

Attn: Mr. Michael Buchanan P 505-490-0798

5847 50th Street Lubbock, TX 79424 P (806) 300-0140 F (806) 797-0947 Terracon.com

June 7, 2024

RE:

By Mike Buchanan at 8:15 am, Jul 09, 2024

New Mexico Oil Conservation Division (NMOCD) EMNRD/OCD 8801 Horizon Blvd NE, Suite 260 Albuquerque, NM 87113

APPROVED

Review of the Additional Groundwater Delineation Work Plan for G.L. Erwin A&B NCT 2 Tank Battery: content satisfactory On 06/27/2024, a meeting was held between OCD and Scout Energy on addressing this work plan and each item as proposed with agreement from both sides.

1. NMOCD agrees with all of the outlined items in this work plan and how Scout Energy is proposing to proceed with each one. Additional Groundwater Delineation Wark Plan Please proceed to implement each scope of work as addressed in this work plan. (item 1 through item 3).

G.L. Erwin A&B NCT 2 Tank Battery Case No. (1R-254), Incident ID nAUTOfAB000198 Jal, Lea County, New Mexico Terracon Project No. AR247096

E Michael.buchanan@emnrd.nm.gov

Scout Energy Partners

Dear Mr. Buchanan:

Terracon Consultants, Inc. (Terracon) and Scout Energy Partners (Scout) have prepared this work plan describing additional site investigation activities planned for the above-reference site. The scope of work is intended to address comments received in a February 20, 2024 letter from the Oil Conservation Division (OCD) to Scout titled "Approval for the Proposed Groundwater Monitoring Reduction Workplan at the G.L. Erwin "A&B" NCT 2 Tank Battery". Specific comments from OCD include the following:

1. Submit a Stage 2 Abatement Plan proposal within sixty (60) days of receipt of this letter and follow guidance under: 19.15.30.13 paragraph (D) for the submission.

2. Submit a work plan to install replacement monitoring wells for MW-18, MW-27 and/or a contingency plan for sampling wells that are dry at time of sampling.

3. Either identify or install background monitoring wells upgradient of site as written proposal specifies with subject title G.L Erwin "A & B" Federal NCT-2 Tank Battery-Requested Project Changes and dated 12/15/2014.

4. Request to reduce sampling COCs will not be approved until background monitoring wells have been identified or installed with analysis for TDS, Fluoride, Chloride and Sulfate.

Scope of Work to Address Item 1

Following the installation and sampling of the proposed monitoring wells as described below, Terracon will prepare a Stage 2 Abatement Plan in accordance with the requirements set forth in NMAC 19.15.30.13 (D).

Explore with us

Additional Groundwater Delineation Work Plan G.L. Erwin A&B NCT2 Tank Battery | Lea County, New Mexico June 7, 2024 | Terracon Project No. AR247096 | Case No. 1R-254



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Scope of Work to Address Item 2

MW-18 and MW-27 have been "dry", without sufficient water in the wells since 2004. MW-18 has a total depth of 76.98 feet and is screened from 54.5 ft to 74.5 ft. MW-27 has a depth of 48.8 feet and is screened from 25 ft to 45 ft. MW-18 and MW-27 are located approximately 150 feet apart from each other and provide groundwater data for the same area of the site with the goal of defining the eastern extent of the plume. Thus MW-27 was drilled 30 feet shallower than MW-18, presumably to evaluate the presence of a shallow water bearing unit, or "perched" water. Since both wells have been "dry", it appears there is no shallow water bearing unit in this area. Therefore, we recommend replacing MW-18 and MW-27 with a single well drilled to a total depth of 90 feet and screened from 70 ft to 90 ft. The replacement well will be named MW-33 and placed to the northeast of MW-18 and MW-27 to provide horizontal delineation of the plume as shown on the attached Exhibit 1.

We also plan to plug and abandon MW-18 and MW-27. Both wells have been dry for the past 20 years and will not be needed once they are replaced with the new, deeper well.

Scope of Work to Address Item 3

Item 3 requests two monitoring wells be installed upgradient of the plume to provide background groundwater information for TDS, Fluoride, Chloride and Sulfate. We agree with the need to establish clear background concentrations, but we suggest a single monitoring well installed upgradient of the plume will provide the required information. The proposed well will be labeled MW-34 and will be placed northwest of MW-26 as shown on Exhibit 1. MW-34 will be drilled to 75 ft total depth, and screened from 55 ft to 75 ft.

