NEW MEXICO ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT

BILL RICHARDSON
Governor
Joanna Prukop
Cabinet Secretary

Mark E. Fesmire, P.E.
Director
Oil Conservation Division

August 14, 2007

Mr. Dan Gibson
Key Energy Services, LLC
6 Desta Drive, Suite 4400
Midland, Texas 79705

Re: **Approval of Class I Injection Well Discharge Permit SUNCO Disposal Well #1 UIC-CLI-005 (I-005)**
Class I Non-Hazardous Oil Field Waste Disposal Well
SUNCO Disposal Well #1, API No. 30-045-28653
1595 FNL and 1005 FWL UL: E Section 2, T 29 N, R 12 W
San Juan County, New Mexico

Dear Mr. Gibson:

Pursuant to all applicable parts of the Water Quality Control Commission (WQCC) Regulations 20.6.2 NMAC and more specifically 20.6.2.3104 - 20.6.2.3999 discharge permit, and 20.6.2.5000-.5299 Underground Injection Control (UIC), the Oil Conservation Division (OCD), the applicant is hereby authorized with corrective actions specified in Item 20(B) herein to continue utilizing its Key Energy Services, LLC. Class I "SUNCO Disposal Well #1" injection well (API No. 30-045-28653). The well is located 1595 feet from the North line and 1005 feet from the West line in the SW/4, NW/4 of Section 2, Township 29 North, and Range 12 West, NMPM, San Juan County, New Mexico, under the conditions specified in the enclosed **Attachment To The Class I Injection Well Discharge Permit**.

Enclosed are two copies of the conditions of approval. **Please sign and return one copy to the New Mexico Oil Conservation Division (OCD) Santa Fe Office within 30 working days of receipt of this letter-including permit fees.**

Please be advised that approval of this permit does not relieve Key Energy Services, LLC. of responsibility should operations result in pollution of surface water, ground water or the environment. Nor does approval of the permit relieve Key Energy Services, LLC. of its responsibility to comply with any other applicable governmental authority's rules and regulations.

If you have any questions, please contact Carl Chavez of my staff at (505-476-3491) or E-mail address: carlj.chavez@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 permit review.

Sincerely,

Wayne Price
Environmental Bureau Chief

RCVD AUG 17 '07
OIL CONS. DIV.
DIST. 3

LWP/cc
Attachments-1
xc: OCD District Office

ATTACHMENT TO THE DISCHARGE PERMIT
Key Energy Services, LLC., SUNCO DISPOSAL WELL #1
Class I Waste Disposal Well UIC-CLI-005 (I-005)
DISCHARGE PERMIT APPROVAL CONDITIONS

August 14, 2007

Please remit a check for $4,500.00 made payable to Water Quality Management Fund:

Water Quality Management Fund
C/o: Oil Conservation Division
1220 S. Saint Francis Drive
Santa Fe, New Mexico 87505

1. **Payment of Discharge Plan Fees:** All discharge permits are subject to WQCC Regulations. Every billable facility that submits a discharge permit application will be assessed a filing fee of $100.00, plus a renewal flat fee (*see* WQCC Regulation 20.6.2.3114 NMAC). The Oil Conservation Division ("OCD") has received the required $100.00 filing fee and Key Energy Services, LLC. still owes the required $4500.00 permit fee for the Class I Well.

2. **Permit Expiration and Renewal Conditions and Penalties:** Pursuant to WQCC Regulation 20.6.2.3109.H.4 NMAC, this permit is valid for a period of five years. **The permit will expire on June 1, 2012** and an application for renewal should be submitted no later than 120 days before that expiration date. Pursuant to WQCC Regulation 20.6.2.3106.F NMAC, if a discharger submits a discharge permit renewal application at least 120 days before the discharge permit expires and is in compliance with the approved permit, then the existing discharge permit will not expire until the application for renewal has been approved or disapproved. ***Expired permits are a violation of the Water Quality Act (Chapter 74, Article 6, NMSA 1978) and civil penalties may be assessed accordingly.***

