Bratcher, Mike, EMNRD

From: Bratcher, Mike, EMNRD
Sent: Thursday, May 19, 2011 4:32 PM
To: 'tgregsto@blm.gov'; Vernon Black; jamos@blm.gov
Cc: 'Allan Rambur'; 'Daniel Frick'; dpotter@linnenergy.com; Terry_gregston@nm.blm.gov
Subject: RE: FW: TURNER B #118

Reference: Linn Energy * Turner B 118 * 30-015-28290 * M-20-17s-31e * Eddy County
OCD Tracking: **2RP-710**

Greetings,

First, it is important to have a site diagram showing the sample points in relation to the spill, well site, etc. While the lab data is required, it is much easier on the reviewer if there is a diagram of the site and a chart showing the testing results and depths. When reviewing these remediation proposals, interruptions are inevitable, at least for me. If I can do the review looking at 2 – 3 pages vs digging through 30 pages of lab data, a timely response is more realistic. At some point, the lab data will be reviewed, so it does need to be submitted.

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While OCD/BLM mutual cooperation in remediating spills and releases is not in its infancy, I am not sure we have reached the "teenage" stage yet, so we are still working through some things. It has been accepted practice that whichever agency has the more stringent clean up requirements, would prevail as lead on a project. As far as I know now, this is still in effect, and would be in effect for this release.

Operators and contractors should be aware that some statements made in this email are generalization in nature and may not be reflective of actual policy, nor applicable to all incidents.

Any OCD approval or inferred approval of remediation proposals does not relieve the operator of liability should their operations have failed to adequately investigate or 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 there are any questions or concerns, or, if we need to meet on site, let me know.

MIKE BRATCHER
NMOCD District 2

1301 W. Grand Ave.
Artesia, NM 88210
575-748-1283 Ext.108
575-626-0857
mike.bratcher@state.nm.us

From: tgregsto@blm.gov [mailto:tgregsto@blm.gov]
Sent: Tuesday, May 17, 2011 1:43 PM
To: Vernon Black; jamos@blm.gov
Cc: 'Allan Rambur'; 'Daniel Frick'; dpotter@linnenergy.com; Bratcher, Mike, EMNRD; Terry_gregston@nm.blm.gov
Subject: Re: FW: TURNER B #118

Gentlemen,

I deal with so many spills and so many sampling events (and I am at an 'age'!), where it is difficult to keep them all sorted out. A sample plat, even if it is hand drawn, is often necessary to make sense of soil sampling results and to formulate a sound approach plan. The sample plat is normally provided by the contractor/operator, but I have drawn the attached sample plat from the GPS of the original spill and my "best recall" of the various sample points in question. Mr. Black, can you confirm that sample point #3 was at the pooling area of the north fork of the spill? If so, then the sample plat is fairly accurate in the depiction of the location of various chloride levels and may be an aid to the folks who were not present at the site to see where the samples were taken from.

Chlorides are funny things. Sometimes they can clean up very rapidly, sometimes they don't. As far as the proposal to take out 2' lifts and then sample, I think it would be prudent to take out 1' foot lifts and sample. This requires more sampling to confirm that further cleanup is needed, however it also prevents removal of soils that are at or below closure. The BLM prefers to be as surgical as possible in removals so that any soils that are at or below closure don't end up being hauled off.

As far as the pit is concerned, any time you have a spill across an old pit, it becomes extremely difficult to determine where the contamination from the spill ends and the contamination from the pit begins. This is an old pit. It does have some vegetation here and there, but lack of vegetation in areas outside of the covered up spill areas was noted during my first inspection of the site. Regardless of whether that lack of vegetation is created by an old pit or an old spill or a new spill, the surface restoration of areas that are impacted by drilling and production activities must be addressed and revegetation of impacted areas achieved. In my conversations with Mr. Black out in the field, I pointed out the fact that a portion of the pit must be disturbed to address the spill cleanup. Addressing this portion of the pit in the spill cleanup and bringing in clean soils to backfill it wouldn't make much sense if the pit remained contaminated/unvegetated on either side of the spill path. The operator would still have to address the unvegetated pit areas and re-establish vegetation. The most economical thing to do is to go ahead and address the pit issues along with the spill cleanup and to achieve revegetation of both the spill impacted and reserve pit issue area. That way, the operator doesn't have to come back in a second time and address the remaining pit issues at a future date.

