Hamlet, Robert, EMNRD

From: Hamlet, Robert, EMNRD

Sent: Tuesday, July 23, 2019 2:05 PM

To: 'Trent M. Wade'

Cc: Bratcher, Mike, EMNRD; 'Stephanie@3bearllc.com'; 'Scott Baber'; Lori K. Marquez; 'John Jankousky at

EME Solutions Inc.'; Venegas, Victoria, EMNRD

Subject: RE: 3Bear Cottonwood Site Characterization and Closure Report

Trent,

The OCD requests a soil sample be taken at two feet below surface (one foot above the base of liner). We need to have scientific evidence that the contaminants did not reach the liner. If the lab tested sample is above 600 mg/kg, we will need the soil above the liner to be pulled back in the area of the spill and a liner inspection accomplished showing that the liner has integrity (no holes or rips). If the soil sample comes back below the 600 mg/kg limit we can move forward and close this out.

In the future, please take a picture of the spill, the excavation, and the soil back-filled and leveled. Also, take a soil sample of the soil at the base of the excavation and have it lab tested, so we have the necessary scientific evidence to close it out.

Thanks,

Robert J Hamlet
State of New Mexico
Energy, Minerals, and Natural Resources
Oil Conservation Division
811 S. First St., Artesia NM 88210
(575) 840-5963
Robert.Hamlet@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 groundwater, 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, or local laws and/or regulations.

From: Trent M. Wade <TWade@barr.com> Sent: Thursday, June 27, 2019 2:52 PM

To: Hamlet, Robert, EMNRD < Robert. Hamlet@state.nm.us>

Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; 'Stephanie@3bearllc.com' <Stephanie@3bearllc.com>; 'Scott Baber' <scott@baberenvironmental.com>; Lori K. Marquez <LMarquez@barr.com>; 'John Jankousky at EME Solutions Inc.' <john.jankousky@eme-solutions.com>; Venegas, Victoria, EMNRD <Victoria.Venegas@state.nm.us>

Subject: [EXT] RE: 3Bear Cottonwood Site Characterization and Closure Report

Robert,

There may be some confusion regarding how the storage containment is designed. The attached design diagram shows that the storage containment has a geotextile liner with three feet of soil on top of it. Please refer to "Detail 7" in the diagram for this detail.

3Bear did not excavate down to the liner while excavating the contaminated soil because the spill did not penetrate this 3 foot soil buffer. Because the remediation was above the level of the liner there was no liner inspection as it was not exposed. The secondary containment was not breached so all liquids were contained and the liner was not compromised. In addition to Cottonwood's design diagram, I have attached a photo showing the spill post-remediation. Let me know if this addresses your concerns.

Thanks,

Trent M. Wade

Chemical Engineer Denver, CO office: cell: 970.381.0564 TWade@barr.com

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From: Hamlet, Robert, EMNRD < Robert.Hamlet@state.nm.us>

Sent: Thursday, June 20, 2019 1:51 PM **To:** Trent M. Wade <TWade@barr.com>

Cc: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; 'Stephanie@3bearllc.com' <<u>Stephanie@3bearllc.com</u>>; 'Scott Baber' <<u>scott@baberenvironmental.com</u>>; Lori K. Marquez <<u>LMarquez@barr.com</u>>; 'John Jankousky at EME Solutions

Inc.' < john.jankousky@eme-solutions.com >; Venegas, Victoria, EMNRD < Victoria.Venegas@state.nm.us >

Subject: RE: 3Bear Cottonwood Site Characterization and Closure Report

Hey Trent,

So it sounds like the liner in the tank had a leak and water and hydrocarbons leaked into the lined storage berm. The thing that's throwing us off a little bit is that you "excavated the soil until it was dry"? Was this an earthen containment or a lined berm? If it was a lined storage berm, a liner inspection will need to be conducted. Please give us 48 hours' notice if a liner inspection will be completed. Provide a picture of the liner with the material removed and the affected area of the liner exposed. Also, certify on the Final C-141 that the liner has visually been inspected and had the ability to contain the leak in question.

Thank you,

Robert J Hamlet State of New Mexico Energy, Minerals, and Natural Resources Oil Conservation Division 811 S. First St., Artesia NM 88210

(575) 840-5963

Robert.Hamlet@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 groundwater, 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, or local laws and/or regulations.

From: Trent M. Wade < TWade@barr.com > Sent: Thursday, June 20, 2019 11:24 AM

To: Hamlet, Robert, EMNRD <Robert.Hamlet@state.nm.us>; Venegas, Victoria, EMNRD

<Victoria.Venegas@state.nm.us>

Cc: Bratcher, Mike, EMNRD < mike.bratcher@state.nm.us; 'Stephanie@3bearllc.com' < Stephanie@3bearllc.com; 'Scott@baberenvironmental.com; Lori K. Marquez < LMarquez@barr.com; 'John Jankousky at EME Solutions Inc.' < john.jankousky@eme-solutions.com>

Subject: [EXT] RE: 3Bear Cottonwood Site Characterization and Closure Report

Robert,

This was a small produced water leak that was contained in the lined storage tank berm. The saturated soil was removed until the soil was no longer wet. No confirmation samples were collected.

Thanks,

Trent M. Wade

Chemical Engineer Denver, CO office: cell: 970.381.0564 TWade@barr.com

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From: Hamlet, Robert, EMNRD < Robert. Hamlet@state.nm.us>

Sent: Thursday, June 20, 2019 10:59 AM

To: Trent M. Wade < Twade@barr.com; Venegas, Victoria, EMNRD < Victoria.Venegas@state.nm.us>

Cc: Bratcher, Mike, EMNRD < mike.bratcher@state.nm.us; 'Stephanie@3bearllc.com' < Stephanie@3bearllc.com; 'Scott Baber' < Stephanie@3bearllc.com; 'Stephanie@3bearllc.com; 'Scott Baber' < Stephanie@3bearllc.com; 'John Jankousky at EME Solutions Inc.' < john.jankousky@eme-solutions.com; 'John Jankousky@eme-solutions.com

Subject: RE: 3Bear Cottonwood Site Characterization and Closure Report

Trent,

Was there some laboratory data that was supposed to be attached at the end of the report?

Thanks,

Robert J Hamlet
State of New Mexico
Energy, Minerals, and Natural Resources
Oil Conservation Division
811 S. First St., Artesia NM 88210
(575) 840-5963
Robert.Hamlet@state.nm.us

From: Trent M. Wade < TWade@barr.com Sent: Monday, June 17, 2019 9:09 AM

To: Venegas, Victoria, EMNRD < Victoria. Venegas @state.nm.us>; Hamlet, Robert, EMNRD

<Robert.Hamlet@state.nm.us>

Cc: Bratcher, Mike, EMNRD < mike.bratcher@state.nm.us>; 'Stephanie@3bearllc.com' < Stephanie@3bearllc.com>; 'Scott@baberenvironmental.com>; Lori K. Marquez < LMarquez@barr.com>; 'John Jankousky at EME Solutions Inc.' < john.jankousky@eme-solutions.com>

Subject: [EXT] 3Bear Cottonwood Site Characterization and Closure Report

Ms. Venegas,

I'm submitting a site characterization and closure report for Cottonwood Water Treatment and Impound on behalf of 3Bear Energy, LLC. An initial release notification was submitted to the state on April 8, 2019. If you have any questions or concerns please let me know.

Thanks,

Trent M. Wade

Chemical Engineer Denver, CO office: cell: 970.381.0564 TWade@barr.com

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