## NM1 - \_\_\_\_45\_

# GENERAL CORRESPONDENCE

# YEAR(S):

# 2013-2016

#### Jones, Brad A., EMNRD

From:	Cottonwood Holdings <cottonwood.holdings@yahoo.com></cottonwood.holdings@yahoo.com>
Sent:	Wednesday, July 08, 2015 3:50 PM
То:	Jones, Brad A., EMNRD
Cc:	djwatson@windstream.net
Subject:	CL 5/19/15 Modification Request Response
Attachments:	DOC.PDF

Mr. Jones,

3

Please find attached a copy of the response letter to the missing modification request you addressed in your compliance letter dated 5/19/15. A hardcopy will be sent to you office shortly. Please let me know if the content of the letter is satisfactory or if you will require additional clarification or materials.

Regards,

John Harrison

575.631.8909 Cottonwood Holdings, LLC 1008 Mesa Verde Hobbs, NM 88240

### JAY DAN LANDFARM, LLC NM1-045 P.O. BOX 632 LOVINGTON, NM 88260

NMOCD Environmental ATTN: Mr. Brad Jones 1220 South St. Francis Drive Santa Fe, NM 87505

RE: Jay Dan Landfarm

Mr. Jones:

After review of our files, Jay Dan Landfarm has found no communication or modification request to change sampling frequency away from the original permit. Jay Dan Landfarm recognizes that we will revert back to the original sampling frequency while considering the transition provisions stated in 19.15.36.20.

If you have any further question regarding this issue please do not hesitate to contact me.

Thanks,

Danny Watson, Owner/Operator Box 632 Lovington, NM 88260 575-631-3482

Susana Martinez Governor

David Martin Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary David R. Catanach, Division Director Oil Conservation Division



August 3, 2015

Danny Watson Jay Dan Landfarm LLC P.O. Box 632 Lovington, New Mexico 88260

RE: Background Proposal Review Jay Dan Landfarm, LLC Permit NM1-045 Location: Unit E of Section 32, Township 15 South, Range 35 East, NMPM Lea County, New Mexico

Dear Mr. Watson:

The Oil Conservation Division (OCD) has completed the review of Jay Dan Landfarm LLC's (Jay Dan) request, dated July 17, 2015 and received by OCD on July 20, 2015, to establish a new facility background for analytical comparison regarding vadose zone monitoring and treatment zone closure. The facility background proposal did not consider all the constituents that must have background established to complete vadose zone (native soils) monitoring by the requirements of 19.15.36 NMAC and/or specified in the conditions of the existing permit NM1-045, and later for closure of the treatment zone (soils to be remediated).

In accordance with Condition 3 of Jay Dan's April 12, 2006 Surface Waste Management Facility Permit NM1-045, under the heading *Treatment Zone Monitoring* (referred to as "vadose zone" in Part 36), "The soil samples must be analyzed using EPA-approved methods for total petroleum hydrocarbons (<u>TPH</u>) and volatile aromatic organics (<u>BTEX</u>) quarterly and for <u>major</u> <u>cations/anions</u> and <u>Water Quality Control Commission (WQCC) metals</u> annually." Jay Dan did not propose to establish background for major cations and anions. Major cations are as follows: Calcium, Sodium, Magnesium, and Potassium. Major anions are as follows: Bicarbonate, Chloride, Fluoride, Nitrates, Nitrites, and Sulfate. Please update the facility background proposal to include the missing constituents in Step 2 of the facility background proposal. Also, please include a backfilling protocol for the sample locations.

Also, please provided a print out of the most recent Google Earth satellite image of the landfarm facility. Please mark on a printed Google Earth satellite image and identified the proposed background sample point locations and the landfarm cells.

