

TEXAS COMMISSION ON ENVIRONMENTAL QUALITY
AGENDA ITEM REQUEST
for General Permit Amendment and Reissuance

AGENDA REQUESTED: November 14, 2012

DATE OF REQUEST: October 26, 2012

INDIVIDUAL TO CONTACT REGARDING CHANGES TO THIS
REQUEST, IF NEEDED: Charlotte Horn, (512) 239-0779

CAPTION: Docket No. 2012-0640-UIC. Consideration of amendment and reissuance of General Permit Number WDWG010000 which authorizes the disposal of nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals into a Class I well.

The amendment incorporates standards for disposal of nonhazardous drinking water treatment residuals (DWTR) that contain naturally occurring radioactive material (NORM) into a salt cavern in horizontally bedded or non-domal salt. A Radioactive Materials License is required for disposal of DWTR containing NORM that does not meet an exempted level for its radiological content.

This permit is a single statewide general permit covering all qualifying Class I injection wells that meet the permit's performance standards. This permit specifies which Class I injection wells may be authorized under the general permit and establishes requirements in order to obtain and maintain such authorization. Notice of the draft amended general permit was published in the July 13, 2012 issue of the *Texas Register* (37 TexReg 5368). (Kathryn Hoffman; Don Redmond, Diane Goss)

Brent Wade
Deputy Director

Charles Maguire
Division Director

Charlotte Horn
Agenda Coordinator

Copy to CCC Secretary? NO X YES

Texas Commission on Environmental Quality

Interoffice Memorandum

To: Commissioners

Date: October 26, 2012

Thru: Bridget C. Bohac, Chief Clerk
Zak Covar, Executive Director

From: Brent Wade, Deputy Director
Office of Waste

Docket No.: 2012-0640-UIC

Subject: Commission Approval of Amendment and Reissuance
Underground Injection Control (UIC) General Permit WDWG010000
Rule Project No. 2012-027-OTH-NR

Background and reason(s) for amendment of the General Permit:

The Texas Commission on Environmental Quality has proposed to amend and reissue the Class I UIC General Permit No. WDWG010000 authorizing the use of a Class I injection well to dispose of nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals (DWTR). The amendment would incorporate new standards for disposal of nonhazardous DWTR, including DWTR containing naturally occurring radioactive material (NORM), into a salt cavern in horizontally bedded or non-domal salt.

Standards for disposal of nonhazardous DWTR in a Class I bedded salt cavern disposal well were added to 30 TAC Chapter 331 by new rules effective August 16, 2012. A Radioactive Materials License is required for disposal of DWTR containing NORM that does not meet an exempted level for its radiological content.

Scope of the general permit amendment:

A.) Summary of what the general permit amendment will do: Amendment of this general permit will incorporate standards for disposal of nonhazardous DWTR, including DWTR containing NORM, into a Class I bedded salt cavern disposal well. Prior to completion of recent rulemaking, rules (30 TAC §331.14) effectively prohibited waste disposal in a Class I well by injection into a bedded salt formation. New and revised rules effective August 16, 2012 provide authorization and technical standards for use of a Class I well for disposal of nonhazardous DWTR (including NORM) into horizontally bedded or non-domal salt.

B.) Scope required by federal regulations or state statutes: The recommended amendments to the UIC general permit are not required by federal regulations or state statutes.

C.) Additional staff recommendations that are not required by federal rule or state statute: Federal rules do not specifically address injection of nonhazardous

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desalination concentrate or nonhazardous DWTR into a Class I well in horizontally bedded or non-domal salt.

Statutory authority: The amended general permit is proposed under the statutory authority of: 1) Texas Water Code (TWC), §27.011, which makes it unlawful to use an injection well to dispose of industrial and municipal waste without first obtaining a permit from the commission; 2) TWC, §27.025, which authorizes the commission to issue a general permit authorizing the use of a Class I injection well to inject nonhazardous brine from a desalination operation or to inject nonhazardous DWTR, to add or delete requirements for the UIC general permit through the amendment process and to amend the UIC general permit after notice and comment; and 3) Texas Health and Safety Code, §361.086, which exempts activities authorized by a general permit issued under TWC, §27.025 from the requirement that each solid waste facility hold a separate permit.

Effect on the:

A.) Regulated community: The amended UIC general permit would provide an expedited permitting process for disposal of nonhazardous DWTR, including DWTR containing NORM, into a Class I bedded salt cavern disposal well.

The proposed amended general permit allows an existing Class II salt cavern disposal well permitted by the Railroad Commission of Texas (RRC) to be authorized by TCEQ under the UIC general permit for use as a Class I bedded salt cavern disposal well.

B.) Public: The public benefit anticipated from amendment of the UIC general permit is provision of a safe in-state disposal option for nonhazardous DWTR that contains NORM.

C.) Agency programs: No new full-time employees will be required as a result of this general permit amendment. Amendment of the UIC general permit is not anticipated to create a special group of affected persons.

Stakeholder meetings: Commission staff announced the anticipated amendment of the UIC general permit at stakeholder advisory group meetings held for the recently-adopted Chapter 331 rulemaking that established standards for disposal of DWTR, including DWTR containing NORM, in a Class I bedded salt cavern disposal well. Stakeholder meetings for the related rulemaking were held at TCEQ headquarters on April 15, 2011, September 20, 2011, and December 8, 2011. Stakeholders expressed support for the amendment of the UIC general permit and emphasized their interest in expedited processing of applications for use of a Class I bedded salt cavern disposal well for disposal of nonhazardous DWTR containing NORM.

Public comment: No public comments were received during the comment period.

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Significant changes from notice of public comment period and public meeting: No changes were made after publication of notice of the draft amended UIC general permit or the public meeting.

Potential controversial concerns and legislative interest: None anticipated

Does this general permit amendment affect any current policies or require development of new policies? No.

What are the consequences if this general permit amendment does not go forward? Are there alternatives to amendment? This amendment is needed to implement recently-adopted rules by incorporating standards into the UIC general permit to provide for disposal of nonhazardous DWTR, including DWTR containing NORM, in a Class I bedded salt cavern disposal well. If this general permit amendment is not approved, the expedited process provided by the UIC general permit will not be available to authorize disposal of nonhazardous DWTR, including DWTR containing NORM, in a Class I bedded salt cavern disposal well. These wells would have to be authorized under an individual Class I injection well permit which is a much longer permitting process that could delay desalination projects.

Key points in the amended general permit adoption schedule:

Date of publication of *Texas Register* and newspaper notice of public comment period and public meeting: July 13, 2012

Anticipated *Texas Register* publication date for issuance of the amended UIC general permit: November 30, 2012

Agency contacts:

Kathryn Hoffman, Rule Project Manager, 239-6890, Radioactive Materials Division
Don Redmond, Staff Attorney, 239-0612
Diane Goss, Staff Attorney, 239-5731
Charlotte Horn, Texas Register Coordinator, 239-0779

cc: Chief Clerk, 2 copies
Executive Director's Office
Susana M. Hildebrand, P.E.
Anne Idsal
Curtis Seaton
Tucker Royall
Office of General Counsel
Kathryn Hoffman
Charlotte Horn

Amendment and Reissuance of Underground Injection Control (UIC) General Permit WDWG010000

Background and Summary

- The Texas Commission on Environmental Quality (TCEQ) is proposing to amend and reissue the Class I UIC General Permit No. WDWG010000 authorizing the use of a Class I injection well to dispose of nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals (DWTR).
 - The amendment would incorporate new standards for disposal of nonhazardous DWTR, including DWTR containing naturally occurring radioactive material (NORM), into a salt cavern in horizontally bedded or non-domal salt.
 - Standards for disposal of nonhazardous DWTR in a Class I bedded salt cavern disposal well were added to 30 TAC Chapter 331 by new rules effective August 16, 2012.
 - A Radioactive Materials License is required for disposal of DWTR containing NORM that does not meet an exempted level for its radiological content.
- This single statewide general permit covering all qualifying Class I injection wells that meet the permit's performance standards expedites the processing of authorizations.
- The amended general permit would authorize injection of the following waste streams into a Class I well:
 - Nonhazardous desalination brine or nonhazardous desalination concentrate; or
 - Nonhazardous DWTR. This includes disposal of nonhazardous DWTR that contain NORM into a salt cavern in horizontally bedded or non-domal salt.
- Notice of the draft amended UIC general permit and public meeting was published in six major Texas newspapers and in the *Texas Register* on July 13, 2012 (37 *TexReg* 5368).
- A public meeting for the proposed amended general permit was held at TCEQ Headquarters on August 14, 2012. The public comment period ended at the close of the meeting. No comments were received during the comment period.

