water pressure in the line.

## v. The preventive and/or corrective actions taken

At approximately 9:30am on April 2, 2014, Envirogen Technologies, Inc. (Envirogen), the treatment plant operator, was made aware of the release and immediately responded by shutting down the IWF. A shutdown was necessary to prevent backflow of untreated groundwater from other wells in the IWF through the section of broken I-AR pipeline. ENVIRON's subcontractor implemented a temporary repair of the I-AR pipeline by removing approximately two feet of broken pipeline and securing a new section of pipeline with compression fittings to connect the well to the IWF system. With the temporary repair in place, Envirogen was able to restart flow from the IWF to the treatment plant at approximately 12:40pm.

Approximately 140 gallons of wastewater (may have included some residual septic waste) was pumped out of the septic holding tank and into a tote. Soil above and adjacent to the septic holding tank was removed and placed in a roll-off bin. An estimated quantity of less than one cubic yard of soil was impacted by the release. This material was excavated and stockpiled on visqueen plastic sheeting separately from the soil which was placed in the roll-off bin. There was no visible indication of leakage from the septic holding tank (i.e., no water staining or discoloration on the outside of the tank). Further, the water level of released water in the septic holding tank was 1 to 1.5 feet below the septic tank effluent line, thus the release did not enter the septic leach lines.

On April 3, 2014, the IWF system was temporarily shut down from 11:25am to 11:40am to cap the I-AR pipeline during installation of a new septic holding tank. Flow from the IWF (except well I-AR) to the treatment plant was restarted at 11:40am.

On April 4, 2013, the IWF was shut down from approximately 6:10am to 7:15am to permanently repair the broken I-AR pipeline. Flow from all IWF wells resumed at 7:15am. At approximately 10:20am, the contractor backfilling around the repaired pipeline noted water coming to the surface approximately 15 feet north of the prior release/repair location. Upon observing the water, the area was excavated to expose the pipeline, excavated material was stockpiled, the IWF was immediately shut down and the line was capped. The contractor also excavated soil that was wet in this area and stockpiled the material (placed on visqueen plastic sheeting and covered with plastic sheeting). It is estimated that less than 5 cubic

yards of soil were excavated on April 4, 2014. The IWF (except for extraction well I-AR) was put back in service at 10:40am. The IWF was down from approximately 2:00 to 3:40pm to permanently repair the I-AR pipeline by fusing it together. Extraction well I-AR remained down until 3:40pm, at which time flow from all IWF wells resumed.

The approximately 140 gallons of wastewater collected in the tote and excavated soil will be managed in conformance with the Site Management Plan, Revision 1, prepared by ENVIRON and dated October 2013 ("SMP"). Additional soil excavation to remove soils impacted with groundwater is planned for the week of April 7, 2014, after which confirmation soil samples will be collected and tested, in consultation with NDEP.

In the future, subsurface clearance shall be performed and documented prior to initiating ground disturbance activities at the NERT site, as described in the NERT Site General Site Activities Health and Safety Plan prepared by ENVIRON and revised May 2013, as well as compliance with the SMP.

Should you have any questions concerning this correspondence, please contact John Pekala at (602) 734-7710 or jpekala@environcorp.com. Thank you.

Sincerely,

John M. Pekala, PG Senior Manager

Nevada CEM 2347, exp. 9/20/2014

Overnight Mail

cc: Regional Administrator, USEPA Region 9

ec: Cliff Lawson, Bureau of Water Pollution Control, NDEP Joe Maez, Bureau of Water Pollution Control, NDEP 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 DeLorme, ENVIRON International Corporation