

**PROPOSED REGULATION OF THE
STATE ENVIRONMENTAL COMMISSION
P2026-02
May 22, 2026**

**Proposed Revisions to Nevada Administrative Code (NAC) 445A
Underground Injection Control Program (UIC)**

Chapter 445A of NAC is hereby amended by adding thereto the provisions set forth as sections 1 to 2, inclusive, of this regulation.

Justification

The proposed changes to NAC 445A are necessary to modernize outdated language, clarify regulatory requirements, and strengthen the protection of groundwater resources under Nevada's Underground Injection Control (UIC) Program. Many of the existing provisions lack the detail and clarity needed for consistent interpretation and implementation by both the Nevada Division of Environmental Protection (Division) and the regulated community. These updates aim to strengthen the state's UIC regulations and address existing regulatory gaps. Overall, the revisions support clearer enforcement, improved industry compliance, and long-term protection of Nevada's underground sources of drinking water.

Sec. 1

Major modification of existing permit.

- 1. A major modification to an existing permit requires a public notice.***
- 2. A major modification to an existing permit may extend the term of the permit for not more than 5 years.***
- 3. For the purpose of this section, "major modifications" include:***
 - (a) A significant increase in approved injection volume, pressure, or expansion of the injection zone.***
 - (b) A major change in the location, design, or operation of injection wells or infrastructure not covered in the original permit.***
 - (c) Any change to injection fluids, methods, or operations that increases the risk to underground sources of drinking water or alters the potential environmental impact.***
 - (d) Any other modification not classified as a minor modification per NAC 445A.902.***

Sec. 2

The O&M manual shall be updated at least every ten (10) years, or as requested by the Division, and must include at least all of the following operations and maintenance procedures:

- 1. Table of Contents.***
- 2. Introduction and Purpose***
 - (a) State the purpose of the manual and provide instructions for its proper use by facility personnel.***
 - (b) Provide a brief technical description of the facility, identifying the type of power plant and summarizing the overall system configuration.***
 - (c) Summarize emergency response procedures and clearly define operator roles and responsibilities during system failures or abnormal conditions.***
- 3. Facility Description***
 - (a) Provide a general description of the facility operations, including primary processes and functional components.***
 - (b) Describe the constructions specifications of all surface basins, including liner type, storage***

capacity, and freeboard dimensions.

(c) Include schematic diagrams illustrating the operational layout and process flow of the power generation system.

4. Water Flow and System Operations

(a) Provide a description of water conveyance operations, including the routing and function of production wells, injection wells, and associated pipelines.

(b) Describe the design and specifications of production and injection wells, including major components such as pumps, valves and separators.

(c) Detail metering and monitoring systems, encompassing flow rates, temperature, pressure measurement points, reading procedures, calibration protocols, and data recordkeeping.

(d) Establish inspection schedules for water control systems and reporting requirements.

5. Water Discharges

(a) Describe water discharges from cooling towers, surface basins, septic systems, stormwater, and other relevant sources.

(b) Summarize discharge permit conditions and associated reporting requirements.

6. Quality Assurance Monitoring Plan

(a) Define sampling protocols for water discharges, including personnel, materials, collection and preservation methods, target analytes, shipping, and laboratory requirements.

(b) Specify reporting obligations and designated responsible individuals.

(c) Outline recordkeeping procedures and required sample documentation.

(d) Explain the significance of monitored parameters.

7. Chemicals Onsite Usage

(a) Inventory of onsite chemicals, emphasizing those in contact with water or cooling systems.

(b) Quantities stored, chemical concentrations, and supplier contact details.

(c) Handling protocols, hazard identification, and safety control measures.

8. Operation and Maintenance Procedures

(a) Scheduled routine inspections for operational systems.

(b) Maintenance protocols for pipelines, pumps, valves, and well control apparatus.

(c) Documentation and reporting procedures for all maintenance activities.

(d) Standard operating procedures for plant shutdowns, well shut offs, and startup sequences.

