Scan Code: 07/17

Region 6
1445 Ross Avenue
Dallas, Texas 75202-2733

UIC AREA Permit No. 06S1264P6273

AUTHORIZATION TO CONVERT or CONSTRUCT INJECTION WELLS UNDER THE UIC PROGRAM OSAGE MINERAL RESERVE WITHIN THE AREA SPECIFIED

In compliance with the provisions of the Safe Drinking Water Act, (hereafter referred to as "the Act" or "SDWA") as amended (42 U.S.C. §300f et seq.),

Chaparral Energy
701 Cedar Lake Blvd.
Oklahoma City, Oklahoma 73114

is authorized to convert any existing well or construct new injection wells anywhere within the area included in: **the SE/4 of Section 10, the S/2 of Section 11, the SW/4 of Section 12, all of Section 14, and the N/2 of Section 23, all in Township 27N, Range 5E** to inject primarily salt water, polymer and carbon dioxide (CO_2) and minor amounts of fresh or brackish water for enhanced recovery of oil from the Burbank Sandstone Formation (Burbank Sand). The CO_2 injected may contain incidental amounts of constituents, such as, hydrogen sulfide (H_2S), nitrogen (N_2) and oxygen (O_2), intrinsic to anthropogenic CO_2 and hydrocarbon gases intrinsic to the field production and recycle of CO_2. The Burbank Sand ranges between approximately 2980 to 3050 feet below land surface. For purposes of clarifying injection well or monitoring well construction requirements, the base of underground sources of drinking water is 245 feet subsurface in the area specified above. Should this permit be amended to include additional areas, the depth to the USDW for each new area will be specified and applicable only to that area.

Wells may be constructed or converted to injection in the permit area provided the well is within the permit area, the well is operated by the permittee and the well is in compliance with all Parts of this permit. Any new well constructed or converted for this purpose shall comply with minimum construction standards, operational requirements, testing requirements, monitoring requirements and reporting requirements set forth in this permit prior to initiating injection. This permit does not affect the authorization status of injection wells existing on the permit area on the effective date of this permit. Such wells may be added to this permit upon written request of the permittee, including proof that the well complies with this permit and written approval by the Director, Water Quality Protection Division ("Director"). Prior authorization terminates on the effective date of inclusion under this permit.

The permittee shall receive separate authorization to inject for each well before using a well to inject fluids. Authorization to inject will be granted upon the Director's confirmation that the operator is compliant with all applicable requirements set forth in this permit and the Osage Class II underground injection control ("UIC") program regulations. Noncompliance with any permit conditions may subject permittee to enforcement according to the SDWA and termination

of authorization to inject for that well.

Authorization to inject may be verbally granted by the Chief, Ground Water/UIC Section ("Chief") or by written "Authorization to Inject" from the Director. Verbal authorization to inject shall be confirmed in writing by the Director. A well included under this permit will remain under this permit until it is plugged or this permit is terminated. A well's authority to inject under this permit may be terminated upon conversion to production or any activity that results in a loss of mechanical integrity. During periods wherein a well under this permit is converted to production, its status (producer) must be provided on each report required under this permit for that well. A well's authority to inject may be reissued upon re-confirmation that the well meets the conditions of this permit and demonstrates mechanical integrity.

Deviations from the construction requirements of this permit are considered a major modification to this permit unless managed by increased monitoring or reporting. Major modification to the permit will require the public participation. Increased monitoring or reporting will be addressed as a minor modification to this permit.

This permit shall become effective on APR 0 3 2012

Prepared by

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Ground Water/UIC Section

Issued on APR 0 3 2012

William K. Honker, P. E., Acting Director
Water Quality Protection Division

Part I. SPECIAL PERMIT CONDITIONS

A. Construction Requirements for Converting Wells Existing Prior to this Permit

1. Cement shall be placed behind all casing strings, from the top of the Burbank Sand to a height of at least 500 feet above the top of the Burbank Sand.

2. The outermost casing(s) through underground sources of drinking water (USDWs) shall be cemented to a depth of at least 50 feet below the base of USDW. For the initial permit area, the base of the USDW is set at 245 feet subsurface. Should this permit be amended in the future to add additional areas, new depths to the base of the USDW will be specified for each area.

