



AREA PERMIT NO. UR02827  
Kingsville Dome *In-Situ* Uranium Mine

This permit supersedes and replaces  
UR02827 issued January 11, 1990

**Texas Commission on  
Environmental Quality**  
Austin, Texas

AREA PERMIT to construct and operate  
Class III underground injection wells for  
*In-Situ* recovery of uranium and aquifer  
restoration under Chapter 27 Texas Water Code

- I. Permittee: URI, Inc.  
6950 S. Potomac Street  
Suite 300  
Centennial, CO 80112
- II. Type of Permit: Initial \_\_\_\_\_ Amended  X  Renewal  X
- III. Nature of Business: *In-situ* Uranium Mining
- IV. General Description and Location of Injection Activity

The Kingsville Dome *In-Situ* Uranium Mine (Attachment 1) is in Kleberg County approximately 8 miles southeast of the City of Kingsville. The site is accessible on FM 1118, 4 miles east of the town of Ricardo. The permit area is a total of 2,135 acres contained within Blocks 41, 42, 48, 49, 50, 54 and 55 (Attachment 2). Within this leased area there are three existing and two future production areas (Attachment 3A). The production zone is a portion of the upper Goliad Sandstone. The production zone is 460 to 850 feet below ground level (420 to 810 feet below sea level). Ground level is approximately 40 feet above sea level.

The mining process requires the coordinated injection and production of fluids through a pattern of multiple injection and production wells. A mining solution comprising native groundwater, carbon dioxide and oxygen will be injected into the uranium bearing

CONTINUED on Pages 2 through 16

The permittee is authorized to conduct injection activity in accordance with limitations, requirements, and other conditions set forth herein. This permit is granted subject to the rules and orders of the commission, and the laws of the State of Texas. The permit will be in effect for ten years from the date of approval or until amended or revoked by the commission. If this permit is appealed and the permittee does not commence any action authorized by this permit during judicial review, the term will not begin until judicial review is concluded.

ISSUED DATE:

\_\_\_\_\_  
For The Commission

formation through multiple injection wells to oxidize and dissolve some of the uranium. The water containing the dissolved uranium will be extracted by a pattern of recovery wells, from which the solution will be piped to the processing plant, where the uranium will be extracted from the water by an ion exchange system. The fluid is reconstituted to its prior condition and recycled to a pattern of injection wells for re-injection.

V. Standard Provisions

A. Production Area Authorization (PAA)

1. Mining in a production area within the permit area requires a PAA from the Texas Commission on Environmental Quality (TCEQ). Mining shall not begin until the PAA is obtained.
2. Each PAA shall include an updated Mine Plan (Attachment 3B) and be in accordance with 30 TAC §305.155.
3. No Restoration Table Value in a PAA issued under the terms of this permit may exceed the High value for that parameter in the Permit Range Table (Attachment 4).

B. Mechanical Integrity

1. In compliance with 30 TAC §§331.43(d), 331.82, 331.85(c), and as specified in the application, proof of mechanical integrity for all Class III wells shall be demonstrated by well completion (cementing) records and by a pressure test. Information required to demonstrate mechanical integrity shall be reported to the executive director before injection of mining solutions.
2. A pressure test shall also be conducted each time a tool that could affect mechanical integrity is run into the well in accordance with 30 TAC §331.82(c)(2).

C. Operating Requirements

1. Mining solutions shall be confined to the production zone within the area of designated production zone monitor wells in accordance with 30 TAC §331.102. This shall be accomplished in each production area by a rate of withdrawal of water which exceeds the rate of injection of water.
2. Monitor wells shall be positioned to provide horizontal and vertical surveillance of groundwater quality to monitor confinement of the mining solutions in accordance with 30 TAC §§331.82(g) and 331.103.
3. Before making any modification in the composition of the mining solutions from that described in the application incorporated by Provision VIII.B., the permittee shall provide adequate descriptive information and obtain authorization by permit amendment or modification.

4. A mining solution consisting of non-ammonia and alkaline leaching solutions, oxidants and native groundwater, shall be used at all production areas.
5. Discharge of fluids into or adjacent to any water in the State is not authorized by this permit.

D. Wellhead Pressure

1. Pressure gauges shall be installed, easily readable, and maintained in working condition on all injection wells or on the injection manifold with the maximum allowable injection pressure clearly marked on each gauge.
2. Wellhead pressures shall be limited to minimize the possibility of leakage from the production zone into the non-production zones. Injection pressures shall not exceed 0.40 psi per foot of well depth or the internal yield pressure of the casing.

E. Monitoring Parameter Upper Limits

1. Chloride, conductivity, and uranium shall be used as control parameters in monitoring for excursions of mining solutions from each production area. Upper limit concentrations which indicate the presence of an excursion shall be calculated for the production and non-production zones by adding 25% (for chloride and conductivity) and 5 mg/L (for uranium) to the maximum values determined in the sampling of the production zone wells and non-production zone wells for each production area.
2. In the event of an excursion, as defined in provision V.G.2. of this permit and in 30 TAC §331.2, in addition to sampling for the monitoring parameters identified in Provision V.E.1 of this permit, the permittee shall provide for each affected well a one-time groundwater analysis in accordance with the requirements of 30 TAC §331.106(2). Sampling shall be in accordance with provision V.F.1.

F. Sampling, Preservation, Analysis and Quality Control

1. To obtain a valid sample, during completion each well shall be pumped until the water is free of mud and foreign material and until conductivity and pH are reasonably constant. As samples are taken during baseline, routine, and restoration sampling, the sampling method, as described in the application or subsequent amendments, shall assure that the water sampled is formation water. Excess water pumped from the Class III wells, baseline wells, or monitor wells containing mining solutions shall not be discharged into or adjacent to any water in the State.