Information and Issues

- Five wells are currently authorized under the UIC general permit. Upon issuance of an amended or renewed general permit, these owners or operators must submit an NOI in accordance with the requirements of the new permit.
- The Executive Director may cancel, revoke, or suspend authorization to inject waste under the general permit based on a finding of historical and significant noncompliance with the provisions of the general permit.

Targeted Timeline Milestones

UIC general permit considered for issuance by TCEQ Commissioners Nov. 14, 2012
Amended general permit published in the *Texas Register*. Nov.30, 2012

FACT SHEET AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

For proposed amendment and reissuance of Class I Underground Injection Control (UIC) General Permit No. WDWG010000 authorizing the use of a Class I injection well to dispose of nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals.

Issuing Office: Texas Commission on Environmental Quality
P.O. Box 13087
Austin, TX 78711-3087

Prepared by: Kathryn Hoffman
Underground Injection Control (UIC) Permits Section
Radioactive Materials Division
(512) 239-6890

Date: October 26, 2012

Permit Action: Amendment with Renewal of General Permit WDWG010000

I. Summary

The Texas Commission on Environmental Quality (TCEQ) is proposing to amend and reissue the Class I UIC General Permit No. WDWG010000 authorizing the use of a Class I injection well to dispose of nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals (DWTR). The amendment would incorporate standards for disposal of nonhazardous DWTR that contain naturally occurring radioactive material (NORM) into a salt cavern in horizontally bedded or non-domal salt. A Radioactive Materials License is required for disposal of DWTR containing NORM that does not meet an exempted level for its radiological content.

Notice of the proposed amended UIC general permit and public meeting was published in six major Texas newspapers and in the *Texas Register* on July 13, 2012 (*37 TexReg 5368*). A public meeting for the proposed amended general permit was held at TCEQ Headquarters on August 14, 2012. The public comment period ended at the close of the meeting. No comments were received during the comment period.

II. Executive Director's Recommendation

The Executive Director has made a preliminary decision that this general permit, if reissued, meets all statutory and regulatory requirements. It is proposed that the general permit be issued to expire ten years from date of issuance in accordance with the requirements of Texas Water Code (TWC) §27.025(h) and 30 Texas Administrative Code (TAC) §331.204(a).

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Amendment and Reissuance of UIC General Permit No. WDWG010000**

III. Permit Applicability

- A. This general permit specifies certain wastes which may be authorized for disposal in a Class I well under the general permit, and it lists wastes that are not eligible for general permit coverage. It also states conditions under which waste disposal must be authorized by an individual permit.
- B. The amended general permit would authorize injection of the following waste streams into a Class I well:
 - 1. desalination brine or desalination concentrate defined in 30 TAC §331.2(32)-(33) as "the waste stream produced by a desalination operation containing concentrated salt water, other naturally occurring impurities, and additives used in the operation and maintenance of a desalination operation;" or
 - 2. drinking water treatment residuals (DWTR) defined in 30 TAC §331.2(38) as "materials generated, concentrated or produced as a result of treating water for human consumption." This includes disposal of nonhazardous DWTR that contain NORM into a salt cavern in horizontally bedded or non-domal salt.
- C. The following waste streams are not eligible for injection under the general permit: waste streams other than nonhazardous desalination brine, nonhazardous desalination concentrate, or nonhazardous DWTR; wastes prohibited from injection in 40 CFR Part 148, Subpart B (waste specific prohibitions such as dioxins, etc.); hazardous wastes; radioactive substances, as defined by THSC §401.003(19), except for radioactive substances that are exempt by rule from requirements as provided under THSC §401.106(a), or DWTR containing NORM. An applicant may seek authorization to inject the above-listed wastes under an individual UIC permit, or under the jurisdiction of the Railroad Commission of Texas, and not under this general permit.
- D. This general permit does not authorize the use of nonhazardous brine from a desalination operation or nonhazardous DWTR as an injection fluid for enhanced recovery purposes. That activity is regulated by the Railroad Commission of Texas.
- E. This proposed general permit would expire at midnight ten years after the date of issuance. If before its expiration, the commission proposes to renew this general permit, the general permit remains in effect after the expiration date for those existing permittees covered by the general permit until the date on which the commission takes final action on the proposed permit renewal.
- F. A facility cannot have Class I injection well authorization under both the general permit and an individual permit.

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- G. Facilities currently authorized by a Class I UIC individual permit may be authorized under this general permit if all conditions are met as specified in the general permit and in accordance with 30 TAC Chapter 331 (relating to Underground Injection Control).
- H. Injection of waste eligible for authorization by this general permit may alternatively be authorized by an individual permit according to 30 TAC Chapter 331 (relating to Underground Injection Control).
- I. The executive director may require a person whose authorization to inject or operate an injection well is suspended under the general permit, to apply for and obtain an individual permit.
- J. Waste injection is not eligible for authorization under this general permit where prohibited by any other applicable rules or laws.

IV. Permit Conditions

The general permit provides that, for all phases in the life of a Class I injection well, from construction through post-closure care, the owner or operator must attain a performance standard to prevent the movement of fluids that would result in the pollution of an underground source of drinking water (USDW). For Class I bedded salt cavern disposal wells, the injection wells and their associated caverns are specifically designed, constructed, operated, and closed to contain the waste and prevent the lateral and vertical migration of the waste outside of the cavern. The general permit also requires a permittee to maintain all monitoring and reporting records, including strip charts and records of calibration and maintenance, a waste analysis plan, records of all data used to complete the Notice of Intent (NOI) for authorization under the general permit, reports, maps, drawings, and other documentation required by the general permit for a minimum period of ten years from the date of the record. The records must either be kept on-site or made readily available for review by a representative of the commission upon request. This period may be extended at the request of the executive director.

V. Changes from Existing General Permit

- A. Definitions of bedded salt, bedded salt cavern disposal well and naturally occurring radioactive material have been added by citing rule references for these definitions.
- B. Under abbreviations, acronyms, and symbols, drinking water treatment residuals (DWTR) and naturally occurring radioactive material (NORM) have been added.

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- C. In the introduction to Part II, a statement has been added to clarify that authorization provided under the general permit includes disposal of nonhazardous DWTR that contain NORM into a salt cavern in horizontally bedded or non-domal salt.
- D. Existing Part II, Section F has been re-titled, "Approval of Construction and Completion for Class I Wells Except Salt Cavern Disposal Wells," because this section does not include all the requirements for salt cavern disposal wells.
- E. A new Part II, Section G titled "Approval of Construction and Completion for Class I Bedded Salt Cavern Disposal Wells and Their Associated Caverns" has been added to specify the requirements for these wells. Consequently, the remainder of the sections under Part II have been re-lettered.
- F. Other non-substantive grammatical changes were made for consistency and clarification.

VI. Addresses

Questions concerning this proposed amended general permit should be sent to:

UIC Permits Section
Radioactive Materials Division
Mail Code 233
TCEQ
P.O. Box 13087
Austin, TX 78711-3087
(512) 239-2334

Supplementary information on this Fact Sheet is organized as follows:

- VII. Legal Basis
- VIII. Regulatory Background
- IX. Permit Coverage
- X. General Requirements
- XI. Procedures for Final Decision
- XII. Administrative Record

VII. Legal Basis

Unless the activity is subject to the jurisdiction of the Railroad Commission or authorized by a rule of the commission, TWC §27.011 makes it unlawful to continue utilizing an injection well

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or begin drilling an injection well or converting an existing well into an injection well to dispose of industrial and municipal waste, to extract minerals, or to inject a fluid without first obtaining a permit from the commission. TWC §27.025 allows the commission to issue, amend and renew a general permit to authorize the use of a Class I injection well to dispose of nonhazardous brine from a desalination operation or nonhazardous DWTR. As provided in THSC §361.086, a separate permit is not required for activities authorized by a general permit issued under TWC §27.025. This proposed general permit requires safeguards to protect groundwater and surface water.