3. For those existing wells without surface casing or whose surface casing does extend at least 50' below the USDW, the top 500 feet of the outermost casing(s) to do so must be cemented to surface.

4. Prior to initial authorization to inject, the permittee shall provide evidence to the Director of compliance with Parts I. A. 1. and A. 2. above by submitting cementing record and either a cement bond log or temperature log. The permittee shall notify the Osage Nation Environmental and Natural Resources Department (Osage Nation ENRD) at least five days before testing a well under this Part.

5. Injection shall be through tubing and packer. The packer shall be set within 75 feet of the uppermost injection perforation or top of open hole.

6. All cements, casings, liners, tubings, packers and tubing-casing annulus fluids employed shall be designed to withstand the anticipated acidic environment.

7. Burst pressure for the tubulars comprising the tubing/casing annulus shall be rated at 1.5 times the highest differential pressures to which they will be exposed down hole. Existing wells unable to meet this condition shall be equipped with a pop-off valve set to relieve pressures exceeding 10% above maximum authorized surface injection pressures (MASIP).

8. The tubing/packer/casing or liner annulus shall be filled with a corrosion inhibiting fluid.

9. All wells shall be equipped with standard female fittings with cut-off valves affixed to the wellhead in a manner that allows opportunity to detect pressure in each annulus between the tubing and surface casing.

B. Construction Requirements for Newly Drilled Wells

1. Newly drilled wells shall be constructed with surface casing set to at least 500 feet subsurface and cemented back to surface.

2. Long-string casing shall be set at least to the top of the Burbank Sand formation, and cemented back to surface. If cement is not circulated on the long-string casing, a cement bond log or temperature survey shall be run and submitted to the Section Chief showing

bonding of at least 5oo feet directly above the Burbank formation.

3. Prior to initial authorization to inject, the permittee shall provide evidence to the Director of compliance with Parts I. B. 1. and B. 2. by cementing record and either a cement bond log or temperature log.

4. Injection shall be through tubing and packer. The packer shall be set within 75 feet of the uppermost injection perforation or top of open hole.

5. All cements, casings, liners, tubing, packers and tubing-casing annulus fluids employed shall be designed to withstand the anticipated acidic environment.

6. Burst pressure for the tubulars comprising the tubing/casing annulus shall be rated at 1.5 times the highest differential pressures to which they will be exposed down hole

7. The tubing/packer/casing or liner annulus shall be filled with a corrosion inhibiting fluid. The permittee shall notify the Osage Nation ENRD at least five days before testing a well under this Part.

8. The well shall be equipped with standard female fittings with cut-off valves affixed to the wellhead in a manner that allows attachment of a gauge with a standard male fitting to allow for monitoring pressure in each annulus between the tubing and surface casing.

C. Area of Review (AOR) Corrective Action

1. Before receiving authorization to inject for any well authorized by this permit, the permittee shall complete corrective action and reporting on any well bore within ¼-mile AOR of the injection well according to Parts I. C. 2. through C. 6. Should the permittee be unable to obtain permission to take corrective action on a well in the AOR, the Director may require additional monitoring according to Part I. C. 6.

2. Any producing, temporarily abandoned, or injection well within the AOR existing before the effective date of this permit shall be constructed according to Parts I. A. 1, A. 2, and A. 6. Any producing, temporarily abandoned, or injection well within the AOR constructed after the effective date of this permit shall be constructed according to Parts I. B. 1, B. 2, and B. 5. Any wells within the AOR to be plugged or re-plugged will be plugged according to standards specified in Part I. C. 3.

3. Any well plugged after the effective date of this permit shall be plugged according to procedures set forth in 40 CFR §147.2905 or as directed by the EPA Tulsa Field Office (EPATFO). The permittee shall provide plugging plans to the Osage Nation ENRD for approval by EPATFO at least five days before initiation of plugging operations.

4. Upon receipt of evidence of upward migration of fluids into or between USDWs, the Chief may require the permittee to replug a well previously recognized as plugged, if that

well is suspected of contributing to the upward migration.

5. The permittee shall submit to the Chief a copy of a signed BIA Form No. 208 or 139, whichever is appropriate, showing the work completed on each well for which corrective action was required.

