

NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

GARY E. JOHNSON Governor Jennifer A. Salisbury Cabinet Secretary

January 15, 2002

Lori Wrotenbery Director Oil Conservation Division

<u>CERTIFIED MAIL</u> <u>RETURN RECEIPT NO. 5357 7263</u>

Mr. Mike Talovich Key Energy Services, Inc. Four Corners Div. P.O. Box 900 Farmington, NM 87499

RE: Approval of Discharge Plan UIC-CLI-005 Class I Non-Hazardous Oil Field Waste Disposal Well API No. 30-045-28653 San Juan County, New Mexico

Dear Mr. Talovich:

The groundwater discharge plan renewal for the Key Energy Services, Inc. Four Corners Div. (Key) Class I non-hazardous oil field waste disposal well UIC-CLI-005 located in SW/4 NW/4 of Section 2, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico, is hereby approved under the conditions contained in the enclosed attachment. Enclosed are two copies of the conditions of approval. Please sign and return one copy to the OCD Santa Fe Office within 30 working days of receipt of this letter.

The original Order SWD-457 was issued January 13, 1992, the discharge plan was approved on August 26, 1996 by the OCD with an expiration date of August 26, 2001. The discharge plan renewal application dated April 18, 2001 submitted pursuant to Section 5101.B.3. of the New Mexico Water Quality Control Commission (WQCC) Regulations also includes all earlier applications and all conditions later placed on those approvals. The discharge plan renewal application was submitted pursuant to Section 5101.B.3. of the New Mexico Water Quality Control Commission (WQCC) Regulations. The discharge plan renewal application was submitted pursuant to Section 5101.B.3. of the New Mexico Water Quality Control Commission (WQCC) Regulations. The discharge plan is renewed pursuant to Section 5101.A. and 3109.C. Please note Section 3109.G., which provides for possible future amendment of the plan. Please be advised that approval of this plan does not relieve Key of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does it relieve Key of its responsibility to comply with any other governmental authority's rules and regulations.

Please be advised that all exposed pits, including lined pits and open top tanks (exceeding 16 feet in diameter) shall be screened, netted, or otherwise rendered non-hazardous to wildlife including migratory birds.

Please note that Section 3104 of the regulations requires that when a plan has been approved, discharges must be consistent with the terms and conditions of the plan. Pursuant to Section 3107.C Key is required to notify the Director of any facility expansion, production increase, pressure increase, or process modification that would result in any change in the discharge of water quality or volume.

Pursuant to Section 3109.H.4, this plan is for a period of five (5) years. This approval will expire August 26, 2006 and Key should submit an application for renewal in ample time before this date. Note that under Section 5101.F of the regulations, if a discharger submits a discharge plan renewal application at least 120 days before the discharge plan expires and is in compliance with the approved plan, then the existing discharge plan will not expire until the application for renewal has been approved or disapproved.

The discharge plan for the Key Class I non-hazardous oil field waste disposal well is subject to the WQCC Regulation 3114. Every billable facility submitting a discharge plan will be assessed a fee equal to the filing fee of \$100.00 plus a flat fee of \$4500.00 for Class I injection wells. The OCD has not received the \$4500.00 flat fee. The flat fee may be paid in a single payment due on the date of the discharge plan approval or in five equal installments over the expected duration of the discharge plan. Installment payments shall be remitted yearly, with the first installment due on the date of the discharge plan approval and subsequent installments due on this date of each calendar year.

Please make all checks payable to: Water Quality Management Fund C/o: Oil Conservation Division 1220 South Saint Francis Drive Santa Fe, New Mexico 87505.

If you have any questions, please contact Wayne Price of my staff at (505-476-3487) or E-mail WPRICE@state.nm.us. On behalf of the staff of the OCD, I wish to thank you and your staff for your cooperation during this discharge plan review.

Sincerely,

Roger C. Anderson Environmental Bureau Chief RCA/lwp

Attachment-1 xc: OCD Aztec Office David Catanach, UIC Director, OCD Santa Fe

ATTACHMENT TO DISCHARGE PLAN UIC-CLI-005 APPROVAL KEY ENERGY SERVICES, INC., CLASS I WELL API No. 30-045-28653 SW/4 NW/4 Section 2, Ts 29 N, R 12 West SAN JUAN COUNTY, NEW MEXICO DISCHARGE PLAN APPROVAL CONDITIONS January 15, 2002

- 1. <u>Payment of Discharge Plan Fees:</u> The \$100 dollar filing fee has been paid. The \$4500.00 flat fee shall be submitted upon receipt of this approval. The required flat fee may be paid in a single payment due at the time of approval, or in equal annual installments over the duration of the plan, with the first payment due upon receipt of this approval.
- 2. <u>Commitments:</u> Key will abide by all commitments submitted in the discharge plan renewal application dated April 18, 2001, all previous commitments including OCD Order SWD-457 and these conditions for approval.
- 3. <u>Maximum Injection Pressure:</u> The maximum operating injection pressure at the wellhead will be 2850 psi in accordance with OCD Order SWD-457. The injection well or system shall be equipped with a pressure limiting device which will limit the wellhead pressure on the injection well to no more than 2850 psi. The pressure limiting device shall annually be demonstrated to operate to the satisfaction of the OCD.

