

NM2 - _____ 19_____

**GENERAL
CORRESPONDENCE
YEAR(S):**

_____ 2013 - 2016 _____

State of New Mexico
Energy, Minerals and Natural Resources Department

Susana Martinez
Governor

Tony Delfin
Acting Cabinet Secretary

David R. Catanach, Division Director
Oil Conservation Division



November 14, 2016

Stacey Boultinghouse
ETC Field Services LLC
800 E. Sonterra Boulevard, Suite 400
San Antonio, Texas 78258

**Re: Calculation of Background Concentrations
ETC Field Services LLC
Permit NM2-019
Location: Unit F of Section 36, Township 23 South, Range 36 East, NMPM,
Lea County, New Mexico**

Dear Ms. Boultinghouse:

The Oil Conservation Division (OCD) has reviewed ETC Field Services LLC's (ETC) email request, dated August 24, 2016, to calculate background concentrations using the statistical software program ProUCL and the analytical data obtained from the August 2014 background sampling event. The August 2016 request proposes to only establish background concentrations for the treatment zone closure performance standard constituents of 19.15.36.15.F NMAC to pursue closure of remediated soils within the landfarm cells. OCD wishes to remind ETC that background concentrations have not been established to demonstrate the comparison to the vadose sample results to determine whether a release has occurred from operations. The August 2014 background samples were analyzed for TPH, determined by EPA method 418.1; GRO and DRO, determined by EPA SW-846 method 8015D; BTEX, determined by EPA SW-846 method 8021B or 8260B; chlorides determined by EPA method 300.1; and other constituents listed in Subsections A and B of 20.6.2.3103 NMAC, using approved EPA methods. The August 2014 background analytical results did not include the additional "major cations/anions" required by the existing March 2002 permit, NM2-019, for the vadose monitoring comparison.

OCD hereby approves the use of the statistical software program ProUCL to calculate background concentrations for the assessment of treatment zone performance standards of Subsection F of 19.15.36.15 NMAC and for the comparison to the vadose zone monitoring results to determine whether a release has occurred, based upon the following conditions:

1. ETC shall assess the background data for normality and outliers to determine if a parametric or non-parametric statistical method is required to calculate the background concentration for each constituent;

2. ETC shall ensure that non-detects are represented by the reporting limit (RL) or practical quantitation limit (PQL) utilized by the laboratory on the background samples to determine each non-detect and shall not remove any non-detects from the data set when using ProUCL to calculate background concentrations;
3. ETC shall ensure that when calculating a background concentration based upon both detects and non-detects, that the statistical rule of "simple substitution" is applied and one-half of the value of RL is utilized to calculate background concentration.
4. ETC shall submit a proposal to address how background will be established for the vadose monitoring assessment by permit for the additional "major cations/anions," Sodium, Calcium, Magnesium, Potassium, Carbonate, and Bicarbonate, that were not included or addressed in the August 2014 background sampling event within 30 days of the effective date of this approval;
5. ETC shall submit the facility background demonstration under a separate cover for OCD review and consideration of approval; and
6. ETC shall obtain written approval from OCD prior to implementing any changes to this approval.

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

If there are any questions regarding this matter, please do not hesitate to contact Brad Jones of my staff at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,



Jim Griswold
Environmental Bureau Chief

JG/baj

cc: OCD District I Office, Hobbs
Bernie Bockisk, GHD, 6121 Indian School Road NE, Suite 200, Albuquerque, NM 87110

Jones, Brad A., EMNRD

From: Bockisch, Bernie <Bernard.Bockisch@ghd.com>
Sent: Thursday, August 25, 2016 10:36 AM
To: Jones, Brad A., EMNRD
Cc: Griswold, Jim, EMNRD; Boultinghouse, Stacy
Subject: Jal Land Farm Background Proposal Letter (NM-02-019)
Attachments: 082148 Background letter_1AP.bbrev2.pdf

Brad,

I have attached a letter with our proposed approach to calculating the background concentrations for the Jal Landfarm. Please let me know if you have any questions regarding our approach. We would be happy to meet with you to discuss our approach if you believe this would be helpful.

Bernie

Bernard Bockisch, PMP
Senior Project Manager

GHD

T: +1 505 884 0672 | M: +1 505 280 0572 | E: Bernard.Bockisch@ghd.com
6121 Indian School Rd. NE Albuquerque New Mexico 87110 | www.ghd.com

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August 24, 2016

Reference No. 082148

Mr. Brad Jones
Energy, Minerals and Natural Resources Department
New Mexico Oil Conservation Division
1220 South St. Francis Drive
Santa Fe, New Mexico 87505

Dear Mr. Jones:

**Re: Calculation of Background Concentrations
Jal No. 4 Land Farm
Permit No. NM-02-0019
Jal, New Mexico**

GHD Services Inc. (GHD) is providing this letter on behalf of ETC Field Services LLC (ETC). The Jal No. 4 Land farm (Site) is located approximately ten (10) miles north of Jal in Lea County, New Mexico. The Site is located in section 36, township 23 south, range 36 east. It is surrounded primarily by undeveloped rangeland and oil and gas production.

Understanding of the Issue

The first round of closure samples on cells 5 through 15 were collected at the Jal Landfarm in October 2014. The closure sampling was performed in accordance with the methods detailed in the Landfarm Closure and Post-Closure Care Plan (Closure Plan) dated July 2014. In addition to other sampling, the treatment zone samples were analyzed for the metals listed in Subsections A and B of 20.6.2.3103 New Mexico Administrative Code (NMAC). The samples were analyzed by EPA SW-846 Methods 6010C or 6020A. The concentrations of these metals were compared with the higher of the laboratory practical quantitation limit (PQL) or the background value established in the permit application.