(e) Response protocols for common operational issues including leaks and equipment malfunctions.

9. Emergency Procedures

(a) Defined roles and responsibilities for emergency response.

(b) Protocols for managing well leaks, blowouts, and mandatory spill reporting.

(c) Comprehensive contact information for regulatory agencies and emergency support resources.

(d) Availability of 24-hour emergency contact phone numbers.

(e) Response to emergency procedures must include, without limitation, notification of users, the Division, and if necessary, the local health authority

10. Replacement of Worn or Damaged Equipment

(a) The O&M manual shall include a plan for timely replacement of worn or damaged equipment to ensure safe and effective operations.

(b) The plan must outline procedures for identifying equipment requiring replacement.

(c) Records of all replacement activities must be maintained.

11. Appendices

(a) Copies of all Division permits.

(b) Sample monitoring and maintenance reports.

(c) SDS sheets for chemicals used onsite.

(d) Signed approvals and references.

12. The Operation & Maintenance (O&M) manual, including all relevant reports, site conditions,

inspections, monitoring data, and records of work performed, must be always kept at the facility and accessible to the Division, with the operator also maintaining a copy of the site-specific manual on hand.

Sec. 34. NAC 445A.8491 is repealed:

~~[NAC 445A.8491 Motor vehicle waste disposal wells: Requirements for well in operation or under construction on or before April 5, 2000. (NRS 445A.425, 445A.465)]~~

- ~~1. The owner of an existing motor vehicle waste disposal well that was in operation or under construction on or before April 5, 2000, shall close the well, obtain a permit to operate the well or convert the well in accordance with NAC 445A.8493 to 445A.8499, inclusive.~~
- ~~2. Not later than 90 days after October 25, 2001, the owner of the well shall submit to the Director information concerning the location and operating status of the well, and such additional information concerning the well as requested by the Director.~~
- ~~3. Based on the information provided by the owner of the well, the Director shall determine whether the well is located within a groundwater protection area and notify the owner of that determination.~~
- ~~4. If the Director determines that the well is not located within a groundwater protection area, the Director shall make a preliminary determination, based on data provided by the Division, whether the well is located within another sensitive groundwater area and notify the owner of that determination. If the Director makes a preliminary determination that a well is located within another sensitive groundwater area, the owner of the well shall close the well, obtain a permit to operate the well or convert the well in accordance with NAC 445A.8493 to 445A.8499, inclusive.~~
- ~~5. If, by January 1, 2004, or, if an extension has been approved by the Environmental Protection Agency, by January 1, 2005, the local source water assessment has not been completed and the plan for the determination of other sensitive groundwater areas has not been carried out for the area in which the motor vehicle waste disposal well is located, the motor vehicle waste disposal well shall be deemed to be located within a groundwater protection area and must be permitted, closed or converted accordingly.]~~
- ~~6. If the Director determines that the well is not located within a groundwater protection area or other sensitive groundwater area, and if the well is not deemed to be located within a groundwater protection area pursuant to subsection 5, the owner shall close the well, obtain a permit to operate the well or convert the well in accordance with its classification pursuant to NAC 445A.810 to 445A.925.~~

~~(Added to NAC by Environmental Comm'n by R042-01, eff. 10-25-2001; A by R103-04, 2-11-2005)]~~

NAC 445A.8493 Motor vehicle waste disposal wells: [Deadlines for owner of well to meet requirements; extension of deadlines;] Conversion of well. (NRS 445A.425, 445A.465)

- ~~[1. Except as otherwise provided in this section, the owner of an existing motor vehicle waste disposal well that is located within:

 - ~~(a) A groundwater protection area shall, not later than 1 year after the date on which the local source water assessment for the area is completed or January 1, 2005, whichever occurs first, close the well, obtain a permit to operate the well or convert the well.~~
 - ~~(b) Another sensitive groundwater area shall, not later than January 1, 2007, close the well, obtain a permit to operate the well or convert the well.~~~~
- ~~2. The deadlines set forth in subsection 1 may be extended for not more than 1 year if the Environmental Protection Agency approves an extension for this State pursuant to 40 C.F.R. §§ 144.87(b) and 144.87(c).~~
- ~~3. The Director may extend the deadline for the closure of a motor vehicle waste disposal well for not more than 1 year if he or she determines that the most efficient option for compliance with~~