3. **Permit Terms and Conditions:** Pursuant to WQCC Regulation 20.6.2.3104 NMAC, when a permit has been issued, Key Energy Services, LLC. must ensure that all discharges shall be consistent with the terms and conditions of the permit. In addition, all facilities shall abide by the applicable rules and regulations administered by the OCD pursuant to the Oil and Gas Act, NMSA 1978, Sections 70-2-1 through 70-2-38. All injection operations related to oil and natural gas production in New Mexico are regulated under the provisions of the Oil and Gas Act, NMSA 1978, Sections 70-2-1 *et seq.* and the Water Quality Act, NMSA 1978, Sections 74-6-1 *et seq.* These Acts delegate authority for enforcement of their provisions relating to oil and natural gas drilling, production, processing, and transportation to the Oil Conservation Division (OCD) of the New Mexico Energy, Minerals and Natural Resources Department, and to the Oil Conservation Commission (OCC) and the Water Quality Control Commission (WQCC). To carry out its authority, the OCC has promulgated rules (19 NMAC) and numerous orders. Key Energy Services, LLC. shall comply with WQCC Regulations 20.6.2 *et seq.* NMAC relating to Class I Waste Disposal Wells.

4. **Key Energy Services, LLC. Commitments:** Key Energy Services, LLC. shall abide by all commitments submitted in its February 27, 2007 Discharge Plan Application and C-108 Application for

Authorization to Inject Renewal including subsequent attachments and amendments; letters and conditions herein for approval. Permit applications that reference previously approved plans on file with the division shall be incorporated in this permit and Key Energy Services, LLC. shall abide by all previous commitments of such plans and these conditions for approval.

5. **Modifications:** WQCC Regulation 20.6.2.3107.C, 20.6.2.3109 and 20.6.2.5101.I NMAC addresses possible future modifications of a permit. Key Energy Services, LLC. (discharger) shall notify the OCD of any facility expansion, production increase or process modification that would result in any significant modification in the discharge of water contaminants. The Division Director may require a permit modification if any water quality standard specified at 20.6.2.3103 NMAC is or will be exceeded, or if a toxic pollutants as defined in WQCC Regulation 20.6.2.7 NMAC is present in ground water at any place of withdrawal for present or reasonably foreseeable future use, or that the Water Quality Standards for Interstate and Intrastate streams as specified in 20.6.4 NMAC are being or may be violated in surface water in New Mexico.

6. **Waste Disposal and Storage:** Key Energy Services, LLC. shall dispose of all other non-injected wastes at an OCD-approved facility. Only oil field RCRA-exempt and non-exempt non-hazardous wastes may be disposed of by injection in an OCD Class I well. RCRA non-hazardous, exempt and non-exempt oil field wastes may be disposed of at an OCD-approved facility upon proper waste determination pursuant to 40 CFR Part 261. Any waste stream that is not listed in the discharge permit application must be approved by the OCD on a case-by-case basis.

A. **OCD Rule 712 Waste:** Pursuant to OCD Rule 712 (19.15.9.712 NMAC) disposal of certain non-domestic waste without notification to the OCD is allowed at NMED permitted solid waste facilities if the waste stream has been identified in the discharge permit and existing process knowledge of the waste stream does not change.

B. **Waste Storage:** Key Energy Services, LLC. shall store all waste in an impermeable bermed area, except waste generated during emergency response operations for up to 72 hours. All waste storage areas shall be identified in the discharge permit application. Any waste storage area not identified in the permit shall be approved on a case-by-case basis only. Key Energy Services, LLC. shall not store oil field waste on-site for more than 180 days unless approved by the OCD.

7. **Drum Storage:** Key Energy Services, LLC. must store all drums, including empty drums, containing materials other than fresh water on an impermeable pad with curbing. Key Energy Services, LLC. must store empty drums on their sides with the bungs in place and lined up on a horizontal plane. Key Energy Services, LLC. must store chemicals in other containers, such as tote tanks, sacks, or buckets on an impermeable pad with curbing.

8. **Process, Maintenance and Yard Areas:** Key Energy Services, LLC. shall either pave and curb or have some type of spill collection device incorporated into the design at all process, maintenance, and yard areas which show evidence that water contaminants from releases, leaks and spills have reached the ground surface.

