

**NM2 - 4**

**GENERAL  
CORRESPONDENCE  
YEAR(S):**

**2013 - 2016**

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

Jami Bailey, Division Director  
Oil Conservation Division



April 8, 2014

Mike Diamond  
Benson-Montin-Greer Drilling Corporation  
4900 College Blvd.  
Farmington, New Mexico 87402

**RE: 1<sup>st</sup> and 2<sup>nd</sup> Quarter 2013 Monitoring Report Review**  
**Benson-Montin-Greer Drilling Corporation**  
**BMG Evap. Pond/Landfarm: Permit NM2-004**  
**Location: Unit D of Section 20, Township 25 North, Range 1 East, NMPM**  
**Rio Arriba County, New Mexico**

Dear Mr. Diamond:

The Oil Conservation Division (OCD) has completed the review of Benson-Montin-Greer Drilling Corporation's (BMG) 1st and 2nd Quarter 2013 Monitoring Report, dated October 9, 2013. OCD has determined that the vadose zone results were not compared to the established background results or PQL (whichever is higher) in order to determine if a release had occurred and if the required follow-up actions are required to be completed. The five year vadose sampling event has not been implemented and demonstrated. Also, the incorrect test method for TPH was utilized and demonstrated in regards to vadose zone monitoring.

Pursuant to Paragraph (5) of 19.15.36.15.E NMAC, "If vadose zone sampling results show that the concentrations of TPH, BTEX or chlorides exceed the higher of the PQL or the background soil concentrations, then the operator shall notify the division's environmental bureau of the exceedance, and shall immediately collect and analyze a minimum of four randomly selected, independent samples for TPH, BTEX, chlorides and the constituents listed in Subsections A and B of 20.6.2.3103 NMAC. The operator shall submit the results of the re-sampling event and a response action plan for the division's approval within 45 days of the initial notification. 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 additional testing required of Paragraph (5) of 19.15.36.15.E NMAC demonstrated and confirmed the downward migration of TPH contamination three to four feet into the native soil (vadose zone) below the soil being remediated (treatment zone) on the ground surface. OCD did not receive the required response action plan to address the confirmed contamination. Please complete the requirements of Paragraph (5) of 19.15.36.15.E NMAC. Tables 3 and 4 of the written report identify and compare the results for BTEX, DRO, GRO, MRO, and chlorides to "NMOCD Rule 36 Threshold" values. The "NMOCD Rule 36 Threshold" values seem to coincide with the

additional lift limits for the treatment zone as identified within the permit conditions combined with the additional lift limits for the treatment zone of Part 36, specifically Subsection D of 19.15.36.15 NMAC and are not applicable for a vadose zone demonstration. The requirements of Subsection E of 19.15.36.15 NMAC are clear that the operator "shall compare each result to the higher of the PQL or the background soil concentrations to determine whether a release has occurred." Please complete this task and submit with the required response action plan in accordance with Paragraph (5) of 19.15.36.15.E NMAC.

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 PQL or the background soil concentrations to determine whether a release has occurred." OCD has reviewed the administrative file and has been unable to locate the five year vadose sampling demonstration. Part 36 became effective February 14, 2007. The five year sampling event is due, please provide. Regarding the five year sampling event, please do not perform laboratory analysis 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 perform the five year monitoring program on all of the active landfarm cells and submit all future sampling results demonstrating compliance of Paragraph (3) of 19.15.36.15.E NMAC by EPA SW-846 methods 6010B or 6020.

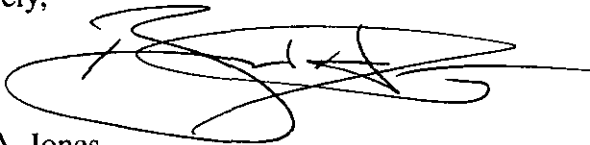
In regards to utilizing the proper TPH test method for vadose zone monitoring, in accordance with Paragraph (2) of 19.15.36.15.E NMAC the operator shall analyze the samples from the vadose zone "using the methods specified below for TPH, BTEX and chlorides and shall compare each result to the higher 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 EPA method 418.1 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 shall comply with the operational, waste acceptance and closure 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.

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Please note that the submittal of treatment zone monitoring results alone does not constitute a request for an successive/additional lift. 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 complete the required actions of 19.15.36.15.E NMAC and provide OCD with the additional sampling results compared to background or PQL and a response action plan within 45 days of receipt of this letter. Please preform the five year monitoring program on all of the active landfarm. Also, please submit future vadose zone sampling results demonstrating TPH by EPA Method 418.1 and compliance to Paragraph (3) of 19.15.36.15.E NMAC by EPA SW-846 methods 6010B or 6020. 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](mailto:brad.a.jones@state.nm.us).

Sincerely,

A handwritten signature in black ink, appearing to read 'Brad A. Jones', with a long horizontal line extending to the right.

Brad A. Jones  
Environmental Engineer

BAJ/baj

cc: OCD District III Office, Aztec  
Animas Environmental Services, Inc., Farmington, NM 87401