



NEVADA DIVISION OF  
**ENVIRONMENTAL  
PROTECTION**

**STATE OF NEVADA**  
Department of Conservation & Natural Resources

Brian Sandoval, Governor  
Bradley Crowell, Director  
Greg Lovato, Administrator

December 15, 2017

**Andrew W. Steinberg**  
**Nevada Environmental Response Trust**  
**35 E Wacker Drive, Suite 1550**  
**Chicago, IL 60601**

**Re: 2017 REISSUANCE OF UNDERGROUND INJECTION CONTROL GENERAL PERMIT GU07RL  
FOR LONG-TERM REMEDIATION ACTIVITIES**

**SITE IDENTIFICATION NUMBER: GU07RL-51057**  
**PROJECT SITE NAME: NERT SEEP WELL FIELD SITE**

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Pursuant to Nevada Revised Statutes, all water pollution control permits are required to be renewed every five years. The Nevada Division of Environmental Protection (NDEP) reviewed, public noticed, and reissued the general permit for Long Term Remediation Activities on November 15, 2015. Comments were received from various parties and considered while making the final determinations regarding this general permit.

Since the last permit cycle, there have been minor changes to the permit, most being the addition of standard language required in all permits or reorganization of certain sections of the permit. Significant changes were not made to 1) sampling and monitoring requirements; 2) reporting requirements. If needed, a redline copy can be sent for those who wish to see changes.

Please read through the permit to ensure you understand the responsibilities under the requirements and conditions of the permit. You are required to follow this 2017 version of the permit from this point forward.

Should you have any questions regarding this general permit reissue, please contact Russ Land at (775) 687-9428, or by email at [rland@ndep.nv.gov](mailto:rland@ndep.nv.gov).

Sincerely,

Russ Land  
Bureau of Water Pollution Control

ecc: Guy Roemer, Tetra Tech, Inc.

# NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

## UIC GENERAL PERMIT GU07RL ID# 51057 LONG TERM REMEDIATION – More than six months

### AUTHORIZATION TO INJECT

In compliance with the provisions of the Nevada Revised Statutes (NRS) and the Nevada Underground Injection Control (UIC) Regulations, Nevada Administrative Code (NAC) 445A.810 through 445A.925, eligible applicants are authorized to inject the following substances and/or water from a treatment facility or other project derived water operated in conjunction with a corrective action (CA) project overseen by the Nevada Division of Environmental Protection Bureau of Corrective Actions or other CA agency into Class V injection wells in accordance with limitations, requirements and other conditions set forth in Parts I and II hereof.

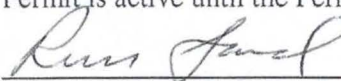
This General Permit is for corrective action (remediation) projects lasting more than six months and allows injection of 1) those materials identified below in Category 1 and/or 2) water which has been treated to meet groundwater quality criteria. This general permit will be updated and renewed again by: November 15, 2022.

Facility/Site Name: <b>Nevada Environmental Response Trust (NERT) Site</b>	
Facility Address: <b>private parcel west of Aguila Road and north of E Galleria Drive, Henderson, Clark County NV</b>	
Legal Description: <b>T21S R63E Sec 31</b>	
Well Owner Name: <b>Nevada Environmental Response Trust</b>	
Address: <b>35 E. Wacker Drive, Suite 1550, Chicago, IL 60601</b>	Facility CA ID: <b>N/A</b>
Operator Name & Address: <b>Tetra Tech, 150 South Fourth St Unit A, Henderson NV 89014</b>	
Authorized injection wells: <b>twenty five (25) injection wells, design as stated in application – submit Well Driller’s Report</b>	
Authorized rates/volumes: <b>up to 35 psi injection pressure; water (mainly from nearby MWs), emulsified oil substrate, sodium sulfite, phosphate soln, glycerin, chlorine dioxide soln as described in Attachment 6 – Proposed Injection Parameters of the UIC application</b>	
Required for sampling: <input checked="" type="checkbox"/> Per approved State or County Corrective Action Workplan	
<input type="checkbox"/> See UIC permit and/or permit issuance cover letter	Approved work plan date: <b>September 6, 2016</b>
<input type="checkbox"/> Additional UIC Sampling required: _____	

Coverage under this general permit will be authorized if a Notice of Intent (NOI) is submitted and the following injection occurs at a specific site:

