



UIC GUIDANCE – Remediation Projects

Underground Injection Control (UIC) Permits for Groundwater Remediation

This Guidance Document contains information on the following:

1. Types of UIC Permits for remediation projects
2. How to apply for these permits
3. Timeline on permit processing
4. Permitting fees
5. How to terminate one of these permits
6. And more

You should be familiar with the following forms:

<i>Form U200 – UIC Permit Application</i>	(required for every UIC permit)
<i>Form U210 – Notice of Intent (NOI)</i>	(required only for general permits)
<i>Form U203 – UIC UNEV Attachments</i>	(required only for UNEV permits)
<i>Form U310 – UIC Notice of Termination</i>	(use only for general permits)

NOTE: *Form U200* and *Form U210* or *Form U203* must each be downloaded separately and completed for the respective permit.

Applicants using any of the compounds or technologies listed below should apply under the general permit. Subject to 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 workplan and site conditions, if the UIC program staff is concerned about any aspects of the project (such as of a public water system supply well or domestic well), the applicant may be required to obtain an UNEV permit and application will be transferred to an UIC UNEV permit.** Applicants injecting other compounds are required to obtain an UIC UNEV Permit and may not apply for this UIC General 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.

Permit Types	
	1. UIC General Permit for Long-Term Remediation (more than six months)
	a. Low-percentage solution of hydrogen peroxide (H ₂ O ₂). Injection shall not exceed 350 gallons/well per month (applies only to vertical wells, trench-style wells may receive more);
	b. Potassium and sodium permanganate;
	c. Ozone;
	d. Polysulfide;
	e. Nutrients: nitrate, ammonia, phosphate, vitamins;
	f. Carbon sources/electron donors: acetate, lactate, glucose, complex sugars (e.g. molasses or corn syrup, other food process byproducts (e.g. yeast), complex organic material (e.g. wood chips)
	g. Oxygen infusers;
	h. Oxygen releasing compounds;
	i. Hydrogen releasing compounds; and/or
	Note: use sodium thiosulfate to dechlorinate potable water used for injection is allowed under permit.

2. UIC General Permit for Short-Term Remediation

- a. Issued one-time only for injection of the above compounds for **less than six months**.
- b. If additional work is needed, reapplication for a long-term General Permit will be required.

3. UIC UNEV Permit

- a. UNEV permits cover all remediation technologies that do not pose degradation issues.
- b. UNEV site specific permits shall be issued on a case-by-case basis depending on the facts and variables for that specific site and remediation technology.
- c. Even though the workplan may identify materials listed above, NDEP will make a determination at the time of application if there are concerns and will notify the applicant if a site specific UNEV permit will be required.

EPA Well Code	5X26 Aquifer Remediation Related Wells (including subsurface fluid distribution systems) 5X25 Experimental Technology Wells – used in experimental or unproven technologies such as pilot scale tests
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Purpose of UIC Permit	The purpose of issuing permits is to protect the public health, safety and the general welfare of the people of this state. Pursuant to NAC 445A.850, an applicant for a permit to inject fluids must satisfy the director that the underground injection will not degrade the physical, chemical, or biological quality of the aquifer into which the fluid is injected.
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For Assistance With this Application	Contact NDEP Bureau of Water Pollution Control, Underground Injection Control Program: Susie Hult (775) 687-9492
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Who Must Apply?	Pursuant to NRS 445A.465, except as authorized by a permit, it is unlawful for any person to inject fluids through a well into any waters of the state (aquifer) and discharge from a point source a pollutant or inject fluids through a well that could be carried into the waters of the state by any means (including the unsaturated zone above waters of the state).
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NAC 445A.8355 and NAC 445A.838 define a well as:

- 1. A bored, drilled or driven shaft with a depth greater than the largest surface dimension;
- 2. A hole which is dug, with a depth greater than the largest surface dimension;
- 3. An improved sinkhole; or
- 4. A subsurface fluid distribution system - an assemblage of perforated pipes, drain tiles or other similar mechanisms intended to distribute fluids below the surface of the ground.

NAC 445A.849, defines a Class 5 well to include:

- 1. Injection wells used to inject fluids for the chemical or microbiological treatment of contaminated groundwater or soil;
 - 2. Injection wells that are approved under a state cleanup program and used to re-inject pumped and treated contaminated groundwater, other than hazardous waste, back into the same formation; and
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3. Injection wells used in experimental technologies.

Class 5 wells do not include wells used for air sparging, Dual Phase Extraction (DPE), or Soil Vapor Extraction (SVE).

Review Timeline Within 30 days after receipt of an application and appropriate fee, NDEP shall notify the applicant if the application is complete, but only with respect to the submittal of the information, not the adequacy of the information. The UIC Program may request additional information to complete the application at any time during the permitting process.

General permits can generally be issued within 30 days of receipt of a complete application. A Temporary UIC UNEV permit for groundwater remediation can usually be issued within 60 days of receipt of a complete application. A final five-year UIC UNEV permit, including the public notice period, takes approximately 3-6 months to process.