9. **Above Ground Tanks:** Key Energy Services, LLC. shall ensure that all aboveground tanks have impermeable secondary containment (e.g., liners and berms), which will contain a volume of at least one-third greater than the total volume of the largest tank or all interconnected tanks. Key Energy Services, LLC. shall

retrofit all existing tanks before discharge permit renewal. Tanks that contain fresh water or fluids that are gases at atmospheric temperature and pressure are exempt from this condition.

10. Labeling: Key Energy Services, LLC. shall clearly label all tanks, drums, and containers to identify their contents and other emergency notification information. Key Energy Services, LLC. may use a tank code numbering system, which is incorporated into their emergency response plans.

11. Below-Grade Tanks/Sumps and Pits/Ponds.

A. All below-grade tanks and sumps must be approved by the OCD prior to installation and must incorporate secondary containment with leak detection into the design. Key Energy Services, LLC. shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal. All existing below-grade tanks and sumps without secondary containment and leak detection must be tested annually or as specified herein. Systems that have secondary containment with leak detection shall have a monthly inspection of the leak detection system to determine if the primary containment is leaking. Small sumps or depressions in secondary containment systems used to facilitate fluid removal are exempt from these requirements if fluids are removed within 72 hours.

B. All pits and ponds, including modifications and retrofits, shall be designed by a certified registered professional engineer and approved by the OCD prior to installation. In general, all pits or ponds shall have approved hydrologic and geologic reports, location, foundation, liners, and secondary containment with leak detection, monitoring and closure plans. All pits or ponds shall be designed, constructed and operated so as to contain liquids and solids in a manner that will protect fresh water, public health, safety and the environment for the foreseeable future. Key Energy Services, LLC. shall retrofit all existing systems without secondary containment and leak detection before discharge permit renewal.

C. Key Energy Services, LLC. shall ensure that all exposed pits, including lined pits and open top tanks (8 feet in diameter or larger) shall be fenced, screened, netted, or otherwise rendered non-hazardous to wildlife, including migratory birds.

D. Key Energy Services, LLC. shall maintain the results of tests and inspections at the facility covered by this discharge permit and available for OCD inspection. Key Energy Services, LLC. shall report the discovery of any system which is found to be leaking or has lost integrity to the OCD within 15 days. Key Energy Services, LLC. may propose various methods for testing such as pressure testing to 3 pounds per square inch greater than normal operating pressure and/or visual inspection of cleaned tanks and/or sumps, or other OCD-approved methods. Key Energy Services, LLC. shall notify the OCD at least 72 hours prior to all testing.

12. Underground Process/Wastewater Lines:

A. Key Energy Services, LLC. shall test all underground process/wastewater pipelines at least once every five (5) years to demonstrate their mechanical integrity, except lines containing fresh water or fluids that are gases at atmospheric temperature and pressure. Pressure rated pipe shall be tested by pressuring up to one and one-half times the normal operating pressure, if possible, or for atmospheric drain systems, to 3 pounds per square inch greater than normal operating pressure, and pressure held for a minimum of 30 minutes with no more

than a 1% loss/gain in pressure. Key Energy Services, LLC. may use other methods for testing if approved by the OCD.

B. Key Energy Services, LLC. shall maintain underground process and wastewater pipeline schematic diagrams or plans showing all drains, vents, risers, valves, underground piping, pipe type, rating, size, and approximate location. All new underground piping must be approved by the OCD prior to installation. Key Energy Services, LLC. shall report any leaks or loss of integrity to the OCD within 15 days of discovery.

Key Energy Services, LLC. shall maintain the results of all tests at the facility covered by this discharge permit and they shall be available for OCD inspection. Key Energy Services, LLC. shall notify the OCD at least 72 hours prior to all testing.

13. Class V Wells: Key Energy Services, LLC. shall close all Class V wells (e.g., septic systems, leach fields, dry wells, etc.) that inject non-hazardous industrial wastes or a mixture of industrial wastes and domestic wastes unless it can be demonstrated that ground water will not be impacted in the reasonably foreseeable future. Leach fields and other wastewater disposal systems at OCD-regulated facilities that inject non-hazardous fluid into or above an underground source of drinking water are considered Class V Waste Disposal Wells under the EPA UIC program. Class V wells that inject domestic waste only, must be permitted by the New Mexico Environment Department (NMED).