6. If the permittee cannot locate or implement effective corrective action on any well of record requiring corrective action, a monitor well shall be constructed according to the requirements of Part I. E. Such monitor wells shall be located no more than 25 feet from the recorded location of the subject well. Monitoring and reporting shall be conducted according to the requirements in Parts I. G. and H.

7. After injection commences, corrective action shall be completed, as directed by the Chief, any time evidence of fluid migration into underground sources of drinking water is detected or reasonably suspected.

D. Monitor Well Network

1. A network of monitoring wells shall be constructed to encompass the permit area and may be repositioned to enhance detection of fluid migration into USDWs. This system shall include one monitor well to be placed within 50 feet of the intersection of all quarter sections in the permit area. These monitor wells may be repositioned, if approved by the Chief, to fulfill Part I. C. 6. or in consideration of other criteria including: accessibility, results of corrective action, coverage across the permit area and location of water supply wells.

2. Monitor wells shall be completed as required throughout the quarter section before initiation of CO_2 injection in that quarter section or, when the static fluid level in the injection zone, any place within that quarter section, exceeds the base of the USDW specified for that area, whichever comes first.

3. Before receiving authorization to inject for any well authorized under this permit, the permittee shall submit to the Chief a copy of a report showing construction details of each monitoring well required under Parts I. C. 6. or I. D. 1. of this permit.

4. Monitor wells shall be constructed according to Part I. E. of this permit.

E. Construction Requirements for all Monitor Wells

1. At minimum, monitor wells shall be drilled to the base of the USDW as specified by the permit for the area in which the monitoring well is located and shall be constructed in a manner allowing periodic acquisition of samples representative of water quality in the well at a depth of approximately 10 feet above the base of USDW. A 20-foot long screen

shall be set at the base of the lowest water bearing formation encountered when drilling the monitor well.

2. The casing in each well shall be a minimum of 2 inches in diameter, extend at least two feet above the surface, be set with cement and/or bentonite from the top of the screened interval to the surface, and secured with a cement pad at the surface capable of preventing surface fluid flow into the well. Details for the construction of ground water monitoring wells can be found in EPA's guidance document: RCRA GROUND-WATER MONITORING:DRAFT TECHNICAL GUIDANCE.

3. Each monitor well shall be secured with a lockable cap, protected to prevent accidental damage from vehicular traffic, and permanently marked with its company identification number and global positioning system coordinates.

F. Injection Well Operating Requirements

1. The permittee shall demonstrate, to the satisfaction of the Director, that the injection well has no significant leak in the casing/tubing annulus and allows no fluid migration through vertical channels behind the casing pursuant to 40 CFR §147.2920(b) (1) (i) and (2) (ii) or (iii) respectively. The demonstration of mechanical integrity (MI) must be made at least once every five years thereafter. The Director may require increased frequency of this testing if circumstances deem it prudent. To acquire authorization to inject (ATI), the permittee must submit a successful MI demonstration and proof of cement behind the well's casing(s) in the form of "as built" diagrams with supporting cement bond log(s) or temperature log(s) to the Chief. The Chief may issue ATI either verbally or in writing upon finding the well is compliant with the corrective action, monitoring well and injection well construction and MI requirements of this permit.

2. Each injection well shall be equipped with standard female fittings with cut-off valves affixed to the wellhead in a manner that allows attachment of a gauge with a standard male fitting to allow for monitoring pressure in each annulus between the tubing and surface casing.

3. Injection pressure at the wellhead shall not exceed 850 psig during injection of saltwater and 2165 psig when injecting CO_2.

4. The permittee is authorized to inject primarily salt water, polymer and carbon dioxide (CO_2) and minor amounts of fresh or brackish water for enhanced recovery of oil from the Burbank Sandstone formation (Burbank Sand). The CO_2 injected may contain incidental amounts of constituents, such as, hydrogen sulfide (H_2S), nitrogen (N_2) and oxygen (O_2), intrinsic to anthropogenic CO_2 and hydrocarbon gases intrinsic to the field production and recycle of CO_2. Injection of authorized fluids may be alternated without prior approval.

5. For each injection well authorized under this area permit the maximum injection volume for saltwater is 124,000 barrels per calendar month.

