STATE OF NEVADA
NEVADA DIVISION OF ENVIRONMENTAL PROTECTION

UIC GENERAL PERMIT GU07RL ID_____
LONG TERM REMEDIATION - More than 180 days

AUTHORIZATION TO INJECT

In compliance with the applicable portions of the Nevada Revised Statutes (NRS), Nevada Administrative Code (NAC), and Code of Federal Regulations, this permit authorizes eligible participants to inject fluids (i.e., solutions or mixtures of water with the following substances) as part of a corrective action (CA) project overseen by the Nevada Division of Environmental Protection's Bureau of Corrective Actions, (or other oversight 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 180 days** and allows injection of those materials identified 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 14, 2030**

Facility/Site
Name:
Adress:
Legal Description: __¼ __¼, Sec.__, T__, R__

Permittee/Well Owner
Name:
Adress:

Operator
Name:
Adress:

Contaminants(s)
Being Remediated:

Authorized Injection Wells,
Rates and Volumes: **Attachment 1**

Sampling Requirements:
□ Per CA Workplan
□ Additional UIC Monitoring:

Table 1: Permitted Injections

☐ Category 1 Active Ingredient/ Reagent(s): _____ _____ _____	□ ≤ 20% hydrogen peroxide solution (by relative/estimated mass of limiting reagent) per injection well/combined total □ Oxygen without O_2 infuser □ Hydrogen-releasing compound □ Activated carbon □ Carbon sources □ Ozone □ Surfactant □ Nutrient solution □ Nutrient solution with microbial culture(s) □ Sulfate, Persulfate, or Polysulfide □ Potassium and Sodium permanganate □ Reducing Agents □ Oxidizing Agents
☐ Category 2	Injection of water that has been treated to meet groundwater quality criteria.

This permit is active until the permittee submits and receives approval for the Notice of Termination (UIC Form 310).

This permit shall become effective: **Month Day, 20XX**

_____ _____
NAME | TITLE **Date**
Bureau of Water Pollution Control

PART I

I.A LIMITATIONS AND GENERAL CONDITIONS

I.A.1 **Effect of Permit**- The permittee is allowed to engage in underground injection within the conditions of this permit and shall operate the system according to the established procedures and as approved by the Nevada Division of Environmental Protection (Division). 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 programs.

I.A.2 **Authority to Require an Individual Permit**- 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**.** 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 Underground Injection Control (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.

I.A.3 **Permitted Injections-** 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.

I.A.4 **Modification-** The Permittee is authorized only to inject what is listed on page 1 of this permit; any action other than the discharges listed will require a permit modification. Any modification to the injection practices requires submission of changes and re-issuance of this permit by the UIC Program prior to implementation. Upon review, the Division may require the applicant to apply for a modification of this permit if there is a determination by the Division or other administrative authority that the project endangers public health or safety of the environment.

I.A.5 **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.**

I.A.6 **Additives:** Introducing foreign materials or unapproved additives to the injection zone is prohibited. The use of any other additive(s) requires modification and reissuance of the permit, the remediation work plan if necessary, and authorization from the Division prior to injection.

I.A.7 **Injectate Limitations-** The injectate shall be limited and groundwater monitored by the Permittee, pursuant to the criteria listed below.

a. Only the approved substances, at the authorized volumes and injection rates, shall be injected following appropriate treatment to meet groundwater quality criteria. Any other water or fluid generated as part of the facility's CA project may be authorized through modification of this permit.
b. Injection practices shall not cause injectate and/or groundwater to surface at or near the injection points, or cause 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.B.6-7; and 3) any additional UIC monitoring requirements identified on page 1 of this permit.
d. If, during the 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.A.2.**
e. Surface discharges are not authorized by this permit.

I.A.8 Annual requirements - 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.

I.A.9 Completion of Remediation - Upon completion of the remediation project, all wells shall be abandoned pursuant to the 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.

I.A.10 Schedule of Compliance - 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.

I.B MONITORING AND REPORTING REQUIREMENTS

I.B.1 Minimum Requirements for Sampling and Monitoring

a. Water Samples shall be collected by "grab" method. Definition: "grab" sample means either a single discrete sample or individual samples collected over a 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 or 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.
c. 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.
d. Annual, semi-annual and quarterly samples shall be collected during the same month(s) each year.
e. 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.
f. 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.
g. 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.
h. Monitoring points or constituents may be increased or decreased by the Division for good cause.

I.B.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 analysis
d. The analytical techniques or methods used
e. The results of all required analysis
f. The precision and accuracy of the analytical data Raw laboratory data result sheets

I.B.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.

I.B.4 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.

I.B.5 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.