Groundwater Sampling

Following installation of the new monitoring wells groundwater samples will be collected from each monitoring well, the water well, and the recovery well. Samples will be collected utilizing low-flow sampling equipment or hand bailers. The groundwater samples will be analyzed for chloride, fluoride, sulfate, and TDS.

Field Methods

The monitoring wells will be installed using air rotary drilling techniques to depths described above. Precise location, depth and screened intervals may be adjusted in the field based on site conditions and observed groundwater levels while drilling. Since the new well locations will be drilled in areas of the site that are removed from the area of the spill, soil samples will not be collected or analyzed during installation.

The monitoring wells will be constructed with 20 feet of 2-inch diameter, 0.010-inch machine-slotted polyvinyl chloride (PVC) well screen with a threaded bottom cap and 55 to 70 feet of 2-inch diameter, threaded, flush-joint PVC riser pipe to the surface. The annular space will be backfilled with pre-sieved 20/40-grade silica sand around the well screen from the bottom of the boring to approximately 2 feet above the top of the well screen. A minimum of 2 feet of hydrated bentonite pellets will be placed above the sand pack and cement/bentonite slurry to the surface. The well will be completed with a 4-inch diameter above grade protective casing set in a concrete pad and protected with above-grade bollards at each corner of the well pad. The locations of the proposed monitoring wells are presented in the attached Exhibit 1.

The new monitoring wells will be developed by surging and removing groundwater until fluids appear relatively free of fine-grained sediment.

The plugging and abandoning process will be completed by attempting to remove all the PVC from the well hole and backfilling with a Type 1 cement-bentonite slurry to the surface.

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Investigation-Derived Waste (IDW)

The proposed monitoring wells will be located in areas of the site removed from the spill; therefore, soils are not anticipated to be impacted. The soil cuttings generated during installation will be dispersed at the location of each respective proposed monitoring well. Groundwater collected during well development and from the purging and sampling process will be collected in a poly tank and left on-site until lab results are analyzed.

Schedule

The well installation and sampling event is scheduled to begin on the week of July 15, 2024 and anticipated to be completed July 25, 2024. However, initiation of the work is contingent on obtaining a drilling permit from the New Mexico Office of State Engineer. Should you have any questions regarding this work plan, please contact me at (612) 865-4899 or John.Grams@terracon.com.

Sincerely,

Terracon

John Grams, P.G. (Texas) Environmental Department Manager

cc: Spencer Jackson, Scout Energy Partners

Attachment – Exhibit 1, Site Map

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Marwan Salameh, PhD, P.E. (Texas, New Mexico) Sr. Engineer

erracon

EXHIBIT 1 SITE MAP





Project No.:		
AR247096		
Date:	ierr a	
June 05 2024		
Drawn By:	5847 501	th St
JWL	Lubbock, TX	
Reviewed By:		
JCG	PH. 806-300-0140	terracon.com

District I 1625 N. French Dr., Hobbs, NM 88240 Phone: (575) 393-6161 Fax: (575) 393-0720 District II

811 S. First St., Artesia, NM 88210 Phone:(575) 748-1283 Fax:(575) 748-9720

District III

1000 Rio Brazos Rd., Aztec, NM 87410 Phone:(505) 334-6178 Fax:(505) 334-6170

District IV

1220 S. St Francis Dr., Santa Fe, NM 87505 Phone:(505) 476-3470 Fax:(505) 476-3462

State of New Mexico Energy, Minerals and Natural Resources Oil Conservation Division 1220 S. St Francis Dr. Santa Fe, NM 87505

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Action 352097

CONDITIONS Operator: OGRID: SCOUT ENERGY MANAGEMENT LLC 330949 13800 Montfort Road Action Number: Dallas, TX 75240 352097 Action Type: [UF-GWA] Ground Water Abatement (GROUND WATER ABATEMENT) CONDITIONS

CONDITIONS		
Created By	Condition	Condition Date
michael.buchanan	Review of the Additional Groundwater Delineation Work Plan for G.L. Erwin A&B NCT 2 Tank Battery: content satisfactory On 06/27/2024, a meeting was held between OCD and Scout Energy on addressing this work plan and each item as proposed with agreement from both sides. 1. NMOCD agrees with all of the outlined items in this work plan and how Scout Energy is proposing to proceed with each one. Please proceed to implement each scope of work as addressed in this work plan. (item 1 through item 3).	7/9/2024