Jay Dan Landfarm, LLC Permit NM1-0454 August 3, 2015 Page 2 of 2

OCD is willing to accept an equivalent method to EPA Method 418.1 that is capable of demonstrating a carbon range from  $C_6$  to  $C_{36}$  (e.g. Method 8015 for GRO/DRO/MRO or ORO). Please ensure that appropriate reporting limits are utilized. A typical reporting limit for EPA Method 418.1 is 20 mg/kg. If statistics are used in the demonstration, please provide references from EPA statistical guidance documents to support proposed statistical methods.

Please update and resubmit a revised facility background proposal for OCD' consideration of approval. If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Brad A. Jones

Environmental Engineer

BAJ/baj

cc: OCD District I Office, Hobbs John Harrison, Cottonwood Holdings LLC, 1008 Mesa Verde, Hobbs, NM 88240

### JAY DAN LANDFARM, LLC (100) NM1-045 P.O. BOX 632 LOVINGTON, NM 88260

7/17/2015

NMOCD Environmental ATTN: Mr. Brad Jones 1220 South St. Francis Drive Santa Fe, NM 87505

RE: Jay Dan Landfarm

Mr. Jones:

Please find enclosed a copy of our proposal to establish a new background for analytical comparison. If the proposal is acceptable and approved, we intend to move forward with the sampling as soon as possible.

I appreciate your time and continued cooperation with us and look forward to hearing from you soon.

Thanks,

Danny Watson, Owner/Operator Box 632 Lovington, NM 88260 575-631-3482

### Background Proposal

Prepared for: Jay Dan Landfarm Prepared by: John Harrison, Consultant

July 17, 2015 Proposal number: 001

### Summary

#### Objective

The objective of this proposal is to establish a new background for comparison of sampling data for Jay Dan Landfarm (NM-0045). This new background, if acceptable, will be used to substantiate sampling results and confirm if a release has occurred above the acceptable limits.

#### **Action Plan**

- 1. Jay Dan plans to establish a new "Background" analytical to compare our Vadose sampling. The Vadose sample will be compared to the new background or the PQL from the laboratory, whichever is greater, to determine if a release has occurred. If it is determined a release of BTEX, TPH or Chloride has occurred, subsequent steps will be taken to comply with NMAC 19.15.36.15.E(5). Notification of the potential release will be made to the OCD, then a minimum of four randomly selected independent samples will be collected and analyzed for TPH, BTEX, Chloride and the constituents listed in subsection A and B of NMAC 20.6.2.3103. The results of these samples will be submitted to the OCD within 45 days after receipt from the lab. With these results, additional actions to remediate and/or prevent future contamination will be proposed.
- 2. The background sampling will consist of four separate locations, NE, SE, NW, SW corners of the landfarm area to make one composite sample. The samples will be taken from areas that have been un-impacted from previous landfarm operations or activities. These samples shall be collected at a depth of two feet.
- 3. The sample will be analyzed for BTEX, TPH (418.1), Chloride and all constituents listed in subsection A and B of NMAC 20.6.2.3103.
- 4. Sample locations will be documented with photos and GPS for verification.
- Once the analytical results are received from the laboratory, copies will be distributed to Jay Dan for review. After review and it is determined that this background is reportable and representative of the background, copies will be submitted to OCD.
- 6. Once OCD has reviewed and accepts the new background data, Jay Dan will use this information, "Background" and PQL provided by the laboratory for future Vadose zone comparisons.



#### Jones, Brad A., EMNRD

From: Sent: To: Cc: Subject: Jones, Brad A., EMNRD Wednesday, July 08, 2015 9:51 AM 'Cottonwood Holdings' 'djwatson@windstream.net' RE: Compliance letter dated 5/19/15