- a. Sample preservation, analysis and analytical quality control shall be as defined in the most recent issue of Methods for Chemical Analysis of Water and Wastes (EPA - Technology Transfer). Total Dissolved Solids shall be determined by evaporation at 180°C. The permittee shall have a Quality Assurance/Quality Control program consistent with the TCEQ's "Quality Assurance Project Plan for Environmental Monitoring and Measurement Activities Relating to the Resource Conservation Recovery Act and Underground Injection Control" (TCEQ QAPP).
  - b. Any other method not specified in the referenced EPA document and TCEQ QAPP shall be approved by the executive director before it can be used.
2. The permittee shall notify the TCEQ Office of Compliance and Enforcement, Critical Infrastructure Division, Mail Code 177, P.O. Box 13087, Austin, TX 78711-3087 of intent to collect samples for baseline, stability, or final closing of each PAA at least two weeks before sample collection to allow the staff an opportunity to split samples for confirming analysis.

#### G. Monitoring and Reporting Requirements

##### 1. Routine Mining Operations

- a. Water samples shall be taken in accordance with 30 TAC §331.84(c) from all monitor wells for production areas in which mining solutions have been introduced, and shall be analyzed for the control parameters identified in Section V.E. of this permit and 30 TAC §331.105(1) and (2). This monitoring program shall be continued for each subject production area until the TCEQ Office of Compliance and Enforcement, Critical Infrastructure Division, Mail Code 177, P.O. Box 13087, Austin, TX 78711-3087 and the Radioactive Materials Division, Underground Injection Control Permits Section, Mail Code 233, P.O. Box 13087, Austin, TX 78711-3087 are officially notified that restoration has commenced.
- b. As required by 30 TAC §331.85(e), routine monitoring data shall be reported at least quarterly to the TCEQ Office of Compliance and Enforcement, Critical Infrastructure Division, Mail Code 177, P.O. Box 13087, Austin, TX 78711-3087 on a form provided by the executive director, in accordance with the form completion instructions and postmarked no later than the 10<sup>th</sup> day of the following reporting period.
- c. The permittee shall retain in an organized fashion and furnish to the TCEQ's representative, upon request, records of all monitoring information, copies of all reports and records required by this permit, for a period of at least 3 years from the date of the sample, measurement, report, record, certification, or application. In accordance with the requirement of 30 TAC §305.157, the permittee shall retain all records concerning the nature and composition of the injected fluids until 3 years after completion of plugging and abandonment procedures for any wells.

- d. In addition to the recordkeeping and reporting requirements specified elsewhere in this permit, the permittee shall maintain at the permitted mining site all data from monitoring and testing, inspections, and other records required by the provisions of 30 TAC Chapters 305 and 331 and the permit. These records will be made available to representatives of the TCEQ upon request.
  - e. The permittee shall keep records throughout the term of the permit of data used to complete the final application, any supplemental information, and a copy of the issued area permit and PAAs. All copies of the renewals, amendments, revisions, and modifications must also be kept at the facility such that the most current documents are available for inspection at all times.
  - f. All materials, including any related information submitted to complete the application shall be retained, not just those materials which have been incorporated into the permit as required by 30 TAC §305.47.
2. Excursions
- a. An excursion (defined by 30 TAC §331.2 as the movement of mining solutions into a designated monitor well) is indicated by the sampled concentration of any control parameter identified in Section V.E.1. of this permit being equal to or above the upper limit established for the applicable PAA. Within two days of detecting an apparent excursion, the permittee shall repeat the sampling and complete a verifying analysis of the samples taken from each apparently affected well in accordance with 30 TAC §331.105(3).
  - b. If the verifying analysis confirms the existence of an excursion, the permittee shall notify TCEQ Office of Compliance and Enforcement, Critical Infrastructure Division, Mail Code 177, P.O. Box 13087, Austin, TX 78711-3087 by the next working day by telephone and by letter postmarked within 48 hours of identification of the excursion. The notification must identify the affected monitor well and the control parameter concentrations.
  - c. While mining solutions are present in a designated monitor well, the permittee shall conduct sampling and analysis of each affected well at a frequency of at least two times per week in accordance with 30 TAC §331.105(4).
  - d. Reporting for wells on excursion shall be monthly according to 30 TAC §331.85(f). Parameters analyzed and reported during periods of excursions shall consist of the control parameters specified in Provision V.E.1. of this permit.
3. Restoration
- a. The executive director shall be notified in accordance with the requirements of 30 TAC §331.107(b) when mining operations have ceased within a given production area. The permittee shall commence groundwater restoration in accordance with the requirements of 30 TAC §331.107(a).

- b. During restoration, monitor wells shall be sampled quarterly for control parameters to detect excursions. Monitor well(s) on excursion shall be sampled twice a week in accordance with the requirements of 30 TAC §331.105(3)(4).

During restoration, baseline wells in a production area shall be sampled quarterly and analyzed for all parameters provided in the Restoration Table for the applicable Production Area Authorization in accordance with 30 TAC §331.107 (d). The permittee may select other wells in a production area for additional sampling for certain parameters.

