



**NEW MEXICO ENVIRONMENT DEPARTMENT GROUND
WATER QUALITY BUREAU**

UNDERGROUND INJECTION CONTROL

GENERAL DISCHARGE PERMIT



Certified Mail- Return Receipt Requested

Facility Name: Bacas Auto UST Site

Facility Location: 1301 S Main St, Belen, NM
NA
Valencia County

Legally Responsible Party: Bacas Auto Sales, Attn: Leroy O. Baca
844 MC Baca Lane, Belen, NM 87002

Remediation Oversight Agency Contact: NMED PSTB
Jim Gibb
505-372-8155 20.5.119 NMAC

Remediation or Injection Plan Identification: Bacas Auto UST Site

Permitting Action: New DP-1975

PPS Contact Melanie Sandoval
(505) 660-7892
melanie.sandoval2@env.nm.gov

EFFECTIVE DATE: **TERM ENDS:**

Justin D. Ball
Chief, Ground Water Quality Bureau

[Subsection H of 20.6.2.3109 NMAC, NMSA 1978, § 74-6-5.1]

Version updated December 5, 2018

- BACAS AUTO UST SITE. DP-1975

EFFECTIVE DATE:

I. UIC GENERAL DISCHARGE PERMIT

The New Mexico Environment Department (NMED) Ground Water Quality Bureau (GWQB) issues this Underground Injection Control General Discharge Permit (UIC Permit) for the subsurface emplacement of additive fluids through a Class V UIC injection well for the purpose of facilitating vadose zone or groundwater remediation. The GWQB issues this UIC Permit to Bacas Auto Sales (Permittee) pursuant to the New Mexico Water Quality Act (WQA), NMSA 1978 §§74-6-1 through 74-6-17, and the New Mexico Water Quality Control Commission (WQCC) Ground and Surface Water Protection Regulations, 20.6.2 NMAC.

In issuing this UIC Permit, the GWQB has determined that the requirements of Subsection C of 20.6.2.3109 NMAC have been met. The activities authorized by this UIC Permit are principally governed by Bacas Auto Sales UST Site (Injection Plan), under the authority of 20.5.119 NMAC, with oversight by the New Mexico Environment Department Petroleum Storage Tank Bureau. Compliance with this UIC Permit requires compliance with the terms, requirements, and conditions of the Injection Plan. The term of this UIC Permit shall be no longer than five years from the effective date of this UIC Permit.

The injection activities, the location of the injection site, the type of injection and quantities of additives being used are briefly described as follows:

Injection Activities (summary: including injection well type, number of wells, and injection frequency)

Copy of the Injection Plan Attached (required):

Summary of Injection Plan: Petroleum contaminated soil will be excavated in the area of the tank nest and disposed of at a licensed facility. The excavation will extend into the shallow aquifer approximately one foot. Gravel backfill will be mixed with 600 pounds ORC-Advanced in the excavation using the excavator bucket. Gravel and ORC-A will be placed from the base of the excavation to approximately one foot above the static water table. Clean soil from the excavation and imported clean fill will be used as backfill of the remaining excavation.

Injection Site Information

Depth to most shallow groundwater (required): 15 ft

Existing concentration of total dissolved solids (TDS) in groundwater (required): 644mg/L

Location (required): 1301 S Main St, Belen, NM

County (required): Valencia

Latitude: 34° 38'32.23"N

Longitude: 106° 46'51.26"W

Map Showing Area of Injection Sites Attached (required):

Additives Being Used {including volumes, manufacturer, and mixing ratios}

600 pounds of ORC-A, manufactured by Regenesys, will be mixed with gravel at the water table with the excavator bucket. The ORC-A will not be pre-mixed with water before placement.

Anticipated Precipitation, Dissolution, Adsorption, and Desorption Products

Upon contact with groundwater, this calcium oxy-hydroxide based material becomes hydrated, producing a controlled-release of molecular oxygen (17% by weight) for periods of up to 12 months on a single application. No significant precipitation or desorption effects from the amendment are expected.

Public Notice Posting Locations

2 inch by 3 inch Newspaper Ad required for Renewal applications.

Newspaper: Valencia County News-Bulletin

3 inch by 4 inch Newspaper Ad required for New, Modification, and Renewal/Modification applications.

Newspaper: Valencia County News-Bulletin

2 feet by 3 feet sign posted for 30 days in a location conspicuous to the public at or near the facility required for New, Modification, and Renewal/Modification applications.

Sign Location: On the property fence line facing Main Street.

8.5 inch by 11 inch or larger posted off-site location conspicuous to the public (e.g. public library). Required for New, Modification, and Renewal/Modification applications.

