



Item # **Docket No. 2008-1876-UIC** Consideration of the application by **South Texas Mining Venture, L.L.P.** for two Class I waste disposal well permits, authorizing it to dispose of by-product materials generated from in situ uranium mining operations. The proposed wells will be located on the La Palangana site in **Duval County**, Texas, approximately six miles north of Benavides, Texas. The Commission will also consider hearing requests, related responses and replies, public comment and the Executive Director's response to comments. (Tim Reidy, Gerald Bolmer)

Description of Applications

- Applicant: South Texas Mining Venture, LLP (STMV)  
Underground Injection Control (UIC) Permit Nos. WDW418 and WDW419
- Location: STMV's proposed Palangana uranium mining project is in Duval County, Texas. Two injection wells are proposed for permitting, construction, and operation at the site for wastewater management. Well WDW418 is proposed to be 660 feet from the south line and 660 feet from the west line of the SK&K Survey, A-548 (North Latitude 27°40'15", West Longitude 98°26'07"); well WDW419 is proposed to be 1750 feet from the south line and 660 feet from the west line of the SK&K Survey, A-548 (North Latitude 27°40'30" and West Longitude 98°26'07").
- General: The applicant will conduct in situ uranium mining at the proposed site.
- Request: STMV applied to the Texas Commission on Environmental Quality (TCEQ) on September 6, 2007 for permits to construct underground injection wells for disposal of waste water from the mining operation which is classified as by-product material as defined in §11.e(2) of the Atomic Energy Act and §401.003(3)(B) of the Texas Health & Safety Code.
- Authority: The proposed permits are required by the Texas Water Code §27.011. Draft permits have been prepared in accordance with applicable requirements of 30 Texas Administrative Code (TAC) Chapters 281, 305 and 331, which have been adopted under the authority of Texas Water Code, Chapters 5 and 27.

Technical Information

The permit applications have been evaluated in accordance with 30 TAC Chapters 305, 331, and 335. The review of the permit applications included the evaluation of regional and local geology including the depths of underground sources of drinking water, siting criteria, plans for well construction, operation, and monitoring, assessment of artificial penetrations within the area of review for necessary corrective action, characterization of waste, and waste compatibility with well materials and the injection zone.

The permittee shall set and cement surface casing to a minimum subsurface depth of 1,100 feet and long string casing into or through the injection zone in order to properly protect each underground source of drinking water (USDW) or freshwater aquifer. The injection of wastes is limited to the Yegua Formation within the injection zone between 5,470 to 6,900 feet below ground level (BGL). The authorized injection interval is in the Yegua Formation at approximate depths from 5,960 to 6,900 feet BGL. The pH of injected waste streams shall be greater than 5.0 and less than 12.0. The operating surface injection pressure shall not exceed 1,350 psig. The maximum injection rate for each well shall not exceed 200 gallons per minute. The volume of waste water injected in each well shall not exceed 105,120,000 gallons per year.

The proposed permits include the following:

- A. standard provisions for construction, operation, monitoring, testing, reporting, and closure of the subject injection wells; and
- B. standard provisions to establish and maintain financial assurance to provide for proper facility closure.

Process for Reaching a Final Decision and Opportunities for Public Participation

Once the proposed permit renewals are drafted, they are sent to the Texas Commission on Environmental Quality (TCEQ) Office of the Chief Clerk for public notice. Mailed and newspaper notice of the applications 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 these applications. The TCEQ will hold a public meeting if the executive director determines that there is a significant degree of public interest in the applications 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 applications 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 applications 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 permits and will forward the applications 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.

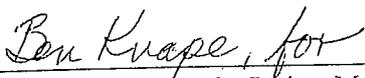
Preliminary Decision

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

The proposed permits do not authorize variances or alternatives to required standards.