- c. When the permittee determines that constituents in the aquifer have been restored to the values in the restoration table, the restoration shall be demonstrated by the first round of stability sampling. A minimum of three (3) sets of samples, taken at a minimum of 30-day intervals, shall be reported to the executive director over a period of one calendar year between cessation of restoration operations and the final set of stability in accordance with 30 TAC §331.107 (f).
- d. Beginning six months after the date of initiation of restoration of a production area, the permittee shall provide to the TCEQ Office of Compliance and Enforcement, Critical Infrastructure Division, Mail Code 177, P.O. Box 13087, Austin, TX 78711-3087 and the Radioactive Materials Division, Underground Injection Control Permits Section, Mail Code 233, P.O. Box 13087, Austin, TX 78711-3087 semi-annual restoration progress reports until restoration is accomplished for the mine area.

#### 4. Annual Report

By January 31<sup>st</sup> of each year, the permittee shall submit to the Underground Injection Control Permits Section, Mail Code 233, P.O. Box 13087, Austin, TX 78711-3087 an annual report. The annual report shall include:

- a. For injection wells, production wells, baseline wells, and monitor wells authorized under the Class III area permit and component production area authorizations, the number and identity of wells plugged and wells constructed during the report period, and the total number of unplugged wells at the time of report;
- b. A revised calculation of plugging cost for unplugged wells as specified in subsection V.H.4. of this permit;
- c. An updated map and tabulation of newly constructed or newly discovered artificial penetrations of the subsurface within the area of review, and for such penetrations, assessment of need for corrective action under 30 TAC §331.44; and
- d. An updated mine plan indicating the estimated schedule of the sequence and timing for mining and aquifer restoration in each production area authorization.

- e. An updated cost estimate for groundwater restoration.

#### H. Plugging and Abandonment

1. Any wells not associated with final restoration, at any time, shall be plugged in accordance with 30 TAC §331.46. Within 120 days of completion of final restoration of each PAA, all wells shall be plugged unless revisions of the time requirements are approved by the executive director under 30 TAC §331.86(a).
2. The permittee shall notify the executive director in writing at least two weeks before commencing plugging and abandonment. The executive director may approve exceptions to this requirement where protection of underground sources of drinking water and fresh water may require plugging and abandoning a well in a shorter period of time.
3. Plugging and abandonment shall be accomplished according to the plans and specifications submitted in the application identified in Provisions VIII.B and V.H.4. Any revised, updated or additional plugging and abandonment plans shall be approved by the executive director through the permit amendment or modification process.
4. The wells shall be plugged by the following procedure developed from the applicant's plugging and abandonment plan submitted as part of the permit application, or by an alternate procedure complying with 30 TAC §§331.46 and 331.86 and approved through the permit amendment process under 30 TAC §305.62 or the permit minor modification process under 30 TAC §305.72:
  - a. A bentonite-cement mixture at approximately 9.40 lbs/gallon slurry weight and not less than 9.10 lbs/gallon shall be set from the bottom of the well to a level not greater than 5 feet below ground level;
  - b. A minimum two-foot cement top plug shall be set in the casing to seal the well near the surface; and
  - c. The well casing shall be cut off at a depth of at least three feet below ground level. To provide opportunity for inspection of the surface plug, the Underground Injection Control Permits Section, Mail Code 233, P.O. Box 13087, Austin, TX 78711-3087 shall be notified a minimum of two weeks before backfilling the excavation with soil to natural grade.
5. Within 30 days after completion of well closure (plugging), a closure report shall be filed with the Underground Injection Control Permits Section, Mail Code 233, P.O. Box 13087, Austin, TX 78711-3087 in accordance with 30 TAC §331.46(n).

VI. Radioactive Materials License

The permittee shall have a valid license(s) from the TCEQ covering the handling and processing of radioactive materials for this facility, prior to mining for the recovery of uranium. The primary and supporting production/processing facilities, along with supplies and materials used by or resulting from these facilities, are to be installed, operated, maintained and handled in accordance with the plans, specifications, and descriptions submitted as part of the application for commission licensing in order to prevent spills, discharges, or dispersion of any materials, directly or indirectly, to surface or ground waters.

VII. Financial Assurance

- A. The permittee shall secure and maintain in full force and effect at all times an acceptable financial assurance mechanism, following 30 TAC §§331.142 - 331.144 to provide for plugging and abandonment of the permitted Class III wells, baseline wells, and monitoring wells.
- B. The amount of financial assurance shall be updated annually for all PAAs to provide for adequate plugging subject to prevailing general economic conditions.
- C. This permit does not authorize underground injection of fluid unless the permittee has in effect an acceptable financial assurance mechanism as described above. Financial assurance for plugging and abandonment shall be submitted at least 60 days prior to commencement of drilling operations in each PAA and be effective before drilling begins in accordance with 30 TAC §37.7021(c).
- D. To obtain release of financial assurance, an independent professional engineer or professional geologist licensed in Texas shall certify that plugging and abandonment has been accomplished in accordance with the permittee's plugging and abandonment plan in accordance with 30 TAC §331.144.

VIII. Additional Provisions

- A. The following rules are incorporated as terms and conditions of this permit by reference:
  - 1. Financial Assurance of Underground Injection Control Wells  
30 TAC Chapter 37 Subchapter Q
  - 2. Consolidated Permits  
30 TAC Chapter 305 Subchapters A, C, F, and H; and
  - 3. Underground Injection Control  
30 TAC Chapter 331 Subchapters A, C, E, F, G, and I.

