

Bratcher, Mike, EMNRD

From: tgregsto@blm.gov
Sent: Tuesday, May 17, 2011 11:23 AM
To: Vernon Black
Cc: dpotter@linenergy.com; Bratcher, Mike, EMNRD
Subject: RE: J L Keel B 22: workplan stipulations

Thank you for the clarification. I will approve proceeding with the cleanup and we will confirm closure on SP1 and SP2 as the cleanup progresses. If the OCD concurs approval, we're good to go.

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

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

To <tgregsto@blm.gov>, <dpotter@linenergy.com>
cc <mike.bratcher@state.nm.us>

05/17/2011 07:09 AM

Subject RE: J L Keel B 22: workplan stipulations

Ms. Gregston,

The sample from SP1 was obtained by use of hand tools and by mechanical means in the middle of the "square" hydrocarbon stained area where the frac tank had set at the edge of the location. We did encounter very hard caliche at 1'BGS, thus a backhoe was used to excavate to 5' BGS. As for SP1 being relatively clean and this being a curious anomaly, my opinion is that due to this spot being on the edge of the hill coupled with pressure on the tank, the released fluid did not pool or sit in this area. It apparently ran down hill very quickly not allowing saturation of the area where the tank sat. I agree that there is no reason to excavate this area to 4'BGS when we can easily remove the stained surface soil. There are/were no visible signs of excavation or cleanup at SP1 prior to the sampling conducted by Hungry Horse.

As for SP2 not being delineated down to closure levels, you're exactly correct in that without knowing this information we do not know how deep the excavation will have to be. We did encounter rock at this point. I made the decision to stop excavation due to this fact and also knowing that we could

conduct field test during remediation and determine how deep to excavate before obtaining confirmation samples.

I hope this clarifies the data/info that may have been lacking or that was unclear in the proposed remediation work plan. Should you wish to meet on location to view where SP1 was placed in the spill path, I will be more than happy to meet you there. SP1 is clearly marked with a pink pin flag labeled SP1 (if the deer or a person has not removed it).

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

From: tgregsto@blm.gov [mailto:tgregsto@blm.gov]
Sent: Monday, May 16, 2011 5:08 PM
To: vernon@hungry-horse.com; dpotter@linneenergy.com
Cc: mike.bratcher@state.nm.us
Subject: J L Keel B 22: workplan stipulations

Mr. Black,

I have received your cleanup plan for the J L Keel B 22.

Sample point #2 was not delineated down to closure levels in your soil sampling; samples only go to 2' and you still have 5,400 chlorides at that point. So it is difficult to estimate how deep the cleanup should be in this part of the spill. It may need to be deeper than the 4 feet proposed. On the other hand, your sample point 1 came out relatively clean...which is odd because this is the point over which the majority of the spill had to run to reach its further destinations. It is a curious anomaly that needs further clarification. Has some excavation and cleanup already occurred at the SP1 point? Was it very hard caliche that just shed the majority of the spill? If the SP1 sample point is indeed clean, then there is no need to excavate 4 feet of clean soil at that point. I need some more data/info from you in that regard and may need to meet you on location to view where your SP1 has been placed in the spill path.

Once the above issues are addressed and clarified, the work plan for the J L Keel B 22 is approved with the following stipulations:

- 1. Notify Terry Gregston, (575) 361-2635, when you move equipment onto the location to begin cleanup operations.**
- 2. Notify Terry Gregston in the event that you encounter excavation difficulties, unexpected void areas, or archeological artifacts. An onsite may be required to assess the situation.**
- 3. The BLM requires horizontal cleanup of the spill impacted areas in addition to vertical cleanup/mitigation measures. The goal of horizontal cleanup is to ensure that there is a minimum of 4 feet of clean soil across the horizontal surface of the entire spill affected area.**
- 4. The BLM will wish to inspect the excavation once it reaches cleanup depth/width. Confirmation samples of the bottom, sidewalls, and any visibly affected areas outside of the excavation trench will be required; the BLM will witness the sampling. Contact Terry Gregston to schedule.**
- 5. Lab analysis of the confirmation sampling must be forwarded to Terry Gregston at terry_gregston@nm.blm.gov for final approval before backfilling. Based on the sampling results, additional cleanup may be required or the site may be approved for closure.**
- 6. Once final approval of cleanup is given, the excavation can be backfilled with clean soil.**

7. **Install erosion control measures in the pasture-affected areas to prevent the unconsolidated soils from washing or blowing away.**
8. **Install caliche berms on well pad to prevent future spills leaving the pad; berms should be built with compactable caliche capable of containing any future spills.**
9. **Seed reclaimed and equipment-impacted pasture areas with a combination BLM seed mix #2 and #4 (50/50).**
10. **Notify the BLM when the site work is finished for final inspection and sign off on spill cleanup.**
11. **Continue to monitor spill reclamation area to ensure impacted pasture areas revegetate and that erosion issues do not develop.**

BLM approval of this proposal 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 location does not revegetate, or future issues with contaminants are encountered, the operator will be asked to address the issues until 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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