#### John,

Thank you for notifying OCD of the permit modification status. OCD has some concern regarding the last sentence in your email below. OCD's instructions provided in the May 2015 review letter states "If Jay Dan is unable to demonstrate the approval, Jay Dan shall revert back permitted vadose zone monitoring frequency. Please note that the transitional provisions of 19.15.36.20 NMAC must be considered. Please review OCD's letter dated June 30, 2011 and titled "Compliance with the Transitional Provisions of the Surface Waste Management Facilities rule (Rule 36) and Treatment and Vadose Monitoring Requirements at Existing Landfarms" for expectation of compliance." Based upon your response, the two underlined sentences above were not considered and/or addressed in the response. Please review OCD's June 30, 2011 letter, "Compliance with the Transitional Provisions of the Surface Waste Management Facilities rule (Rule 36) and Treatment Facilities rule (Rule 36) and Treatment and Vadose Monitoring Requirements at Existing Landfarms" and the transitional provisions of Part 36 (19.15.36.20 NMAC) and resubmit your response. Please either clarify in the follow-up response why it was required or please rescind the email below and resubmit addressing both the permit modification status and the change in vadose zone monitoring sampling frequency.

OCD's May 2015 review letter provided many instructions. An important one are the new policies discussed in the last paragraph of the review letter. The second sentence in the last paragraph states "For future submittals, please include a cover letter from the owner/operator, on the owner's/operator's company letterhead, that recognizes the owner/operator has reviewed the submittal, signed by the owner/operator." This submittal did not include the requested cover letter. Please include in the resubmittal.

If you have any questions regarding this matter, please contact me.

#### Brad

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

From: Cottonwood Holdings [mailto:cottonwood.holdings@yahoo.com] Sent: Tuesday, July 07, 2015 10:37 PM To: Jones, Brad A., EMNRD Subject: Compliance letter dated 5/19/15

Mr. Jones,

I have been reviewing additional files and documents provided by my client and came across this compliance letter. In my review of Jay Dan files, I do not find any correspondence with the OCD or a modification request with the OCD's approval to move to a semiannual sampling frequency. As your letter on 5/19/15 indicates, I need confirmation that Jay Dan will revert back to monitoring TPH & BTEX quarterly and major cations/anions and WQCC metals annually, as permitted. <u>,</u>۴

Regards,

John Harrison 575.631.8909 Cottonwood.Holdings@yahoo.com

#### Jones, Brad A., EMNRD

From:
Sent:
To:
Subject:

Cottonwood Holdings <cottonwood.holdings@yahoo.com> Tuesday, July 07, 2015 10:37 PM Jones, Brad A., EMNRD Compliance letter dated 5/19/15

Mr. Jones,

I have been reviewing additional files and documents provided by my client and came across this compliance letter. In my review of Jay Dan files, I do not find any correspondence with the OCD or a modification request with the OCD's approval to move to a semiannual sampling frequency. As your letter on 5/19/15 indicates, I need confirmation that Jay Dan will revert back to monitoring TPH & BTEX quarterly and major cations/anions and WQCC metals annually, as permitted.

Regards,

John Harrison 575.631.8909 Cottonwood.Holdings@yahoo.com

#### State of New Mexico Energy, Minerals and Natural Resources Department

Susana Martinez Governor

David Martin Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary David R. Catanach, Division Director Oil Conservation Division



June 30, 2015

Danny Watson Jay Dan Landfarm LLC P.O. Box 632 Lovington, New Mexico 88260

 RE: Extension Request To Respond To OCD's 2014 Bi-Annual Sampling and Five Year Monitoring Report Reviews Jay Dan Landfarm, LLC Permit NM1-045 Location: Unit E of Section 32, Township 15 South, Range 35 East, NMPM Lea County, New Mexico

Dear Mr. Watson:

The Oil Conservation Division (OCD) has completed the review of Jay Dan Landfarm LLC's (Jay Dan) request, dated June 18, 2015 and received by OCD on June 23, 2015, for an extension to respond to OCD's request for additional information based upon OCD's May 19, 2015 written review of Jay Dan's 2014 Bi-Annual Sampling and Five Year Monitoring Report Reviews. Based upon our conversation on June 25, 2015, OCD hereby grants a 30-day extension to the submittal deadline for a demonstration to establish the facility background, as provided in OCD's May 19, 2015 review.