- B. This permit is based on, and the permittee shall follow the plans and specifications dated September 24, 2012, as revised on December 12, 2012, February 15, 2013, May 17, 2013, February 5, 2014 and January 26, 2015 which are hereby approved subject to the terms of this permit and any other orders of the TCEQ. These materials are incorporated into this permit by reference as if fully set out herein. Any and all revisions to these elements shall become conditions of this permit upon the date of approval by the commission.
- C. Acceptance of this permit by the permittee constitutes an acknowledgment and agreement that the permittee will comply with all the terms and conditions embodied in the permit, and the rules and other orders of the commission in accordance with 30 TAC §305.124.
- D. This permit is subject to further orders and rules of the commission. In accordance with the procedures for amendments and orders, the commission may incorporate into permits already granted, any condition, restriction, limitation, or provision reasonably necessary for the administration and enforcement of Texas Water Code Chapters 27. Additionally, the permittee has a duty to comply with the following permit conditions:
1. **Modification of Permitted Wells, Operational Methods, and Related Specifications**

The wells and operational methods authorized are limited to those described herein and by the application submittals. All wells and operational methods are subject to the terms and conditions of this permit and TCEQ rules. Prior to constructing or operating any wells in a manner which differs from either the related plans and specifications contained in the permit application or the limitations, terms, or conditions of this permit, the permittee must comply with the TCEQ permit amendment rules as provided in 30 TAC §305.62 or minor modification rules as provided in 30 TAC §305.72.
  2. **Definitions**

For purposes of this permit, terms used herein shall have the same meaning as those in 30 TAC Chapters 3, 37, 305, and 331 unless this permit specifically provides otherwise; where terms are not defined in the regulations or the permit, the meaning associated with such terms shall be defined by a standard dictionary reference or the generally accepted scientific or industrial meaning of the term.
  3. **Permit Expiration**

In order to continue a permitted activity after the expiration date of the permit the permittee shall submit a new permit application at least 180 days before the expiration date of the effective permit, unless permission for a later date has been granted by the executive director in accordance with 30 TAC §305.65. Authorization to continue such activity will terminate upon the effective denial of said application.

- E. This permit does not convey any property rights of any sort, nor any exclusive privilege, and does not become a vested right in the permittee in accordance with 30 TAC §§305.122(c) and 305.125(16).
- F. The issuance of this permit does not authorize any injury to persons or property or an invasion of other property rights, or any infringement of state or local law or regulations in accordance with 30 TAC §305.122(d).
- G. In the event of conflict between the application, permit, rules, and statutory requirements the most stringent requirement shall apply in accordance with 30 TAC §305.154(a).