I.B.6 Semi-Annual Reports- The Permittee shall submit semi-annual reports (due January 28th and July 28th,) in accordance with Part I.B.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 in **Table 2.**

Table 2: Category 1 – Substance Injection

Parameter and Location	Frequency	Limitations	Sampling Location
Injection mass (pounds per well per month)	Total Monthly	See Attachment 1	Injection well
Injection volume (gallons)	Total monthly	See Attachment 1	Injection well
Solution concentration	Each injection event	See Attachment 1	Injection well

Table 3: 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 2)	Day 7 & 90 of pumping / injection (including restart), Annually thereafter	Drinking water standards when applicable	Inlet of treatment system
UIC Sample List 3 – Organics (Attachment 2)	Day 7 of pumping / injection (including restart), Quarterly thereafter	Drinking water standards when applicable	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 should 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. A 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.

b. The chain of custody documents and laboratory analytical data shall not be submitted with the UIC Summary Report. These documents shall be retained by the permit holder and made available upon request by the Division.

I.B.7 **Reporting** - Monitoring results and other requirements obtained during the previous reporting period, whether an 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

I.B.8 **Required Monitoring Period -** 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).**

I.B.9 **Requests for Cancelation -** A request may be submitted to the UIC program to cease reporting during the one year monitoring period, or to cancel the UIC permit. The 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 rational for such action. **Requests for cancellation must contain:**

a. Certification of well abandonment OR written confirmation from a regulatory agency for continued use as monitoring wells on a well by well basis
b. Final UIC monitoring report
c. Notice of Termination U310 Form
d. 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.

PART II

II.A MANAGEMENT REQUIREMENTS

II.A.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 at a greater frequency or level than authorized shall constitute a violation of the permit. Any anticipated facility expansions, or treatment modifications which will result in new, different, or increased injections 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.

II.A.2 Noncompliance Notification – Written notification shall be provided as soon as possible but no later than twenty-four (24) hours after the event of noncompliance.

a. 5-Day Report: A written Report shall be submitted to the Underground Injection Control Program of the Division within five (5) days if, for any reason, the permittee is unable to or does not comply with the conditions, requirements and limitations specified in this permit. The permittee shall provide the Administrator or his representative with the following information:
   i. The exact dates, times, and duration of noncompliance
   ii. The specific cause of noncompliance and exact location
   iii. An estimated volume unauthorized discharge if applicable
   iv. Identification of which injection well(s) are affected
   v. The corrective actions taken and anticipated time of continuance
   vi. Steps taken or planned to reduce, eliminate, and prevent recurrence of noncompliance

II.A.3 Spills - The permittee is responsible for carrying out notification in the event of a spill. If the permittee has acknowledged that a spill greater than 25 gallons or 3 cubic yards has occurred, notify the Division by calling the **NDEP Spill Hotline, 1-888-331-6337 or an online submission on the NDEP web page** as soon as possible and no later than one working day from the time of discovery. The permittee shall promptly notify the Administrator in writing of each spill, in accordance with the procedure specified in Part II.A.2 above.

II.A.4 Facilities Operation – 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 shall always be maintained in good working order and operate as efficiently as possible.

II.A.5 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 and minimize any adverse impact to waters of the State resulting from noncompliance with any limitations specified in this permit.

II.A.6 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 Division in writing of each such diversion or bypass, in accordance with the procedure specified in Part II.A.2 above.

II.B RESPONSIBILITIES

II.B.1 Right of Entry and Inspection of Premises – To enforce the provisions of any regulation, order or permit issued thereunder, the Director or authorized representative of the Department may, upon presenting proper credentials, pursuant to NRS 445A.655.

a. Enter any premises in which any act violating NRS 445A.300 to 445A.730, inclusive, originates or takes place or in which any required records are required to be maintained;
b. At reasonable times, have access to and copy any records required to be maintained
c. Inspect any equipment or method for continuing observation
d. Have access to and sample any discharges or injection of fluids into waters of the State which result directly or indirectly from activities of the owner or operator of the premises where the discharge originates or takes place or the injection of fluids through a well takes place.

II.B.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 and enter into a written agreement containing a specific date for the transfer, a copy of which shall be submitted to the Division. Until notice is given by the Division that the permit is transferred, the most recent owner or operator is responsible for complying with permit conditions. The following shall proceed:

a. The new Permittee shall complete and file a UIC Change of Ownership Form and submit proof of financial responsibility at least 30 days before the transfer is made.
b. The Administrator may require modification, or revocation with subsequent reissuance of the permit, to change the name of the permittee and incorporate such other requirements as may be deemed necessary.

II.B.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.

II.B.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
c. A change in any condition requires either a temporary or permanent reduction or elimination of the injection or discharge.

II.B.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.

II.B.6 Duty to Comply– 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.