VIII. Regulatory Background

- A. The TCEQ issued UIC general permit WDWG010000 on December 15, 2009 to implement rules adopted as a result of House Bill (HB) 2654, 80th Legislature, 2007. HB 2654 and subsequent amended rules effective July 10, 2008 allow the commission to issue, amend and renew a general permit to authorize the use of a Class I injection well to dispose of nonhazardous brine from a desalination operation or nonhazardous DWTR. Currently, five Class I injection wells are authorized under the general permit to be constructed and operated by the San Antonio Water System for disposal of nonhazardous brine from a desalination operation or nonhazardous DWTR.
- B. Amendment of this general permit is being proposed to incorporate standards for disposal of nonhazardous DWTR containing NORM into a bedded salt formation. Prior to completion of recent rulemaking, rules (30 TAC §331.14) effectively prohibited waste disposal in a Class I well by injection into a bedded salt formation. However, TCEQ initiated rulemaking to remove this prohibition and to provide authorization and technical standards for use of a Class I well for disposal of nonhazardous DWTR (including NORM) into a bedded salt formation. Proposed rules were published in the *Texas Register* on February 24, 2012 (37 *TexReg* 1198). The rules were approved for adoption by the TCEQ Commissioners at their July 25, 2012 Agenda meeting. The adopted rules were published in the *Texas Register* on August 10, 2012 (37 *TexReg* 6078). Under the proposed rules, an existing salt cavern well permitted as a Class II well by the Railroad Commission of Texas (RRC) may be converted and permitted for use as a Class I bedded salt cavern disposal well if the requirements of the rules are met.

IX. Permit Coverage

The purpose of the general permit is to provide an option for expedited processing of applications for use of a Class I well for disposal of nonhazardous brine from a desalination

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operation or nonhazardous DWTR, including DWTR containing NORM. To obtain authorization for waste disposal under this general permit, an applicant will need to use the following guidelines.

- A. All applicants seeking authorization to operate one or more Class I injection wells under this general permit must submit a completed NOI for each well on a form approved by the executive director.
- B. To date five wells have been authorized under the UIC general permit. Upon issuance of an amended or renewed general permit, these owners or operators must submit an NOI in accordance with the requirements of the new permit.
- C. Submission of an NOI is an acknowledgment that the conditions of the general permit are applicable to the proposed Class I well operation, and that the applicant agrees to comply with the conditions of the general permit. Following review of the NOI, the executive director either confirms coverage by providing a notification and an identification number to the applicant or notifies the applicant that coverage under this general permit is denied.
- D. Authorization under this general permit is not transferable. If the owner or operator of the regulated entity changes, the present owner and operator must submit a Notice of Termination (NOT), and the new owner and operator must submit an NOI. The NOT and NOI must be submitted not later than 30 days prior to the change in owner or operator status. If the NOT and NOI are submitted as required, there will be no lapse in authorization for this facility.
- E. If the permittee becomes aware that it failed to submit any relevant facts, or submitted incorrect information in an NOI, the correct information must be provided to the executive director in a Notice of Change (NOC) letter within 14 days after discovery. If relevant information provided in the NOI changes (for example, a phone number, map or drawing) an NOC letter must be submitted within 14 days of the change.
- F. A permittee may terminate coverage under this general permit by providing an NOT on a form approved by the executive director. Authorization to inject waste terminates at midnight on the day that an NOT is postmarked for delivery to the TCEQ. An NOT must be submitted within 14 days after the owner or operator of the facility changes, the waste injection becomes authorized under an individual permit, the use of the property changes and is no longer subject to regulation under this general permit, or the waste injection becomes unnecessary, is delayed, or is completed.
- G. The executive director may cancel, revoke, or suspend authorization for waste disposal under this general permit based on a finding of historical and significant

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noncompliance with the provisions of this general permit. Denial of authorization to dispose of waste in a Class I well under this general permit or suspension of a permittee's authorization under this general permit must be done according to commission rules in 30 TAC Chapter 331 Subchapter L (relating to General Permit Authorizing Use of a Class I Injection Well to Inject Nonhazardous Desalination Concentrate or Nonhazardous Drinking Water Treatment Residuals). The executive director must provide written notice to a facility if the executive director denies the facility's NOI or authorization to inject waste under a general permit, including, at a minimum, a brief statement of the basis for this decision.

X. General Requirements

- A. All applicants seeking authorization to operate a Class I injection well under this general permit must submit a completed NOI on a form approved by the executive director. Information to be included in the NOI, including required technical information, is specified in the general permit and is stated in the NOI form and instructions.
- B. The technical information submitted in the NOI must demonstrate that the project will prevent the movement of fluids that could result in the pollution of a USDW and must establish that the applicant's plans and specifications meet all applicable standards, rules and the requirements of the general permit.
- C. The general permit specifies standards substantially equivalent to federal standards for Class I nonhazardous waste wells. Additional standards are specified for Class I bedded salt cavern disposal wells and their associated caverns.
- D. Pre-injection units associated with wells authorized under the general permit will be included in the NOI and authorized under the general permit or under another permit issued by the commission.
- E. A certification statement will be required to certify that the design, construction, operation, maintenance, testing and closure of the well will be conducted in accordance with applicable rules and the terms of the general permit.
- F. The permittee has a duty to comply with all conditions in this general permit and 30 TAC Chapters 305 and 331. Failure to comply with any condition is a violation of the general permit and the statutes under which the general permit was issued. Any violation may be grounds for enforcement action, for terminating coverage under the general permit, or for requiring a permittee to apply for and obtain an individual permit.

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- G. NOIs, NOTs, and NOCs must be signed in accordance with the requirements of 30 TAC §305.44(a) (relating to Signatories to Applications). Plans, reports, and other information requested or required by the executive director must be signed in accordance with the requirements of 30 TAC §305.128 (relating to Signatories to Reports).
- H. The permittee must at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) installed or used by the permittee to achieve compliance with the permit conditions. Proper operation and maintenance also includes adequate laboratory and process controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the permit conditions.
- I. All monitoring and reporting records, including strip charts and records of calibration and maintenance, records of all data used to complete the NOI for authorization under this general permit, reports, maps, drawings, and other documentation required by this general permit must be maintained for a minimum period of ten years from the date of the record and either be kept on-site or made readily available for review by an authorized representative of the commission upon request. This period may be extended at the request of the executive director.
- J. At the request of the executive director, the permittee must furnish any information necessary to determine whether cause exists for revoking, suspending, or terminating authorization under this permit. The requested information must be provided within a reasonable time frame and in no case later than 30 days from the date of the request. Any noncompliance or any required information not submitted or submitted incorrectly must be reported to the executive director as promptly as possible.
- K. At various times the permittee is required to collect and analyze samples and submit reports of the results of their analysis to TCEQ. To ensure the quality of the samples obtained by the permittee, the permittee is required to have in place a quality assurance/quality control program consistent with the TCEQ's EPA-approved "Quality Assurance Project Plan for Environmental Monitoring and Measurement Activities Relating to the Resource Conservation and Recovery Act (RCRA) & Underground Injection Control (UIC)" (TCEQ QAPP). Additionally, pursuant to state law, the permittee is subject to administrative, civil, and criminal penalties, for knowingly making any false statement, representation, or certification on any report, record, or document submitted or required to be maintained by the permit.

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1. Samples required by this general permit must be collected and measurements must be taken at times and in a manner so as to be accurate and representative of the monitored activity. All waste analyses utilized for waste identification or verification and other analyses for environmental monitoring must be performed in accordance with methods specified in the current editions of EPA SW-846, ASTM or other methods accepted by the TCEQ.
 2. The permittee must ensure that properly trained and authorized personnel monitor and sample the waste water related to any permitted activity.
 3. All analytical data produced in compliance with the monitoring and testing requirements under this general permit must be generated by a lab that the Texas Laboratory Accreditation Program (TLAP) has accredited under the National Environmental Laboratory Accreditation Conference (NELAC) standard for matrices, methods, and parameters of analysis unless there is a TCEQ-approved exception.
- L. A person must include with the NOI requesting coverage under the terms of a general permit and with each NOC a fee of \$100 for each disposal well. A fee is not required for submission of an NOT.
- M. A person authorized by a general permit must pay annual facility and waste management fees according to Chapter 335, Subchapter J of this title (relating to Hazardous Waste Generation, Facility and Disposal Fee System) unless specified in the general permit. These fees are consistent with fees charged for Class I wells authorized by an individual permit.
- N. The applicant will assure, in accordance with 30 TAC Chapter 37, Subchapter Q (relating to Financial Assurance for Underground Injection Control Wells), the resources necessary to close, plug and abandon the well(s) proposed to be authorized under the general permit. The amount for financial assurance and the means by which financial assurance will be secured must be provided in the NOI.
- O. The executive director, or duly authorized representative, may notify the permittee at any time that the written operating record, waste analysis plan, engineering plan, or closure plan does not meet one or more of the minimum requirements of the general permit. Such notification must identify those provisions of the general permit that are not being met and must identify which provisions require modifications in order to meet the minimum requirements of the general permit. Within thirty (30) days of such notification, the permittee must make the required changes and must submit to the TCEQ a written certification that the requested changes have been made.