Prepared by:

Reviewed by:

  
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Industrial & Hazardous Waste Permits Section  
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Industrial & Hazardous Waste Permits Section  
Waste Permits Division



Texas Commission on  
Environmental Quality  
Austin, Texas

Permit To Conduct  
Class I Underground Injection  
under provisions of Texas Water Code,  
Chapters 26 & 27, and Texas Health  
and Safety Code, Chapter 361

I. Permittee

South Texas Mining Venture, LLP  
500 N. Shoreline Blvd.  
Suite 800N  
Corpus Christi, TX 78471

II. Type of Permit

Initial  Renewal  Amended   
Commercial  Noncommercial   
Hazardous  Nonhazardous   
Onsite  Offsite   
Authorizing Disposal of Waste from Captured Facility   
Authorizing Disposal of Waste from Off-site Facilities Owned by Owner/Operator

III. Nature of Business

In Situ Uranium Mining

IV. General Description and Location of Injection Activity

The disposal well is to be used to dispose of by-product materials as defined in §11.e(2) of the Atomic Energy Act and §401.003(3)(B) of the Texas Health & Safety Code, generated by the permittee's in situ uranium mining activities. The well will be located 660 feet from the south line and 660 feet from the west line of the SK&K Survey, A-548, Texas, Latitude 27°40'15" North, Longitude 98°26'07" West, Duval County, Texas. The authorized injection zone is within the Jackson Group and Yegua Formations at the approximate depths of 5,470 to 6,900 feet below ground level (BGL). The authorized injection interval is in the Yegua Formation at approximate depths from 5,960 feet to 6,900 feet BGL.

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The permittee is authorized to conduct injection 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:

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

- V. Drilling and Completion Requirements
  - A. The drilling and completion of the well shall be done in accordance with 30 Texas Administrative Code (TAC) Section (§) 331.62, the plans and specifications of the permit application, and the following conditions.
  - B. The permittee shall set and cement surface casing to a minimum subsurface depth of 1100 feet and long string casing into or through the injection zone in order to properly protect each underground source of drinking water (USDW) or freshwater aquifer.
  - C. To protect the ground surface from spills and releases, the base of the wellhead shall be enclosed by a diked, impermeable pad with sump. Any liquid collected shall be disposed of in an appropriate manner.
  - D. Mechanical integrity shall be demonstrated prior to authorization by the Executive Director to conduct injection operations.
  - E. Any changes to the plans and specifications in the original application shall be approved in writing by the Executive Director that said changes provide protection standards equivalent to or greater than the original design criteria.
- VI. Character of the Waste Streams
  - A. Waste authorized to be injected by this permit shall consist solely of the following:
    - 1. Wastes generated during closure of the well and associated facilities that are compatible with permitted wastes, the reservoir, and well materials;
    - 2. Lixiviant bleed stream;
    - 3. Lab waste stream;
    - 4. Resin transfer water;
    - 5. Filter press wash stream;
    - 6. Reverse osmosis brine stream;
    - 7. Restoration wastewater; and
    - 8. Other associated wastes such as groundwater and rainfall contaminated by the above authorized wastes, spills of the above authorized wastes, and wash waters and solutions used in cleaning and servicing the waste disposal well system equipment and process pad that are compatible with the permitted wastes, the reservoir, and well materials.
  - B. The pH of injected waste streams shall be greater than 5.0 and less than 12.0.
  - C. Except when authorized by the Executive Director, the specific gravity of injected fluids shall be less than or equal to 1.10 as measured at 60°F/60°F.

- D. No discharge of wastes is authorized by this permit from this facility into waters of the State other than those waste streams authorized above in Paragraph VI.A. which may be injected into the Jackson Group and Yegua Formations within the injection zone between depths of approximately 5,470 to 6,900 feet BGL.

VII. Waste Streams Prohibited From Injection

Wastes prohibited from injection into WDW418 include but are not limited to the following list. The permittee is also required to comply with all other laws or regulations that are applicable to the activities authorized by this permit.

- A. 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 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;
- B. Any by-product material as defined by Texas Health & Safety Code §401.003(3)(A);
- C. Any low level radioactive wastes as defined by Texas Health & Safety Code §401.004;
- D. Any naturally occurring radioactive material (NORM) waste as defined by Texas Health & Safety Code §401.003(26); or
- E. Any oil and gas NORM waste as defined by Texas Health & Safety Code §401.003(27).