As per 19.15.36.16(F)(5) NMAC and the Closure Plan, if the concentration of a given metal exceeds the higher of the PQL or background concentration, a site specific risk assessment using United States Environmental Protection Agency's (EPA) approved methods will be performed. The concentrations of several metals detected in the first round of closure sampling in October 2014 exceeded their respective PQLs and background values.

Based on this, a work plan to perform a site specific risk assessment dated January 2015 was submitted by Regency Field Services (Regency), the previous owner of the land farm. In their work plan, Regency stated that they did not believe that the background soil concentrations approved in the permit provided for a statistically valid background soil concentration. Based on this, Regency collected an additional 12 soil samples to perform a statistical analysis to be used to calculate more representative background concentrations.

GHD

6121 Indian School Road NE Suite 200 Albuquerque New Mexico 87110 USA
T 505 884 0672 F 505 884 4932 W www.ghd.com



During a meeting held in April 2015, the NMOCD rejected Regency's proposed background concentrations based on the following:

- The statistical approach proposed was not supported by EPA methodology.
- The NMOCD had an issue with the addition of the standard deviation to the 95th UCL.
- The statistical approach did not have determination on the normality of the data.
- The statistical approach did not consider the effect of non-detects that were present in the data.

History of Background Concentrations

An application to operate the Site as a land farm was submitted to the New Mexico Oil Conservation Division (NMOCD) on May 31, 2001. A permit for the land farm (NM-02-0019) was issued on March 18, 2002. The permit was approved in accordance with NMOCD Rule 711 which was in effect at the time of the approval. The revised regulation, 19.15.36 NMAC, came into effect on February 14, 2007.

As required by the permit (Treatment zone monitoring, Provision No. 1), a background soil sample was collected on April 11, 2001 from within the land farm boundaries. In accordance with the permit requirements, the background sample consisted of a single point collected at a depth of approximately 2 feet below ground surface. The background soil sample was analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by EPA Method 8021, total petroleum hydrocarbons (TPH) by EPA Method 418.1, major cations and anions by EPA Method 300.1, and RCRA Metals by EPA Method 6010. The results of this sample were reported in the Landfarm Closure and Post-Closure Care Plan dated July 11, 2014. GHD and ETC understand that these are the background concentrations that are currently in effect for the site.

Proposed Background Concentration Calculation

GHD and ETC agree that a single soil sample does not provide a statistical representation of the background soil concentrations. Based on this, GHD and ETC propose to calculate background concentrations using the program ProUCL and the soil analytical data that was collected by Regency. ProUCL is a comprehensive statistical software package developed by EPA for computing statistical intervals to respond to concerns at a specific Superfund site. ProUCL:

- Is originally created by and approved for use by the EPA.
- Can determine normality and calculate background concentrations on normal or non-normal data sets.
- Can be run on environmental data sets with and without non-detect data samples.
- Can provide recommendations on which output to use.

Please let us know if calculating the background concentrations using ProUCL and the existing soil data is acceptable to the NMOCD. If not, the existing background concentrations can continue to be used. If you have any questions, please feel free to contact me at (505) 884-0672.



Sincerely,

GHD

A handwritten signature in black ink, appearing to read 'Bernard Bockisch', written in a cursive style.

Bernard Bockisch, PMP
Senior Project Manager

BB/mc/1

A handwritten signature in black ink, appearing to read 'Andrew Pawlisz', written in a cursive style.

Andrew Pawlisz, DABT ERT(UK) WPIT
Senior Toxicologist / Associate

Jones, Brad A., EMNRD

From: Callaway, Crystal - RegencyGas <Crystal.Callaway@Regencygas.com>
Sent: Friday, April 04, 2014 12:08 PM
To: Jones, Brad A., EMNRD
Subject: annual/5 year report delivery extension (PERMIT- NM-02-0019)

Good Afternoon Brad- Per our discussion, I am requesting a 45 Day extension for delivery of the annual/5 year report for Regency's Landfarm permit (NM-02-0019). As we discussed, I was just recently hired by Regency Gas, as their Remediation Specialist, and have just started to evaluate Regency's Legacy remediation portfolio for West Texas and New Mexico. Based on our permit annual reporting schedule, the annual/5 year report should have been delivered to NMOCD on March 18th, however, our consultant did not submit it to Regency, until March 28th. Based on the submission date to Regency and our schedule for in-house technical review, which at a minimum usually requires approximately three weeks, we would be looking to deliver the report to your office on May 6th. As a follow-up to this email, I will be sending you a meeting invite for that date. Please let me know if you have any further questions or recommendations.

Thank you,

*Crystal D. Callaway, BSN, RN, CHMM
Senior Environmental Remediation Specialist*

*Regency Energy Partners
301 Commerce Street, Suite 700
Fort Worth, TX. 76109*

*Office: (817)302-9407
Mobile: (817)807-6514
Fax: (817)302-9353*

Email: Crystal.Callaway@Regencygas.com

Private and confidential as detailed [here](#). If you cannot access hyperlink, please e-mail sender.

Jones, Brad A., EMNRD

From: Jones, Brad A., EMNRD
Sent: Monday, April 07, 2014 7:55 AM
To: 'Callaway, Crystal - RegencyGas'
Subject: RE: annual/5 year report delivery extension (PERMIT- NM-02-0019)

Crystal,

OCD hereby approves the 45 day extension request. Please propose a time for May 6th in which you would like meet.

Brad

Brad A. Jones
Environmental Engineer
Environmental Bureau
NM Oil Conservation Division
1220 S. St. Francis Drive
Santa Fe, New Mexico 87505
E-mail: brad.a.jones@state.nm.us
Office: (505) 476-3487
Fax: (505) 476-3462

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