Flyer Location: Belen Public library, 333 Becker Ave., Belen, New Mexico 87002

This UIC Permit consists of the complete and accurate completion of this UIC Permit form as determined by the GWQB.

Issuance of this UIC Permit does not relieve the Permittee of the responsibility to comply with the WQA, WQCC Regulations, and any other applicable federal, state and/or local laws and regulations, such as zoning requirements and nuisance ordinances.

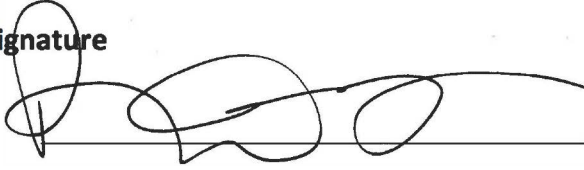
Signatures

Signature must be that of the person listed as the legally responsible party on this application.

I, the applicant, attest under penalty of law to the truth of the information and supporting documentation contained in this application for an Underground Injection Control General Discharge Permit.

Applicant's Signature

Signature:



Date:

3/8/24

Printed Name:

Patrice Feltman on behalf of
Leroy Baca

Title:

Coenologist

Applicant Note that Submissions Must Include:

- 1- One electronic copy of the application delivered to the GWQB via email or other format
- 2- Two hardcopies of the application delivered to: Ground Water Quality Bureau
Harold Runnels Building
1190 Saint Francis Drive
P.O. Box 5469
Santa Fe, NM 87502-5469
- 3- Payment by check or electronic transfer of one application fee of \$100.00

II. FINDINGS

In issuing this UIC Permit, GWQB finds:

- 1. The Permittee is injecting fluids so that such injections will move directly or indirectly into groundwater within the meaning of Section 20.6.2.3104 NMAC.**
- 2. The Permittee is injecting fluids so that such fluids will move into groundwater of the State of New Mexico which has an existing concentration of 10,000 mg/L or less of TDS within the meaning of Subsection A of 20.6.2.3101 NMAC.**
- 3. The Permittee is using a Class V UIC well as described in 20.6.2.5002(B)(S)(d)(ii) NMAC for in situ groundwater remediation by injecting a fluid that facilitates vadose zone or groundwater remediation.**
- 4. The Permittee is injecting fluids into groundwater in order to achieve the remediation goals identified in the Injection Plan.**

III. AUTHORIZATION TO DISCHARGE

The Permittee is authorized to inject chemical additives into groundwater in accordance with this UIC Permit and the Injection Plan under the oversight of NMED PSTB.

[20.6.2.3104 NMAC, Subsection C of 20.6.2.3106 NMAC, Subsection C of 20.6.2.3109 NMAC]

IV. CONDITIONS

The conditions of this UIC Permit shall be complied with by the Permittee and are enforceable by GWQB.

- 1. The Permittee shall perform remediation activities in accordance with the Injection Plan and shall notify GWQB of any changes prior to making them.**

[20.6.2.3107 NMAC]

- 2. The Permittee shall monitor the injection activities and their effects on groundwater quality as required by the Injection Plan and shall provide GWQB with electronic copies of the required reporting and any pertinent documentation of activities at the site.**

[20.6.2.3107.A NMAC, 20.6.2.3109.A NMAC]

3. If the GWQB or the Permittee identifies any failure of the Injection Plan or this UIC Permit to comply with 20.6.2 NMAC not specifically noted herein, GWQB may require the Permittee to submit a corrective action plan and a schedule for completion of corrective actions to address the failure.

Additionally, the GWQB may require the Permittee to submit a proposed modification to the Injection Plan, this UIC Permit, or both.

[20.6.2.3107.A NMAC, 20.6.2.3109.E NMAC]

4. ADDITIONAL MONITORING REQUIREMENTS - (RESERVED) - Placeholder for any added monitoring and reporting requirements.
5. TERMINATION - Within 30 days of completion of activities authorized by this UIC Permit the Permittee shall submit a closure report and a request to terminate the UIC Permit to the GWQB for its approval. The closure report shall identify how the injection well(s) was (were) closed in accordance with the Injection Plan. The Permittee shall provide NMED PSTB with a copy of this closure report.

[20.6.2.5005 NMAC, 19.27.4 NMAC]

6. INSPECTION and ENTRY - The Permittee shall allow a representative of the NMED to inspect the facility and its operations subject to this UIC Permit and the WQCC regulations. The GWQB representative may, upon presentation of proper credentials, enter at reasonable times upon or through any premises in which a water contaminant source is located or in which are located any records required to be maintained by regulations of the federal government or the WQCC. The Permittee shall allow the GWQB representative to have access to, and reproduce for their use, any copy of the records, and to perform assessments, sampling or monitoring during an inspection for the purpose of evaluating compliance with this UIC Permit and the WQCC regulations.