If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Brad A. Jones Environmental Engineer

BAJ/baj

cc: OCD District I Office, Hobbs

#### JAYDAN LANDFARM NM 1-045 BOX 632 LOVINGTON, NM 88260

RECEIVED OCD

2015 JUN 23 P 3:20

June 18, 2015

NMOCD Environmental ATTN: Brad Jones 1220 South St. Francis Dr. Santa Fe, NM 87505

Mr. Jones:

Just received your letter concerning problems with JayDan facility, I have been out of town on a job.

It appears we have some compliance issues. The person who was working at the facility just recently left and I just found a replacement. I would appreciate an extension of time to get him up to speed with the problems and the facility.

My request for a time extension would be appreciated.

Sincerely,

hat

JayDan Landfarm (DANNY WAtson) Box 632 Lovington, NM 88260 575-631-3482

Susana Martinez Governor

David Martin Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary David R. Catanach, Division Director Oil Conservation Division



May 19, 2015

Danny Watson Jay Dan Landfarm LLC P.O. Box 632 Lovington, New Mexico 88260

#### RE: 2014 Bi-Annual Sampling and Five Year Monitoring Report Reviews Jay Dan Landfarm, LLC Permit NM1-045 Location: Unit E of Section 32, Township 15 South, Range 35 East, NMPM Lea County, New Mexico

Dear Mr. Watson:

The Oil Conservation Division (OCD) has completed the review of Jay Dan Landfarm LLC's (Jay Dan) May 2014 Bi-Annual Treatment and Vadose Zone Monitoring Report; September 2014 New Background Report; September 2014 Release Response Report for Cells 1-3 and Five Year Vadose Zone Monitoring Report for Cell 4; and the December 2014 Bi-Annual Treatment and Vadose Zone Monitoring Report. OCD appreciates Jay Dan's efforts to implement changes to your monitoring protocols to comply with the requests in OCD's 2013 Bi-Annual Sampling and Five Year Monitoring Report Review, dated April 8, 2014. The review of the 2014 monitoring data has resulted in the discovery of some issues that must be addressed in order for Jay Dan to remain compliant with Permit NM1-045 and 19.15.36 NMAC (Part 36).

OCD has reviewed the administrative files for the facility and determined that the vadose zone monitoring frequency changed from the permit condition "The soil samples must be analyzed using EPA-approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and for major cations/anions and Water Quality Control Commission (WQCC) metals annually" to semi-annual in 2009. OCD has been unable to locate Jay Dan's modification request for the change in sampling frequency or OCD's approval for such a modification request. Please provide OCD a copy of Jay Dan's modification request and OCD approval in order to continue the semi-annual sampling frequency. If Jay Dan is unable to demonstrate the approval, Jay Dan shall revert back permitted vadose zone monitoring frequency. Please note that the transitional provisions of 19.15.36.20 NMAC must be considered. Please review OCD's letter dated June 30, 2011 and titled "Compliance with the Transitional Provisions of the Surface Waste Management Facilities rule (Rule 36) and Treatment and Vadose Monitoring Requirements at Existing Landfarms" for expectation of compliance.