- CATEGORY 1** - One of the following is injected:
  - Low-percentage solution of hydrogen peroxide (H<sub>2</sub>O<sub>2</sub>). Injection shall not exceed 350 gallons/well per month;
  - Potassium and sodium permanganate;
  - Sulfate or Polysulfide;
  - Ozone;
  - Nutrients: nitrate, ammonia, phosphate, vitamins;
  - Oxygen infusers (note: direct oxygen injection – no infuser);
  - Hydrogen releasing compounds;
  - Carbon sources/electron donors (including, but not limited to acetate, lactate, glucose, and complex sugars);
  - Surfactant
  - Chemical oxidation compounds
- CATEGORY 2** - Injection of water that has been treated to meet groundwater quality criteria.

Modifications to the above requirements must be pre-approved by the UIC Program pursuant to Part I.A.8. The Permittee shall comply with all provisions of this permit and any letter of authorization issued pursuant to it.

Effective Issue Date for the project named above is: <b>May 30, 2017</b>	
Permit is active until the Permittee submits the Notice of Termination form U310, and receives UIC approval.	
	Signed this <u>15th</u> day of <u>December</u> 2017.
Russ Land, Bureau of Water Pollution Control	

## **PART I**

### **A. LIMITATIONS, MONITORING AND OTHER REQUIREMENTS**

Subject to the Nevada Administrative Code (NAC) 445A.894, the director may require any person authorized to inject by a general permit to apply for and obtain an individual permit. **Upon review of the facts, if the Underground Injection Control (UIC) Program staff is concerned about any aspects of the project (such as a public water system supply well or domestic well), the applicant may be required to obtain an individual permit and application will be processed as a UIC UNEV permit.** The Permittee is only authorized to inject what is listed on page 1 of this permit; any actions other than the discharges listed will require an individual UIC UNEV Permit. If an individual permit is issued to a person holding a general permit for the same activity and discharge points, the general permit is automatically terminated on the effective date of the individual permit.

1. During the period beginning on the effective date of this permit for a specific project and lasting until the permit is terminated, the Permittee is authorized to inject:
  - a. **CATEGORY 1**: Substances which are injected into a well for remediation purposes per approved rates specified and authorized on page 1; and/or
  - b. **CATEGORY 2**: Water that has been treated for remediation purposes to meet groundwater quality criteria.
2. **Injection shall not occur in a well that has had free product light non-aqueous phase liquids (LNAPL) and/or dense non-aqueous phase liquids (DNAPL) during the previous 3 months.**
3. Extraction, treatment, and injection must prevent introduction of any foreign materials or unapproved additives to the injection zone. The use of any other additive(s) requires written authorization from the Nevada Division of Environmental Protection (the Division) prior to injection. **Sodium thiosulfate utilized to dechlorinate potable water may be used for injection under this general permit.**
4. The injectate shall be limited and groundwater monitored by the Permittee, pursuant to the criteria listed below.
  - a. Only the approved substances or water extracted and/or generated on-site shall be injected, and only in the volumes and at the injection rates authorized following appropriate treatment to meet groundwater quality criteria. Other water generated as part of the facility's CA project may also be authorized under this permit. These additional waters shall be produced from an on-site activity, treated to meet groundwater quality criteria, and receive prior Division approval through notification under the Notice of Intent for this permit.
  - b. Injection practices shall not cause injectate and/or groundwater to surface at or near the injection points, nor cause any physical, biological, or chemical degradation of groundwater pursuant to the UIC regulations.
  - c. Monitoring and reporting shall be conducted pursuant to the following: 1) the approved corrective action Workplan; 2) the corresponding category sampling required in Part I.A.6.; and 3) any additional UIC monitoring requirements identified on page 1 of this permit.
  - d. If, during operation of this facility, the Permittee or their representatives become aware of any condition which degrades the quality of the aquifer (outside of the treatment zone for injection), injection shall cease immediately and the UIC Program shall be notified pursuant to Part II.B.2.
  - e. Surface discharges are not authorized by this permit.
5. **Monitoring and Reporting Requirements:**

**The Permittee shall submit semi-annual reports (August 15<sup>th</sup> and February 15<sup>th</sup>) in accordance with Part I.A.7. for UIC activities in a UIC Summary Report submitted to the UIC Program on a continuous basis, whether actively injecting or not.**

The required sampling type, frequency and location are based on the discharge category, as follows:

**Table 1: Category 1 – Substance Injection**

Parameter and Location	Frequency	Limitations	Sampling Location
Injection volume/mass (gallons/pounds per well per month)	Total monthly	See authorization on page 1	Injection well
Solution Ratio (%)	Each injection event	See authorization on page 1	Injection well

**Table 2: Category 2 – Pump and Treat**

Parameter and Location	Frequency	Limitations	Sampling Location
Injectate Flow Rate (gpm)	Total monthly	See authorization on page 1 (daily average)	Injection well
UIC Sample List 3 – Organics (Attachment I)	Day 7 & 90 of pumping / injection (including restart), Annually thereafter	Monitor and Report	Inlet of treatment system
UIC Sample List 3 – Organics (Attachment I)	Day 7 of pumping / injection (including restart), Quarterly thereafter	Drinking Water Standards	Outfall of treatment system
Depth to Groundwater (feet)	Quarterly	Monitor and Report, water level shall not rise to within three (3) feet of ground surface.	---
Groundwater Elevation (amsl)	Quarterly	Monitor and Report	---

gpm: gallons per minute, amsl: above mean sea level

- a. The UIC Summary Report shall at a minimum contain the following:
  1. UIC General Permit and unique ID number.
  2. Reporting period: semi-annual period and year; and date submitted.
  3. Individual/company reporting.
  4. Project name and address.
  5. Corrective Action Case Officer name and Facility ID #.
  6. Identify which wells were used for injection, which wells were used for extraction (if applicable) and injection rate, volume, date, time and concentration of the substance injected. If no injection occurred, state so in report.
  7. The results of the sampling analyses and monitoring as required by the tables above.
  8. Is free product present on-site? If free product is encountered, indicate free product type(s) and date(s) observed.
  9. Brief summary detailing normal and any unusual activities.
  10. Statement that all required CA Reports have been provided to the appropriate regulatory agency.
  11. Name, title and signature of authorized reporting individual.
  12. The UIC Summary Report for Category 1 injection shall be no longer than two (2) pages.
  13. The UIC Summary Report for Category 2 injection is recommended to be no longer than five (5) pages.

The chain-of-custody documents and laboratory analytical data shall not be submitted with the UIC Summary Report. These documents shall be held on site and made available upon request by the Division.

6. Monitoring results and other requirements obtained during the previous reporting period, whether injection has occurred or not, shall be summarized for each month and reported **no later than 45 days** following the end of the reporting period (January-June, July-December).

**Signed copies of only the UIC Summary Report** shall be submitted to the UIC program at the following address:

Nevada Division of Environmental Protection  
Bureau of Water Pollution Control  
Attn: Injection Monitoring Report  
901 South Stewart Street, Suite 4001  
Carson City, Nevada 89701

7. Monitoring and system management shall continue for a period of not less than one year following remedial system shutdown approval. **Decisions regarding terminating Corrective Actions (remediation) per NAC 445A.22745 and decisions regarding no further action for the Site per NAC 445A.22725 will be made by the BCA or state-authorized county programs after monitoring groundwater conditions for a minimum of one (1) year per NAC 445A.22745 (2).**

A request may be submitted to the UIC program to cease reporting during the one year monitoring period, or to cancel the UIC permit. Permittee must notify the UIC Program in writing of this request; and for cancellation, must indicate their understanding of the consequences of cancellation prior to receiving final closure approval. Following an evaluation by the UIC Program, the Permittee will be notified in writing granting cancellation or denial of cancellation with rationale for such action. **Requests for cancellation must contain: 1) Either certification of well abandonment OR written confirmation from a regulatory agency for continued use as monitoring wells on a well by well basis; 2) final UIC monitoring report; and 3) Notice of Termination U310 Form 4) any affidavits not already on file in UIC permit. Any wells that are not needed for monitoring are required to be properly abandoned prior to UIC permit cancellation.**

8. The Permittee shall operate and maintain the system per established procedures and as approved by the Division. Any modification to the injection practices which is not approved on page 1 of this permit requires submission of changes and re-issuance of this permit by the UIC Program prior to implementation.
9. Nothing in this authorization shall be construed to eliminate the responsibility for remediation of this site. Remediation shall be accomplished in accordance with plans approved by the BCA, or other State-approved corrective action program.
10. The Permittee shall submit the annual review and services fee in accordance with NAC 445A.872 starting **July 1st** of the year immediately following permit issuance and every year thereafter while the Permittee is authorized to inject under the general permit.
11. Upon completion of the remediation project, all wells shall be abandoned pursuant to current Division of Water Resources (DWR) regulations (NAC 534) and by UIC regulations by filling them with cement grout from total depth to land surface. A driller licensed in the state of Nevada shall perform all abandonment work.