Nothing in this UIC Permit shall be construed as limiting in any way the inspection and entry authority of GWQB under the WQA, the WQCC Regulations, or any other local, state, or federal regulations.

[20.6.2.3107.D NMAC, NMSA 1978, §§ 74-6-9.B and 74-6-9.E]

7. **MODIFICATIONS and/or AMENDMENTS** - In the event the Permittee proposes a change to the injection plan that would result in a change in the volume injected; the location of the injections; or the concentration of the additives being injected by the facility, the Permittee shall notify GWQB prior to implementing such changes. The Permittee shall obtain approval (which may require modification of this UIC Permit) by GWQB prior to implementing such changes.

[20.6.2.3107.C NMAC, 20.6.2.3109.E and G NMAC]

8. **COMPLIANCE with OTHER LAWS** - Nothing in this UIC Permit shall be construed in any way as relieving the Permittee of the obligation to comply with all applicable federal, state, and local laws, regulations, permits, or orders.

[NMSA 1978, § 74-6-5.L]

9. **PERMIT FEES** - Payment of permit fees is due at the time of UIC Permit approval. Permit fees shall be paid in a single payment remitted to GWQB no later than 30 days after the UIC Permit effective date.

Permit fees are associated with issuance of this UIC Permit. Nothing in this UIC Permit shall be construed as relieving the Permittee of the obligation to pay all permit fees assessed by GWQB. A Permittee that ceases injecting or does not commence injecting during the term of the UIC Permit shall pay all permit fees assessed by GWQB. An approved UIC Permit shall be suspended or terminated if the facility fails to remit a payment by its due date.

[20.6.2.3114.F NMAC, NMSA 1978, § 74-6-5.K]

Work Plan

Work Plan for FRP Implementation

Baca's Auto Sales, 1301 South Main St.

Belen, New Mexico

Facility ID #26826, Release ID #1998

1. Introduction

Daniel B. Stephens & Associates, Inc. (DBS&A) has prepared this work plan and cost estimate to implement the Phase 3 final remediation plan (FRP) for corrective action at the Baca's Auto Sales Responsible Party (RP) Lead site (the site), located at 1301 South Main Street in Belen, New Mexico (Figure 1). The work plan was prepared with direction from the New Mexico Environment Department (NMED) Petroleum Storage Tank Bureau (PSTB) project manager and in accordance with the FRP dated January 3, 2024 and requirements of Part 119 of the New Mexico Petroleum Storage Tank Regulations and DBS&A standard operating procedures (SOPs).

2. Site History

The site is located on a 2-acre parcel of land on the northwest corner of South Main Street and M C Baca Lane (Figure 2). The site is bounded to the west by residential properties and vacant land, to the east by South Main Street/New Mexico Highway 314 (NM 314) and a Phillips 66 station, to the north by residential properties, and to the south by M C Baca Lane. A decorative wall with metal rod fencing encloses the site along Main Street.

The site was an operating service station until the late 1980s. When the station was closed, one underground storage tank (UST) was removed from the site and two USTs were closed-in-place (CIP). The removed tank was reported as 2,000 or 4,000 gallons, and may have contained diesel fuel based on the presence of diesel in soil samples collected south of the canopy. The CIP tanks were reported as 5,000-gallon and 10,000-gallon gasoline tanks. Mr. LeRoy Baca, the site owner and operator, indicated in a phone call that the CIP tanks were partially filled with sand during closure. Petroleum hydrocarbon contamination was reported during tank removal and closure. Petroleum hydrocarbon contamination was also reported during roadwork on South

Main Street adjacent to the site. The building to the south is currently occupied by Tiki Shack Ice Cream Bar and a small automobile mechanic shop.

The building on the subject property is not currently operating as a business, but does have an active restroom that services the building to the south.

Previous investigations included the installation of 14 soil borings, 7 of which were completed as monitor wells at the site. During the 2002 minimum site assessment (MSA), the horizontal extent of soil contamination was partially defined to the west and north, and appeared to be mostly confined to the site. The secondary investigation in 2003 showed that soil contamination was not well delineated on the north side of the property (i.e., MW-5 and SB-10), and that a contaminated smear zone just above the water table extended off-site to the southeast.

The site buildings and canopy located within the contaminated soil area will not be demolished during excavation activities. Major underground utilities (water, sewer, gas, and electricity) are located east of the site along South Main Street. Overhead electric lines also exist along the sidewalk east of the site. Minor service lines provide gas, sewer, and water to the site buildings.