6. For each injection well authorized under this permit the maximum injection volume for CO_2 is 186 million cubic feet (MMCF) per calendar month. These authorized CO_2 volumes are at standard temperature and pressure (STP). All volumes of CO_2 injected will be reported as if measured at STP.

G. Monitoring Requirements

1. Quarterly, the permittee shall measure static water level and analyze for chlorides, total dissolved solids (TDS) and alkalinity in each monitor well. Samples are to be analyzed according to procedures set out in the most recent edition of Standard Methods for the Examination of Water and Wastewater. To ensure appropriate collection and analysis the permittee must submit a field sampling plan and quality assurance project plan within 90 days of the date of this permit.

2. The permittee shall utilize the first sampling results from all monitoring wells in a quarter section to establish baseline groundwater quality for that monitoring well. The first quarterly sample must be acquired prior to injection in the quarter section.

3. If at the end of two years the monitoring results do not exceed thirty percent of the baseline established for any specific monitoring well by the first quarterly sample analysis in Part I. G. 2., the frequency of sampling that monitoring well can be reduced to once a year, if approved by the Chief.

H. Reporting Requirements

(a) Ground Water Quality Report

1. The permittee shall provide to the EPA, Region 6 quarterly, a report of monitor well sampling during the prior quarter. The reports shall be submitted by the dates shown below. The reports shall include a summary of the analytical results from each monitoring well sampling event for the previous four quarters, in chronological order, signed and dated by the submitting company official. Any monitoring well whose sampling frequency has been extended by approval of the Chief under Part I. G. 3., should be so noted with the date of that approval in the report.

Report Due Date	Reporting Period
March 1	October –December
June 1	January – March
September 1	April – June
December 1	July - September

2. The permittee shall orally report to the EPA, Region 6 within 24 hours of receiving analytical results exceeding a thirty percent (30%) increase above baseline values determined under Part I. G. 2.

3. Within five days of the oral report, provided in Part I. H. (a) 2., the permittee shall submit a written report to the EPA, Region 6 providing the status of their investigation into the increases and any subsequent corrective actions proposed or taken to protect USDWs.

(b) Well Identification/Status Report

1. At the beginning of each month the operator shall provide a Well Identification/Status Report (WISR) spreadsheet electronically to EPA Region 6. In column fashion the spreadsheet shall identify by well number and location, all wells currently authorized under the permit or in process of coming under the permit. In addition, the report must certify that the ¼ mile AOR corrective action requirements for each well currently injecting are completed and the date of its last successful mechanical integrity test.

2. Each WISR report shall include a plat map of the project area. This plat map shall show the location of all injection wells listed in the WISR report and all monitoring wells currently operating. Once an area authorized under the permit is fully developed under the permit, the operator may cease submission of the plat map. If the area permit is modified to include additional areas within the Burbank Field, submission of the plat map will be required again, reflecting the additional area(s) until they are fully developed.

Part II. CONDITIONS APPLICABLE TO ALL PERMITS - OSAGE

A. Confidentiality

Any information except the permittee's name and address and information concerning the existence, absence or level of contaminants in drinking water may be claimed as confidential. Any claim of confidentiality must be asserted at the time of submission. If no claim is made, EPA may make the information available to the public without further notice.

B. Duty to Comply

1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Act and is grounds for enforcement action, for permit termination, revocation and reissuance, or modification.

   Compliance with the terms of this permit does not constitute a defense to any action brought under Section 1431 of the Safe Drinking Water Act (SDWA) of any other law for any imminent or substantial endangerment to human health of the environment or for any breach of any other applicable legal duty.

2. The permittee need not comply with the provisions of this permit to the extent and for the duration such noncompliance is authorized in a temporary emergency permit under 40 CFR §147.2906.

C. Duty to Halt or Reduce Activity

It shall not be a defense for a permittee, in an enforcement action, that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

D. Duty to Mitigate

The permittee shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this permit.

E. Proper Operation and Maintenance

1. All injections wells must have and maintain mechanical integrity consistent with 40 CFR §147.2920(b). Mechanical integrity must be demonstrated initially and also any time the tubing is removed from the well, the packer is reset, or a loss of mechanical integrity becomes evident during operation. Furthermore, the Regional Administrator (RA) may by written notice require the permittee to demonstrate mechanical integrity at anytime. The permittee shall notify the Osage UIC office of his intent to prove mechanical integrity at least 5 days prior to such demonstration. The permittee shall report the results of the mechanical integrity demonstration within 30 days after completion (unless the demonstration is witnessed by an EPA inspector, in which case the inspector will prepare the report).