14. Housekeeping: Key Energy Services, LLC. shall inspect all systems designed for spill collection/prevention and leak detection at least monthly to ensure proper operation and to prevent over topping or system failure. All spill collection and/or secondary containment devices shall be emptied of fluids within 72 hours of discovery. Key Energy Services, LLC. shall maintain all records at the facility and available for OCD inspection.

15. Spill Reporting: Key Energy Services, LLC. shall report all unauthorized discharges, spills, leaks and releases and conduct corrective action pursuant to WQCC Regulation 20.5.12.1203 NMAC and OCD Rule 116 (19.15.3.116 NMAC). Key Energy Services, LLC. shall notify both the OCD District Office and the Santa Fe Office within 24 hours and file a written report within 15 days.

16. OCD Inspections: The OCD may place additional requirements on the facility and modify the permit conditions based on well emergencies, OCD inspections, and/or quarterly reporting information.

17. Storm Water: Key Energy Services, LLC. shall implement and maintain run-on and runoff plans and controls. Key Energy Services, LLC. shall not discharge any water contaminant that exceeds the WQCC standards specified in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) including any oil sheen in any stormwater run-off. Key Energy Services, LLC. shall notify the OCD within 24 hours of discovery of any releases and shall take immediate corrective action(s) to stop the discharge.

18. Unauthorized Discharges: Key Energy Services, LLC. shall not allow or cause water pollution, discharge or release of any water contaminant that exceeds the WQCC standards listed in 20.6.2.3101 NMAC or 20.6.4 NMAC (Water Quality Standards for Interstate and Intrastate Streams) unless specifically listed in the permit application approved herein.

An unauthorized discharge is a violation of this permit.

19. **Vadose Zone and Water Pollution:** Key Energy Services, LLC. shall address any contamination through the discharge permit process or pursuant to WQCC 20.6.2.4000-.4116 NMAC (Prevention and Abatement of Water Pollution). The OCD may require Key Energy Services, LLC. to modify its permit for investigation, remediation, abatement, and monitoring requirements for any vadose zone or water pollution. Failure to perform any required investigation, remediation, abatement and submit subsequent reports will be a violation of the permit.

20. **Additional Site Specific Conditions:**

A. Key Energy Services, LLC. shall notify the OCD within 24 hours after having knowledge of ground water pollution complaints or well problems within a 1-mile radius of SUNCO Disposal Well #1.

B. **The operator shall complete the following "Required Corrective Action" on the following two wells by February 15, 2008, and submit written verification of completion to the Environmental Bureau in the Santa Fe office of the Division.** If this required work and written verification is not completed by said date, the owner/operator shall immediately shut-in this injection well, submit to the Aztec district office of the Division a sundry notice of intent to plug and abandon with a proposed procedure and submit to the Environmental Bureau a valid closure plan.

Required Corrective Action:

Allen "A" Well No. 1 (API No. 30-045-08851) operated by BP America Production Company and located 790 feet from the North line and 790 feet from the West line of Section 1, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico.

Cornell "C" Well No. 1 (API No. 30-045-13092) operated by BP America Production Company and located 990 feet from the North line and 990 feet from the West line of Section 11, Township 29 North, Range 12 West, NMPM, San Juan County, New Mexico.

Within each of above wells, remedial cementing shall be completed, placing cement across any equivalent injection interval in the well and/or across the Point Lookout member of the Mesaverde Group, whichever is at a shallower depth. Prior to work, a cement bond log shall be run to verify all existing cement and, after completion of any work involving cementing, another cement bond log shall be run showing placement of remedial cement. All cement bond logs shall be supplied to the Division and also to BP America.

21. **Class I Injection Well(s) Construction Conditions.**
All wells, except those municipal wells injection of non-corrosive wastes, shall inject fluids through tubing with a packer set immediately above the injection zone, or tubing.