DBS&A conducted an additional site investigation to better define the extent of contaminated soil in August 2023. During the additional investigation, a previously unknown UST was located. The remaining fuel was pumped out and the UST was removed in September 2023.

3. Scope of Work

The proposed scope of work includes excavation, disposal, and replacement of petroleum-contaminated soil. The scope of work has been divided into 10 tasks, as follows:

- Task 1: Project planning
- Task 2: Monitor well plugging and abandonment
- Task 3: Soil excavation and disposal and site restoration
- Task 4: As-built report
- Task 5: Monitor well replacement
- Tasks 6 through 9: Four quarters of groundwater monitoring
- Task 10: Contingency

For the purposes of the scope of work detailed in this work plan, it is assumed that site conditions will allow for the performance of the proposed field activities.

3.1 Task 1: Project Planning

The following activities have already been performed by DBS&A prior to implementation of field activities:

- Develop a site-specific health and safety plan (HASP)
- Obtain an access agreement (signed contract) for the site
- Develop a traffic control plan

The following activities will be performed by DBS&A prior to implementation of field activities, as detailed in the FRP:

- Acquire appropriate permits for plugging and abandonment of existing monitor wells, replacement of the monitor well network, and underground injection control
- Conduct a site visit with the excavation contractor
- Call for utility locates
- Conduct meetings with adjacent property owners
- Negotiate subcontractor agreements and services; issue work orders
- Conduct a kickoff meeting

This task also includes preparation of this work plan. New Mexico One Call will be contacted and the appropriate companies will mark underground utilities adjacent to the roadway. After utilities have been marked, DBS&A will meet with the excavation contractor to discuss the progress of work and potential health and safety concerns, such as excavation in proximity to the natural gas line that runs along Main Street.

Health and safety issues will be addressed through adherence to DBS&A's Site-Specific HASP, as well as the Traffic Control Plan, to protect workers, nearby property owners, and the general public. If identified, DBS&A will bring the issue to the contractor's attention immediately. However, the construction contractor is ultimately responsible for construction means, methods, sequence and techniques, and jobsite safety.

Prior to construction activities, a grid will be marked over the area of excavation. This work will be completed immediately prior to the kickoff meeting, which will be coordinated with the PSTB

project manager and engineer and the construction contractor. Truck routes and soil staging areas will be discussed in relation to the anticipated progress of work, and any remaining health and safety concerns will be resolved.

3.2 Task 2: Monitor Well Plugging and Abandonment

DBS&A will subcontract with Atkins Engineering Associates (AEA) prior to implementation of corrective action to plug and abandon monitor wells MW-1 through MW-5 and MW-8, which are located within the area of excavation. This work will be completed following receipt of the approved plugging plan of operations from the NM Office of the State Engineer (OSE).

Prior to abandoning the wells, DBS&A will gauge fluid levels using an electronic interface probe. The concrete pads and vaults will then be removed from each well, the casing will either be completely removed or cut off at a depth of 1 to 2 feet below ground surface (bgs), and the remaining borehole will be tremmie-grouted with a neat cement grout. Total depth is assumed to be approximately 20 feet bgs.

Upon completion of the well plugging and abandonment, DBS&A will prepare a letter report documenting the project planning and well abandonment activities. The report will document the abandonment method at each well and include as attachments (1) a copy of the plugging plan submitted to and approved by the New Mexico Office of the State Engineer (OSE), (2) a copy of the plugging record submitted to the OSE, (3) photographic documentation of site activities, and (3) field notes recorded during abandonment activities.

3.3 Task 3: Soil Excavation, Disposal, and Backfill

Prior to excavation, the site will be secured with a combination of concrete barriers, signage, and temporary fencing. At the end of each day, entry points will be barricaded to deter vehicular traffic from entering the site, and open excavations will be flagged and secured with temporary fencing. Traffic control will be set up according to the approved traffic control plan, as needed. During all excavation activities, Occupational Safety and Health Administration (OSHA) regulations for excavations in 29 CFR 1926, Subpart P will be followed.

The proposed extent of excavation is shown on Sheet 4 of the FRP engineering drawings. Based on the detailed soil investigation program completed by DBS&A, the proposed excavation includes a total of approximately 5,200 bank cubic yards. This includes almost 4,000 cubic yards of material that will require off-site disposal, including 3,756 bank cubic yards of petroleum

contaminated soil (PCS) (4,883 loose cubic yards) and 205 bank cubic yards of asphalt (348 loose cubic yards). The area to be impacted is approximately 16,600 square feet.