ATTACHMENT 1 – Injection Well Information

Table 4: Well Information Table					
Injection Well ID	Latitude	Longitude	Total Depth (ft bgs)	Injection Limits	
				Total Volume (gal)	Pressure (psig)

ft: feet, bgs: below ground surface, gal: gallons, lbs: pounds, psig: pounds per square inch gauge..

Table 5: Injection of Bioremediation Amendments				
Well ID	Phase 1: Injection Limits at Wellhead			
	Volume (gal)	Mass (lbs)	Flow Rate (gpm)	Pressure (psig)
Well ID	Phase 2: Injection Limits at Wellhead			
	Volume (gal)	Mass (lbs)	Flow Rate (gpm)	Pressure (psig)

gal: gallons, gpm: gallons per minute, lbs: pounds, psig: pounds per square inch gauge.

ATTACHMENT 2 – UIC Sample List 3

Nevada Division of Environmental Protection Underground Injection Control Program - Sampling and Monitoring Report Form	
Facility Name :	**Depth of sampled water's origin :**
Facility Owner:	**County:**
NDEP UIC Permit # :	**Location :** Lattitude Longitude
Well ID # :	**Sampler :**
Type of Well : Monitor Production Injection	**Date Sampled :**

UIC Sample List 3 - Organic EPA Method 8260B (page 1 of 2)

Parameter	IRIS RfD ug/kg-d	DW Health Advisories ug/L	DW Standards mg/L	DW Standards ug/L	Measured Values
Acetone	100				
Dichlorodifluoromethane (Freon 12)	200	1,000			
Chloromethane	4	3			
Vinyl chloride			0.002	2	
Chloroethane					
Bromomethane (Methyl Bromide)	1	10			
Trichlorofluoromethane (Freon 11)	300	2,000			
1,1-Dichloroethene			0.007	7	
Tertiary Butyl Alcohol (TBA)					
Dichloromethane (Methylene chloride)			0.005	5	
tran-1,2-Dichloroethene			0.1	100	
Methyl tert-butyl ether (MTBE)			0.20 or 0.020*	200 or 20	
1,1-Dichloroethane					
Di-isopropyl Ether (DIPE)					
cis-1,2-Dichloroethene			0.07	70	
Bromochloromethane	13	90			
Chloroform			0.08	80	
Ethyl Tertiary Butyl Ether (ETBE)					
2,2-Dichloropropane					
1,2-Dichloroethane			0.005	5	
1,1,1-Trichloroethane (TCA)			0.2	200	
1,1-Dichloropropene					
Carbon tetrachloride			0.005	5	
Benzene			0.005	5	
Tertiary Amyl Methyl Ether (TAME)					
Dibromomethane					
1,2-Dichloropropane			0.005	5	
Trichloroethene (TCE)			0.005	5	
Bromodichloromethane			0.0**	0.0**	
cis and trans-1,3-Dichloropropene	30	0.4			
1,1,2-Trichloroethane			0.005	5	
Toluene			1	1,000	
1,3-Dichloropropane					
Dibromochloromethane			0.060**	60**	
1,2-Dibromoethane (EDB)			0.00005	0.5	
Tetrachloroethene (PCE)			0.005	5	
1,1,1,2-Tetrachloroethane	30	1-70			
Chlorobenzene			0.1	100	
Ethylbenzene			0.7	700	
o-Xylene & m,p-Xylene			10.0***	10,000***	

UIC Sample List 3 - Organic EPA Method 8260B (page 2 of 2)

Parameter	IRIS RfD ug/kg-d	DW Health Advisories ug/L	DW Standards mg/L	DW Standards ug/L	Measured Values
Bromoform			0**	0.0**	
Styrene			0.1	100	
1,1,2,2-Tetrachloroethane	0.05	0.2-0.3			
1,2,3-Trichloropropane	6	40			
Isopropylbenzene (cumene)	100	11,000 (acute)			
Bromobenzene		4,000 (acute)			
n-Propylbenzene					
2- and 4-Chlorotoluene (o and p)	20	100			
1,3,5-Trimethylbenzene					
tert-Butylbenzene					
1,2,4-Trimethylbenzene					
sec-Butylbenzene					
1,3-Dichlorobenzene (m)	90	600			
1,4-Dichlorobenzene (p)			0.075	75	
4-Isopropyltoluene					
1,2-Dichlorobenzene (o)			0.6	600	
n-Butylbenzene					
1,2-Dibromo-3-chloropropane (DBCP)			0.0002	0.2	
1,2,4-Trichlorobenzene			0.07	70	
Naphthalene	20	100			
Hexachlorobutadiene	2	1			
1,2,3-Trichlorobenzene					
tert-Butyl formate (TBF)					

ATTACHMENT 3 - Facility/Site Map

ATTACHEMNT 4 - Chemical Authorizations