~~applicable state and federal requirements concerning such wells in connection to a sanitary sewer or installation of new treatment technology. The Director may not extend the deadline for obtaining a permit.~~

4-] The Director may authorize the conversion of a motor vehicle waste disposal well to another Class V type of well, including, without limitation, a storm water well, if the conversion is done in accordance with 40 C.F.R. § 144.89(b). The Director shall, in conjunction with the owner of the well to be converted, establish a specific schedule pursuant to which the well must be converted.

(Added to NAC by Environmental Comm'n by R042-01, eff. 10-25-2001; A by R103-04, 2-11-2005)

NAC 445A.867 Application for permit. (NRS 445A.425, 445A.465)

1. Except as otherwise provided in NAC 445A.8491 to 445A.8499, inclusive, an applicant for a permit to inject fluids must satisfy the Director that the underground injection will not endanger any source of drinking water. Each application for a *new permit, renewal, or modification* must be signed by the owner or, if the owner does not operate the well, the operator of the well and must contain the following information:

- (a) The name of the facility.
- (b) The name and address of the owner.
- (c) The name and address of the operator, if different than the owner.
- (d) A description of the location of each injection well by the quarter-quarter section, section, township and range, and latitude and longitude.
- (e) A map of the location of the facility, preferably *the North American Vertical Datum of 1988 (NAVD88) or the North American Datum of 1983 (NAD83), or other appropriate datums as approved by the Division to ensure consistency and accuracy, ~~a topographic map prepared by the United States Geological Survey,~~* extending at least 1 mile beyond the boundaries of the facility, locating each injection well for which a permit is sought and the area of review. The map must show, within the area of review, the number, location and type of all injection wells, producing wells, abandoned wells, surface bodies of water, surface and subsurface mines, quarries, public and private systems to supply water and other pertinent features on the surface.
- (f) A plan for corrective action, as required pursuant to NAC 445A.899, for each well within the area of review which penetrates the zone for injection, but is not correctly completed or plugged.
- (g) A narrative report, geologic cross section and isopach map in sufficient scale to detail the local geology and hydrology. The information should be sufficient to show the geologic formations, structural features and concentration of total dissolved solids for each formation, zone for injection and confining zone.

(h) The plans and drawings for construction showing the details of the casing and cementing, including the size of the hole, type of casing and type and grade of cement.

(i) The drilling log for each production or injection well owned or operated by the applicant which is located within the area of review.

(j) The proposed operating data, including:

- (1) The average and maximum daily rates of injection and the volume of the fluid injected;
- (2) The average and maximum pressures of the injection; and
- (3) The source of the fluid injected and an analysis of its physical, chemical and biological characteristics.

(k) A chemical analysis, if available, of the fluid in the receiving formation to ensure compatibility with the injectate, and an analysis of the hydraulic conductivity of the receiving formation.

(l) The proposed procedures for injection, including additives to or storage and pretreatment, if any, of the fluid injected, the use of the well, the planned standard practices for stimulation of the well and the planned schedule for workover.

(m) A certificate that the applicant has ensured, through a performance bond or other appropriate means, the resources necessary to plug and abandon the well.

(n) A plan for plugging and abandoning the well as described in NAC 445A.923.

(o) Any other information required by the Director to ensure that the proposed operation will not degrade an underground source of drinking water. That information may include a plan for monitoring the elevation or quality of groundwater surrounding the zone for injection.

(p) Operations and maintenance manual as described in NAC 445A...(Sec. 2).

(q) Signed chemical use request which includes facility and permit information, chemical information, and chemical feed information

2. In addition to the requirements of subsection 1, an applicant for a permit for the injection of reclaimed water for indirect potable reuse must satisfy the requirements of NAC 445A.274 to 445A.280, inclusive, as applicable.