Mr. Watson Jay Dan Landfarm Permit NM1-034 May 19, 2015 Page 2 of 4

Pursuant to 19.15.36.15.E NMAC, the operator is required to compare the vadose results "to the higher of the PQL [Practical Quantitative Limit] or the background soil concentrations to determine whether a release has occurred." OCD's review of the administrative files for the facility resulted in the discovery of the initial facility background data set from April 2006. The April 13, 2006 background data set provided results for the following 34 analytes: sodium, calcium, magnesium, potassium, conductivity, total alkalinity, chloride, sulfate, bicarbonate, carbonate, pH, total dissolved solids, arsenic, silver, barium, cadmium, chromium, lead, mercury, selenium, aluminum, cobalt, copper, iron, manganese, molybdenum, nickel, zinc, gasoline range organics (GRO), diesel range organics (DRO), benzene, toluene, ethyl benzene, and total xylene, which was provided in the May 2014 Bi-Annual Treatment and Vadose Zone Monitoring Report. The April 13, 2006 background data set demonstrated a detection of DRO at 186 mg/kg. The May 2014 report also included a sheet identified as "New Mexico Limits" and a regulatory reference of "Rule 53 G.(e)." The regulatory reference indicates that this was proposed landfarm closure language for Part 36 during the rulemaking hearing. This language was not adopted by the Oil Conservation Commission and is not effective or applicable for the comparison to vadose zone results. The review of the September 2014 New Background Report resulted in the detection of toluene at a concentration of 0.0819 mg/kg in the vadose zone, 2 feet below the ground surface in native soils. The cover letter did not address or mention the detection. OCD also discovered that TPH by EPA method 418.1 was run with the reporting limit of 100 mg/kg for the facility background. A reporting limit of 100 mg/kg for TPH by EPA method 418.1 is too high to establish the facility background. It assumes that the native soils can be contaminated up to 100 ppm in TPH. OCD is unable to accept a PQL of 100 mg/kg as background for TPH. Please re-establish background for TPH by 418.1 or an equivalent method capable of demonstrating a carbon range from  $C_6$  to  $C_{36}$ . Also, OCD is unsure how the two (2) background data sets will be used for future monitoring. Please provide OCD a demonstration to establish the facility background and/or PQLs. If statistics are used in the demonstration, please provide references from EPA statistical guidance documents to support proposed statistical methods.

OCD compared the April 2006 background data set to the May 2014 bi-annual treatment zone and vadose zone monitoring results, since the 2006 background data was the only background available at the time of assessment. OCD determined common exceedances to all cells for calcium, magnesium, potassium, arsenic, manganese, iron, zinc, and sulfate, and a detection of TPH at 136 mg/kg in Cell 1, 145 mg/kg in Cell 2, and 145 mg/kg in Cell 3 in the bi-annual vadose zone monitoring results. None of the exceedances were recognized in the assessment or recommended for the release response sampling of 19.15.36.15.E.(5) NMAC. The assessment provided in the report's cover letter stated "I compared the vadose sampling to the "background" test as required, and found no problems." Since the 2006 background data set was provided with this submittal, it is assumed it was used for the comparison demonstration. The vadose zone was not sampled for Cell 4, only the treatment zone was sampled during this event. The biannual treatment zone results demonstrated chloride concentrations of 2240 mg/kg in Cell 2 and 736 mg/kg in Cell 4. November 16, 2004 facility permit application identifies the depth of ground water to be approximately 75 below the ground surface. Pursuant to Part 36, this would limit the waste acceptance criteria of contaminated soils for chlorides to less than 500 mg/kg. Since the waste acceptance criteria concentration will also be the closure standard for chlorides, this will create issues at closure.