Based on DBS&A's conceptual site model, excavation activities will focus on removal of contaminated soil above the thick clay layer, as well as removal of contaminated soil in the tank pit. The two CIP USTs will be overexcavated and removed. Depth of the excavation will also vary due to required sloping for excavation safety and proximity to site structures. The deepest part of the excavation will be at the tank pit, which is estimated to be buried 16 feet deep. The surrounding area will be excavated to a depth of approximately 9 feet. If petroleum impact is determined to exist below 9 feet, the excavation will continue below 9 feet until clean soil is encountered, as site conditions allow. Excavation within the roadway and under the canopy is not included in this cleanup strategy. A full description of excavation methodology, staging, hauling and disposal, backfill (including amendment with ORC), waste characterization sampling, and confirmation sampling is provided in the FRP (Sections 4.2.2 to 4.2.4).

It is not clear whether subsurface utility lines will be encountered during excavation activities. If encountered, each line will be repaired and/or replaced with equivalent size and materials as existing and in accordance with applicable plumbing and utility codes. If utility line replacement is needed, DBS&A will prepare a PSTB engineering change order and submit to the PSTB engineer for approval. The change order will provide specific details on proposed repairs, which will likely be outside the original scope of work proposed for FRP implementation. Depending on the scope of utility line replacement, a request for contingency set-aside may be prepared together with the PSTB change order.

Site restoration will include backfill and compaction, as well as asphalt replacement. In the tank pit, a layer of gravel will be placed in the bottom of the excavation to approximately 1 foot above the static water table so that saturated soils can be appropriately compacted. Clean soils staged during the excavation and engineered fill imported to the site will be used as backfill. The backfill soils will be placed as directed in the FRP plan set and FRP specifications.

A site survey, completed by a New Mexico Licensed Land Surveyor, will document final site conditions, including the final grade of the site and utility locations.

The PSTB project manager will be provided electronic weekly updates of project activities during the excavation phase via e-mail. Soil volumes, field screening results, compaction testing results, volume of ORC-A used to amend backfill, photographic documentation, and other details related to the excavation work will be documented in the as-built report. DBS&A will notify the

PSTB project manager indicating when the excavation and backfill activities have been completed.

3.4 Task 4: As-Built Report

A final as-built report will be submitted to the PSTB project manager after completion of Tasks 1 through 3 in accordance with NMAC 20.5.119.1925.D. The report will document the soil excavation and include all supporting field screening results, field notes and field forms, laboratory analytical results from the confirmation and waste characterization samples, details of soil disposal including copies of the waste manifests, record drawings showing the areal extent of the soil excavation and finished grade, well completion diagrams, the layout and details of the vapor mitigation system, and photographic documentation of field activities.

3.5 Task 5: Monitor Well Replacement and Site Restoration

After completion of site activities, DBS&A will subcontract with AEA to replace the plugged and abandoned monitor wells (MW-1 through MW-5 and MW-8) that were within the excavation area. The replacement wells will be installed using direct-push technology (DPT) and a track-mounted Geoprobe 6620 DT drilling rig at locations agreed upon with the PSTB project manager at least four days prior to mobilization for drilling. The top of casing elevation of the newly installed monitor well will be surveyed to a common U.S. Geological Survey (USGS) datum. Horizontal and vertical coordinates will be measured to within 0.01 foot for each monitor well relative to state plane coordinates based on North American Datum 1983 (NAD 83) by a New Mexico-licensed land surveyor. Coordinates will also be reported in decimal degrees of latitude and longitude. A letter report documenting the well replacement and site activities will serve as the deliverable for this task and will include well completion diagrams and other well installation related data and photographic documentation of field and site restoration activities.

Installation and well construction will be performed as described in the FRP.

3.6 Tasks 6 through 9: Quarterly Groundwater Monitoring and Reporting

Subsequent to remediation, DBS&A will initiate quarterly groundwater monitoring in accordance with DBS&A SOPs. Up to six wells associated with the site will be gauged during each monitoring event. All wells that do not contain light nonaqueous-phase liquid (LNAPL) will be

sampled. In the event that remedial activities cause a decrease in site contaminant of concern (COC) concentrations, the sampling program may be adjusted in future years.

Fluid levels will be gauged using an electronic interface probe to determine if LNAPL is present and to determine the depth to water. If detected by the interface probe, the LNAPL thickness will be measured to within 0.01 foot. The interface probe will be decontaminated before each measurement using a solution of deionized water and soap.