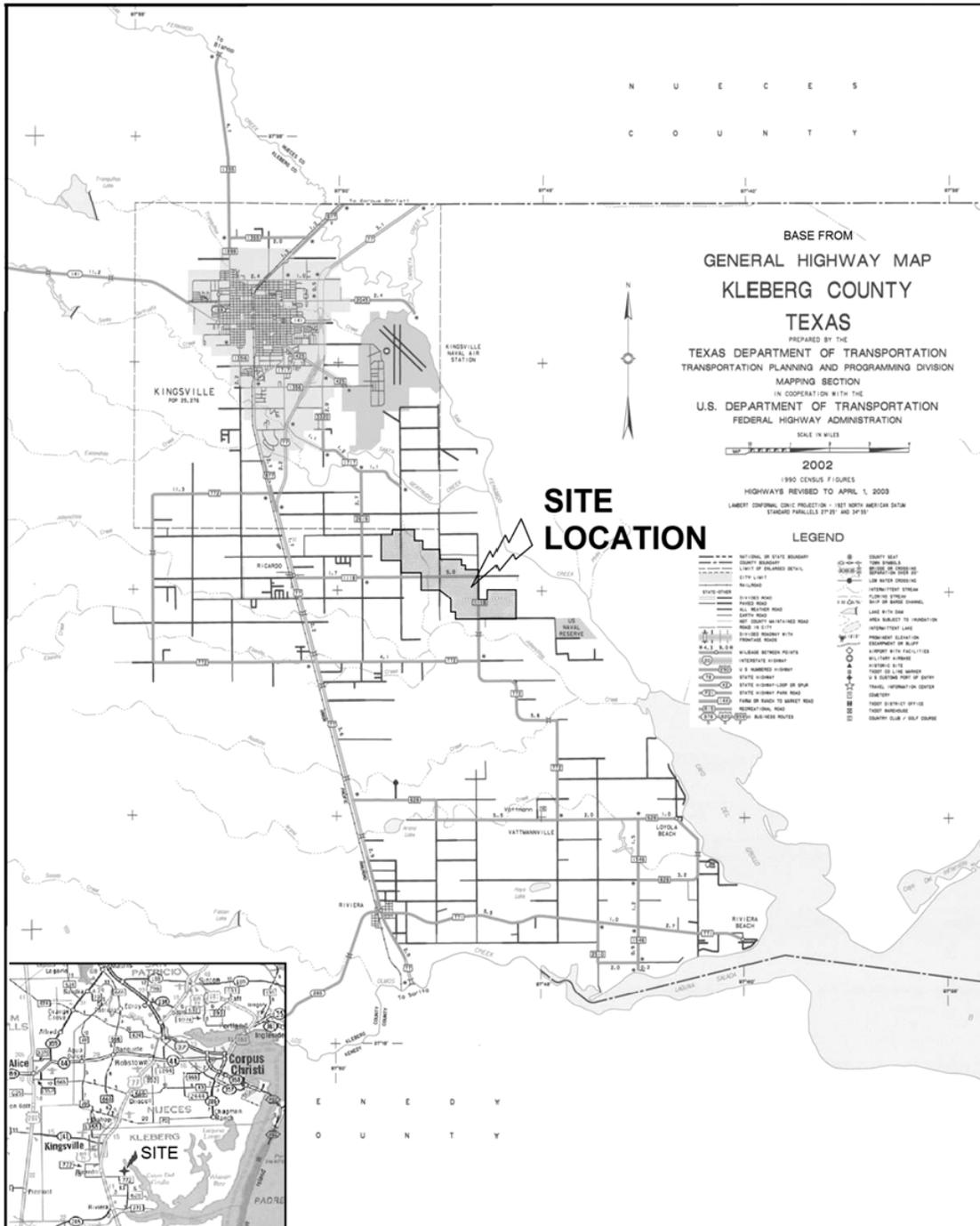
IX. Special Provisions

- A. Coincident with sampling, production and non-production zone monitor wells shall be visually inspected to assure that they are capped and intact, and except during restoration, monitor wells shall also be visually inspected a second time during the calendar quarter at a time selected by the permittee. Broken, cracked, or loose monitor wells casings shall be repaired immediately. Records for inspection and repair of all monitor wells shall be maintained at the site for review by the Executive Director.
- B. Any injection in a new production area for purposes of mining or recovery of uranium under this permit will require a new Production Area Authorization. Any injection in Production Area 3 for purposes of mining or recovery of uranium may require amendment to Production Area Authorization UR02827PAA3, including amendment of baseline water quality values, restoration values, control parameter upper limits, and installation of new and additional monitor wells, as determined by the executive director.
- C. Wastewater Ponds
  - 1. All wastewater ponds except those described in IX.C.3. below shall be lined with a minimum 30 mil thick chlorinated polyethylene liner or equivalent approved lining, and constructed with an underdrain leak detection system in accordance with the plans and specifications contained in the Permit Application. The leak detection system shall be monitored weekly. A minimum of two feet of freeboard shall be maintained in all ponds during normal operations. A minimum of one foot of freeboard may be maintained during emergency periods such as high rainfall, for a period not to exceed 14 days. An easily readable freeboard gauge shall be installed and maintained for each pond. The TCEQ Office of Compliance and Enforcement, Critical Infrastructure Division, Mail Code 177, P.O. Box 13087, Austin, TX 78711-3087 shall be notified immediately when the freeboard decreases to less than two feet.

2. If any leaks are detected in the pond liner, the TCEQ Office of Compliance and Enforcement, Critical Infrastructure Division, Mail Code 177, P.O. Box 13087, Austin, TX 78711-3087 shall be notified immediately. The pond fluids will be evacuated as soon as practicable to another approved location and the leak repaired. A determination of the extent of any subsurface contamination shall be made and a report submitted to the Executive Director within 14 days after the leak is detected. The report shall also contain the company's plan for corrective action.
  3. All ponds used for wastewater storage prior to injection down a waste disposal well shall be subject to the terms and conditions of the disposal well permit.
- D. During the full-scale restoration at this site, the permittee shall use reverse osmosis (R.O.) treatment of ground water from the mine zone aquifer in accordance with the plans outlined in the technical report submitted as part of the application.
- E. Waste water produced from the reject side of the R.O. unit, less that amount of water constituting the bleed streams, shall be replaced by an equal amount of makeup water purchased for that purpose. Prior to the purchased water being injected into the mine zone, it will be commingled with the R.O. product and mine zone water.
- F. Waste streams and reject restoration fluids will be disposed of down a Commission approved Class I waste disposal well. The permittee must comply with all terms and conditions of the waste disposal well permit.