A. Construction: The tubing and packer shall be designed and maintained for the duration of expected service.

B. Logs or tests required for the following situations:

a. For surface casing intended to protect underground sources of drinking water:

i. Resistivity, spontaneous potential, and caliper logs before the casing is installed; and
ii. A cement bond, temperature, or density log after the casing is set and cemented.

b. For intermediate and long strings of casing intended to facilitate injection:

i. Resistivity, spontaneous potential, porosity, and gamma ray logs before the casing is installed.
ii. Fracture finder logs; and
iii. A cement bond, temperature, or density log after the casing is set and cemented.
iv. At a minimum, the following information concerning the injection formation shall be determined or calculated for new Class I wells:
1. Fluid pressure;
2. Temperature;
3. Fracture pressure;
4. Other physical and chemical characteristics of the injection matrix; and
5. Physical and chemical characteristics of the formation fluids.

22. Class I Injection Well(s) Identification, Operation, Monitoring, Bonding and Reporting.

A. Well Identification: API # 30-045-28653

B. Well Work Over Operations: OCD approval will be obtained prior to performing remedial work, pressure test or any other work. 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 Environmental Bureau and District Office.

C. Injection Formation, Interval & Waste: Injected oil field exempt/non-exempt non-hazardous wastes shall be injected into the Point Lookout Formation from the interval 4380 ft to 4480 ft at a daily rate of 2,000 to 4,000 barrels per day. Tubing shall be surrounded by surface casing set to a depth protective of fresh ground water (< 10,000 ppm TDS). The owner/operator shall take all steps necessary to ensure that the injected waste enters only the above specified injection interval and is not permitted to escape to other formations or onto the surface. The operator shall provide written notice of the date of commencement of injection to the Santa Fe Office of the Division.

D. Well Injection Pressure Limits: The wellhead maximum allowable injection pressure on the well shall be limited to no more than 1580 psig. In addition, the injection well or system shall be equipped with a pressure limiting device in workable condition, which shall, at all times, limit surface injection pressure to the maximum allowable pressure for this well. The maximum operating surface injection and/or test pressure measured at the wellhead shall not exceed 1580 psig unless

otherwise approved by the OCD. The pressure-limiting device shall monthly be demonstrated and reported quarterly to the OCD. Key Energy Services, LLC. 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. Any pressure that causes new fractures or propagation in existing fractures or causes damage to the system shall be reported to OCD within 24 hours of discovery.

The Director of the OCD may authorize an increase in injection pressure upon demonstration by the operator of said well that such higher pressure will not result in migration of the injected fluid from the injection formation. Such demonstration shall consist of a valid step-rate test run in accordance with and acceptable to the OCD.

E. Mechanical Integrity Testing (MIT):

The owner/operator shall complete an annual casing-tubing annulus pressure test from the surface to the approved injection depth and below the depth of fresh ground water (< 10,000 ppm TDS) to assess casing and tubing integrity. The MIT shall consist of a 30-minute test at a minimum pressure from 300 to 500 psig measured at the surface. A Bradenhead test(s) shall also be performed annually along with the casing-tubing annulus test. A Bradenhead test(s) shall be performed in all annular spaces including surface casing if not cemented.

The owner/operator shall complete an annual pressure fall-off test to monitor the pressure buildup in the injection zone. The well shall be shut down for the time sufficient to conduct the test and shall be submitted to the OCD in the annual report (see Section 22K (11)).

All testing shall be performed annually or shall also be performed whenever the tubing is pulled or the packer reseated or when the injection formation will be isolated from the casing/tubing annuals. The operator shall notify the supervisor of the Santa Fe Office of the Division of the date, time and time of the installation of disposal equipment and of any MIT so that it may be inspected and witnessed.

1. General Requirements:

    a. If the testing requires a packer then casing-tubing annulus must be loaded with inert fluid 24 hours prior to testing.
    b. Have manpower and equipment available for pressure test. Wellhead shall be prepared for test and all valves and gauges should be in good working order.
    c. Pumps, tanks, external lines etc. must be isolated from the wellhead during test.
    d. A continuous recording pressure device with a 4-hour clock shall be installed on the casing-tubing annulus. The pressure range shall not be greater than 500 psig. The operator must provide proof that the pressure-recording device has been calibrated within the past 6 months.
    e. A minimum of one pressure gauge shall be installed on the casing/tubing annulus.