Prior to sampling, the wells will be purged using dedicated, disposable polyethylene hand bailers by bailing a minimum of three casing volumes or until groundwater chemistry has stabilized. If a well is purged dry, it will be sampled when the well has recharged. During purging, groundwater field parameters (dissolved oxygen [DO], oxidation/reduction potential [ORP], electrical conductivity [EC], pH, and temperature) will be measured using a YSI Professional or equivalent device.

After purging, wells that do not contain LNAPL will be sampled for laboratory analysis providing they contain a sufficient amount of groundwater. To minimize volatilization and ensure sample integrity, dedicated, disposable polyethylene bottom-emptying devices will be used to transfer groundwater samples from the bailers to the appropriate containers. Samples collected for VOC analysis will be transferred from bailers into laboratory-prepared 40-milliliter (mL) glass sample bottles that contain mercuric chloride as a preservative. The bottled groundwater samples will be labeled and preserved on ice in an insulated cooler for delivery to HEAL in Albuquerque, New Mexico for analysis. Groundwater samples will be analyzed for VOCs using EPA method 8260B (full list). Groundwater samples will be accompanied by full chain of custody documentation at all times.

Following completion of each quarter of sampling and upon receipt of laboratory analytical reports, DBS&A will prepare and submit to the NMED PSTB project manager a quarterly monitoring report conforming to 20.5.119.1926 NMAC. The report will include, but not be limited to, the following:

- Area/vicinity map
- Detailed site diagram with locations of buildings, monitor wells, storage tanks and lines, sumps, impoundments, pit areas, water lines, and other relevant structures
- Summary of site conditions
- Discussion of the sampling collection procedures

- Laboratory results with chain of custody records and quality assurance information
- Tabulation and graphs of recent and historical (including baseline) groundwater elevations, LNAPL levels (if applicable), and contaminant concentrations in each well, such as the following tables and graphs:
 - ◇ Groundwater analytical chemistry
 - ◇ Soil vapor analytical chemistry
 - ◇ Fluid level measurements and groundwater elevations
 - ◇ Summary of LNAPL recovery
 - ◇ System operations data
 - ◇ Cumulative mass removal
 - ◇ Well circuit soil vapor field screening data
 - ◇ Groundwater elevation and LNAPL thickness over time for each well containing LNAPL
 - ◇ Groundwater elevations and COC concentrations for key wells
- Groundwater elevation map
- Groundwater contaminant and isoconcentration maps with contaminant concentrations for each well (baseline data will be included as a separate appendix in each report)
- Identification and explanation of any operational adjustments made for system optimization
- Discussion of actual system operation and effectiveness compared to expected parameters used for the remedial design
- Evaluation of contaminant reduction
- Familiarity statement by the DBS&A project manager
- Description of actions taken or future plans for the recovery of contaminant mass
- Summary and recommendations

In addition to this information, the first quarterly monitoring report will also include the geologic logs and well completion diagrams for each of the newly installed wells, field notes and photographs documenting the well installation field activities, copies of approved permits in accordance with 20.5.119 NMAC, and an updated geologic cross section that includes new data collected during the site investigation.

3.7 Task 10: Contingency

A 15 percent contingency, based on the previously detailed tasks, has been included to cover unforeseen circumstances that may arise in the implementation of the scope of work.

Unforeseen circumstances may include additional drilling costs due to unexpected drilling conditions, unforeseen utility crossings during system installation, additional analytical costs associated with collection of out-of-scope samples, etc. The contingency may also be used to remove contaminated soils beyond the volume predicted by the current best available data. In the event of the need for changes in the scope which necessitate use of the contingency, DBS&A will work with the NMED PSTB to identify a cost-effective solution. The contingency will be accessed only with prior written approval of the NMED PSTB project manager.

4. Cost Estimate

DBS&A proposes to execute the scope of services described in this work plan on a lump-sum basis. In the event that changed conditions are encountered, costs may need to be revised. Table 1 summarizes the costs for the scope of work detailed in this work plan. Task 1 and 2 will be billed following submittal of a letter report documenting activities associated with project planning and well plugging and abandonment. Soil excavation and disposal, and site restoration (Task 3) has been split into three monthly letter reports, which will document progress of excavation remediation over a total of 12 weeks. Task 4 will be billed following submittal of the "as-built" report. Task 5 will be billed following submittal of a letter report documenting monitor well replacement activities at the site. Each quarter of groundwater monitoring (Tasks 6 through 9) will be billed upon submittal of a quarterly monitoring report. Opinions of construction costs are based on the current understanding of site conditions. In the event that changed conditions are encountered, opinions of cost may need to be revised.