3. As used in this section:

(a) "Indirect potable reuse" has the meaning ascribed to it in NAC 445A.27441.

(b) "Reclaimed water" has the meaning ascribed to it in NAC 445A.27445.

NAC 445A.868 Information required in application for Class II well. (NRS 445A.425, 445A.465) An applicant for a permit for a Class II well must include in his or her application *the requirements outlined in NAC 445A.867 and* the following information concerning the injection formation:

1. The fluid pressure;
2. The estimated fracture pressure; and
3. The physical and chemical characteristics of the injection zone.

Regardless of any previously submitted information, an applicant must submit a complete and current application including all information required by the Director. Incomplete applications will not be processed. The applicant shall submit the information using the most current versions of the approved application forms, or as otherwise directed by the Division.

(Added to NAC by Environmental Comm'n, eff. 10-21-87)—(Substituted in revision for NAC 445.42495)

NAC 445A.869 Modification of information required in application for Class V well. ([NRS 445A.425](#), [445A.465](#)):

1. The Director may modify the information required in an application for a permit for a Class V well for good cause and upon determining that additional or less information will ensure that a

proposed injection well will not degrade an underground source of drinking water. *Regardless of any previously submitted information, an applicant must submit a complete and current application including all information required by the Director. Incomplete applications will not be processed.*

2. *The applicant shall submit the information using the most current versions of the approved application forms, or as otherwise directed by the Division.*

(Added to NAC by Environmental Comm'n, eff. 7-22-87)—(Substituted in revision for NAC 445.425)

NAC 445A.916 Tests for mechanical integrity: Frequency. ([NRS 445A.425](#), [445A.465](#), [445A.660](#)) Tests to demonstrate mechanical integrity must be conducted at least once each 5 years for the life of an injection well. The Director may require such tests more frequently if conditions of the operation so warrant. The holder of a permit shall notify the Director at least 45 days before the date upon which a test for mechanical integrity is to be performed. *If the test to demonstrate mechanical integrity is done under injection, then the test must be performed in a manner that is representative of the individual wells normal operating conditions such as injection rate and pressure.*

NAC 445A.920 Loss of or failure to demonstrate mechanical integrity. (NRS 445A.425, 445A.465)

1. If the holder of a permit or the Director finds that an injection well fails to demonstrate mechanical integrity during a test or a loss of mechanical integrity becomes evident during operation, the operation of the injection well must be stopped immediately and may not be resumed until approved by the Director.

2. *A pressure test must maintain constant pressure for the duration of the test to demonstrate mechanical integrity.*

(Added to NAC by Environmental Comm'n, eff. 7-22-87)—(Substituted in revision for NAC 445.42755)

NAC 445A.922 Retention of records from monitoring. ([NRS 445A.425](#), [445A.465](#), [445A.660](#))

1. The holder of a permit shall retain records of all information resulting from the monitoring required by the permit including:

- (a) The records of the calibration and maintenance of the injection well and all original, continuous charts from recording instruments;

- (b) Copies of all reports required by the permit;

- (c) Records of all data used to complete the application for the permit; and

- (d) The reports of the nature and composition of all injected fluids.

2. ~~*The records enumerated in paragraphs (a), (b) and (c) of subsection 1 must be retained for at least 3 years after the date the sample or measurement is taken or the report or application is made. This period may be extended by the Director.*~~ The records enumerated in ~~paragraph (d) of~~ subsection 1 must be retained for 5 years after the completion of any procedures for plugging and abandonment. The Director may require the owner or operator to deliver the records to his or her office at the conclusion of the period for retaining the records.

3. The records of information resulting from monitoring must include:

- (a) The date, exact place and time of the sampling or measurement;

- (b) The name of the person who performed the sampling or measurement;

- (c) The date the analysis was performed;

- (d) The name of the person who performed the analysis; and

- (e) The results of each analysis.