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- P. The general permit also requires that the permittee amend the NOI by submitting an NOC whenever there is a change in the information submitted in the NOI; if the design, construction, completion, operation, testing or closure of the well are not effective in preventing the movement of fluids that could result in the pollution of a USDW; or following written notification from the executive director that the technical report does not meet one or more of the minimum requirements of the general permit.
- Q. The permittee is subject to administrative, civil, and criminal penalties, as applicable, under Chapter 7 of the TWC.

XI. Procedures for Final Decision

- A. According to 30 TAC §331.202, when the amended general permit is proposed, notice must be published in the *Texas Register* and in at least one newspaper of statewide or regional circulation. The commission may publish notice in additional newspapers of statewide or regional circulation. Mailed notice must also be provided to the following:
 - 1. the county judge of the county or counties in which permittees under the general permit could be located;
 - 2. persons who filed public comment or request for a public meeting on or before the deadline for filing public comment or request for a public meeting; and
 - 3. any other person the executive director or Chief Clerk may elect to include.
- B. After notice of the general permit is published in the *Texas Register* and the newspaper(s), the public will have 30 days to provide public comment on the proposed general permit.
- C. Any person, agency, or association may make a request for a public meeting on the proposed general permit to the executive director of the TCEQ before the end of the public comment period. A public meeting will be granted when the executive director or commission determines, on the basis of requests, that a significant degree of public interest in the proposed amended general permit exists. A public meeting is intended for the taking of public comment, and is not a contested case proceeding under the Administrative Procedure Act. The executive director may call and conduct public meetings in response to public comment.
- D. If the executive director calls a public meeting, the commission will give notice of the date, time, and place of the meeting, as required by 30 TAC §§39.11(7) and 331.202(d). The executive director must prepare a response to all significant public comments on the proposed amended general permit raised during the public

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comment period. The executive director must make the response available to the public. The general permit will then be filed with the commission to consider final authorization of the permit. The executive director's response to public comment must be made available to the public and filed with the chief clerk at least ten days before the commission acts on the general permit.

- E. The general permit, and wells authorized under the general permit, are not subject to the opportunity for a contested case hearing, as long as all requirements for a Class I injection well permit are met according to 30 TAC §§50.113(d), 55.101(f) and 55.201(i). Public notice of, and the opportunity to comment on, the general permit is not affected.

XII. Administrative Record

The following section is a list of the fact sheet citations to applicable statutory or regulatory provisions and appropriate supporting references.

- A. Texas Water Code
Sections 27.011 and 27.025
- B. Texas Health and Safety Code
Sections 361.086, 401.003 and 401.106
- C. TCEQ Rules
30 TAC Chapters 37, 39, 50, 55, 305 and 331
- D. 40 Code of Federal Regulations
Chapters 148



TCEQ DOCKET NO. 2012-0640-UIC
CLASS I UIC GENERAL PERMIT
NO. WDWG010000

This permit supersedes and
replaces UIC General Permit
WDWG010000 issued on
December 15, 2009.

Texas Commission on Environmental Quality

P.O. Box 13087
Austin TX 78711-3087

General Permit to Dispose of Nonhazardous Brine from a Desalination Operation or Nonhazardous Drinking Water Treatment Residuals into a Class I Well

under provisions of
Chapter 27 of the Texas Water Code
and 30 Texas Administrative Code Chapter 331

Operators of Class I wells located in the state of Texas may inject nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals according to standards, monitoring requirements and other conditions set forth in this general permit, as well as the rules of the Texas Commission on Environmental Quality (TCEQ), the laws of the State of Texas, and other orders of the TCEQ. This general permit meets the Safe Drinking Water Act and the Texas Water Code requirements for the protection of human health and the environment. Authorization for the use of an injection well under this general permit does not confer a vested right. This general permit does not authorize any invasion of rights and does not authorize any violation of federal, state, or local laws and regulations. The issuance of this general permit does not grant to the owner or operator the right to use private or public property. It is the responsibility of the owner or operator to acquire property rights as necessary to conduct the permitted activities.

This general permit and the authorization contained herein shall expire at midnight ten years after the date of issuance.

ISSUED AND EFFECTIVE DATE:

For the Commission

**TCEQ General Permit Number WDWG010000
Relating to Disposal of Nonhazardous Brine
from a Desalination Operation or Nonhazardous
Drinking Water Treatment Residuals into a Class I Well**

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Part I. Definitions and Terminology

Section A. Definitions

All definitions in Section 27.002 of the Texas Water Code (TWC) and 30 Texas Administrative Code (TAC) Chapters 3, 37, 281, 305, 331 and 335 shall apply to this permit and are incorporated by reference. For convenience, some specific definitions of words or phrases used in this permit are listed as follows:

Applicant--See 30 TAC §3.2

Bedded salt--See 30 TAC §3.2

Bedded salt cavern disposal well--See 30 TAC §3.2

Class I nonhazardous industrial solid waste--See Texas Health and Safety Code (THSC) §361.003.

Commission--See 30 TAC §3.2

Desalination brine--See 30 TAC §331.2

Desalination concentrate--See 30 TAC §331.2

Desalination operation--See 30 TAC §331.2

Drinking water treatment residuals--See 30 TAC §331.2

Enhanced oil recovery project (EOR)--See 30 TAC §331.2

Executive Director--See 30 TAC §3.2

General permit--See Texas Water Code (TWC), §27.025 and 30 TAC §331.2

Hazardous waste--See 30 TAC §335.1

Individual permit--See 30 TAC §331.2

Industrial solid waste--See THSC §361.003

Municipal solid waste--See THSC §361.003

Naturally occurring radioactive material--See THSC §401.003

Notice of Change (NOC)--See 30 TAC §331.2

Notice of Intent (NOI)--See 30 TAC §331.2

Notice of Termination (NOT)--A written submittal to the executive director from an owner or operator authorized under a general permit requesting termination of coverage under this general permit.

Operator--See 30 TAC §335.1

Owner--See 30 TAC §335.1

Public water system--See 30 TAC §331.2

Radioactive substance--See THSC §401.003

Solid waste--See 30 TAC §335.1

Section B. Commonly Used Abbreviations, Acronyms and Symbols

CFR	Code of Federal Regulations
DWTR	Drinking Water Treatment Residuals
EOR	Enhanced Oil Recovery
EPA	United States Environmental Protection Agency
NOC	Notice of Change
NOI	Notice of Intent
NORM	Naturally Occurring Radioactive Material
NOT	Notice of Termination (to terminate coverage under general permit)
TAC	Texas Administrative Code
TCEQ	Texas Commission on Environmental Quality
THSC	Texas Health and Safety Code
TWC	Texas Water Code
UIC	Underground Injection Control
USDW	Underground Source of Drinking Water
§	Section
§§	Sections

Part II. Permit Applicability and Coverage

This general permit provides authorization for use of a Class I injection well to inject nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals. This includes disposal of nonhazardous drinking water treatment residuals that contain naturally occurring radioactive material into a salt cavern in horizontally bedded or non-domal salt. The terms "nonhazardous" and "hazardous" in this general permit are used in the context of solid waste as defined in 30 TAC §335.1. This general permit contains requirements applicable to all Class I wells that are eligible for coverage under the general permit.

Section A. Waste Eligible to be Injected under the General Permit

Only nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals not listed under paragraph B.2. below, may qualify for disposal into a Class I well under the general permit. To be

classified as nonhazardous, the waste must not meet any of the criteria for hazardous waste as specified in 40 Code of Federal Regulations (CFR) Part 261 (relating to Identification and Listing of Hazardous Waste) and 30 TAC Chapter 335 Subchapter R (relating to Waste Classification). If the waste is not classified as hazardous according to state and federal rules, it is considered nonhazardous.

Section B. Limitations on Coverage

1. Waste injection is not eligible for authorization under this general permit where prohibited by any other applicable rules or laws.
2. Waste streams prohibited from injection under the general permit include, but are not limited to:
 - a. waste streams other than nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals;
 - b. wastes prohibited from injection in 40 CFR Part 148, Subpart B (relating to Prohibitions on Injection);
 - c. hazardous wastes as defined under 40 CFR §261.3(a) through (d), issued pursuant to the Resource Conservation and Recovery Act and the Hazardous and Solid Waste Amendments, which are regulated by the commission as authorized by the United States Environmental Protection Agency (EPA), including but not limited to any listed hazardous waste or a waste derived from the treatment, storage or disposal of a listed hazardous waste;
 - d. radioactive substances, as defined by Texas Health and Safety Code (THSC) §401.003(19), except for drinking water treatment residuals containing NORM or radioactive substances that are exempt by rule from requirements as provided under THSC §401.106(a). Specific radioactive materials prohibited from injection include, but are not limited to:
 - i. any by-product material as defined by THSC §401.003(3);
 - ii. any low-level radioactive waste as defined by THSC §401.004;
 - iii. any oil and gas NORM waste as defined by THSC §401.003(27);
 - iv. any special nuclear material as defined by THSC §401.003(24);and
 - e. waste streams associated with the exploration, development, or production of oil, gas and geothermal resources, and other wastes regulated by the Railroad Commission of Texas, except such waste

streams authorized for injection and disposal by a Class II permit issued by the Railroad Commission of Texas.