## **B. SCHEDULE OF COMPLIANCE**

1. The Permittee shall implement and comply with the provisions of the schedule of compliance after approval by the Administrator, including in said implementation and compliance, any additions or modifications which the Administrator may make in approving the schedule of compliance.
  - a. The Permittee shall achieve compliance with the conditions, limitations and requirements of the permit at the commencement of relevant activity.
  - b. The Permittee shall submit any items listed in this General Permit issuance letter as required.

## PART II

### A. RECORDKEEPING AND OTHER MONITORING REQUIREMENTS

#### 1. Minimum Requirements for Sampling and Monitoring

- a. Definition: "grab" sample means either a single discrete sample or individual samples collected over a period of time not to exceed 15 minutes. Samples and measurements taken as required herein shall be representative of the volume and/or nature of the subject of interest.
- b. A laboratory certified by the State of Nevada must perform analyses. Testing methods for constituents must be EPA or Division approved and meet drinking water analysis requirements.
- c. The analytical method detection/reporting limits for the constituents listed above must be at least as low as primary or secondary drinking water standards when applicable.
- d. **The UIC Program requires inorganic analyses of metals for "Total Metals"** in which samples are not filtered and are preserved with a weak acid in the field. Any exceptions to this policy must be requested and pre-approved by the UIC program prior to the sampling event. It must be clearly stated on all reports which analyses were performed.
- e. All gauges and/or flow meters used for compliance with this permit shall be calibrated pursuant to O&M manual (or standard industry specifications), and documented in the monitoring reports.
- f. Water samples shall be 1) collected by grab method, and 2) unfiltered for metals analysis; unless otherwise approved by the Division in writing.
- g. Annual, semi-annual and quarterly samples shall be collected during the same month(s) each year.
- h. All UIC water samples shall be collected using UIC Form U230, and the completed U230 forms submitted for each water sample with the UIC report.
- i. Test procedures for the analyses of required constituents shall comply with applicable analytical methods cited in 40 CFR 141 and under state of Nevada Drinking Water Program approved analytical methods, under which such procedures may be required, unless other procedures are approved by the Administrator.
- j. When sampling for radioactive constituents, ensure the laboratory reports only the adjusted gross alpha, as the drinking water standard of 15 pCi/L is an adjusted standard that subtracts radon and uranium from the total activity. Uranium is added in List 2 to verify value and additional activity.
- k. Monitoring points or constituents may be increased or decreased by the Division for good cause.

#### 2. **Recording of Results** - For each measurement or sample taken pursuant to the requirements of this permit, the Permittee shall record the following information:

- a. Chain-of-custody sheets with the exact place, date, and time of sampling;
- b. The dates the analyses were performed;
- c. The person(s) who performed the analyses;
- d. The analytical techniques or methods used;
- e. The results of all required analyses;
- f. The precision and accuracy of the analytical data; and
- g. Raw laboratory data result sheets.

#### 3. **Additional Monitoring by Permittee** – If the Permittee monitors any constituent at the location(s) designated herein more frequently than required by this permit, or monitors additional constituents other than those required by this permit, using approved analytical methods as specified above, the results of such monitoring shall be made available to the Division.

#### 4. **Records Retention** – All records and information resulting from the monitoring activities required by this permit, including all records and analyses performed, calibration and maintenance of instrumentation, and recordings from continuous monitoring instrumentation, **shall be retained for a minimum of three (3) years**, or longer if required by the Administrator.

#### 5. **Modification of Monitoring Frequency, Location and Sample Type** – After considering monitoring data, discharge flow or receiving water conditions, the Division may, for just cause, modify the monitoring frequency, location and/or sample type by issuing a Notice or an Administrative Order to the Permittee.