VIII. Operating Parameters

- A. The well shall be operated in compliance with the requirements of 30 TAC Chapters 305, and 331, the plans and specifications of the permit application, and the following conditions.
- B. Surface injection pressure shall not cause pressure in the injection zone to:
  - 1. initiate any new fractures or propagate existing fractures in the injection zone;
  - 2. initiate new fractures or propagate existing fractures in the confining zone; or
  - 3. cause movement of fluid out of the injection zone that may contaminate USDW and fresh water.
- C. The operating surface injection pressure shall not exceed 1,350 psig.
- D. The maximum injection rate shall not exceed 200 gallons per minute.
- E. The volume of waste water injected shall not exceed 105,120,000 gallons per year.
- F. A positive pressure of at least 100 psig over tubing injection pressures shall be maintained in the tubing-casing annulus for the purpose of leak detection. Temporary

deviations from this requirement which are a part of normal well operations are authorized but may not exceed 15 minutes in duration. For 15 minutes after the pressure differential drops below 100 psig, the permittee shall conduct troubleshooting and proceed to restore a minimum 100 psig pressure differential. If a minimum 100-psig pressure differential cannot be achieved within 15 minutes, the permittee shall notify the Texas Commission on Environmental Quality (TCEQ) and commence shut-in procedures on the well. The permittee may continue to operate the well under flow conditions that maintain a minimum 100-psig pressure differential.

- G. The permittee shall notify the Executive Director at least 24 hours prior to commencing any workover which involves taking the injection well out of service. Approval by the Executive Director shall be obtained before the permittee may begin work. Notification shall be in writing and shall include plans for the proposed work. The Executive Director may grant an exception to the prior written notification and approval when immediate action is required to prevent pollution according to 30 TAC §331.5. Completion of the well outside the approved injection interval, by perforation of casing, setting of screen, or establishment of open hole section, requires that the permitted injection interval be changed according to 30 TAC §331.62(3)(B) to include the depths of all well completions. Pressure control equipment shall be installed and maintained during workovers which involve the removal of tubing.

IX. Monitoring and Testing Requirements

- A. Monitoring and testing shall be in compliance with the requirements of 30 TAC §305.125, §331.64, the plans and specifications of the permit application, and the following conditions.
- B. The integrity of the long string casing, injection tubing, and annular seal shall be tested by means of an approved pressure test with a liquid or gas annually and whenever there has been a well workover. The integrity of the cement within the injection zone shall be tested by means of an approved radioactive tracer survey annually. A radioactive tracer survey may be required after workovers that have the potential to damage the cement within the injection zone.
- C. The pressure buildup in the injection zone shall be monitored annually, including at a minimum, a shutdown of the well for a sufficient time to conduct a valid observation of the pressure fall-off curve.
- D. A temperature log, noise log, oxygen activation log or other approved log is required at least once every five years to test for fluid movement along the entire borehole.
- E. A casing inspection, casing evaluation, or other approved log shall be run whenever the owner or operator conducts a workover in which the injection string is pulled, unless the Executive Director waives this requirement due to well construction or other factors which limit the test's reliability, or based upon the satisfactory results of a casing inspection log run within the previous five years. The Executive Director may require that a casing inspection log be run every five years if there is sufficient reason to believe the integrity of the long string casing of the well may be adversely affected by naturally occurring or man-made events.

- F. Injection fluids shall be tested in accordance with 30 TAC §331.64(a) and the approved waste analysis plan.
- G. The pH and specific gravity of the injected waste shall be monitored continuously at a minimum frequency of at least once every 24 hours and whenever the waste stream changes.
- H. Corrosion monitoring of well materials shall be conducted quarterly and in accordance with 30 TAC §331.64(f). Test materials shall be the same as those used in the wellhead, injection tubing, packer, and long string casing, and shall be continuously exposed to the waste fluids except when the well is taken out of service.
- I. The permittee shall ensure that all waste analyses used for waste identification or verification and other analyses for environmental monitoring have been performed in accordance with methods specified in the current editions of EPA SW-846, ASTM or other methods accepted by the TCEQ. The permittee shall have a Quality Assurance/Quality Control program that is consistent with EPA SW-846 and the TCEQ Quality Assurance Project Plan.

X. Record Keeping Requirements

The permittee shall keep complete and accurate records as required by 30 TAC Chapters 305 and 331.

XI. Financial Assurance for Well Closure

In accordance with 30 TAC Chapter 37, 30 TAC Section 305.154(a)(9), and Sections 331.142-144, the permittee shall secure and maintain in full force financial assurance, in a form approved by the Executive Director, in the amount of \$164,900 (in 2007 dollars) for WDW418. The amount of the financial assurance may, at the discretion of the Executive Director, be altered at a future date to provide for adequate closure. Financial assurance shall be obtained at least 60 days prior to the commencement of drilling of the well. The injection of fluids is not authorized until the permittee has received approval of the above financial assurance from the Executive Director.