3. An applicant seeking a permit, or an owner or operator with a Class I injection well authorized under a general permit, that requests injection of any of the wastes listed in Section B of this Part must seek authorization under 30 TAC Chapter 331 for an individual Underground Injection Control (UIC) permit, or authorization under the jurisdiction of the Railroad Commission of Texas, and not under this general permit.
4. This general permit does not authorize the use of nonhazardous brine from a desalination operation or nonhazardous drinking water treatment residuals as an injection fluid for enhanced recovery purposes. That activity is regulated by the Railroad Commission of Texas.
5. The executive director may cancel, revoke, or suspend authorization to inject waste under this general permit based on a finding of historical and significant noncompliance with the provisions of this general permit. Denial of authorization to dispose of waste in a Class I well under this general permit or suspension of an owner or operator's authorization under this general permit shall be done according to commission rules in 30 TAC Chapter 331 Subchapter L (relating to General Permit Authorizing Use of a Class I Injection Well to Inject Nonhazardous Desalination Concentrate or Nonhazardous Drinking Water Treatment Residuals).

Section C. Obtaining Authorization

1. Submission of a Notice of Intent (NOI) is an acknowledgment that the conditions of this general permit are applicable to the proposed waste injection, and that the applicant agrees to comply with the conditions of this general permit.
2. For all wells, authorization begins upon issuance by the TCEQ of written acknowledgment of both the Notice of Intent and demonstration of financial assurance.
3. All applicants seeking authorization to operate a Class I injection well under this general permit must submit a completed NOI conforming with a form and instructions approved by the executive director. The NOI shall, at a minimum, include:
 - a. legal name (as filed with the Texas Secretary of State), address and contact information for the facility, operator and owner;
 - b. location of the injection well activity including the latitude and longitude of the proposed well;

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- c. ownership status of the facility (public, private, etc.);
- d. size of the facility and a general description of the nature of the business including Standard Industrial Classification (SIC) and North American Industry Classification System (NAICS) codes which best reflect the principal products or services provided by the facility;
- e. type of well (industrial, municipal, etc.) and whether it is a new or existing (conversion) well;
- f. for existing wells, the authorization status of the well (active, inactive or terminated permit or authorization);
- g. whether the facility is located on Indian lands;
- h. TCEQ Solid Waste Registration Number;
- i. a listing of all existing, pending, interim status, or permit-by-rule State and/or Federal permits, licenses or construction approvals which pertain to pollution control or industrial solid waste management activities conducted by or existing at the facility;
- j. public interest demonstration, including the compliance history;
- k. letter from the Railroad Commission of Texas stating that the drilling of a disposal well and the injection of the waste into the subsurface stratum selected for disposal will not endanger or injure any oil or gas formation;
- l. signature page;
- m. certification statement (to confirm, in detail, responsibility for the facility to be constructed and operated in accordance with the requirements of this UIC general permit); and
- n. technical report, including
 - i. a topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, and other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant within a quarter mile of the facility property boundary;
 - ii. area of review;

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- iii. corrective action plan and well data;
 - iv. maps and cross sections of underground sources of drinking water (USDWs);
 - v. maps and cross sections of the geologic structure of the area;
 - vi. well design and construction procedures;
 - vii. formation testing and stimulation program;
 - viii. injection procedures and operating data (injection rate, volume, pressure, annulus fluid, etc.);
 - ix. chemical, physical, radiological and biological characteristics of the waste;
 - x. contingency procedures for well failures and shut-ins;
 - xi. monitoring program (mechanical integrity testing, monitoring and recording devices, sampling frequency, parameters measured, etc.);
 - xii. plugging and abandonment plan for the well including a cost estimate; and
 - xiii. pre-injection units, if not authorized under another TCEQ permit.
4. The technical information submitted in the NOI (as described in the NOI form and instructions) must demonstrate that the project will prevent the movement of fluids that could result in the pollution of an underground source of drinking water (USDW) and must establish that the applicant's plans and specifications meet all applicable standards, rules and the requirements of the general permit. The technical reports shall:
- a. be prepared in accordance with good engineering and geoscience practices, signed and sealed by a licensed Texas professional engineer or licensed Texas professional geoscientist, as appropriate, and in conformance with the Texas Engineering Practice Act and the Texas Geoscience Practice Act and the licensing and registration boards under these acts;
 - b. include plans for design, construction, completion, operation, waste analysis, testing and closure of the Class I injection well to prevent the movement of fluids that could result in the pollution of a USDW;
 - c. describe and ensure the implementation of practices which are to be used to assure compliance with the limitations and conditions of this permit;

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- d. include all information required in the NOI form and instructions;
 - e. be organized and labeled consistent with the organization of the NOI;
and
 - f. identify specific individual(s) responsible for development, implementation, operation, maintenance, inspections, recordkeeping, and revision of the technical report. The activities and responsibilities of the technical report personnel shall address all aspects of the facility's technical report.
5. An NOI shall be signed in accordance with 30 TAC §305.44 (relating to Signatories to Applications).
 6. Following review of the NOI, the executive director shall either acknowledge coverage by providing an identification number to the applicant or notify the applicant that coverage under this general permit is denied.
 7. A copy of the NOI, along with any correspondence from the executive director acknowledging the NOI, shall be retained at the facility site and kept with other records related to authorization under this general permit at all times during operation of the authorized well and for a period of three years following the completion of any plugging and abandonment procedures or termination of authorization under the general permit.
 8. Existing Class I wells authorized under the expiring general permit are required to submit a new NOI within 90 days after renewal of the general permit to continue authorization.
 9. Authorization under this general permit is not transferable. A transfer of operational control includes changes to the structure or business organization of a company, such as changing from a partnership to a corporation, or changing to a different corporation type such that a different filing (or charter) number is established with the Texas Secretary of State. Any change in an owner or operator's charter number, as registered with the Texas Secretary of State, is considered a change in ownership of the company and requires the new owner and operator to apply for permit coverage as stated below, including providing financial assurance coverage. If the owner or operator of the regulated entity changes, the present owner and operator must submit a Notice of Termination (NOT), and the new owner and operator must submit a new NOI. The NOT and NOI must be submitted not later than 30 days prior to the change in owner or operator status. If the NOT and NOI are submitted as required under this provision, there will be no lapse in authorization for

this facility. An NOT is not required for a company name change without a change in operational control or business organization as long as the secretary of state can verify that a change in name alone has occurred.

Section D. Amending the Notice of Intent (NOI)

1. The owner or operator shall revise the NOI by submitting a Notice of Change (NOC) to the same address as the NOI before any change is made in the design, construction or completion of the Class I injection well.
2. An NOC letter must be submitted with supplemental or corrected information within 14 days following:
 - a. the time when the operator becomes aware that the design, construction, completion, operation, testing or closure of the well are not effective in preventing the movement of fluids that could result in the pollution of a USDW;
 - b. the time when the owner or operator becomes aware that he/she failed to submit any relevant facts in an NOI, or submitted incorrect information in an NOI or in any report to the executive director; or
 - c. the time when relevant facts in the NOI change (for example, a phone number, map or drawing).

Section E. Financial Assurance Prior to Commencement of Well Construction

1. For new wells, evidence of financial assurance shall be submitted at least 60 days prior to commencement of drilling operations. All financial assurance mechanisms shall be in effect before commencement of drilling operations.
2. For converted wells and other previously constructed wells, the owner or operator shall submit an acceptable financial assurance mechanism along with the Notice of Intent.