Mr. Watson Jay Dan Landfarm Permit NM1-034 May 19, 2015 Page 3 of 4

OCD compared the September 2014 new background data set to the September 2014 release response results for Cells 1-3 and the five year vadose zone sampling results for Cell 4. In regards to the release response results for compliance with 19.15.36.15.E.(5) NMAC, Cell 1 demonstrated an exceedance for nitrates and concentrations slightly above the September 2014 background data set for arsenic, barium, cadmium, chromium, lead, and fluoride. Cell 2 demonstrated an exceedance for nitrates and concentrations slightly above the 2014 background data set for arsenic, barium, cadmium, chromium, lead, manganese, uranium, sulfate, and fluoride. Cell 3 demonstrated an exceedance for nitrates and concentrations slightly above the 2014 background data set for arsenic, barium, cadmium, chromium, lead, iron, silver, sulfate, and fluoride None of these exceedances were recognized in the assessment nor was a response action plan proposed or included with the submittal, as required of 19.15.36.15.E.(5) NMAC. The assessment provided in the report's cover letter stated "The analytical for all testing was compared to the new background and lab PQL, and all was in compliance." OCD had to use the April 2006 and September 2014 background data sets complete the comparison to the September 2014 five year vadose zone sampling results for Cell 4. The laboratory chain of custody indicates that the vadose zone sampling event was an attempt to combine the annual vadose zone sampling required by permit condition and compliance with the five year vadose zone monitoring of 19.15.36.15.E.(3) NMAC. Also, this seemed to be an attempt to make up the missing vadose sample for Cell 4 from the May 2014 sampling event. The 2006 background data set includes major anions and all of the major cations required to complete the comparison to annual vadose zone sampling required by permit condition, that were not included in the 2014 new background data set. When compared to the 2014 background data set, OCD determined common analyte exceedances for sulfate, barium, iron, zinc, arsenic, cadmium, chromium, copper, lead, manganese, selenium, and silver. When compared to the 2006 background data set, OCD determined common analyte exceedances for calcium, magnesium, sodium, and potassium. None of the exceedances were recognized in the assessment. In both sampling events, the release response and five year, sulfate and TPH by EPA method 418.1 were run with reporting limits of 100 mg/kg. Please ensure that the laboratory's reporting limit does not exceed the established background and/or PQLs for all future vadose zone sampling events.

On September 10, 2014 OCD approved the High Chloride Soil Identification, Isolation, and Removal Plan for Cell 2 and 4. The plan requires OCD approval to excavate the high chloride soils down to the native ground surface and haul the soils to an OCD approved landfill. OCD has not received any request since the plan was approved. Please provide OCD an update on the status of the work performed under the approved plan.

Please note that submittal of treatment zone monitoring results alone does not constitute a request for a successive/additional lift. Furthermore, the permit condition specifies "Authorization from the OCD must be obtained prior to application of successive lifts and/or removal of remediated soils." OCD requires such request to be made under a separate cover from other reporting and include the supporting analytical results and an updated facility map that illustrates and identifies the individual landfarm cells within the facility boundary and indicate the approximate location within the landfarm cells in which the samples were obtained.

Please provide OCD a copy of Jay Dan's modification request and OCD approval in order to continue the semi-annual sampling frequency within 45 days of the date of this letter. Please provide OCD a demonstration to establish the facility background within 45 days of the date of

Mr. Watson Jay Dan Landfarm Permit NM1-034 May 19, 2015 Page 4 of 4

this letter. If statistics are used in the demonstration, please provide references from EPA statistical guidance documents to support proposed statistical methods. OCD is unable to accept a PQL of 100 mg/kg as background for TPH. Please re-establish background for TPH by 418.1 or an equivalent method capable of demonstrating a carbon range from  $C_6$  to  $C_{36}$ . Please submit a response action plan to address the exceedances of the September 2014 Release Response Report for Cells 1-3 within 90 days of the date of this letter. Please ensure that the laboratory's reporting limit does not exceed the established background and/or PQLs for all future vadose zone sampling events.

OCD has implemented some new policies for submittal. For future submittals, please include a cover letter from the owner/operator, on the owner's/operator's company letterhead, that recognizes the owner/operator has reviewed the submittal, signed by the owner/operator. Also, please provide an updated facility map, for each individual sampling event, that identifies the individual landfarm cells within the facility boundary and indicate the approximate location within the landfarm cells in which the samples were obtained. If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or brad.a.jones@state.nm.us.