Table 1. Cost Estimate

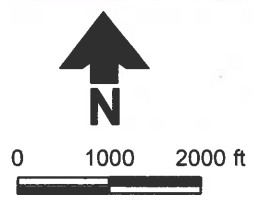
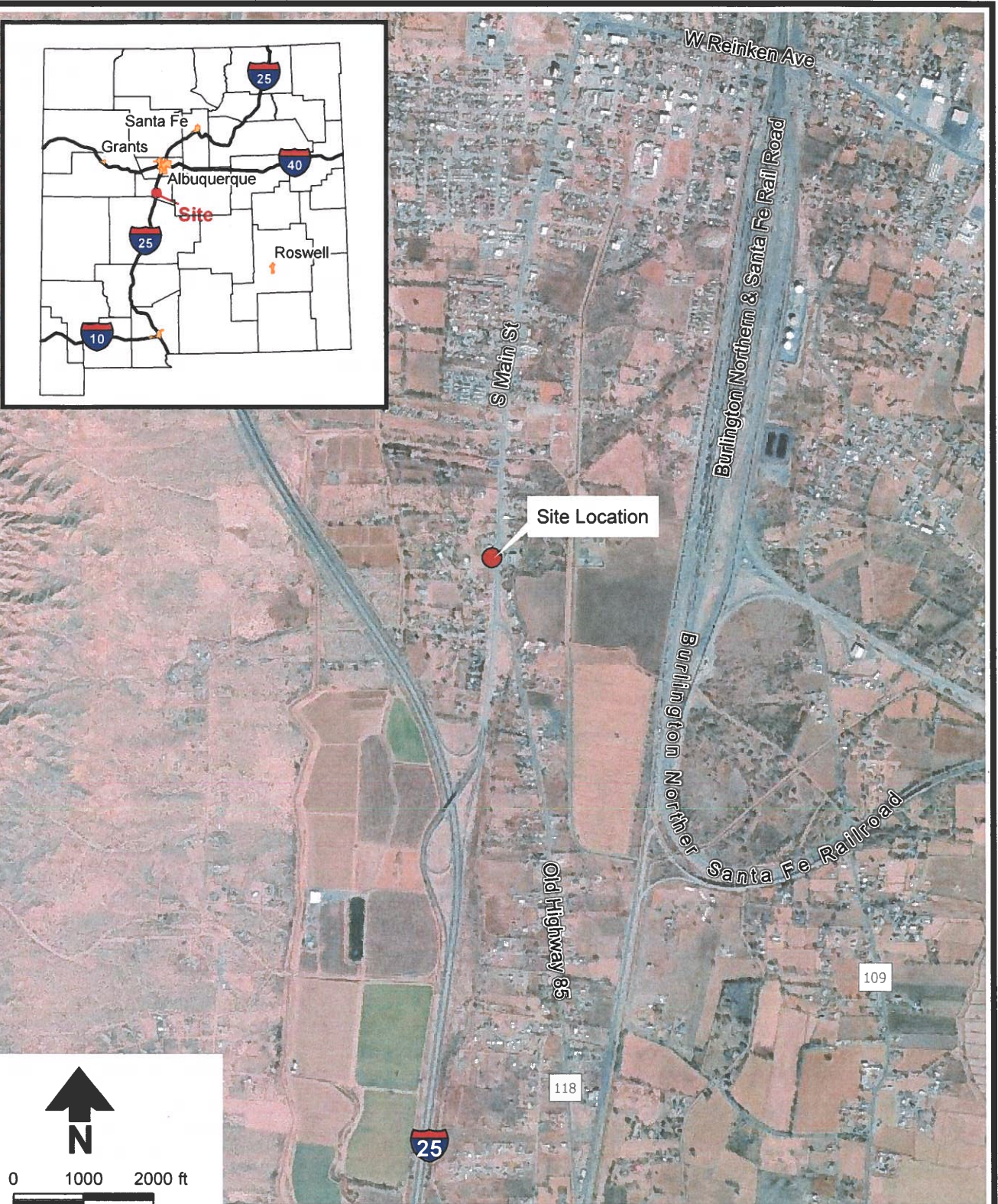
Task	Task Description	Cost	Tax ^a	Total
1-2	Project planning and monitor well plugging and abandonment	\$20,204.25	\$1,540.57	\$21,744.82
3a	Soil excavation and disposal, site restoration - 1st month	\$280,142.60	\$21,360.87	\$301,503.47
3b	Soil excavation and disposal, site restoration - 2nd month	\$280,142.60	\$21,360.87	\$301,503.47