2. If the permittee or the RA finds that the well fails to demonstrate mechanical integrity during a test, or a loss of mechanical integrity as defined by 40 CFR §147.2920(b), becomes evident during operation, the operation shall be halted immediately and shall not be resumed until the RA gives approval to recommence injection.

3. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance includes effective performance, adequate engineering capability available, adequate funding, adequate operator staffing and training, and adequate laboratory and process controls, including 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 conditions of the permit.

F. Permit Actions

1. This permit may be modified, revoked and reissued, or terminated for the following causes (see 40 CFR §147.2927 and 40 CFR §147.2928):

   a) There are substantial changes to the facility or activity which occurred after permit issuance that justify revised or additional permit conditions.

   a) The RA has received information (e.g., from monitoring reports, inspections) which warrants a modified permit.

   b) The regulations or standards on which the permit was based have changed.

   c) The RA has received notice of a proposed permit transfer.

   d) An interested person requests in writing that a permit be modified and the RA determines that cause for modification exists.

   e) Cause exists for termination under 40 CFR §147.2928, but the RA determines that permit modification is appropriate.

   The modifications procedure described in 40 CFR §2927(c) must be followed to accomplish the modifications described in item "a" through "f" of this section.

2. Minor modifications do not require that the procedure listed in 40 CFR §147.2927(c) be followed.

   Minor modifications consist of:

   a) Correcting typographical errors;

   b) Requiring more frequent monitoring or reporting;

   c) Changing ownership or operational control (see 40 CFR §147.2926, Permit Transfers); or

d) Changing quantities or types of injected fluids, provided:

(i) The facility can operate within conditions of the permit;

(ii) The facility classification would not change.

The filing of a request by the permittee for a permit modification, or a notification of planned changes or anticipated noncompliance, does not stay any permit condition.

G. Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege.

H. Duty to Provide Information

The permittee shall furnish to the RA within a reasonable time any information which the RA requests to determine whether cause exists for modifying, revoking and reissuing or terminating this permit. The permittee shall also furnish to the RA, upon request, copies of records required to be kept by this permit.

I. Inspection and Entry

The permittee shall allow EPA representatives upon the presentation of credentials and other documentation to:

1. Enter upon the permittee's premises where a regulated facility or activity is located or conducted, or where records required by this permit are kept;

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

3. Inspect, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

4. Sample or monitor, at reasonable times for the purposes of assuring permit compliance or as otherwise authorized by the SDWA, any substances or parameters at any location.

J. Monitoring and Records

1. Samples and measurements taken for the purpose of monitoring shall be representative of the injection activity. The operator shall monitor the injection pressure (psi) and rate (bbl/day) once a month. Reporting of monitoring results shall be in accordance with procedures and at intervals prescribed in condition II.L.4 of this permit.

2. The permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings of continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the RA at any time.

   The permittee shall retain records concerning the nature and composition of all injected fluids until three (3) years after the completion of any plugging and abandonment procedures specified under 40 CFR §147.2905. The RA may require the owner or operator to deliver the records to the RA at the conclusion of the retention period.

3. Records of monitoring information shall include:

   a. The date, exact place, and time of sampling or measurements;

   b. The individuals who performed the sampling or measurements;

   c. The date(s) analyses were performed;

   d. The individual(s) who performed the analyses;

e. The analytical techniques or methods used including quality assurance techniques employed to insure the generation of reliable data; and

f. The results of such analyses.

4. The owner/operator shall retain all monitoring records for three (3) years, unless an enforcement action is pending, and then until three (3) years after the enforcement action has been resolved.

K. Signatory Requirements

All applications, reports, or information submitted to the RA shall be signed and certified (see 40 CFR §147.2925(j)) by the injection facility owner/operator or his duly authorized representative.

L. Reporting Requirements

1. The owner/operator shall notify the Osage UIC office within 30 days of the date on which injection commenced.

2. Planned changes - The permittee shall give advance notice to the RA of any planned changes which may result in noncompliance.

