

R. T. HICKS CONSULTANTS, LTD.

901 Rio Grande Blvd NW ▲ Suite F-142 ▲ Albuquerque, NM 87104 ▲ 505.266.5004 ▲ Fax: 505.266-0745

February 20, 2015

RECEIVED

By OCD; Dr. Oberding at 11:47 am, Feb 23, 2015

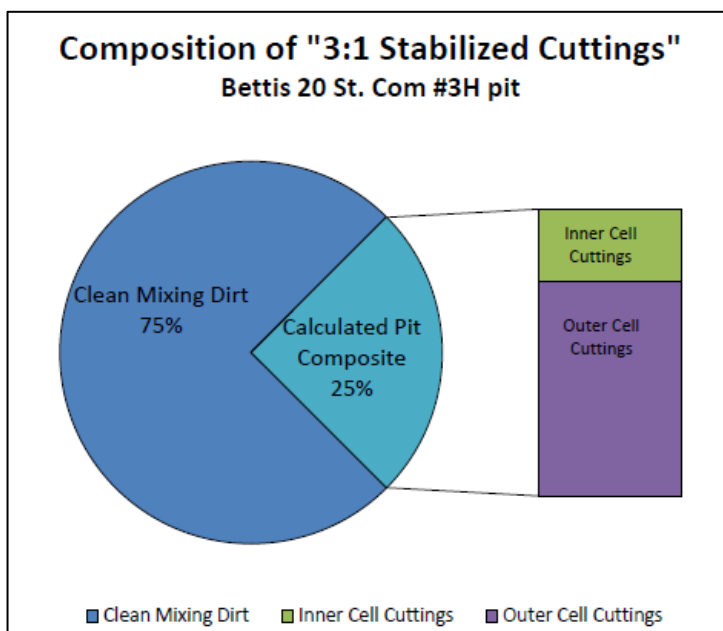
Dr. Tomáš Oberding
NMOCD District 1
1625 French Drive
Hobbs, New Mexico 88240
VIA EMAIL

RE: Murchison - Bettis 20 St. Com #3H Temporary Pit, In-place Burial Notice
API #30-025-41437, Pit Permit #P1-06546
Unit O, Section 20, T24S, R33E, Lea County

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 (email as approved by NMOCD on 1/7/2015) that closure operations at the above- referenced pit will begin on **Tuesday, February 24, 2015**. The closure process should require about two weeks, depending on the availability of machinery and weather conditions. The "In-place Burial" closure plan for the pit was submitted with the C-144 temporary pit application and NMOCD approved the plan on April 7, 2014. The rig was released on May 24, 2014. In an effort to mitigate a potential for elevated hydrocarbon concentrations, Micro-Blaze[®] microbial product was applied to the surface of the pit cuttings on September 18, 2014. A 3-month extension for closure was approved by NMOCD on November 23, 2014.

On December 3, 2014, 4-point composite samples were collected from the inner horseshoe cell, outer horseshoe cell, and from the clean soil of the berms (beneath the liner) of the pit for laboratory analyses. The table on page 2 of this notice demonstrates the calculated concentration for "3:1 stabilized" material that results when the pit contents are combined with available mixing soil during the closure process. The calculated value mathematically mixes 3 parts clean soil (mixing dirt) with 1 part of the weighted pit composite calculation, as depicted in the adjacent chart. The pit composite consists of 25% solids from the inner cell of the drilling pit and 75% of the solids from the outer cell (1:3 ratio), representative of the volume of cuttings in each cell.



Bettis 20 St. Com #3H pit Sample Name	Sample Type	Sample Date	Chloride 80,000	Benzene 10	BTEX 50	GRO+ DRO 1000	TPH 418.1 2500
Inner Composite	4-pt field comp.	12/3/2014	4,400	ND	ND	2,000	4,400
Outer Composite	4-pt field comp.	12/3/2014	23,000	1.0	16.0	2,500	5,500
Mixing Dirt	5-pt field comp.	12/3/2014	ND	ND	ND	ND	ND
3:1 Stabilized CALCULATED (3 parts mixing dirt, 1 part weighted pit cuttings)			4,587.50	0.19	3.00	593.75	1,306.25

ND = Not detected at the laboratory's reporting limit

All values are mg/kg

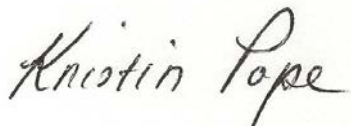
The formula used in the table:

$$3:1 \text{ Stabilized Solids} = \frac{[(\text{Outer Composite} \times 0.75) + (0.25 \times \text{Inner Composite})]}{4}$$

Laboratory analyses of the component samples and the calculation of stabilized cuttings "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." 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

Enclosure: Approval of variance for email notice

Copy: Murchison Oil and Gas, New Mexico State Land Office (Ed Martin)

From: [Oberding, Tomas, EMNRD](#)
To: [Kristin Pope](#)
Cc: [ccottrell@jdmii.com](#); [Randy Hicks](#); [gboans@jdmii.com](#); [Chace Walls](#); [Martin, Ed](#)
Subject: RE: VARIANCE REQUEST: Email substitution for pit closure notices
Date: Wednesday, January 07, 2015 10:13:08 AM

Ms. Pope,

This email is fine for OCD documentation, for the current site closure.

Mahalo

-Doc

Tomáš 'Doc' Oberding, PhD
Senior Environmental Specialist
New Mexico Oil Conservation Division, District 1
Energy, Minerals and Natural Resources Department
(575) 393-6161 ext 111
E-Mail: tomas.oberding@state.nm.us

OCD approval does not relieve the operator of liability should their operations fail to adequately investigate and remediate contamination that may pose a threat to ground water, surface water, human health or the environment. In addition, OCD approval does not relieve the operator of responsibility for compliance with any other federal, state, local laws and/or regulations.

If you have any questions or concerns, and for notification, please contact me.

From: Kristin Pope [<mailto:kristin@rthicksconsult.com>]
Sent: Wednesday, December 31, 2014 1:35 PM
To: Oberding, Tomas, EMNRD
Cc: [ccottrell@jdmii.com](#); [Randy Hicks](#); [gboans@jdmii.com](#); [Chace Walls](#); [Martin, Ed](#)
Subject: VARIANCE REQUEST: Email substitution for pit closure notices

Dr. Oberding:

Please find the attached variance request for a substitution of email to SLO in lieu of temporary pit closure notices submitted via US Mail, return receipt requested. It is referenced for the Murchison – Jackson Unit #14H but I also submitted a closure report for the Jackson Unit #16H.

Please contact me with any questions about this upon your return to work. Thank you.

Kristin Pope
R.T. Hicks Consultants
Carlsbad Field Office
575.302.6755