ATTACHMENT 1

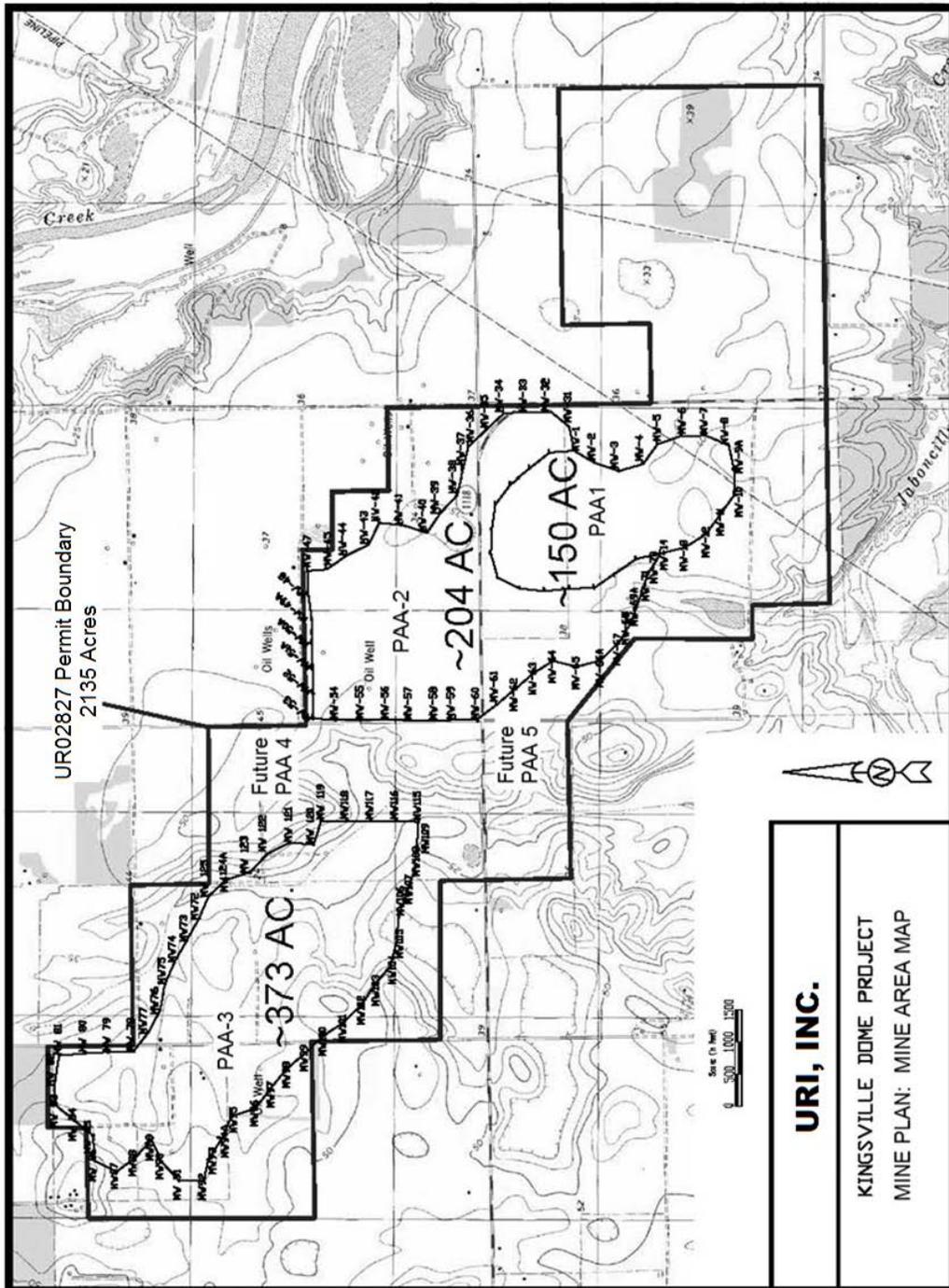
MINE LOCATION MAP





ATTACHMENT 3A

MINE PLAN: MINE AREA MAP





ATTACHMENT 4

PERMIT RANGE TABLE  
 PAAs 1, 2 and 3

<i>Parameter</i>	<i>Unit</i>	<i>Low</i>	<i>High</i>
Calcium	mg/l	5.15	99
Magnesium	mg/l	1.5	16
Sodium	mg/l	296	525
Potassium	mg/l	4.72	31
Carbonate	mg/l	0	71
Bicarbonate	mg/l	110	505
Sulfate	mg/l	13	557
Chloride	mg/l	196	443
Nitrate	mg/l	0	5.8
Fluoride	mg/l	0.47	1.1
Silica	mg/l	9.1	34
TDS	mg/l	880	1570
Conductivity	µMhos	1490	2820
Alkalinity	mg/l	93	444
pH	-	7.3	9.57
Arsenic	mg/l	<0.0001	0.029
Cadmium	mg/l	<0.0001	0.03
Iron	mg/l	<0.01	0.26
Lead	mg/l	<0.0001	0.034
Manganese	mg/l	<0.001	0.172
Mercury	mg/l	<0.0001	0.01
Molybdenum.	mg/l	<0.01	3.5
Selenium	mg/l	<0.001	0.072
Uranium	mg/l	0	3.75
Ammonia	mg/l	<0.01	13
Ra226	pCi/l	0.01	202

## TECHNICAL SUMMARY AND EXECUTIVE DIRECTOR'S PRELIMINARY DECISION

### Description of Applications

Applicant: URI, Inc. (URI)

*In-situ* Uranium Mining Project

Underground Injection Control (UIC) Permit No. UR02827

Location: The Kingsville Dome mine is located 8 miles southeast of the city of Kingsville, and 4 miles east of the town of Ricardo off FM 1118, Kleberg County, Texas.

General: The facility is an *in-situ* uranium mine.

Request: URI submitted separate renewal and major amendment applications to the Texas Commission on Environmental Quality (TCEQ). The renewal application dated September 24, 2012 was for the renewal of TCEQ area Permit No. UR02827, which authorizes injection wells within the permitted area used for the continuance of groundwater restoration. The major amendment application dated December 12, 2012 requested amendment of the permit to provide authority to construct and operate injection wells for mining of uranium, which expired under the existing permit on September 1, 2012. Both of these applications are in accordance with 30 Texas Administrative Code (TAC) §§331.81 - 331.86 and 331.122. The applications were declared administratively complete on March 22, 2013.

During the technical review process, URI submitted revisions to the applications to revise well plugging methods in the closure plan for Class III wells and to update the permit range table to include groundwater quality information from the wells used to produce the PAA3 baseline water quality table.

Authority: The permit is required by Texas Water Code §27.011. The permit applications have been evaluated and a draft permit has been prepared in accordance with applicable requirements of 30 TAC Chapters 281, 305, and 331.

### Technical Information

The proposed permit includes the following:

- A. Establishes a 10-year term for the permit;
- B. Requires proof of mechanical integrity for all Class III wells in accordance with 30 TAC §§331.4, 331.43(d), 331.82(c)(2), and 331.85(c);
- C. Requires confinement of mining solutions to the zone in which uranium will be recovered in accordance with 30 TAC §331.102;
- D. Requires placement of monitor wells to provide vertical and horizontal surveillance of groundwater quality in accordance with 30 TAC §§331.82(g) and 331.103;
- E. Specifies composition of mining solutions;
- F. Establishes parameters for groundwater monitoring for the detection of excursions of mining

- solutions from the production zone, and requirements for addressing excursions;
- G. Establishes requirements for sampling, sample preservation, sample analysis, and quality control for sampling;
  - H. Establishes requirements of monitoring and reporting;
  - I. Establishes requirement for aquifer restoration in accordance with 30 TAC §331.107;
  - J. Establishes requirements for plugging and abandonment of baseline wells, monitor wells, injection wells, and production wells;
  - K. Establishes requirements for financial assurance for plugging and abandonment of all wells;
  - L. Includes special condition: Any injection in a new production area for purposes of mining or recovery of uranium under this permit will require a new Production Area Authorization. Any injection in Production Area 3 for purposes of mining or recovery of uranium may require amendment to Production Area Authorization UR2827PAA3, including amendment of baseline water quality values, restoration values, control parameter upper limits, and installation of new and additional monitor wells, as determined by the executive director; and
  - M. Revises the permit range table to include groundwater quality information from Class III wells located in Production Area 3.