Section F. Approval of Construction and Completion for Class I Wells Except Bedded Salt Cavern Disposal Wells

1. A new injection well may not commence injection until construction is complete; and
 - a. The owner or operator has submitted notice of completion of construction to the executive director; and
 - b. the executive director has inspected or otherwise reviewed the new injection well and finds it is in compliance with the conditions of the permit; or

- c. the owner or operator has not received notice from the executive director of his intent to inspect or otherwise review the new injection well within 13 days of the date of the notice in 30 TAC §331.65(e)(1)(A), in which case prior inspection or review is waived and the owner or operator may commence injection. The executive director shall include in his notice a reasonable time period in which he shall inspect the well.
2. Within 90 days after the completion or conversion of the well, the owner or operator shall submit a completion report to the executive director. The report must include:
 - a. all available logging and testing program data on the well;
 - b. a demonstration of mechanical integrity;
 - c. the anticipated maximum pressure and flow rate at which the owner or operator will operate;
 - d. the results of the formation testing program;
 - e. the actual injection procedure;
 - f. the compatibility of injected waste with fluids in the injection zone and minerals in both the injection zone and the confining zone; and
 - g. the status of corrective action on defective wells in the area of review.
3. The executive director may approve or disapprove the construction and completion for an injection well or project. In making a determination whether to grant approval of construction and completion, the executive director shall review the project for compliance with standards in 30 TAC §331.45(2).

Section G. Approval of Construction and Completion for Class I Bedded Salt Cavern Disposal Wells and Their Associated Caverns

1. Before beginning cavern construction and operation, the permittee shall obtain written approval from the executive director which states that the well construction is in compliance with the applicable provisions of the permit. To obtain approval, the permittee shall submit to the executive director reports and certifications in accordance with §331.243(k) within 90 days of completion of well construction.
2. Within 30 days of completion of the bedded salt cavern construction stage the operator shall submit a report with the results of all tests regarding cavern integrity.

3. Within 90 days of completion of cavern construction, the permittee shall provide notification to the executive director which states that the cavern construction is in compliance with the applicable provisions of the permit. The permittee shall submit to the executive director reports and certifications in accordance with §331.244(f)(2).

Section H. Termination of Coverage

1. An owner or operator shall terminate coverage under this general permit through the submittal of an NOT, on a form approved by the executive director, when one of the following conditions occurs:
 - a. owner or operator of the facility changes;
 - b. the injection of waste becomes authorized under an individual permit;
 - c. the use of the property changes and is no longer subject to regulation under this general permit; or
 - d. the waste injection becomes unnecessary or is completed.
2. Authorization to inject waste under the general permit terminates at midnight on the day that an NOT is postmarked for delivery to the TCEQ except in the case of a permit transfer. Please refer to Part II.C.9.

Section I. Denial of Authorization

1. The executive director shall deny authorization to inject waste under an existing general permit for reasons stated in 30 TAC §331.203(c)(2).
2. The executive director may deny authorization to inject or operate an injection well under an existing general permit for reasons including, but not limited to those stated in 30 TAC §331.203(c)(3).
3. As stated in 30 TAC §331.203(c)(1), the executive director shall provide written notice to a facility if the executive director denies the facility's NOI or authorization to inject waste under a general permit, including, at a minimum, a brief statement of the basis for this decision.

Section J. Suspension of Authorization

1. The executive director shall provide written notice to an owner or operator that the executive director intends to suspend the owner or operator's authority to inject waste under a general permit, including:
 - a. a brief statement of the basis for this decision;
 - b. a statement of whether the owner or operator shall immediately cease injection of waste;

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- c. a statement setting the deadline for filing the application for an individual permit; and
 - d. a statement that the owner or operator's waste injection authorization under the general permit shall be suspended on the effective date of the commission's action on the individual permit application unless the commission expressly provides otherwise, or unless the executive director has required the owner or operator to immediately cease injection of waste.
 2. If an owner or operator's authorization under a general permit is suspended, the owner or operator shall immediately cease waste injection.
 3. The executive director may require the person whose authorization to inject or operate an injection well is suspended to apply for and obtain an individual permit.
 4. After providing written notice to the owner or operator, the executive director shall suspend authorization to inject or operate an injection well under an existing general permit for the following reasons:
 - a. the quantity of waste, the type of waste, or the type of operation does not comply with the general permit;
 - b. the owner or operator of the facility:
 - i. has failed to pay any portion of a delinquent fee or charge assessed by the executive director;
 - ii. is not in compliance with all requirements, conditions, and timeframes specified in an unexpired commission final enforcement order relating to the activity regulated by the general permit: or
 - iii. is subject to an unexpired enforcement order that requires the facility to comply with operating conditions different from or additional to the requirements of the general permit; and
 - c. an application is not received by the deadline specified by rule or in the general permit.
 5. After providing written notice to the owner or operator, the executive director may suspend authorization to inject waste under an existing general permit for reasons including, but not limited to, the following:
 - a. a change has occurred in the availability of demonstrated technology or practices for the prevention, control, or abatement of pollutants

- applicable to the injection necessary to be implemented to meet applicable federal or state standards;
- b. the owner and/or the operator of the facility has not filed an NOI in accordance with 30 TAC §305.43;
 - c. circumstances have changed since the time of the NOI so that injection of waste is no longer appropriately controlled to meet applicable standards under the general permit, or either a temporary or permanent cessation of the authorized waste injection is necessary;
 - d. the facility has been determined by the executive director to have been out of compliance with any rule, order, or permit of the commission, including nonpayment of fees assessed by the executive director; and
 - e. the owner or operator of the facility is the subject of an unresolved agency enforcement action in which the executive director has issued written notice that enforcement has been initiated.

Section K. Authorization under an Underground Injection Control (UIC) Individual Permit

1. Injection of waste eligible for authorization by this general permit may alternatively be authorized by an individual Class I UIC permit according to 30 TAC Chapter 331 (relating to Underground Injection Control).
2. When an individual permit is issued for injection of waste that is currently authorized under this general permit, the owner or operator shall terminate coverage under this general permit and shall submit an NOT to the executive director. The authorization under this general permit will be terminated when the executive director has issued the individual permit and received the NOT.

Section L. Authorization of an Individually-Permitted Well under the UIC General Permit

A facility shall not have Class I injection well authorization under both an individual permit and the general permit. Waste injection at facilities currently authorized by a Class I UIC individual permit may only be authorized under this general permit if the following conditions are met:

1. the injection of waste meets the applicability and eligibility requirements for coverage under this general permit;
2. the executive director has determined that continued coverage under an individual permit is not required based on consideration of the quantity of waste to be injected, type of waste, type of operation, injection well design,

- injection well construction, compliance history, or other site-specific considerations;
3. no previous application or permit for waste injection by the applicant has been denied, terminated, or revoked by the executive director as a result of an enforcement action or concerns about movement of fluids along the borehole into or between USDWs or freshwater aquifers. The executive director may provide a waiver to this provision based on new circumstances at the facility, or if there is a new facility owner or operator; and
 4. the applicant requests cancellation of authorization under the existing UIC individual permit within 30 days after receiving notice from the executive director that authorization under this general permit is effective.

Section M. Permit Renewal and Expiration

1. Permit term. This general permit is effective from the date of issuance for a term of ten years, unless otherwise amended, revoked, or cancelled by the commission prior to that date. Authorizations for waste injection under the provisions of this general permit may be issued until the expiration date of the permit. This general permit may be amended, revoked, or cancelled by the commission after notice and comment as provided by 30 TAC §§331.202 and 331.204.
2. Amended general permit. Upon issuance of an amended general permit by the TCEQ, all owners or operators covered under the general permit shall submit an NOI in accordance with the requirements of the new permit or obtain an individual permit.
3. Permit renewal. If the commission proposes to renew a general permit before its expiration, the general permit shall remain in effect after the expiration date for those existing owners and operators covered by the general permit until the date on which the commission takes final action on the proposed permit renewal. No new NOIs will be accepted or new authorizations honored for authorization under the general permit after the expiration date.
4. Application following renewal. Upon issuance of a renewed general permit, all facilities, including those covered under the expired general permit, will be required to submit an NOI according to the requirements of the new general permit, or obtain an individual permit.
5. Expiration without renewal. According to 30 TAC §331.204(d), if the commission has not proposed to renew a general permit at least 90 days before its expiration date, owners and operators authorized under the

general permit shall submit an application for an individual permit before the general permit's expiration. If an application for an individual permit is submitted before the general permit's expiration, authorization under the expired general permit remains in effect until the issuance or denial of an individual permit.

