
From: Randall Hicks <r@rthicksconsult.com>
Sent: Thursday, January 25, 2018 1:11 PM
To: 'Tucker, Shelly'
Cc: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; clifmann@hotmail.com; 'Kristin Pope'; mike@rthicksconsult.com; 'JC Services'; Billings, Bradford, EMNRD; 'Boeke, Bruce'; 'Kyle Rybacki'
Subject: RE: Chi Operating - Response to BLM/OCD Denial based upon High Karst - It is not High Karst
Attachments: BDU6BatteryResponse2DenialFinal.pdf

All

Here are the plates attached to the report. Sorry about that.

I look forward to the meeting at 1 pm next Wednesday. My “agenda” for this meeting would include

1. Obtaining clarity from BLM regarding how an operator should approach proactive corrective actions in areas mapped as High Karst. Specifically if the mapped contact between high karst and moderate karst is “nearby”, as is the case with the BDU 6 site
 - i. is the documentation presented in our January 17 submittal sufficient to assuage concerns regarding any impacts of the release and/or the proposed remedy relative to the mapped high karst or
 - ii. Is a field tour always going to be required?
2. An explanation of the how the Karst Potential Map should be used in addressing corrective actions and releases. Obviously we should have looked at the map and provided at least some of discussion in the attached submittal to BLM and OCD in the Corrective Action Plan. That was our bad – after looking at the data and depth to water, karst did not even cross our minds.
3. After we all feel comfortable regarding the role of the Karst Potential Map in addressing corrective actions, I would like to have the group talk about the extent to which characterization of the release is required. Here are my thoughts to start a discussion
 - a. Characterization must be sufficient to allow the design of a corrective action. Corrective action can range from doing nothing (because there are no risks) to excavation and removal because the risks are high or the release is so small that dig-haul-dispose is less expensive than consultants and laboratories. Characterization efforts are not the same for these two response actions.
 - b. An initial sampling and data evaluation program, such as what was completed at the BDU6 site, may be sufficient to develop an appropriate remedy that is satisfactory to all parties. While guidance, rules or academic curiosity may suggest that additional characterization is desired, we always ask: Will additional data change the remedy?

Thanks all.

Randall Hicks
R.T. Hicks Consultants
Cell: 505-238-9515
Office: 505-266-5004

From: Tucker, Shelly [mailto:stucker@blm.gov]
Sent: Thursday, January 25, 2018 8:08 AM
To: Randall Hicks

Cc: Bratcher, Mike, EMNRD; Weaver, Crystal, EMNRD; clifmann@hotmail.com; Kristin Pope; mike@rthicksconsult.com; JC Services; Billings, Bradford, EMNRD; Boeke, Bruce; Kyle Rybacki

Subject: Re: Chi Operating - Response to BLM/OCD Denial based upon High Karst - It is not High Karst

Mr. Hicks,

Upon review of your report, we have been unable to locate the referenced Plate 1 and Plate 3. Would you please forward a copy of the referenced *Plates*?

Additionally, based on internal research and documentation, the BLM would like request a joint meeting with the NMOCD, Randall Hicks, and representatives from Chi on Wednesday, January 31st at 1:00pm here at the BLM office. If, after the meeting, an on-site is still warranted, we can schedule to meet sometime Thursday afternoon.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Shelly J Tucker

Environmental Protection Specialist
O&G Spill/Release Coordinator

Bureau of Land Management
620 E. Greene St
Carlsbad, NM 88220

575.234.5905 - Direct
575.361.0084 - Cellular
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stucker@blm.gov

The **BLM acceptance/approval does not** relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

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On Wed, Jan 24, 2018 at 3:28 PM, Randall Hicks <r@rthicksconsult.com> wrote:

All

I appreciate that OCD will defer to BLM regarding the applicability of denying the remediation proposal based upon the fact that the site is within a mapped area of High Karst. I respectfully request that representatives of Chi be present if BLM cave/karst experts elect to conduct an on-site examination of the geology.

Also, OCD is correct in assigning a relatively low priority to this site due to the following:

1. The site has been fully characterized with respect to Water Quality Control Commission groundwater standards of BTEX and chloride. The regulated constituents are not detected.
2. Given the 200+ feet to groundwater and the results of the sampling, the threat to groundwater is nil.
3. Each day, natural biodegradation and volatilization removes hydrocarbons from the soil. Thus, time is on our side.

I remain available to accompany BLM on a site visit any time Wednesday, January 31 or the afternoon of January 30 or February 1.

As I am coming to the Delaware Basin to conduct 2 other assignments, I would appreciate a relatively quick response regarding when/if a visit may occur. I can work my other assignments around any BLM site visit.

I look forward to a geologic field trip of the area with the experts from BLM. I hope others can make it as it is always fun looking at rocks.