Fees The UIC Fee Schedule can be accessed at <http://ndep.nv.gov/bwpc/uicfees.pdf>. A fee is due when the application is submitted. The fee for groundwater remediation permits is a flat fee based on the type of permit and is not a function of the number of injection wells.

UIC General Permit for Long Term Remediation – more than six months:

\$1,500 application fee with *UIC Form U200 & Notice of Intent (NOI) Form U210*
\$900 Annual fee due by July 1 every year the permit is active
\$200 plan review fee for modifications
There is no renewal fee for the UIC General Permit for Long-Term Remediation.

UIC General Permit for Short-Term Remediation – six months or less

\$300 application fee with *UIC Form U200 & Notice of Intent (NOI) Form U210* for one time only (no renewals)
There is no Major Modification, renewal, or annual fees for the UIC General Permit for Short-Term Remediation.

UIC UNEV Permit: Short and Long Term Remediation –

\$3,000 application fee with the *UIC Form U200 & UIC Form U203*
\$1,500 Major Modification fee (see NAC 445A.902 for Minor Modifications which are no charge)
\$1,500 renewal fee due 180 days before permit expiration
\$1,500 Annual fee due by July 1 every year the permit is active

What Regulations Apply? Regulations that apply primarily include, but are not limited to NAC 445A.810 to 445A.925 and NRS 445A.265 to 445A.470. These regulations may be found at <http://ndep.nv.gov/admin/nrs.htm>.

What Other Permits are Required? Additional permits may also be required. Other permitting agencies include the Division of Water Resources (775-687-4380) and the agency having jurisdiction for Air Quality Permits (NDEP, Washoe County, Clark County, and Carson City).

How Long is The All UNEV Permits are issued for a 5 year time period. Coverage under the UIC General

Permit Valid? Permit starts when the application is approved and the permit is issued with an individual identification number. The UIC General Permit will be renewed by the UIC Program every 5 years. Coverage under the General Permit will continue until a Permittee submits a *Notice of Termination of Coverage – Form U310*. Coverage under the UIC UNEV Permit starts when the temporary permit or final permit is issued and lasts for 5 years after the final permit is issued.

For UIC UNEV permits, the **renewal application and fee is due 180 days prior to the expiration** of the permit. A renewal application and fee is not required for the UIC General Permits.

What are the Monitoring and Reporting Requirements? The monitoring and reporting requirements for the short-term and long-term general permits are as follows:

Long-term:

The Permittee shall submit **quarterly reports in accordance with Section 7 for UIC activities in 1) the workplan report to the official corrective action program, and 2) a maximum two-page UIC summary report submitted to the UIC Program** on a continuous basis, **whether actively injecting or not**, which contains the following data:

- a. The UIC Summary Report shall be no longer than two (2) pages containing:
 1. UIC General Permit and Unique ID number.
 2. Reporting period: quarter 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, and injection rate, volume, date, and time, and concentration of the substance injected; or identify no injection occurred.
 7. Is Free Product Present On-site?
 8. Brief summary detailing normal and any unusual activities.
 9. Name, title and signature of authorized reporting individual.

- b. The following shall appear in each Corrective Action (CA) Workplan Report
 1. The UIC General Permit and Unique ID number.
 2. The results of any chemical analyses with copies of the original signed laboratory reports as required by either this permit on page 1, or the CA Workplan.
 3. For each injection event in the reporting period document Injection Rate, Volume, Date, and Time, and concentration of the chemical injected.
 4. Water level and contour map illustrating groundwater gradient and flow direction.
 5. Narrative report of injection activities for that reporting period. The report shall include, but not be limited to, any problems encountered with the injection, the results of any tests performed during that period, and any changes noted to the groundwater. If no injection has occurred, report the non-injection status and the reason.
 6. And all other items required by the currently approved workplan.

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.

Signed copies of only the two-page UIC Summary Report shall be submitted to the UIC Compliance Coordinator at the following address:

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

Note: CA Workplan Reports shall be reported in accordance with the Workplan and Case Officer.

Short-term:

Monitoring reports will not be required for the UIC General Permit for Short-Term Remediation. All requirements in this permit will be summarized and reported in the Corrective Action Workplan reports.

How to Apply

Prior to applying, you must have a Letter of Concurrence for the injection Workplan from the Bureau of Corrective Actions (BCA) Case Officer or state-authorized county program Case Officer. To submit an UIC permit application, follow the steps described below:

Step	Action
1.	Submit a Workplan along with the <u>Letter of Concurrence</u> for the Workplan.
2.	Complete the <i>UIC Permit Application – Form U200</i> with the owner/operator signature. Include all specified information.
3.	If applying for the General Permit, submit the <i>Notice of Intent (NOI) – Form U210</i> with all required attachments; <u>or</u> if applying for the UIC UNEV Permit, submit all requirements listed in <i>UNEV Permit Application Form U203 – Application Attachments</i> .
4.	Retain a copy of the complete application package for your files.
5.	Submit the fee and complete application package to: Nevada Division of Environmental Protection Bureau of Water Pollution Control, Attention: UIC Program 901 S. Stewart Street, Suite 4001 Carson City, NV 89701-5249

How to Renew an To submit a renewal UIC UNEV Permit application, follow the steps described in the table

UIC UNEV Permits below and submit the fee and all required documents **180 days before the permit expires**.
General Permits do not need to be renewed.