Part III. Technical Standards and Requirements

The owner or operator must comply with the following standards and requirements for injection of waste into a Class I well under the general permit:

1. **Construction Standards.** All Class I wells shall be designed, constructed, and completed to prevent the movement of fluids that could result in the pollution of an underground source of drinking water (USDW).
2. **Operating Requirements (Performance standard).** All Class I wells shall be operated to prevent the movement of fluids that could result in the pollution of a USDW and to prevent leaks from the well into unauthorized zones.
3. **Public Interest.** A well authorized under the general permit must be in the public interest with respect to criteria stated in TWC §27.051 and 30 TAC §331.121(b).
4. **Siting.** Wells shall be sited in such a fashion that they inject into a formation which is beneath the lowermost formation containing, within one quarter mile of the well bore, a USDW.
5. **Area of Review.** The area of review shall be determined by a radius of 1/4 mile from the proposed or existing wellbore, or the area within the cone of influence, whichever is greater.
6. **Defective Wells in Area of Review.** For wells within the area of review which penetrate the injection zone but are not properly completed or plugged, corrective action must be taken.
7. **Drilling and Completion.** The drilling and completion of the well shall be done in accordance with the detailed in the plans and specifications of the technical report and 30 TAC §331.62(b), and for bedded salt cavern disposal wells §331.243.
8. **Casing and Cementing.** In accordance with 30 TAC §331.62(b)(2), and for bedded salt cavern disposal wells, §331.243(d)(1), wells shall be cased and cemented to prevent the movement of fluids into or between underground sources of drinking water. The casing and cement used in the construction of each newly drilled well shall be designed for the life expectancy of the well. In determining and specifying casing and cementing requirements,

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- the factors listed in 30 TAC §331.62(b)(2)(A)-(G), and for bedded salt cavern disposal wells, §331.243(d)(1)(A)-(K) shall be considered.
9. **Tubing and Packer.** Injection wells, except those municipal wells injecting noncorrosive wastes, shall inject fluids through tubing with a packer set immediately above the injection zone. The tubing, packer, and fluid seal shall be designed for the expected service. The factors listed in 30 TAC §331.62(b)(3)(A)-(B), and for bedded salt cavern disposal wells, §331.243(e)(2) shall be considered.
 10. **Annular Fluid.** The annulus between the tubing and the long string of casings shall be filled with a fluid approved by the executive director and a pressure, also approved by the executive director, shall be maintained on the annulus in accordance with 30 TAC §331.63(n), and for bedded salt cavern disposal wells, §331.245(a)(4).
 11. **Logging and Testing.** Appropriate logs and other tests shall be conducted during the drilling and construction of a new well. A descriptive report interpreting the results of such logs and tests shall be prepared by a knowledgeable log analyst and submitted to the executive director. At a minimum, such logs and tests shall include those required under 30 TAC §331.62(b)(4), and for bedded salt cavern disposal wells, §331.243(g).
 12. **Injection Formation Properties.** In accordance with 30 TAC §331.62(b)(5), at a minimum, the following information concerning the injection formation shall be determined or calculated for a new well:
 - a. fluid pressure;
 - b. temperature;
 - c. fracture pressure;
 - d. other physical, chemical and radiological characteristics of the injection matrix; and
 - e. physical and chemical characteristics of the formation fluids.
 13. **Injection Pressure.** For wells not located in non-domal or bedded salt, except during well stimulation, the injection pressure at the wellhead shall not exceed a maximum which shall be calculated so as to assure that the pressure in the injection zone during injection does not initiate new fractures or propagate existing fractures in the injection zone, initiate new fractures or propagate existing fractures in the confining zone, or cause movement of fluid out of the injection zone that may pollute USDWs or surface water.

14. **Bedded Salt Cavern Disposal Wells.** For bedded salt cavern disposal wells, a maximum allowable operating pressure and test pressure shall not exceed 0.8 pounds per square inch per foot of depth measured at the higher elevation of either the long string casing seat or the highest interior elevation of the cavern roof, but in no case shall it disrupt the bond between the salt, cement, and the casing seat, initiate new fractures or propagate existing fractures in the cavern or the confining zone, or cause movement of fluid or waste out of the injection zone. A minimum operating pressure that is protective of bedded salt cavern integrity shall be maintained.
15. **Annular Injection.** Injection between the outermost casing protecting USDWs and fresh or surface water and the wellbore is prohibited.
16. **Monitoring and Testing.** Monitoring and testing shall include the activities specified in 30 TAC §331.64(k), and for bedded salt cavern disposal wells and their associated caverns, §331.246.
17. **Reporting.** The owner or operator shall comply with requirements for completion reports, operating reports and annual reports as specified in 30 TAC §331.65(e), and for bedded salt cavern disposal wells, as specified in §331.247.
18. **Recordkeeping.** The owner or operator shall keep complete and accurate records as required by 30 TAC §305.157 and 30 TAC Chapters 331 and 335. The owner or operator shall furnish to the executive director, upon request and within a reasonable time frame, and in no case later than 30 days from the date of the request, copies of records required to be kept by the permit.
19. **Closure Standards.** The well shall be closed in accordance with the applicable standards as specified in 30 TAC §331.46(a). Bedded salt cavern disposal wells and their associated caverns shall be closed in accordance with §331.250. The obligation to implement the closure plan survives the termination of a permit or the cessation of injection activities. The requirement to maintain and implement an approved plan is directly enforceable regardless of whether the closure plan requirement is a condition of the permit.
20. **Corrective Action.** The owner or operator may perform corrective action as is necessary to prevent the movement of fluid into or between USDWs caused by the lack of mechanical integrity. The owner or operator may resume injection upon receipt of written notification from the executive director that the owner or operator has demonstrated mechanical integrity under 30 TAC §331.64(k)(4).

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21. Pre-injection Units. According to 30 TAC §331.2, pre-injection units are defined as the onsite above-ground appurtenances, structures, equipment, and other fixtures including the injection pumps, filters, tanks, surface impoundments, and piping for wastewater transmission between any such facilities and the well that are or will be used for storage or processing of waste to be injected, or in conjunction with an injection operation. Pre-injection units for wells authorized under this general permit must be authorized through either this general permit or another permit or authorization issued by the commission.
- a. No authorization of a pre-injection unit shall be approved, and authorization may be denied or revoked, if:
 - i. a pre-injection unit causes or allows the release of fluid that would result in the pollution of underground sources of drinking water, fresh water, or surface water; or
 - ii. a pre-injection unit poses an immediate threat to public health or safety.
 - b. As provided in the NOI form and instructions, the owner and operator shall:
 - i. identify pre-injection units associated with Class I well(s) to be authorized under this general permit;
 - ii. state the authorization status of the pre-injection units (either this general permit or another permit issued by the commission); and
 - iii. for pre-injection units to be authorized under this general permit, submit information for each pre-injection unit demonstrating compliance with the applicable design criteria of 30 TAC §§331.5(c), 331.17(d) and 331.18(b)(6).
 - c. Unless subject to a radioactive materials license issued under 30 TAC Chapter 336, applicants requesting authorization under this general permit for a nonhazardous waste commercial Class I injection well, but who are not required to have a Resource Conservation and Recovery Act (RCRA) permit for the surface facility, must submit form TCEQ-0024, "Application for a Permit to Store, Process or Dispose of Industrial Nonhazardous Solid Waste," to the Waste Permits Division, Industrial and Hazardous Waste Permits Section, Mail Code 130 at the TCEQ address.
 - d. For NORM waste disposal, Class I injection well permitting must be accompanied by an application for a radioactive materials license.

Part IV. Standard Permit Conditions

1. Authorization to inject waste in a Class I well must be obtained prior to the construction of any new waste disposal well facility as stated in 30 TAC §331.7. This authorization may be obtained through either this general permit or an individual permit.
2. Pre-injection units as defined in 30 TAC §331.2 for wells authorized under this general permit must be authorized through either this general permit or another permit issued by the commission.
3. NOIs, NOTs, and NOCs shall be signed in accordance with the requirements of 30 TAC §305.44(a) (relating to Signatories to Applications). Plans, reports, and other information requested or required by the executive director shall be signed in accordance with the requirements of 30 TAC §305.128 (relating to Signatories to Reports).
4. The applicant must provide acceptable financial assurance in accordance with 30 TAC Chapter 37, Subchapter Q (relating to Financial Assurance for Underground Injection Control Wells).
5. The owner or operator has a duty to comply with all conditions in this general permit and 30 TAC Chapters 305, 335 and 331. Failure to comply with any condition is a violation of the general permit and the statutes under which the general permit was issued. Any violation may be grounds for enforcement action, for terminating coverage under this general permit, or for requiring an owner or operator to apply for and obtain an individual permit.
6. It is not a defense for an owner or operator in an enforcement action that it would have been necessary to halt or reduce the permitted waste injection to maintain compliance with the permit conditions.
7. The owner or operator shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) installed or used by the owner or operator to achieve compliance with the permit conditions. Proper operation and maintenance also includes adequate laboratory and process controls, and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems only when necessary to achieve compliance with the permit conditions.
8. All monitoring and reporting records, including strip charts and records of calibration and maintenance, the waste analysis plan, records of all data used to complete the NOI for authorization under this general permit, reports, maps, drawings, and other documentation required by this

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general permit must be maintained for a minimum period of ten years from the date of the record and either be kept on site or made readily available for review by an authorized representative of the commission upon request. This period may be extended at the request of the executive director.