Sincerely,

Brad A. Jones Environmental Engineer

BAJ/baj

cc: OCD District I Office, Hobbs
Eddie Seay, Eddie Seay Consulting, Hobbs, NM 88242
Mark Larson, Larson & Associates, Inc. Midland, TX 79701

Susana Martinez Governor

David Martin Cabinet Secretary

Brett F. Woods, Ph.D. Deputy Cabinet Secretary Jami Bailey, Division Director Oil Conservation Division



April 8, 2014

Danny Watson Jay Dan Landfarm LLC P.O. Box 632 Lovington, New Mexico 88260

RE: 2013 Monitoring Reports Review Jay Dan Landfarm, LLC Permit NM1-045 Location: Unit E of Section 32, Township 15 South, Range 35 East, NMPM Lea County, New Mexico

Dear Mr. Watson:

The Oil Conservation Division (OCD) has completed the review of Jay Dan Landfarm LLC's (Jay Dan) June 4, 2013 and November 2013 Monitoring Reports. OCD has determined that the reported treatment zone chloride concentrations exceed the waste acceptance criteria of Part 36. The vadose zone results were not compared to the background results in order to determine if a released had occurred and if the required follow-up actions are required to be completed. The five year vadose sampling event was not implemented on all of the active landfarm cells and additional laboratory analysis was performed that was not required by regulation. Also, the incorrect test method for TPH was utilized and demonstrated in regards to vadose zone monitoring.

Pursuant to Subsection A of 19.15.36.15 NMAC, "Oil field waste acceptance criteria. Only soils and drill cuttings predominantly contaminated by petroleum hydrocarbons shall be placed in a landfarm. The division may approve placement of tank bottoms in a landfarm if the operator demonstrates that the tank bottoms do not contain economically recoverable petroleum hydrocarbons. Soils and drill cuttings placed in a landfarm shall be sufficiently free of liquid content to pass the paint filter test, and <u>shall not have a chloride concentration exceeding 500</u> mg/kg if the landfarm is located where ground water is less than 100 feet but at least 50 feet below the lowest elevation at which the operator will place oil field waste or exceeding 1000 mg/kg if the landfarm is located where ground water is 100 feet or more below the lowest elevation at which the operator will place oil field waste. The person tendering oil field waste for treatment at a landfarm shall certify, on form C-138, that representative samples of the oil field waste have been subjected to the paint filter test and tested for chloride content, and that the samples have been found to conform to these requirements. The landfarm's operator shall not Jay Dan Landfarm Permit NM1-045 April 8, 2014 Page 2 of 3

accept oil field waste for landfarm treatment unless accompanied by this certification. The November 16, 2004 facility permit application identifies the depth of ground water to be approximately 75 below the ground surface. This would limit the acceptance of contaminated soils up to 500 mg/kg for chlorides. The June 4, 2013 monitoring report identified the following chloride results for the soils to be remediated: Cell #1 1380 mg/kg; Cell #2 8080 mg/kg; Cell #3 592 mg/kg; and Cell #4 2360 mg/kg. The November 2013 monitoring report identified chlorides at 832 mg/kg in Cell #1. Since the acceptance concentration will also be the closure standard for chlorides, this will create issues at closure. Please contact OCD to resolve this issue.

Pursuant to Paragraph (5) of 19.15.36.15.E NMAC, "If vadose zone sampling results show that the <u>concentrations of TPH, BTEX or chlorides exceed the higher of the PQL or the background</u> <u>soil concentrations</u>, then the <u>operator shall notify the division's environmental bureau of the</u> <u>exceedance</u>, and <u>shall immediately collect and analyze a minimum of four randomly selected</u>, <u>independent samples for TPH, BTEX, chlorides and the constituents listed in Subsections A and</u> <u>B of 20.6.2.3103 NMAC</u>. The operator shall <u>submit the results of the re-sampling event and a</u> <u>response action plan for the division's approval within 45 days of the initial notification</u>. The response action plan shall address changes in the landfarm's operation to prevent further contamination and, if necessary, a plan for remediating existing contamination." The June 4, 2013 and November 2013 Monitoring Reports only included the laboratory results from the sampling events. The rest of the vadose zone assessment was not completed to determine if a release has occurred and/or if the required additional testing and a response action plan of Paragraph (5) of 19.15.36.15.E NMAC are required. Please complete the required assessment.