Task	Task Description	Cost	Tax ^a	Total
3c	Soil excavation and disposal, site restoration - 3rd month	\$280,142.60	\$21,360.87	\$301,503.47
4	As-built report	\$8,250.00	\$629.06	\$8,879.06
5	Monitor well replacement and letter report	\$33,386.13	\$2,545.69	\$35,931.82
6	First quarter groundwater monitoring and reporting	\$8,318.75	\$634.30	\$8,953.05
7	Second quarter groundwater monitoring and reporting	\$6,793.75	\$518.02	\$7,311.77
8	Third quarter groundwater monitoring and reporting	\$6,793.75	\$518.02	\$7,311.77
9	Fourth quarter groundwater monitoring and reporting	\$6,793.75	\$518.02	\$7,311.77
10	Contingency	\$132,834.81	\$10,128.65	\$142,963.47
Total		\$1,063,802.99	\$81,114.98	\$1,144,917.97

^a New Mexico gross receipts tax of 7.625%

Figures

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Aerial Photograph: Maxar, Vivid 1/21/2022

ISS1ABQIDATA\MARKETING\PROPOSALS IN PROGRESS\B22.1452.PR NMED PSTB BACAS\GIS\BACAS AUTO SALES\BACAS AUTO SALES.APRX



Aerial Photograph: Maxar, Vivid 1/21/2022

Explanation

- Monitor well
- Soil boring



DBS&A
a Geo-Logic Company

1/24/2023

DB22.1452.PR

BACAS AUTO SALES
1301 S. MAIN STREET, BELEN, NM
Site Map

Figure 2

Specification Sheet



**OXYGEN
RELEASE
COMPOUND**

ORC Advanced® Technical Description

ORC Advanced® is an engineered, oxygen release compound designed specifically for enhanced, *in situ* aerobic bioremediation of petroleum hydrocarbons in groundwater and saturated soils. Upon contact with groundwater, this calcium oxyhydroxide-based material becomes hydrated producing a controlled release of molecular oxygen (17% by weight) for periods of up to 12 months on a single application.

ORC Advanced decreases time to site closure and accelerates degradation rates up to 100 times faster than natural degradation rates. A single ORC Advanced application can support aerobic biodegradation for up to 12 months with minimal site disturbance, no permanent or emplaced above ground equipment, piping, tanks, power sources, etc are needed. There is no operation or maintenance required. ORC Advanced provides lower costs, greater efficiency and reliability compared to engineered mechanical systems, oxygen emitters and bubblers.



Example of ORC Advanced

ORC Advanced provides remediation practitioners with a significantly faster and highly effective means of treating petroleum contaminated sites. Petroleum hydrocarbon contamination is often associated with retail petroleum service stations resulting from leaking underground storage tanks, piping and dispensers. As a result, ORC Advanced technology and applications have been tailored around the remediation needs of the retail petroleum industry and include: tank pit excavations, amending and mixing with backfill, direct-injection, bore-hole backfill, ORC Advanced Pellets for waterless and dustless application, combined ISCO and bioremediation applications, etc.

For a list of treatable contaminants with the use of ORC Advanced, view the [Range of Treatable Contaminants Guide](#)

Chemical Composition

- Calcium hydroxide oxide
- Calcium hydroxide
- Monopotassium phosphate
- Dipotassium phosphate

Properties

- Physical state: Solid
- Form: Powder
- Odor: Odorless
- Color: White to pale yellow
- pH: 12.5 (3% suspension/water)



**OXYGEN
RELEASE
COMPOUND**

ORC Advanced® Technical Description

Storage and Handling Guidelines

Storage

- Store in a cool, dry place out of direct sunlight
- Store in original tightly closed container
- Store in a well-ventilated place
- Do not store near combustible materials
- Store away from incompatible materials
- Provide appropriate exhaust ventilation in places where dust is formed

Handling

- Minimize dust generation and accumulation
- Keep away from heat
- Routine housekeeping should be instituted to ensure that dust does not accumulate on surfaces
- Observe good industrial hygiene practices
- Take precaution to avoid mixing with combustibles
- Keep away from clothing and other combustible materials
- Avoid contact with water and moisture
- Avoid contact with eyes, skin, and clothing
- Avoid prolonged exposure
- Wear appropriate personal protective equipment

Applications

- Slurry mixture direct-push injection through hollow rods or direct-placement into boreholes
- *In situ* or *ex situ* slurry mixture into contaminated backfill or contaminated soils in general
- Slurry mixture injections in conjunction with chemical oxidants like RegenOx or PersulfOx
- Filter sock applications in groundwater for highly localized treatment
- *Ex situ* biopiles

Health and Safety

Wash thoroughly after handling. Wear protective gloves, eye protection, and face protection. Please review the [ORC Advanced Safety Data Sheet](#) for additional storage, usage, and handling requirements.



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