The production zone is a portion of the Goliad Sandstone Formation approximately 460 to 850 feet below ground level (420 to 810 feet below sea level). Hydrologic pump tests have determined that no communication exists between the production zone and the overlying and underlying aquifers. Clay aquitards protect these overlying and underlying aquifers from *in-situ* mining in the mineralized sands.

The mining procedure involves injection of native groundwater, carbon dioxide, and oxygen into the uranium bearing sands through a pattern of injection wells. The uranium is oxidized and dissolved by this solution. The solution is then pumped from a pattern of recovery wells, to the processing plant where uranium is extracted by ion exchange. Finally, the water is reconstituted with oxidizing agents and is recycled to the field for reinjection. A small amount of water is continuously withdrawn from the overall operation for disposal. This produces a hydraulic sink causing groundwater to flow toward the production area. Monitor wells will be installed at each of the production areas to provide horizontal and vertical surveillance of groundwater quality and to monitor confinement of the mining solution in the production zone. Mining began in 1988. Presently, URI is not actively mining. PAA1, PAA2 and PAA3 are in the stability phase.

After mining is completed, the permittee is authorized to use injection wells for groundwater restoration of the production areas according to the requirements of 30 TAC §331.107. The permittee is required to use reverse osmosis treatment during full-scale groundwater restoration.

The mining permit does not authorize discharge of fluids into or adjacent to any water in the State. Matters relating to the handling and storage of radioactive materials are authorized by a radioactive material license.

URI has been issued two (2) UIC Class I disposal well permits, WDW247 and WDW248 for management of excess volumes of water produced as by-products of the in situ mining and groundwater restoration processes. WDW248 was drilled and put into operation in 1987.

State rules and federal regulations prohibit injection that may degrade underground sources of drinking water (USDW). Since the ore bearing sands are in a USDW, and the mining activity will elevate the concentration of dissolved minerals in the ground water in each production area within the area included in the permit, rules provide for exemption of specified portions of a mined aquifer from definition and protection as a USDW. An aquifer exemption, therefore, is required to conduct injection into a USDW-quality aquifer for the beneficial purpose of mineral production. Starting in 1987, and later expanded in 1994 a total of 2135 acres and a depth interval of 420 to 810 feet below sea level has been designated by the TCEQ and the U.S. Environmental Protection Agency (EPA) as an exempted aquifer for purposes of *in-situ* uranium mining. This aquifer exemption remains in effect and applicable to proposed *in-situ* uranium mining by URI. The exempted aquifer includes the production zone sands for *in-situ* recovery of uranium by URI. The applications for renewal and major amendment of TCEQ area Permit No. UR02827 do not modify or expand the existing exemption that has already been approved by TCEQ and EPA for the Kingsville Dome Mine.

In addition to the proposed *in-situ* mining permit, PAAs for individual production areas within the permitted area must be issued by the TCEQ. A PAA includes an updated mine plan, a groundwater restoration table, a baseline water quality table, a control parameter upper limits table, specification of monitor wells and their locations, and any special provisions determined to be appropriate.

In accordance with 30 TAC Chapter 37, §305.154(a)(9), and §§331.142-144, the permittee shall secure and maintain a financial assurance mechanism, to provide for the proper plugging and abandonment of all injection, production and monitor wells on the site. Financial assurance will be reviewed annually and may be altered and/or updated at a future date to reflect the prevailing general economic conditions. Financial assurance is also required as a condition of a radioactive materials license to ensure groundwater quality is restored after mining is terminated in each production area.

#### Process for Reaching a Final Decision and Opportunities for Public Participation

Once the proposed permit is completed, it is sent to the TCEQ Office of the Chief Clerk for public notice. Mailed and newspaper notice of the application and executive director's preliminary decision are provided in accordance with 30 TAC §39.651(d) with instructions for submitting public comments and requesting a public meeting. Written public comments and requests for a public meeting must be submitted to the Office of the Chief Clerk within 30 days from the date of publication of the newspaper notice.

The executive director will consider public comments in making a final decision on this application. The TCEQ will hold a public meeting if the executive director determines that there is a significant degree of public interest in the application or if requested by a local legislator. After the deadline for public comments, the executive director will consider the comments and prepare a response to all

relevant and material or significant public comments. The response to comments will include the executive director's decision on the application and will provide instructions for requesting a contested case hearing or reconsideration of the executive director's decision.