## B. MANAGEMENT REQUIREMENTS

1. **Change in Injection or Discharge** – All injection or discharges authorized herein shall be consistent with the terms and conditions of this permit. The discharge of any constituent identified in this permit more frequently than or at a level in excess of that authorized shall constitute a violation of the permit. Any anticipated facility expansions, or treatment modifications which will result in new, different, or increased injection or discharges must be reported by submission of a new application or, if such changes will not violate the limitations specified in this permit, by notice to the permit issuing authority of such changes. Following such notice, the permit may be modified to specify and limit any constituents not previously limited.
2. **Noncompliance Notification** – If, for any reason, the Permittee does not comply with or will be unable to comply with the conditions, requirements and limitations specified in this permit, the Permittee shall provide the Administrator with the following information, in writing, within five (5) days of becoming aware of such conditions:
  - a. A description of the noncompliance or violation.
  - b. The period of noncompliance, including exact dates and times, or if not corrected, the time the noncompliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the noncompliance.
  - c. Notification shall be provided verbally as soon as possible but not later than the end of the first working day after learning of the violation.
3. **Facilities Operation** – The Permittee shall at all times maintain in good working order and operate as efficiently as possible, all treatment or control facilities, devices or systems installed or used by the Permittee to achieve compliance with the terms and conditions of this permit.
4. **Adverse Impact** – The Permittee shall take all reasonable steps, including such accelerated or additional monitoring as necessary to determine the nature and impact of the non-complying injection or discharge, to minimize any adverse impact to waters of the State resulting from noncompliance with any limitations specified in this permit.
5. **Bypass** – Any diversion from or bypass of facilities necessary to maintain compliance with the terms and conditions of this permit is prohibited except where unavoidable to prevent loss of life or severe property damage. The Division will have the final authority in the determination of whether a discharge is deemed unavoidable. The Permittee shall promptly notify the Administrator in writing of each such diversion or bypass, in accordance with the procedure specified in Part II.B.2 above.

## C. RESPONSIBILITIES

1. **Right of Entry** – Pursuant to NRS 445A.655, the Permittee shall allow the Administrator and/or his authorized representatives, upon the presentation of credentials:
  - a. To enter upon the Permittee's premises where a source is located or in which any records are required to be kept under the terms and conditions of this permit;
  - b. To have access to and copy any records required to be kept under the terms and conditions of this permit;
  - c. To inspect any monitoring equipment or monitoring method required in this permit; and
  - d. To perform any necessary sampling to determine compliance with this permit or to sample any injection or discharge.
2. **Transfer of Ownership or Control** – In the event of any change in ownership or control, the Permittee shall notify the succeeding owner of the existence of this permit, in writing, at the earliest possible date to allow sufficient time for the succeeding owner to demonstrate financial responsibility to the Division within 30 days prior to transfer of ownership. The letter shall include the date agreed upon by both parties for the transfer of ownership. A copy of the letter shall be forwarded to the Administrator. The

Administrator of the Division of Environmental Protection shall approve all transfers of permits. The Administrator may require modification, or revocation with subsequent reissuance of the permit, to change the name of the new Permittee and incorporate additional requirements as deemed necessary due to any changes made to the injection wells or system by the new Permittee.

3. **Availability of Reports** – Except for data determined to be confidential under NRS 445A.665, all reports prepared in accordance with the terms of this permit shall be available for public inspection. Knowingly making any false statement on any such report may result in the imposition of criminal penalties as provided for in NRS 445A.710.
4. **Permit Modification, Suspension or Revocation** – After notice and opportunity for a hearing, this permit may be modified, suspended, or revoked in whole or in part during its term for cause including, but not limited to, the following:
  - a. Violation of any terms or conditions of this permit;
  - b. Obtaining this permit by misrepresentation or failure to disclose fully all relevant facts; or
  - c. A change in any condition that requires either a temporary or permanent reduction or elimination of the injection or discharge.
5. **Civil and Criminal Liability**
  - a. Nothing in this permit shall be construed to relieve the Permittee from civil or criminal penalties for noncompliance.
  - b. Nothing in this permit shall be construed to preclude the institution of any legal action or relieve the Permittee from any responsibilities, liabilities, or penalties established pursuant to any applicable State law or regulation.
  - c. The issuance of this permit does not convey any property rights, in either real or personal property, or any exclusive privileges, nor does it authorize any injury to private property or any invasion of personal rights, nor any infringement of federal, State or local laws or regulations.
6. **Compliance with Regulations** – The Permittee shall comply with all provisions of the UIC regulations, NAC 445A.810 through 445A.925, and all pertinent laws and regulations. Nothing in this permit relieves the Permittee from responsibilities, liabilities or penalties established by any other state, federal or local jurisdiction.