f. OCD must witness the beginning of test (putting chart on) and ending of test (removing chart). At the end of test, the operator may be required to bleed-off well pressure to demonstrate recorder and gauge response.
g. The Operator shall supply the following information on the pressure chart that the inspector will file in the well records:

1. Company Name, Well Name, API #, Legal Location.
2. Test Procedure with "Pass/Fail" designation..
3. Testing Media: Water, Gas, Oil, Etc.
4. Date, time started and ending.
5. Name (printed) and signature of company representative and OCD Inspector

2. Test Acceptance:

The OCD shall use the following criteria in determining if a well has passed the Mechanical Integrity Test:

a. Passes if Zero Bleed-Off during the test.
b. Passes if Final Test Pressure is within ± 10% of Starting Pressure, if approved by the OCD inspector.
c. Fails if any Final Test Pressure is greater than ± 10% of Starting Pressure. Operators must investigate for leaks and demonstrate that mechanical integrity of the well(s) by ensuring there are no leaks in the tubing, casing, or packer, and injected/produced fluids are confined within the piping and/or injection zones. Wells shall not resume operations until approved by OCD.

Note: OCD recognizes that different operations, well designs, formation characteristics and field conditions may cause variations in the above procedures. If the operator wishes to make or discuss anticipated changes, please notify the OCD for approval. All

operators are responsible to notify OCD of any procedure that may cause harm to the well system or formation. Please be advised that OCD approval does not relieve any operator of liability should operations result in pollution of surface water, groundwater, or the environment.
d. When the MIT is not witnessed by an OCD Representative and fails, the owner/operator shall notify the OCD within 24 hours after having knowledge of well MIT failure.

F. Loss of Mechanical Integrity: The operator shall report within 24 hours of discovery any failure of the casing, tubing or packer, or movement of fluids outside of the injection zone. The operator shall cease operations until proper repairs are made and receive OCD approval to re-start injection operations. In addition, any associated fresh ground water monitor wells, which exhibit anomalous static water levels, detection of elevated general chemistry constituents, public health issues, etc. shall be immediately reported to the OCD.

G. Injection Record Volumes and Pressures: The owner/operator shall submit quarterly reports of its disposal, operation and well workovers provided herein. The minimum, maximum, average flow waste injection volumes (including total volumes) and annular pressures of waste (oil field exempt/non-exempt non-hazardous waste) injected will be recorded monthly and submitted to the OCD Santa Fe Office on a quarterly basis.

The casing-tubing annulus shall contain fluid and be equipped with a pressure gauge or an approved leak detection device in order to determine leakage in the casing, tubing, or packer. The SUNCO DISPOSAL WELL #1 shall be equipped with an expansion tank under constant 100 psig pressure connected to the casing-annulus and maintained under constant pressure. The expansion tank shall initially be filled half-full (250 gallon expansion tank) with an approved fluid to establish an equilibrium volume and fluid level. Weekly monitoring of fluid levels in the expansion tank coupled with documented additions/removals of fluids into or out of the expansion tank is required to maintain the equilibrium volume. Any loss or gain of fluids in the expansion tank shall be recorded, and if significant, reported to the OCD within 24 hours of discovery. The owner/operator shall provide the following information on a quarterly basis: weekly expansion tank volume readings shall be provided in a table in the cover letter of each quarterly report. Key shall monitor, record and note any fluid volume additions or removals from the expansion tank on a quarterly basis. In addition, any well activity (i.e., plugging, changing injection intervals, etc.) shall be conducted in accordance with all applicable New Mexico Oil Conservation Division regulations.

H. Analysis of Injected Waste: Provide an analytical data or test results summary of the injection waste water with each annual report. The analytical testing shall be conducted on a quarterly basis with any exceedence reported to the OCD within 24 hours after having knowledge of an exceedence(s).

I. Records shall be maintained at Key for the life of the well. The required analytical test methods are:

a. Aromatic and halogenated volatile hydrocarbon scan by EPA Method 8260C GC/MS. Semi-volatile Organics GC/MS EPA Method 8270B including 1 and 2-methylnaphthalene.
b. General water chemistry (Method 40 CFR 136.3) to include calcium, potassium, magnesium, sodium, bicarbonate, carbonate, chloride, sulfate, total dissolved solids (TDS), pH, and conductivity.
c. Heavy metals using the ICP scan (EPA Method 6010) and Arsenic and Mercury using atomic absorption (EPA Methods 7060 and 7470).
d. EPA RCRA Characteristics for Ignitability, Corrosivity and Reactivity (40 CFR part 261 Subpart C Sections 261.21 – 261.23, July 1, 1992).