If the remediation Workplan has not changed from the original UIC UNEV Permit application, the Letter of Concurrence and Workplan is not required for the renewal application. If the Workplan has changed from the original UIC UNEV Permit application, you must submit the Letter of Concurrence for the revised Workplan from the Bureau of Corrective Actions (BCA) Case Officer or the Washoe County District Health Department (WCDHD) Case Officer.

Step	Action
1.	If the Workplan has changed from the original UIC UNEV Permit application, submit the <u>Letter of Concurrence</u> for the Workplan and submit the revised Workplan.
2.	Complete the <i>UIC Permit Application – Form U200</i> with the owner/operator signature. Include all specified information.
3.	To renew the UIC UNEV Permit, submit all requirements listed in <i>UNEV Permit Application Form U203 – Application Attachments</i> if they are different than those submitted with the original application. Follow instructions in the Attachments.
4.	Retain a copy of the complete application package for your files.
5.	Submit the renewal fee and complete application package <u>180 days prior to permit expiration</u> to: <p style="text-align: center;">Nevada Division of Environmental Protection Bureau of Water Pollution Control, Attention: UIC Program 901 S. Stewart Street, Suite 4001 Carson City, NV 89701-5249</p>

How to Cancel an UIC General Permit Cancellation of an UIC General Permit shall occur when the concurrence letter from the Case Officer is received with the *Notice of Termination (NOT) – Form U310*. Documentation and certification must be received that the injection discharge will not occur in the future without reapplying for a permit. Cancellation may also occur upon determination by the UIC Program that the permitted activity endangers human health or the environment and can only be regulated by revocation.

Upon receipt of the *Form U310 - NOT*, the UIC Program shall determine whether there is a need to continue monitoring and reporting pursuant to the permit conditions at any given site. This is often the case with remediation projects where such permit conditions must remain in force for a minimum of one year following authorization to discontinue actual cleanup activities. If continued monitoring, reporting and inspections are not necessary, and the Permittee is no longer discharging, the permit may be cancelled.

Injection wells must be properly plugged and abandoned pursuant to all local, state, and federal regulations. Submit the Well Driller’s Report(s) for plugging, or a statement and proper documentation must be provided explaining why the wells will not be plugged and the intended use of the wells.

How to cancel an UIC UNEV Permit Cancellation of an UIC UNEV permit shall occur upon written request by the Permittee providing documentation and certification that the injection discharge will not occur in the future without reapplying for a permit. Cancellation may also occur upon determination by the UIC Program that the permitted activity endangers human health or the environment and can only be regulated by revocation.

Written requests must satisfy the following criteria:

1. **Must** be signed by the owner/operator or a duly authorized agent of the Permittee;
2. **Must** identify the reason why the permit is no longer needed and what will happen to the injectate fluids in the future;
3. **Must** state that the injection well(s) has/have been properly plugged and abandoned pursuant to all local, state and federal regulations and provide copies of the Well Driller's Report(s) for plugging; **or** a statement and proper documentation must be provided explaining why the wells will not be plugged and the intended use of the wells. If not already on file with the UIC Program, all affidavits and/or bonding documentation must also be provided at this time;
4. **Must** state the Permittee is in compliance with all regulatory and permit conditions, including monitoring reports and fees; and
5. For all remediation projects, **must** include the Letter of Concurrence from the Bureau of Corrective Actions or other authorized agencies stating injection activities will not be necessary for remediation purposes in the future.

Upon receipt of a request to cancel a UIC UNEV permit, the BWPC shall determine whether there is a need to continue monitoring and reporting pursuant to the permit conditions at any given site. This is often the case with remediation projects where such permit conditions must remain in force for a minimum of one year following authorization to discontinue actual cleanup activities. If continued monitoring, reporting and inspections are not necessary, and the Permittee is no longer discharging, the permit may be cancelled.

How to allow the UIC UNEV Permit to Expire If the Permittee does not wish to renew their UIC UNEV permit and will allow the permit to expire on the date of expiration, the UIC Program is tasked with the following actions through written correspondence and/or site inspection:

1. Ensure injection will not occur in the future; and
2. Ensure the injection well is properly plugged or converted to another well type.

The Permittee is required to provide this information to the UIC Program at time of expiration. Failure to do so shall place the Permittee in non-compliance with State regulations.

Once a permit has expired or has been cancelled, reactivation of a permit is prohibited without reapplication and review in accordance with NRS 445A and NAC 445A.