XII. Additional Requirements

- A. 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.
- B. 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 26 and 27, and Texas Health and Safety Code, Chapter 361 and 401.
- C. 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.

- D. 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.
- E. The following rules are incorporated as terms and conditions of this permit by reference:
  - 1. Financial Assurance, 30 TAC Chapter 37;
  - 2. Consolidated Permits, 30 TAC Chapter 305; and
  - 3. Underground Injection Control, 30 TAC Chapter 331.
- F. The express incorporation of the above rules as terms and conditions of this permit does not relieve the permittee of an obligation to comply with all other laws or regulations which are applicable to the activities authorized by this permit.
- G. Incorporated Application Materials. This permit is based on, and the permittee shall follow the plans and specifications contained in the Class I Underground Injection Control Application dated September 6, 2007 as revised on November 26, 2007 and January 3, 2008, which is 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.
- H. The express incorporation of the above-cited permit application as terms and conditions of this permit does not relieve the permittee of an obligation to comply with all laws or regulations which are applicable to the activities authorized by this permit.

### XIII. Pre-injection Units

- A. All pre-injection units servicing this well must be authorized by permit.
- B. All pre-injection units (including loading and unloading) shall be diked to completely contain all spillage and rainfall. The areas within the dike of the pre-injection units shall be lined with an impervious material or reinforced concrete and drained for collection and routing to wastewater holding units.
- C. Pre-injection units associated with the injection well shall be designed, operated and closed in compliance with the plans and specifications of the permit application, and this permit.
- D. Pre-injection units shall consist of:
  - 1. Brine Storage Tank (12,000 gallons)
  - 2. Storm Surge Storage Tanks (2 x 12,000 gallons each)
  - 3. Waste Water Storage Tank (12,000 gallons)
  - 4. Sand Filtration System (including filters, backwash pump and holding tank)
  - 5. Sock Filters (6)

6. Cartridge Filters (4)
  7. Ancillary Piping and Pumps
  8. Corrosion Inhibitor Unit (2, one per well)
  9. High Pressure Disposal Well Pumps (4, two per well)
- E. All wastewater tanks shall be above ground and have adequate design strength, and be compatible with the wastewater. Any tank leak shall be repaired immediately and a report filed shall be with the Executive Director within ten (10) days after the leak is detected describing the cause of the problem and the corrective action taken.
- F. Transmission lines shall be constructed of a material that is compatible with the wastewater, with a thickness and design strength adequate to prevent rupture and shall be protected from freezing and accidental damage. Transmission lines shall be inspected daily. Any transmission line leak shall be repaired immediately and a report filed with the Executive Director within ten (10) days after the leak is detected describing the cause of the problem and the action taken.
- G. Authorized pre-injection units are limited to those listed in Paragraph D of this section and as described in the application's plans and specifications. Prior to constructing or operating any such units in a way that differs from the related plans and specifications, or which will expand facility capacity within the terms of this permit, the permittee is required to:
1. Notify the Executive Director and submit plans and specifications for the proposed modifications or expansion;
  2. Receive written approval under 30 TAC §305.62 or §305.72 from the Executive Director prior to beginning the work (the Executive Director may grant an exception to prior written notification when immediate action is required to prevent uncontained wastewater spills); and
  3. Have facility modifications supervised by a person knowledgeable and experienced in the design and construction of industrial waste handling facilities, who is familiar with the special conditions and requirements of injection well operations.
- H. As built data on all pre-injection units must be submitted for Executive Director approval with the construction and completion report for the well in compliance with 30 TAC §331.45.
- I. Prior to using new surface facilities and newly modified or expanded surface facilities authorized by this permit, the permittee shall obtain written certification from the Executive Director that the permittee has complied with the applicable provisions of this permit. To obtain certification, the permittee shall submit the following to the Executive Director:

1. Final construction, "as-built" plans prepared and sealed by a professional engineer with current registration pursuant to the rules of the Texas Board of Professional Engineers, 22 TAC Chapter 13 and;
2. A certification prepared and sealed by a professional engineer with current registration pursuant to the Texas Engineering Practice Act certifying that construction of the pertinent facility components has been performed in accordance with and in compliance with the provisions of this permit and with the design and construction specifications of the permittee's application or authorized modifications. The certification should include a description of the pertinent facility components with reference to applicable permit provisions.