(Added to NAC by Environmental Comm'n, eff. 7-22-87)—(Substituted in revision for NAC 445.42765)

NAC 445A.923 Plugging and abandonment: Plan; notice; procedure; certification. (NRS 445A.425, 445A.465, 445A.500)

1. If the plan for plugging and abandoning an injection well is determined by the Director to be adequate, it will be incorporated as a condition to the permit.
2. The plan for plugging and abandoning an injection well must contain an estimate, based on the current and prevailing economy, of the cost of plugging each well for which the application for the permit is made. The applicant shall certify in the plan that the estimate of the cost will be reviewed annually during the life of the permit, and that the bond required pursuant to NAC 445A.871 will be increased when the review indicates that the cost of plugging is more than 10 percent greater than the original or most recent estimate of the cost.
3. The holder of a permit, or any person planning to abandon or close any injection well, including, without limitation, shallow Class V wells such as motor vehicle waste disposal wells, shall notify the Director of the intent of the holder or person to abandon or close the injection well at least 30 days, or in the case of a newly drilled injection well at least 5 working days, before the abandonment or closure of the well.
4. Before abandonment, an injection well must be plugged with cement in a manner which will not allow the movement of fluids into or between underground sources of drinking water.
5. All cavities in the well bore not plugged with cement must be filled with heavy drilling fluids in a state of static equilibrium with the weight of the fluid equalized from top to bottom.
6. Upon completion of the procedure for the plugging and abandonment of an injection well, the holder of a permit shall certify to the Director that the condition of the permit relating to plugging and abandonment has been satisfied *and shall be retained throughout the operational life of the well.*

NAC 445A.9658 Septic tanks: General requirements. ([NRS 445A.425](#))

1. A septic tank included as part of an on-site sewage disposal system must:
 - (a) Be constructed of durable materials designed to withstand expected physical loads and corrosive forces.
 - (b) Be verified watertight by a test during installation.
 - (c) Be installed so that the tank is level.
 - (d) Be designed to provide for the settling of solids, the accumulation of sludge and scum, and access for cleaning.
 - (e) Meet the requirements of the *Uniform Plumbing Code*, ASTM International, or other recognized construction code or design manual for the construction of septic tanks, as referenced by the design engineer.
 - (f) Conform to guidelines established by the Division.
 - (g) Have a liquid depth of at least 36 inches. A liquid depth of more than 6 feet must not be considered in determining tank capacity.
 - (h) Have at least 12.5 percent of the tank volume for scum storage, with a minimum airspace of 9 inches.
 - (i) Except as otherwise provided in subsection 4, have two compartments. The capacity of the inlet compartment must not be less than two-thirds of the total capacity of the tank.
2. Septic tank inlets and outlets must allow free venting of tank gases back through the drainage system.
3. The top of the tee or baffle for both the vented inlet and vented outlet must extend at least 12 inches ~~below~~ *above* the level of the liquid. The bottom of the tee or baffle for both the inlet and the outlet must extend at least 12 inches below the level of the liquid. The invert of the inlet pipe must be at least 2 inches above the invert of the outlet pipe.

4. Septic tanks may be installed in a series of not more than two. Each tank in the series must be a single compartment tank, and the volume of the first tank must not be less than two-thirds of the total capacity of both tanks.

5. Each compartment of the septic tank must have at least one manhole to provide access into the compartment. Each manhole must have a minimum diameter of 20 inches. If the inlet compartment is longer than 12 feet, an additional manhole must be provided over the baffle or partition wall. If the tank is longer than 30 feet, an additional manhole must be added for each 10 feet of length. Manholes must be designed to minimize odors and to prevent unauthorized entry.

6. The top of the tank must be at least 6 inches below the finished grade. If the top of the tank is more than 18 inches below the finished grade, each manhole required pursuant to subsection 5 must be extended to within 18 inches of the finished grade.

(Added to NAC by Environmental Comm'n by R194-07, eff. 8-26-2008).