Key shall take all steps necessary to ensure that the injected water enters only the proposed injection interval and is not permitted to escape to other formations or onto the ground surface.

- 4. <u>Mechanical Integrity Testing</u>: In accordance with OCD testing procedures, a mechanical integrity test will be conducted on the well annually and any time the tubing is pulled or the packer is reseated. An approved pressure recorder will be used and copies of the chart submitted to the OCD Santa Fe Office and the OCD Aztec District Office within 30 days following the test date. The OCD will be notified prior to the test so that they may witness the test. Mechanical integrity testing charts will be maintained at Key for the life of the well.
- 5. <u>Annulus:</u> Key shall install and maintain pressure controls and continuous monitoring devices pursuant to WQCC NMAC 20.6.2.5207.B.2.
- 6. <u>Continuous Monitoring and Recording:</u> Continuous monitoring and recording devices will be installed and mechanical charts made of injection pressure, flow rate, flow volume, and annular pressure. Mechanical charts are to be maintained at Key for the life of the well.

- 7. <u>Maintenance Records:</u> All routine maintenance work on the well will be recorded and maintained at Key for the life of the well.
- 8. <u>Wastes Permitted for Injection</u>: Injection will be limited to approved fluids as permitted under OCD Order SWD-457 and non-hazardous oil field waste fluids as permitted under OCD 711 permit NM-01-009. All non-exempt non-hazardous oil field waste will be tested for the constituents listed below in condition number nine (9).
- 9. <u>Chemical Analysis of Injection Fluids</u>: The following analyses of injection fluids will be conducted on a quarterly basis:
 - a. Aromatic and halogenated volatile hydrocarbon scan by EPA method 8260C GC/MS including MTBE. Semi-Volatile Organics GC/MS EPA method 8270B including 1 and 2-methylnaphthalene.
 - b. General water chemistry to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate total dissolved solids (TDS), pH, and conductivity.
 - c. Total heavy metals using the ICAP scan (EPA method 6010/ICPMS) and Mercury using Cold Vapor (EPA method 7470).
 - d. EPA RCRA Characteristics for Ignitability, Corrosivity and Reactivity.

Records of all analyses will be maintained at Key for the life of the well.

- 10. <u>Quarterly Reporting</u>: The following reports will be signed and certified in accordance with WQCC section 5101.G. and submitted quarterly to both the OCD Santa Fe and Aztec Offices:
 - a. Results of the chemical analysis of the injection fluids (number 9).
 - b. Monthly average, maximum and minimum values for injection pressures; flow rate and flow volume; and, annular pressure.
 - c. Monthly volumes of injected fluids pursuant to OCD Rule 1115.

- 11. <u>Drum Storage:</u> All drums containing materials other than fresh water must be stored on an impermeable pad with curbing. All empty drums will be stored on their sides with the bungs in and lined up on a horizontal plane. Chemicals in other containers such as sacks or buckets will also be stored on an impermeable pad and curb type containment.
- 12. <u>Process Areas:</u> All process and maintenance areas which show evidence that leaks and spills are reaching the ground surface must be either paved and curbed or have some type of spill collection device incorporated into the design.
- 13. <u>Above Ground Tanks:</u> All above ground tanks which contain fluids other than fresh water must be bermed to contain a volume of one-third more than the total volume of the largest tank or of all interconnected tanks. All new tanks or existing tanks that undergo a major modification, as determined by the Division, must be placed within an impermeable bermed enclosure.
- 14. <u>Above Ground Saddle Tanks</u>: Above ground saddle tanks must have impermeable pad and curb type containment unless they contain fresh water or fluids that are gases at atmospheric temperature and pressure.
- 15. <u>Labeling:</u> All tanks, drums and containers should be clearly labeled to identify their contents and other emergency notification information.
- 16. <u>Below Grade Tanks/Sumps:</u> All below grade tanks, sumps, and pits must be approved by the OCD prior to installation or upon modification and must incorporate secondary containment and leak-detection into the design. All pre-existing sumps and below-grade tanks must be tested to demonstrate their mechanical integrity no later than March 15, 2002 and every year from tested date, thereafter. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure and/or visual inspection of cleaned out tanks and/or sumps, or other OCD approved methods. The OCD will be notified at least 72 hours prior to all testing. The test results will be submitted to OCD 30 days after test has been conducted.
- 17. <u>Underground Process/Wastewater Lines:</u> All underground process/wastewater pipelines must be tested to demonstrate their mechanical integrity no later than March 15, 2002 and every 5 years, from tested date, thereafter. Permittees may propose various methods for testing such as pressure testing to 3 pounds per square inch above normal operating pressure or other means acceptable to the OCD. The OCD will be notified at least 72 hours prior to all testing. The test results will be submitted to OCD 30 days after test has been conducted.