Permit No. WDW419

Texas Commission on  
Environmental Quality  
Austin, Texas

Permit To Conduct  
Class I Underground Injection  
under provisions of Texas Water Code,  
Chapters 26 & 27, and Texas Health  
and Safety Code, Chapter 361

I. Permittee

South Texas Mining Venture, LLP  
500 N. Shoreline Blvd.  
Suite 800N  
Corpus Christi, TX 78471

II. Type of Permit

Initial                       Renewal                       Amended   
Commercial                       Noncommercial   
Hazardous                       Nonhazardous   
Onsite                       Offsite   
Authorizing Disposal of Waste from Captured Facility   
Authorizing Disposal of Waste from Off-site Facilities Owned by Owner/Operator

III. Nature of Business

In Situ Uranium Mining

IV. General Description and Location of Injection Activity

The disposal well is to be used to dispose of by-product materials as defined in §11.e(2) of the Atomic Energy Act and §401.003(3)(B) of the Texas Health & Safety Code, generated by the permittee's in situ uranium mining activities. The well will be located 1,750 feet from the south line and 660 feet from the west line of the SK&K Survey, A-548, Texas, Latitude 27°40'30" North, Longitude 98°26'07" West, Duval County, Texas. The authorized injection zone is within the Jackson Group and Yegua Formations at the approximate depths of 5,470 to 6,900 feet below ground level (BGL). The authorized injection interval is in the Yegua Formation at approximate depths from 5,960 feet to 6,900 feet BGL.

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The permittee is authorized to conduct injection 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:

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For The Commission

V. Drilling and Completion Requirements

- A. The drilling and completion of the well shall be done in accordance with 30 Texas Administrative Code (TAC) Section (§) 331.62, the plans and specifications of the permit application, and the following conditions.
- B. The permittee shall set and cement surface casing to a minimum subsurface depth of 1100 feet and long string casing into or through the injection zone in order to properly protect each underground source of drinking water (USDW) or freshwater aquifer.
- C. To protect the ground surface from spills and releases, the base of the wellhead shall be enclosed by a diked, impermeable pad with sump. Any liquid collected shall be disposed of in an appropriate manner.
- D. Mechanical integrity shall be demonstrated prior to authorization by the Executive Director to conduct injection operations.
- E. Any changes to the plans and specifications in the original application shall be approved in writing by the Executive Director that said changes provide protection standards equivalent to or greater than the original design criteria.

VI. Character of the Waste Streams

- A. Waste authorized to be injected by this permit shall consist solely of the following:
  - 1. Wastes generated during closure of the well and associated facilities that are compatible with permitted wastes, the reservoir, and well materials;
  - 2. Lixiviant bleed stream;
  - 3. Lab waste stream;
  - 4. Resin transfer water;
  - 5. Filter press wash stream;
  - 6. Reverse osmosis brine stream;
  - 7. Restoration wastewater; and
  - 8. Other associated wastes such as groundwater and rainfall contaminated by the above authorized wastes, spills of the above authorized wastes, and wash waters and solutions used in cleaning and servicing the waste disposal well system equipment and process pad that are compatible with the permitted wastes, the reservoir, and well materials.
- B. The pH of injected waste streams shall be greater than 5.0 and less than 12.0.
- C. Except when authorized by the Executive Director, the specific gravity of injected fluids shall be less than or equal to 1.10 as measured at 60°F/60°F.

- D. No discharge of wastes is authorized by this permit from this facility into waters of the State other than those waste streams authorized above in Paragraph VI.A. which may be injected into the Jackson Group and Yegua Formations within the injection zone between depths of approximately 5,470 to 6,900 feet BGL.

VII. Waste Streams Prohibited From Injection

Wastes prohibited from injection into WDW419 include but are not limited to the following list. The permittee is also required to comply with all other laws or regulations that are applicable to the activities authorized by this permit.

- A. 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 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;
- B. Any by-product material as defined by Texas Health & Safety Code §401.003(3)(A);
- C. Any low level radioactive wastes as defined by Texas Health & Safety Code §401.004;
- D. Any naturally occurring radioactive material (NORM) waste as defined by Texas Health & Safety Code §401.003(26); or
- E. Any oil and gas NORM waste as defined by Texas Health & Safety Code §401.003(27).