J. Area of Review (AOR): The operator shall report within 24 hours of discovery of any new wells, conduits, or any other device that penetrates or may penetrate the injection zone within a 1-mile radius from the Class I Well. Documentation of new wells shall be added to the existing AOR information in the well file within 30 days of the discovery.

K. Bonding or Financial Assurance: The operator shall maintain at a minimum, a one well plugging bond in the amount of $95,000 or the actual amount required to plug/abandon the well pursuant to

OCD and WQCC rules and regulations. If warranted, OCD may require additional financial assurance to ensure adequate funding to plug and abandon the well or for any corrective actions.

L. Annual Report: All operators shall submit an annual report due on January 31 of each year. The report shall include the following information:

1. Cover sheet marked as "Annual Class I Well Report, name of operator, permit #, API# of well(s), date of report, and person submitting report.
2. Brief summary of Class I Well(s) operations including description and reason for any remedial or major work on the well with a copy of OCD Form C-103.
3. Production volumes as required above in 22.G. including a running total should be carried over to each year. The maximum and average injection pressure.
4. A copy of the chemical analysis as required above in 22.H.
5. A copy of any mechanical integrity test chart, including the type of test, i.e. duration, gauge pressure, etc.
6. Brief explanation describing deviations from normal production methods.
7. A copy of any expansion tank monitoring pressure, fluid removals/additions, well problems, drinking water impacts, leaks and spills reports.
8. If applicable, results of any groundwater monitoring.
9. An Area of Review (AOR) update summary.
10. Sign-off requirements pursuant to WQCC Subsection G 20.6.2.5101.
11. A summary with interpretation of MITs, Fall-Off Tests, etc., with conclusion(s) and recommendation(s).
12. Annual facility training.

23. Transfer of Discharge Permit: Pursuant to WQCC 20.6.2.5101.H Key Energy Services, LLC. and any new owner/operator shall provide written notice of any transfer of the permit in accordance with WQCC 20.6.2.3104 (Discharge Permit Required), 20.6.2.3111 (Transfer of Discharge Permit), 20.6.2.5101 (Discharge Permit and Other Requirements for Class I Non-Hazardous Waste Waste Disposal Wells, and Class III Wells). Both parties shall sign the notice 30 days prior to any transfer of ownership, control or possession of a Class I

Well with an approved discharge permit. In addition, the purchaser shall include a written commitment to comply with the terms and conditions of the previously approved discharge permit. OCD will not transfer Class I Well operations until: correspondence between the transferor and transferee is submitted along with a signed certification of acceptance by the transferee, and proper bonding or financial assurance is in place and approved by the division. OCD reserves the right to require a major modification of the permit during the transfer process.

24. Training: All personnel associated with operations at the Key Class I Disposal Well shall have appropriate training in accepting, processing, and disposing o Class I non-exempt non-hazardous oil field waste to insure proper disposal. Key or the new owner/operator for the life of the well shall maintain all training documentation.

25. Closure: The Key Energy Services, LLC. shall notify the OCD when operations of the facility are to be discontinued for a period in excess of six months. Prior to closure of the facility, the operator shall submit for OCD approval, a closure plan including a completed C-103 form for plugging and abandonment of the well(s).

Closure and waste disposal shall be in accordance with the statutes, rules and regulations in effect at the time of closure.

26. Certification: Key Energy Services, LLC. by the officer whose signature appears below, accepts this permit and agrees to comply with all submitted commitments, including these terms and conditions contained here. **Key Energy Services, LLC.** further acknowledges that the OCD may, for good cause shown, as necessary to protect fresh water, public health, safety, and the environment, change the conditions and requirements of this permit administratively.

Conditions accepted by: "I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

_____
Key Energy Services, LLC.- print name above

_____
Company Representative- print name

_____
Company Representative- signature

Title_____

Date:_____