

R. T. HICKS CONSULTANTS, LTD.

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October 13, 2014

Dr. Tomáš Oberding
NMOCD District 1
1625 French Drive
Hobbs, New Mexico 88240
VIA EMAIL

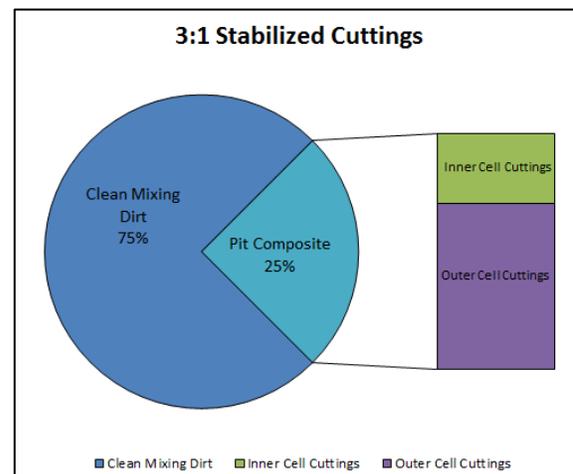
RE: Jackson Unit 19H Temporary Pit, In-place Burial Notice
Unit N, Section 21, T24S, R33E, API #30-025-41138

Dr. Oberding:

On behalf of Murchison Oil and Gas, R. T. Hicks Consultants is provides this notice to NMOCD with a copy to the State Land Office (certified, return receipt request) that closure operations at the above- referenced pit will begin on **Friday, October 17, 2014**. The closure process should require about two weeks. The "In-place Burial" closure plan for the pit was submitted on October 7, 2013 with the C-144 temporary pit application and NMOCD approved the plan on the same day. The rig was released from the Jackson Unit 19H well on December 21, 2013.

As outlined in an email from Hicks Consultants to NMOCD on March 19, 2014, the Jackson Unit 28H well was drilled next to the Jackson Unit 19H and cuttings from the 28H were placed in the 19H pit. After the 28H well was drilled and hydraulic fracturing and flow-back were completed, composite samples from the entire cuttings of the inner and outer cells of the pit were collected on June 4, 2014 for laboratory analyses in accordance with the Pit Rule. As shown in the table on page 2, these samples meet criteria from Table II of 19.15.17.13 NMAC for every constituent *except* GRO+DRO in the outer cell. Obviously, when the inner cell solids are combined with the outer cell's solids, then stabilized with no more than 3 parts clean, dry dirt ("mixing dirt"), the buried solids will meet the in-place burial criteria.

The table also shows the *calculated* concentration for the "stabilized" sample. The calculated value mathematically mixes 3 parts clean soil from the pit berms beneath the liner (mixing dirt) with 1 part of the weighted pit composite, as depicted in the adjacent chart. The pit composite consists of 28% solids from the inner cell of the drilling pit and 72% of the solids from the outer cell (1:2.4 ratio), calculated by measuring the volume of cuttings in each cell after those from both wells were deposited in the pit.



A request was made of the laboratory to composite the inner and outer cell samples in a 1:2.4 ratio to represent the amount of solids in each cell of the pit, and then mix 1 part of this pit

composite with 3 parts mixing dirt to formulate a "Lab 3:1 Stabilized Cuttings" sample. A miscommunication between the laboratory and Hicks Consultants caused a delay in this sample's composition and analysis, resulting in a lab report that indicates the EPA's holding time recommendations have been exceeded. Thus, the sample analyzed was maintained in a closed jar under refrigeration for longer than allowed by protocol.

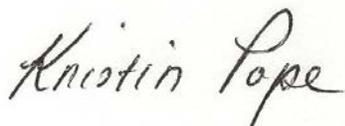
Jackson Unit 19H/28H pit Sample Name	Sample Type	Sample Date	Chloride 80,000	Benzene 10	BTEX 50	GRO+ DRO 1000	TPH 418.1 2500
Inner Composite	Field comp.	6/4/2014	46,000	0.0	0.598	771	200
Outer Composite	Field comp.	6/4/2014	31,000	1.2	19.1	4,150	1,300
Mixing Dirt	Field comp.	6/4/2014	0	0	0	0	0
3:1 Stabilized CALCULATED <i>(3 parts mixing dirt, 1 part weighted pit cuttings)</i>			8,852.94	0.21	3.41	789.04	244.12
Lab 3:1 Stabilized Cuttings	Lab comp.; hold time exceeded	6/4/2014	11,000	0.11	2.19	157	100

The summary table demonstrates a calculated value for the "3:1 Stabilized Cuttings" sample that is based on the individual components', the inner and outer cells, analyses. Although holding time was exceeded on "Lab 3:1 Stabilized Cuttings" sample, the calculated and lab-composited values are agreeably comparable. Both of these methods demonstrate that concentrations of the Table II parameters will meet the limits that allow in-place burial of the stabilized cuttings. We are certain that these results "demonstrate that, after the waste is solidified or stabilized with soil or other non-waste material at a ratio of no more than 3:1 soil or other non-waste material to waste, the concentration of any contaminant in the stabilized waste is not higher than the parameters listed in Table II of 19.15.17.13 NMAC."

On June 23, 2014, NMOCD granted an extension for the closure of this pit, creating a new deadline of September 21, 2014, however, as we discussed during our phone conversation on September 18, 2014, closure of this site has been delayed due to record rainfall in the area recently. I will follow up this notice to you with a phone call today as required by the Pit Rule.

Sincerely,

R.T. Hicks Consultants



Kristin Pope

Copy: Murchison Oil and Gas,

Ed Martin
New Mexico State Land Office
PO Box 1148
Santa Fe, NM 87504-1148
CERTIFIED MAIL – RETURN RECIEPT REQUEST