VIII. Operating Parameters

- A. The well shall be operated in compliance with the requirements of 30 TAC Chapters 305, and 331, the plans and specifications of the permit application, and the following conditions.
- B. Surface injection pressure shall not cause pressure in the injection zone to:
  - 1. initiate any new fractures or propagate existing fractures in the injection zone;
  - 2. initiate new fractures or propagate existing fractures in the confining zone; or
  - 3. cause movement of fluid out of the injection zone that may contaminate USDW and fresh water.
- C. The operating surface injection pressure shall not exceed 1,350 psig.
- D. The maximum injection rate shall not exceed 200 gallons per minute.
- E. The volume of waste water injected shall not exceed 105,120,000 gallons per year.
- F. A positive pressure of at least 100 psig over tubing injection pressures shall be maintained in the tubing-casing annulus for the purpose of leak detection. Temporary

deviations from this requirement which are a part of normal well operations are authorized but may not exceed 15 minutes in duration. For 15 minutes after the pressure differential drops below 100 psig, the permittee shall conduct troubleshooting and proceed to restore a minimum 100 psig pressure differential. If a minimum 100-psig pressure differential cannot be achieved within 15 minutes, the permittee shall notify the Texas Commission on Environmental Quality (TCEQ) and commence shut-in procedures on the well. The permittee may continue to operate the well under flow conditions that maintain a minimum 100-psig pressure differential.

- G. The permittee shall notify the Executive Director at least 24 hours prior to commencing any workover which involves taking the injection well out of service. Approval by the Executive Director shall be obtained before the permittee may begin work. Notification shall be in writing and shall include plans for the proposed work. The Executive Director may grant an exception to the prior written notification and approval when immediate action is required to prevent pollution according to 30 TAC §331.5. Completion of the well outside the approved injection interval, by perforation of casing, setting of screen, or establishment of open hole section, requires that the permitted injection interval be changed according to 30 TAC §331.62(3)(B) to include the depths of all well completions. Pressure control equipment shall be installed and maintained during workovers which involve the removal of tubing.

#### IX. Monitoring and Testing Requirements

- A. Monitoring and testing shall be in compliance with the requirements of 30 TAC §305.125, §331.64, the plans and specifications of the permit application, and the following conditions.
- B. The integrity of the long string casing, injection tubing, and annular seal shall be tested by means of an approved pressure test with a liquid or gas annually and whenever there has been a well workover. The integrity of the cement within the injection zone shall be tested by means of an approved radioactive tracer survey annually. A radioactive tracer survey may be required after workovers that have the potential to damage the cement within the injection zone.
- C. The pressure buildup in the injection zone shall be monitored annually, including at a minimum, a shutdown of the well for a sufficient time to conduct a valid observation of the pressure fall-off curve.
- D. A temperature log, noise log, oxygen activation log or other approved log is required at least once every five years to test for fluid movement along the entire borehole.
- E. A casing inspection, casing evaluation, or other approved log shall be run whenever the owner or operator conducts a workover in which the injection string is pulled, unless the Executive Director waives this requirement due to well construction or other factors which limit the test's reliability, or based upon the satisfactory results of a casing inspection log run within the previous five years. The Executive Director may require that a casing inspection log be run every five years if there is sufficient reason to believe the integrity of the long string casing of the well may be adversely affected by naturally occurring or man-made events.

- F. Injection fluids shall be tested in accordance with 30 TAC §331.64(a) and the approved waste analysis plan.
- G. The pH and specific gravity of the injected waste shall be monitored continuously at a minimum frequency of at least once every 24 hours and whenever the waste stream changes.
- H. Corrosion monitoring of well materials shall be conducted quarterly and in accordance with 30 TAC §331.64(f). Test materials shall be the same as those used in the wellhead, injection tubing, packer, and long string casing, and shall be continuously exposed to the waste fluids except when the well is taken out of service.
- I. The permittee shall ensure that all waste analyses used for waste identification or verification and other analyses for environmental monitoring have been performed in accordance with methods specified in the current editions of EPA SW-846, ASTM or other methods accepted by the TCEQ. The permittee shall have a Quality Assurance/Quality Control program that is consistent with EPA SW-846 and the TCEQ Quality Assurance Project Plan.