Typically in old pit reclamations, the goal is to stabilize the pit contents so that they do not leach salts back up to the surface and to provide enough of a soil cap to provide a four foot root zone for the establishment of vegetation. Unless there are groundwater issues or cave/karst issues or some other critical resource concern, typically reserve pit issues do not require digging out and hauling off the entire pit. In the past, the OCD has been amenable to partial cleanup of grandfathered reserve pits, but I will let Mr. Bratcher throw in his own two cents on this one as he sees fit to do so. Like approval of both agencies is, as always, required.

Sample plats imposed upon aerial images can be great aids to understanding what is taking place at a given site. It was not until I imposed the original spill map and "roughly remembered" sample points upon the aerial that I realized that the soil sample taken at the midpoint of the road may be showing up as a hot anomaly from an old reserve pit for an abandoned well. This second reserve pit/well is on state land and the impacts from the reserve pit in question are under state jurisdiction; whereas the reserve pit on the Turner B 188 is a result of actions to obtain federal minerals and is under federal jurisdiction, if that makes sense. My authority only extends to cleanup of spill events and impacts that result from federal mineral activities. In that regard, the BLM tends to be "color blind" and treats the cleanup of spills and other

impacts from federal mineral actions the same on federal, state, and private lands. So while I have authority over the 118 well/reserve pit issues, it will be entirely the state's call as to how they wish to handle the spill/reserve pit interface issue on the abandoned Fren well. My authority on that segment of the spill extends only to the cleanup of spill impacts.

My suggestion is to pull a couple of samples in the spill path further upslope from the Fren pit (inbetween the sample that we pulled in the middle of the road and the #2 sample point which showed 64ppm chlorides). If a road sample between those two points shows a lack of chloride content consistent with the terminus (32ppm) sample point, then I'd say that the higher readings at the mid point of the road are most likely due to the old Fren pit, which appears to be under the road at that point.

Anyway, hope that gives everyone concerned a better idea of the issues on this site and what needs to be achieved both in this spill cleanup and in the revegetation of the site in question. In many ways, this is a very complex site and spill cleanup.

If anyone has any questions in that regard, feel free to give me a call. My cell phone number is best. If folks want to meet for an onsite, let's set a mutually agreeable time and date. Let me know.

Again, many thanks for everyone's help on this,

Terry Gregston
Environmental Protection Specialist
Bureau of Land Management
620 E. Greene St.
Carlsbad, NM 88220
Office (575) 234-5958
Cell (575) 361-2635
Fax (575) 234-5927

"Vernon Black" <vernon@hungry-horse.com>

05/17/2011 09:54 AM

To "'Allan Rambur'" <ARambur@linnenergy.com>, <dpotter@linnenergy.com>, "'Daniel Frick'" <DFrick@linnenergy.com>, <mike.bratcher@state.nm.us>, <Terry_gregston@nm.blm.gov>

cc

Subject FW: TURNER B #118

Good Morning,

Please see the attached lab results from the confirmation sampling at the Turner B #118. Lab results indicate that the TPH and BTEX contaminants have been eliminated and/or reduced to closure levels. However, chloride levels are still above closure levels at SP1, SP3,West Road, SE and NM Corners of Pit Area.

At SP1, SP3, and the West Road, I recommend removing 2' more of the contaminated soil and conduct chloride field test. Should the field test indicate levels at or below closure levels, confirmation sampling will occur. Should the levels exceed closure levels, I recommend continuing the excavation in 2' lifts along with field testing for chlorides until we reach the point that chloride levels are at or below closure levels. At this point confirmation sampling will occur.