Randall Hicks

R.T. Hicks Consultants

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Office: 505-266-5004

From: Tucker, Shelly [mailto:stucker@blm.gov]

Sent: Wednesday, January 24, 2018 2:39 PM

To: Bratcher, Mike, EMNRD

Cc: r@rthicksconsult.com; Weaver, Crystal, EMNRD; clifmann@hotmail.com; Kristin Pope; mike@rthicksconsult.com; JC Services; Billings, Bradford, EMNRD; Boeke, Bruce; Kyle Rybacki

Subject: Re: Chi Operating - Response to BLM/OCD Denial based upon High Karst - It is not High Karst

Mr. Hicks,

The BLM appreciates your response. I have forwarded this information to our Cave/Karst and Archaeology departments. They are our experts in these fields and I will defer to them for guidance and recommendations. Once the data has been reviewed, we will prepare a response and forward it to you. Until then, the BLM denial of your proposal still stands.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Shelly J Tucker

Environmental Protection Specialist

O&G Spill/Release Coordinator

Bureau of Land Management

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The **BLM acceptance/approval does not** relieve the operator of liability should their operations have failed to adequately investigate and remediate contamination that may pose a threat to groundwater, surface water, human health or the environment or if the location fails to reclaim properly. In such an event that the location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until the contaminant issues are fully mitigated and the location is successfully reclaimed. In addition, BLM approval does not relieve the operator of responsibility for compliance with any other federal, state or local laws/regulations.

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On Wed, Jan 24, 2018 at 8:55 AM, Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us> wrote:

RE: Chi Operating * Benson Delaware Ut 6 Btry * 2RP-4251 * DOR: 5/28/17

Greetings all,

Thank you Randall for getting the remediation proposal to me. It is quite a way from being next in line, but in moving forward with a proposed onsite meeting to address the karst issue, OCD needs to express it's concern on the other issues with the proposal. OCD has concurred with BLM denial of the proposal, based on the site being situated in a BLM mapped high karst area. I am not a karst expert, so I will pretty much defer that to the BLM. I will mention, however, that my observation of the photos and explanations of no visible karst features on the surface of the area surrounding the site is a bit concerning. Photographic evidence submitted showing various geologic stringers and formation appear to be taken from hills that are considerably higher in elevation than the site. It has also been my experience in decades of working in the SE New Mexico oil fields, that underground karst features do not always have an indicator at the surface of their existence. My personal experience includes complete loss of drilling pits, loss of well bores during surface drilling ops, BOP's sinking under drilling rig substructures, drilling rigs sinking at corners and have to be shored up, drilling fluids escaping dozens of yards away from the well bore during surface drilling ops, karst feature roof collapses during delineation boring ops, etc.

As for the current proposal, OCD additionally denies the proposal, based on lack of adequate contaminant definition/delineation. OCD will not approve or consider a remediation proposal until all impacted areas have been completely defined. This one has not been adequately defined at this point.

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

Thank you,

Mike Bratcher

NMOCD District 2

[811 South First Street](#)

[Artesia, NM 88210](#)

[575](#)-748-1283 Ext 108

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.

From: r@rthicksconsult.com [mailto:r@rthicksconsult.com]

Sent: Tuesday, January 23, 2018 10:07 PM

To: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; stucker@blm.gov; Weaver, Crystal, EMNRD <Crystal.Weaver@state.nm.us>

Cc: clifmann@hotmail.com; 'Kristin Pope' <kristin@rthicksconsult.com>; mike@rthicksconsult.com; 'JC Services' <jctrucking@pvt.net>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>

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I will be in Eddy County when OCD and BLM can participate in a geologic field trip to the Chi Operating BDU #6 location. I believe this can be a good time to see the limits of the BLM Karst map and discuss the proposed remedy.

If you can find time for 2-2.5 hours in the field on Tuesday, Wednesday or Thursday next week, that would be best for me. The following week might work too – but not Wednesday..

Let me know what can happen so I can firm up my plans.

Thanks

Randall Hicks

R.T. Hicks Consultants

Cell: 505-238-9515

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From: r@rthicksconsult.com [<mailto:r@rthicksconsult.com>]
Sent: Thursday, January 18, 2018 6:40 AM
To: 'Bratcher, Mike, EMNRD' <mike.bratcher@state.nm.us>; 'stucker@blm.gov' <stucker@blm.gov>
Cc: 'clifmann@hotmail.com' <clifmann@hotmail.com>; 'Kristin Pope' <kristin@rthicksconsult.com>;
'mike@rthicksconsult.com' <mike@rthicksconsult.com>; 'JC Services' <jctrucking@pvt.net>
Subject: Chi Operating - Response to BLM/OCD Denial based upon High Karst - It is not High Karst

Mr. Bratcher and Ms. Tucker

Chi Operating and Hicks Consultants would like to invite you to come to the site and take a geologic tour of this area that, according to some BLM criteria, should be mapped as low karst potential.

Please read this and see what you think. Boots on the ground are better than images and words. So it is with this letter as it is with the BLM Karst Potential Map.

I can be in Eddy County during the first week in February to lead the tour. Bring your friends.

Thanks

Randall Hicks

R.T. Hicks Consultants

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