3. Transfers - This permit is not transferable to any person except after notice to the RA.

a) Permits may be transferred to another permittee:

(1) If the current permittee notifies the RA by certified mail at least 10 days before the proposed transfer date; and

(2) If the notice includes a written agreement between the existing and new permittees containing:

(i) A specific date for transfer of permit responsibility, coverage and liability; and

(ii) Assurance that the new permittee has a surety bond on file with BIA; and

(3) If the RA does not respond with a notice to the existing permittee that the permit will be modified.

b) If the conditions in paragraph (a) of this section are met, the transfer is effective on the date specified in paragraph (a) (2) (i).

4. Monitoring reports - Monitoring results shall be reported annually on the EPA Annual Disposal/Injection Well Monitoring Report form or an identical format. The report shall specify the types of methods used to generate the monitoring data.

5. Compliance schedules - Reports of compliance or noncompliance with, or any progress report on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 30 days following each interim date and the final date of compliance.

6. Twenty-four hour reporting - The permittee shall report to the Osage UIC office any noncompliance which may endanger an underground source of drinking water. The report shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance including exact dates and times; if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

7. The following shall be reported within 30 days of occurrence:

   1) Any monitoring reports or other information required under paragraph 6 that is not available within five (5) days.

   2) Any malfunction of the injection system including any mechanical failure or downhole problem involving well integrity, well workovers, or any noncompliance (Ref. 40 CFR §147.2922).

8. Other noncompliance - The permittee shall report all instances of noncompliance not reported under paragraphs 6 and 7 of this section at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph L.6 of this section.

9. The permittee shall notify the Osage UIC office within 30 days of the date injection has terminated.

10. Other information - When the permittee becomes aware that he failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the RA, the permittee shall promptly submit such facts or information.

M. Additional Conditions

1. The operator of a well shall not allow the movement of fluid containing any contaminant into underground sources of drinking water if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR Part 142 or may otherwise adversely affect human health.

2. The owner/operator shall notify the Osage UIC office within 30 days of the date injection has terminated. The well must be plugged within one year after termination of injection. The RA may extend the time to plug, but only if no fluid movement into a USDW will occur, and the operator has presented a viable plan for utilizing the well within a reasonable time.

1. The permittee shall notify the Osage UIC office by certified mail at least five (5) days prior to the commencement of plugging operations. The notice must include that information prescribed at 40 CFR §147.2905(c).

2. Plugging and Abandonment - The well shall be plugged in a manner which will not allow the movement of fluids either into or between underground sources of drinking water. Placement of cement plugs shall be accomplished by one of the methods described in 40 CFR §147.2905 or some other method approved by the RA.

   The well to be abandoned shall be in a state of static equilibrium with the mud weight equalized top to bottom, either by circulating the mud in the well at least once or by a comparable method prescribed by the RA, prior to the placement of the cement plug(s).

N. Financial Responsibility

The permittee must demonstrate and maintain financial responsibility and resources to close, plug, and abandon the underground injection well. This shall be demonstrated by the submission of a surety bond to the Osage Agency Bureau of Indian Affairs.

O. Civil and Criminal Liability

Nothing in this permit shall be construed to relieve the permittee from civil or criminal penalties for noncompliance.

P. Severability

The provisions of this permit are severable, and if any provision of this permit, or the application of any provision of this permit to any circumstance, is held invalid, the application of such provisions to other circumstances, and the remainder of this permit, shall not be affected thereby.

Q. Explanation of Terms

Terms used in this permit are defined as follows:

"RA" - the EPA Regional Administrator

"UIC" - Underground Injection Control Program

"SDWA"/"the Act" - The Safe Drinking Water Act

"Osage UIC Office" - 625 Grandview Avenue, Osage Agency Campus, P. O. Box 1495, Pawhuska, OK 74056

Well Stimulation - means several processes used to clean the wellbore, enlarge channels, and increase pore space in the interval to be injected thus making it possible for wastewater to move more readily into the formation, and includes (1) surging, (2) jetting, (3) blasting, (4) acidizing, (5) hydraulic fracturing.

Other references to program - specific terms, acronyms and abbreviations shall mean those terms as defined by the UIC program regulations, 40 CFR 124, 144, 145, 146, 147 and the Safe Drinking Water Act.