9. The owner or operator shall furnish any information, at the request of the executive director, which is necessary to determine whether cause exists for revoking, suspending, or terminating authorization under this permit. The requested information must be provided within a reasonable time frame and in no case later than 30 days from the date of the request. Any noncompliance or any required information not submitted or submitted incorrectly shall be reported to the executive director as promptly as possible.
10. Inspection and entry shall be allowed under TWC, Chapters 26 and 27 and THSC §361.032. The statement in TWC §26.014 that commission entry of a regulated entity shall occur in accordance with an establishment's rules and regulations concerning safety, internal security, and fire protection is not grounds for denial or restriction of entry to any part of the regulated entity, but merely describes the commission's duty to observe appropriate rules and regulations during an inspection.
11. At various times the permittee is required to collect and analyze samples and submit reports of the results of their analysis to TCEQ. To ensure the quality of the samples obtained by the permittee, the permittee is required to have in place a quality assurance/quality control program consistent with the TCEQ's EPA-approved "Quality Assurance Project Plan for Environmental Monitoring and Measurement Activities Relating to the Resource Conservation and Recovery Act and Underground Injection Control" (TCEQ QAPP). Additionally, pursuant to state law, the permittee is subject to administrative, civil, and criminal penalties, for knowingly making any false statement, representation, or certification on any report, record, or document submitted or required to be maintained by the permit.
 - a. Samples required by this general permit shall be collected and measurements shall be taken at times and in a manner so as to be accurate and representative of the monitored activity. Samples shall be delivered to the laboratory immediately upon collection, in accordance with any applicable analytical method and required maximum holding time. All waste analyses utilized for waste identification or verification and other analyses for environmental monitoring must be performed

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in accordance with methods specified in the current editions of EPA SW-846, American Society for Testing and Materials (ASTM) or other methods accepted by the TCEQ.

- b. The owner or operator shall ensure that properly trained and authorized personnel monitor and sample the wastewater related to any permitted activity.
 - c. Records of monitoring and testing activities must include:
 - i. the date, time, and place of sample or measurement;
 - ii. the identity of any individual who collected the sample or made the measurement;
 - iii. the chain-of-custody procedures used to maintain sample integrity from sample collection to laboratory delivery;
 - iv. the date and time of laboratory analysis;
 - v. the identity of the individual and laboratory who performed the analysis;
 - vi. the technique or method of analysis; and
 - vii. the results of the analysis or measurement, and for wastewater, the quality assurance/quality control records.
12. All analytical data produced in compliance with the monitoring and testing requirements under this general permit must be generated by a lab that the Texas Laboratory Accreditation Program (TLAP) has accredited under the National Environmental Laboratory Accreditation Conference (NELAC) standard for matrices, methods, and parameters of analysis, unless:
- a. the lab is an in-house lab and either the lab performs work for its owner, for another company with a unit located on the same site, or without compensation for a governmental agency or charitable organization, or the lab is in another state and is accredited or inspected by that state;
 - b. the lab is accredited under federal law;
 - c. the data are needed for emergency-response activities and no TLAP-accredited lab is available; or
 - d. the lab provides analytical data for which the TCEQ does not offer accreditation.

13. Authorization under this permit may be suspended or revoked for the reasons stated in 30 TAC §331.203 (relating to Authorizations and Notices of Intent). Notifying the TCEQ of planned changes or an anticipated noncompliance does not stay any permit condition.
14. This permit does not convey any property rights of any sort or any exclusive privilege.
15. The owner or operator is subject to administrative, civil, and criminal penalties, as applicable, under Chapter 7 of the TWC for violations including but not limited to the following:
 - a. violating the TWC Chapters 26 and 27 or applicable rules of the commission or terms of this General Permit;
 - b. falsifying, tampering with, or knowingly rendering inaccurate any monitoring device or method required to be maintained under a permit; or
 - c. knowingly making any false statement, representation, or certification in any record or other document submitted or required to be maintained under a permit, including monitoring reports or reports of compliance or noncompliance.

Part V. Fees

Section A. Application Fees

1. A person shall include with the NOI requesting coverage under the terms of a general permit a fee of \$100 for each disposal well.
2. An owner or operator authorized under this general permit shall include with each NOC a fee of \$100 for each disposal well.
3. A fee is not required for submission of an NOT.

Section B. Annual Fees

A person authorized by a general permit shall pay annual facility and waste management fees according to 30 TAC Chapter 335, Subchapter J (relating to Hazardous Waste Generation, Facility and Disposal Fee System).

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In the Matter of the Amendment and Reissuance of the UIC General Permit to Authorize the Disposal of Nonhazardous Brine from a Desalination Operation or Nonhazardous Drinking Water Treatment Residuals into a Class I Well	§ § § § § § §	Before the Texas Commission on Environmental Quality
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COMMISSION RESOLUTION ISSUING THE AMENDED GENERAL PERMIT

WHEREAS, under Texas Water Code (TWC) Section (§) 27.011, no person may continue utilizing an injection well or begin drilling an injection well or converting an existing well into an injection well to dispose of industrial and municipal waste, to extract minerals, or to inject a fluid without first obtaining a permit from the Texas Commission on Environmental Quality (TCEQ or Commission), unless the activity is subject to the jurisdiction of the railroad commission or authorized by a rule of the commission;

WHEREAS, under TWC § 27.021, the TCEQ has the authority to issue a permit to dispose of brine produced by a desalination operation or of drinking water treatment residuals in a Class I injection well if the applicant for the permit meets all the statutory and regulatory requirements for the issuance of a permit for a Class I injection well;

WHEREAS, under TWC § 27.025, the TCEQ has the authority to issue and amend a general permit authorizing the use of a Class I injection well to inject nonhazardous brine from a desalination operation or to inject nonhazardous drinking water treatment residuals;

WHEREAS, the amended general permit (WDWG010000) that authorizes the use of a Class I injection well to inject nonhazardous brine from a desalination operation or to inject nonhazardous drinking water treatment residuals in the state of Texas was drafted and proposed by the Executive Director and is attached as Exhibit A;

WHEREAS, the amended general permit (WDWG010000) incorporates standards for disposal of nonhazardous drinking water treatment residuals, including disposal of nonhazardous drinking water treatment residuals that contain naturally occurring radioactive material into a salt cavern in horizontally bedded or non-domal salt;

WHEREAS, the TCEQ published notice of the proposed amended general permit in one or more newspapers of statewide or regional circulation and in the Texas Register, which included an invitation for written comments by the public to the commission regarding the proposed amended general permit and which was published no fewer than 30 days before the date of this resolution adopting the general permit;

WHEREAS, the TCEQ received no public comment on the amended general permit;

WHEREAS, the TCEQ held a public meeting on the general permit on August 14, 2012;

WHEREAS, the Executive Director made no changes to the amended general permit as proposed;

WHEREAS, because no comments were received and no changes were made to the amended general permit as proposed, no written response to comments has been prepared;

WHEREAS, the Commission has reviewed in accordance with Texas Natural Resources Code § 33.205 the changes to the general permit for consistency with the Texas Coastal Management Program (CMP) and has found that the amended general permit is consistent with applicable CMP goals and policies and that the general permit will not adversely affect any applicable coastal natural resource areas as identified in the CMP;

WHEREAS, the Commission has determined in accordance with TWC § 27.025(a) that:

(1) the amended general permit has been drafted to ensure that it can be readily enforced and that the commission can adequately monitor compliance with the terms of the general permit; and

(2) the amended general permit will contain proper safeguards to protect ground and surface fresh water from pollution;

THEREFORE, the Commission, by this resolution, hereby amends and reissues the general permit, attached as Exhibit A, as recommended by the Executive Director and as approved by the Commission during its November 14, 2012 public meeting. The Commission, by this resolution, also hereby acknowledges that a Response to Comments is not required because no comments were received and no changes were made to the amended general permit as proposed.

Furthermore, the Commission directs staff to make any non-substantive changes to the amended general permit to satisfy Texas Register format requirements and requests that the amended general permit be made available to the public in accordance with the requirements of 30 TAC § 331.202(e).

It is so **RESOLVED**.

Date of Adoption:

TEXAS COMMISSION ON
ENVIRONMENTAL QUALITY

Bryan W. Shaw, Ph.D., Chairman