X. Record Keeping Requirements

The permittee shall keep complete and accurate records as required by 30 TAC Chapters 305 and 331.

XI. Financial Assurance for Well Closure

In accordance with 30 TAC Chapter 37, 30 TAC Section 305.154(a)(9), and Sections 331.142-144, the permittee shall secure and maintain in full force financial assurance, in a form approved by the Executive Director, in the amount of \$167,000 (in 2007 dollars) for WDW419. The amount of the financial assurance may, at the discretion of the Executive Director, be altered at a future date to provide for adequate closure. Financial assurance shall be obtained at least 60 days prior to the commencement of drilling of the well. The injection of fluids is not authorized until the permittee has received approval of the above financial assurance from the Executive Director.

XII. Additional Requirements

- A. 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.
- B. 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 26 and 27, and Texas Health and Safety Code, Chapter 361 and 401.
- C. 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.

- D. 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.
- E. The following rules are incorporated as terms and conditions of this permit by reference:
  - 1. Financial Assurance, 30 TAC Chapter 37;
  - 2. Consolidated Permits, 30 TAC Chapter 305; and
  - 3. Underground Injection Control, 30 TAC Chapter 331.
- F. The express incorporation of the above rules as terms and conditions of this permit does not relieve the permittee of an obligation to comply with all other laws or regulations which are applicable to the activities authorized by this permit.
- G. Incorporated Application Materials. This permit is based on, and the permittee shall follow the plans and specifications contained in the Class I Underground Injection Control Application dated September 6, 2007 as revised on November 26, 2007 and January 3, 2008, which is 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.
- H. The express incorporation of the above-cited permit application as terms and conditions of this permit does not relieve the permittee of an obligation to comply with all laws or regulations which are applicable to the activities authorized by this permit.

XIII. Pre-injection Units

- A. All pre-injection units servicing this well must be authorized by permit.
- B. All pre-injection units identified in Provision XIII.D of Permit No. WDW418 may be used for servicing this well provided the requirements of Provisions XIII.A through XIII.I of Permit No. WDW418 are met.

# Compliance History Report

Customer/Respondent/Owner-Operator:	CN603194168	South Texas Mining Venture L.L.P.	Classification:	Rating:
Regulated Entity:	RN105231872	LA PALANGANA URANIUM IN-SITU RECOVERY PROJECT	Classification:	Site Rating:
ID Number(s):	AIR NEW SOURCE PERMITS	REGISTRATION		85564
	UNDERGROUND INJECTION CONTROL	PERMIT		UR03070
	UNDERGROUND INJECTION CONTROL	PERMIT		WDW419
	UNDERGROUND INJECTION CONTROL	PERMIT		UR03070PAA1
	UNDERGROUND INJECTION CONTROL	PERMIT		WDW418
	URANIUM	LICENSE		R06062
Location:	5716 FM 3196, BENAVIDES, TX, 78341			
TCEQ Region:	REGION 16 - LAREDO			
Date Compliance History Prepared:	March 03, 2009			
Agency Decision Requiring Compliance History:	Permit - Issuance, renewal, amendment, modification, denial, suspension, or revocation of a permit.			
Compliance Period:	March 03, 2004 to March 03, 2009			
TCEQ Staff Member to Contact for Additional Information Regarding this Compliance History				
Name:	Carlotta Vann	Phone:	239 - 2348	

### Site Compliance History Components

- |  |       |
|--|-------|
| 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 of the site during the compliance period?    | No    |
| 3. If Yes, who is the current owner?   | N/A   |
| 4. If Yes, who was/were the prior owner(s)?  | _____ |
| 5. When did the change(s) in ownership occur?  | N/A   |
| 6.   |       |

### Components (Multimedia) for the Site :

- A. Final Enforcement Orders, court judgements, and consent decrees of the state of Texas and the federal government.  
N/A
- B. Any criminal convictions of the state of Texas and the federal government.  
N/A
- C. Chronic excessive emissions events.  
N/A
- D. The approval dates of investigations. (CCEDS Inv. Track. No.)  
N/A
- E. Written notices of violations (NOV). (CCEDS Inv. Track. No.)  
N/A
- F. Environmental audits.  
N/A
- 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