As for the chloride levels in the "old pit area" (SE/NW Corners) where the release ran across the pit. I'm very cautious about excavating in and/or around any antiquated pit area without very clear communication between all parties involved. During the initial remediation we did "scrape/remove" approximately 1' of soil from this area. Prior to removing this 1' of material, we exposed various parts of the pit area by hand in order to determine the nature of the exposed plastic. If this plastic was some type of cover and/or barrier, it was very evident that it's integrity was compromised prior to any remediation work conducted by Hungry Horse. As it stands, we have no way of knowing if the chlorides are a result of the release or the contents of the pit area. Having said this, we need to approach this area with caution and a clear plan. I recommend a representative from all three parties meet on site and let's come a clear decision as to the most effective and most efficient course of action for this sensitive area.

Boone Arch will be contacted to provided an Arch Monitor when work resumes.

Thanks,
Vernon K. Black
H.S.E.
Hungry Horse, LLC
Hobbs, NM
575 393 3386 office
575 631 2253 cell

From: Celey Keene [mailto:celey.keene@cardinallabsnm.com]
Sent: Monday, May 16, 2011 11:03 AM
To: 'Vernon Black'
Subject: TURNER B #118

THANK YOU,

Celey Keene
Lab Director
Cardinal Laboratories
101 East Marland
Hobbs, NM 88240
T: (575) 393-2326
F: (575) 393-2476
e-mail: celey.keene@cardinallabsnm.com

[attachment "H100970 HHE.pdf" deleted by Terry G Gregston/CFO/NM/BLM/DOI]

Bratcher, Mike, EMNRD

From: tgregsto@blm.gov
Sent: Friday, May 27, 2011 4:17 PM
To: Vernon Black
Cc: dpotter@linnenergy.com; Bratcher, Mike, EMNRD; Terry_gregston@nm.blm.gov
Subject: RE: FW: TURNER B #118

It sounds like a good approach to me. As far as taking out 4' BGS on the old pit, I would recommend being somewhat surgical in that removal. Any area that is below closure levels should be left in place to minimize the amount of soil removed and the size of the liner installed.

Terry Gregston
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"Vernon Black" <vernon@hungry-horse.com>

05/27/2011 02:07 PM

To <mike.bratcher@state.nm.us>, <Terry_gregston@nm.blm.gov>, <dpotter@linnenergy.com>
cc
Subject RE: FW: TURNER B #118

Per my phone conversation today with Dennis Potter we are prepared to proceed with the remediation of the "legacy pit" area as part of this cleanup. We plan to take this down approximately 4'BGS, place a synthetic liner, backfill with clean soil suitable for re-growth of the area, and re-seed. We'll also work on the road area to the near the old Fren well. Take a few more samples for field test and excavate as necessary. Should it be determined that the area of high chlorides area along the road is possibly the pit from the Fren well, we'll address it as such and seek further guidance. The other area that produced chloride levels above closure levels during confirmation sampling, will also be excavated and field tested until levels are consistent with closure levels.

Boone Arch will be contacted to provide an arch monitor during these activities. BLM will be advised when confirmation sampling is ready to began.

Please advise ASAP if you are not on board with this proposal.

Thanks,
Vernon

From: Bratcher, Mike, EMNRD [mailto:mike.bratcher@state.nm.us]
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To: tgregsto@blm.gov; Vernon Black; jamos@blm.gov
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Environmental Protection Specialist
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Fax (575) 234-5927

"Vernon Black"
<vernon@hungry-horse.com>

05/17/2011 09:54 AM

To "'Allan Rambur'" <ARambur@linnenergy.com>, <dpotter@linnenergy.com>, "'Daniel Frick'" <DFrick@linnenergy.com>, <mike.bratcher@state.nm.us>, <Terry_gregston@nm.blm.gov>

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Thanks,
Vernon K. Black
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From: Celey Keene [mailto:celey.keene@cardinallabsnm.com]
Sent: Monday, May 16, 2011 11:03 AM
To: 'Vernon Black'
Subject: TURNER B #118

THANK YOU,

Celey Keene
Lab Director
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F: (575) 393-2476
e-mail: celey.keene@cardinallabsnm.com

[attachment "H100970 HHE.pdf" deleted by Terry G Gregston/CFO/NM/BLM/DOI]