- 18. <u>Well Workover Operations:</u> OCD approval will be obtained from the Director prior to performing remedial work or any other workover. Approval will be requested on OCD Form C-103 "Sundry Notices and Reports on Wells" (OCD Rule 1103.A.) with appropriate copies sent to the OCD Aztec District Office.
- 19. <u>Housekeeping:</u> All systems designed for spill collection/prevention will be inspected weekly and after each storm event to ensure proper operation and to prevent overtopping or system failure. A record of inspections will be retained on site for a period of five years.
- 20. <u>Spill Reporting:</u> All spills/releases shall be reported pursuant to OCD Rule 116. and WQCC 1203. to the OCD Aztec District Office. Key shall immediately notify the Supervisor of the Aztec District Office and the Environmental Bureau of the Division of the failure of the tubing, casing, or packer in said well and shall take such steps as may be timely and necessary to correct such failure or leakage.
- 21. <u>Transfer of Discharge Plan:</u> The OCD will be notified prior to any transfer of ownership, control, or possession of the well and associated facilities. A written commitment to comply with the terms and conditions of the previously approved discharge plan and a bond must be submitted by the purchaser and approved by the OCD prior to transfer.
- 22. <u>Closure:</u> The OCD will be notified when operations of the well are discontinued for a period in excess of six months. Prior to closure of the well and associated facilities a closure plan will be submitted for approval by the Director. Closure and waste disposal will be in accordance with the statutes, rules and regulations in effect at the time of closure.
- 23. <u>Plugging Bond and /or Letter of Credit:</u> Key shall have in effect a Division approved plugging bond and/or letter of credit for the estimated amount required to plug the well according to the proposed closure plan and adjusted for inflation. The required plugging bond and/or letter of credit shall be adjusted at the time of discharge plan renewal.

Key shall submit a proposal to amend Bond No. U272355 to reflect the current owner and adjust for inflation. Please submit for OCD approval by April 15, 2002.

- 24. <u>Training:</u> All personnel associated with operations at the Key Class I disposal well will have appropriate training in accepting, processing, and disposing of Class I non-exempt non-hazardous oil field waste to insure proper disposal. All training documentation shall be maintained at Key for the life of the well.
- 25. <u>OCD Inspections:</u> Additional requirements may be placed on the well and associated facilities based upon results from OCD inspections.
- 26. <u>Storm Water Plan:</u> Submit a Stormwater run-off plan for OCD approval by April 15, 2002.

27. <u>Waste Disposal</u>: All wastes will be disposed of at an OCD approved facility. Only oilfield exempt wastes shall be disposed of down Class II injection wells. Non-exempt oilfield wastes that are non-hazardous may be disposed of at an OCD approved facility upon proper waste determination per 40 CFR Part 261. Any waste stream that is not listed in the discharge plan will be approved by OCD on a case-by-case basis.

<u>Rule 712 Waste:</u> Pursuant to Rule 712, disposal of certain non-domestic waste is allowed at solid waste facilities permitted by the New Mexico Environment Department as long as the waste stream is identified in the discharge plan, and existing process knowledge of the waste stream does not change without notification to the Oil Conservation Division.

- 28. <u>Class V Wells</u>: No Class V wells that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes will be approved for construction and/or operation unless it can be demonstrated that groundwater will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD regulated facilities which inject non-hazardous fluid into or above an underground source of drinking water are considered Class V injection wells under the EPA UIC program. Class V wells that inject domestic waste only must be permitted by the New Mexico Environment Department.
- 29. <u>Certification:</u> Key Energy Services, Inc., by the officer whose signature appears below, accepts this permit and agrees to comply with all terms and conditions contained herein. Key Energy Services, Inc. further acknowledges that these conditions and requirements of this permit modification may be changed administratively by the Division for good cause shown as necessary to protect fresh water, human health and the environment.

<u>Conditions accepted by:</u> KEY ENERGY SERVICES, INC.

Company Representative- print name

Date____

Company Representative- Sign

Title