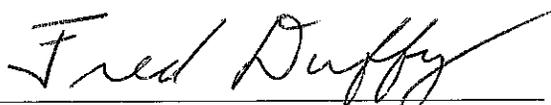
A contested case hearing will only be granted based on disputed issues of fact that are relevant and material to the commission's decision on the application on issues that were raised during the public comment period and not withdrawn. The executive director may issue final approval of the application unless a timely contested case hearing request or request for reconsideration is filed. If a timely hearing request or request for reconsideration is filed, the executive director will not issue final approval of the permit and will forward the application and request to the TCEQ Commissioners for their consideration at a scheduled commission meeting. If hearing requests are granted, the hearings will be conducted by the State Office of Administrative Hearings. Decisions regarding the permit may be reconsidered in response to a Motion for Rehearing or a Motion for Reconsideration and by appeal to a District Court in Travis County.

Preliminary Decision

The executive director has made a preliminary decision that the proposed permit, if issued, meets all statutory and regulatory requirements.

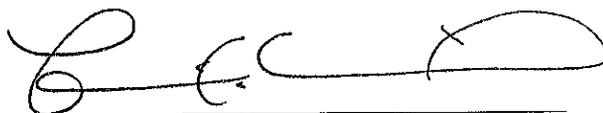
The proposed permit does not authorize variances or alternatives to required standards.

Prepared by:



Fred Duffy, P.G., Project Manager  
Underground Injection Control Permits Section  
Radioactive Materials Division

Reviewed by:



Lorrie Council, P.G., Manager  
Underground Injection Control Permits Section  
Radioactive Materials Division



# Compliance History Report

**PUBLISHED** Compliance History Report for CN600604417, RN102380763, Rating Year 2014 which includes Compliance History (CH) components from September 1, 2009, through August 31, 2014.

<b>Customer, Respondent, or Owner/Operator:</b>	CN600604417, Uri, Inc.	<b>Classification:</b> HIGH	<b>Rating:</b> 0.00
<b>Regulated Entity:</b>	RN102380763, KINGSVILLE DOME	<b>Classification:</b> HIGH	<b>Rating:</b> 0.00
<b>Complexity Points:</b>	5	<b>Repeat Violator:</b> NO	
<b>CH Group:</b>	14 - Other		
<b>Location:</b>	641 E FM 1118 KINGSVILLE, TX 78363-2628, KLEBERG COUNTY		
<b>TCEQ Region:</b>	REGION 14 - CORPUS CHRISTI		

**ID Number(s):**

<b>AIR NEW SOURCE PERMITS</b> REGISTRATION 15129	<b>AIR NEW SOURCE PERMITS</b> ACCOUNT NUMBER KJ0020N
<b>UNDERGROUND INJECTION CONTROL</b> PERMIT UR02827	<b>UNDERGROUND INJECTION CONTROL</b> PERMIT WDW247
<b>UNDERGROUND INJECTION CONTROL</b> PERMIT WDW248	<b>UNDERGROUND INJECTION CONTROL</b> PERMIT 5X250011
<b>UNDERGROUND INJECTION CONTROL</b> PERMIT 5X2500111	<b>UNDERGROUND INJECTION CONTROL</b> PERMIT UR02827PAA3
<b>UNDERGROUND INJECTION CONTROL</b> PERMIT UR02827PAA2	<b>UNDERGROUND INJECTION CONTROL</b> PERMIT UR02827PAA1
<b>URANIUM</b> LICENSE R03653	

**Compliance History Period:** September 01, 2009 to August 31, 2014    **Rating Year:** 2014    **Rating Date:** 09/01/2014

**Date Compliance History Report Prepared:** February 10, 2015

**Agency Decision Requiring Compliance History:** Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.

**Component Period Selected:** September 01, 2009 to August 31, 2014

**TCEQ Staff Member to Contact for Additional Information Regarding This Compliance History.**

**Name:** Fred Duffy    **Phone:** (512) 239-6891

**Site and Owner/Operator History:**

- 1) Has the site been in existence and/or operation for the full five year compliance period? YES
- 2) Has there been a (known) change in ownership/operator of the site during the compliance period? NO
- 3) If **YES** for #2, who is the current owner/operator? N/A
- 4) If **YES** for #2, who was/were the prior owner(s)/operator(s)? N/A
- 5) If **YES**, when did the change(s) in owner or operator occur? N/A

**Components (Multimedia) for the Site Are Listed in Sections A - J**

**A. Final Orders, court judgments, and consent decrees:**

N/A

**B. Criminal convictions:**

N/A

**C. Chronic excessive emissions events:**

N/A

**D. The approval dates of investigations (CCEDS Inv. Track. No.):**

Item 1	May 18, 2010	(801903)
Item 2	July 08, 2010	(826476)

Item 3	August 04, 2010	(829967)
Item 4	May 18, 2011	(920247)
Item 5	June 13, 2011	(923976)
Item 6	July 19, 2011	(936089)
Item 7	October 05, 2011	(952504)
Item 8	May 16, 2012	(1003146)
Item 9	May 17, 2012	(1003000)
Item 10	June 13, 2012	(1013041)
Item 11	February 05, 2013	(1056134)
Item 12	May 29, 2013	(1093894)
Item 13	June 21, 2013	(1099754)
Item 14	March 12, 2014	(1146808)
Item 15	May 19, 2014	(1167079)
Item 16	June 24, 2014	(1174105)

**E. Written notices of violations (NOV) (CCEDS Inv. Track. No.):**

A notice of violation represents a written allegation of a violation of a specific regulatory requirement from the commission to a regulated entity. A notice of violation is not a final enforcement action, nor proof that a violation has actually occurred.

N/A

**F. Environmental audits:**

**G. Type of environmental management systems (EMSs):**

N/A

**H. Voluntary on-site compliance assessment dates:**

N/A

**I. Participation in a voluntary pollution reduction program:**

N/A

**J. Early compliance:**

N/A

**Sites Outside of Texas:**

N/A