In accordance with Paragraph (1) of 19.15.36.15.E NMAC, "The operator shall monitor the vadose zone beneath the treatment zone in each landfarm cell." Pursuant to Paragraph (3) of 19.15.36.15.E NMAC, "The operator shall collect and analyze a minimum of four randomly selected, independent samples from the vadose zone, using the methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC at least every five years and shall compare each result to the higher of the POL or the background soil concentrations to determine whether a release has occurred." The five year sampling was only performed on the following landfarm cell(s): Cell #2 sampled April, 13, 2013 and Cell #3 sampled Oct. 16, 2013. Also, the laboratory results submitted in the monitoring report demonstrated that analysis was performed for all the constituents listed in Subsections A and B of 20.6.2.3103 NMAC. As underlined in the above reference of Paragraph (1) of 19.15.36.15.E NMAC, the "methods specified below for the constituents listed in Subsections A and B of 20.6.2.3103 NMAC" are those identified in Subsection F of 19.15.36.15 NMAC: such as "determined by EPA SW-846 methods 6010B or 6020 or other EPA method approved by the division..." Please preform the five year monitoring program on the remaining active landfarm cells in order the complete the five year monitoring and to demonstrate compliance of Paragraphs (1) and (3) of 19.15.36.15.E NMAC.

In regards to utilizing the proper TPH test method for vadose zone monitoring, in accordance with Paragraph (2) of 19.15.36.15.E NMAC the operator shall analyze the samples from the vadose zone "using the methods specified below for TPH, BTEX and chlorides and shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred." The "methods specified below for TPH, BTEX and chlorides" are those identified in Subsection F of 19.15.36.15 NMAC: such as "TPH, as determined by

Jay Dan Landfarm Permit NM1-045 April 8, 2014 Page 3 of 3

<u>EPA method 418.1</u> or other EPA method approved by the division..." Pursuant to the Transitional Provisions of Subsection A of 19.15.36.20.NMAC, "Existing surface waste management facilities <u>shall comply with the operational, waste acceptance and closure</u> requirements provided in 19.15.36 NMAC, except as otherwise specifically provided in the applicable permit or order, or in a specific waiver, exception or agreement that the division has granted in writing to the particular surface waste management facility." The most common vadose zone monitoring (commonly referred to, but incorrectly as "Treatment Zone Monitoring" within existing landfarm permits) condition in an existing landfarm permit is as follows: "The soil samples must be analyzed using EPA-approved methods for total petroleum hydrocarbons (TPH) and volatile aromatic organics (BTEX) quarterly and for major cations/anions and Water Quality Control Commission (WQCC) metals annually." The permit condition only identified the constituent and does not specify the test method. Part 36 specifies EPA Method 418.1 as the required vadose zone analyses for TPH. Please submit all future vadose zone sampling results demonstrating TPH by EPA Method 418.1.

Please implement the required waste acceptance criteria of Subsection A of 19.15.36.15 NMAC. Please complete the required actions of 19.15.36.15.E NMAC and provide OCD with the additional sampling results, a response action plan, and submit the sampling results demonstrating TPH by EPA Method 418.1 within 120 days of receipt of this letter. Also, please provide an updated facility map that illustrates and identifies the individual landfarm cells within the facility boundary and indicate the approximate location within the landfarm cells in which the samples were obtained. If there are any questions regarding this matter, please do not hesitate to contact me at (505) 476-3487 or <u>brad.a.jones@state.nm.us</u>.

Sincerely,

Brad A. Jones

Environmental Engineer

BAJ/baj

cc: OCD District I Office, Hobbs Eddie Seay, Eddie Seay Consulting, Hobbs, NM 88242