From: Jennifer Knowlton

To: <u>Billings, Bradford, EMNRD; Yu, Olivia, EMNRD; Hernandez, Christina, EMNRD</u>

Cc: gerald@3bearllc.com; scott@3bearllc.com
Subject: RE: 1RF-24 Libby Recycling Containment
Date: Thursday, July 19, 2018 7:23:31 PM

Mr. Bradford,

On behalf 3 Bear Energy, we would like to inform you that the spark test has been completed and no additional leaks were found. 3 Bear has begun putting the pit back into service. It will take several weeks for there to be measurable water in the pit. Meanwhile, 3 Bear will be monitoring the leak detection sump.

I will be preparing a final report with documentation and a summary of actions next week.

Jennifer Knowlton, PE | Regional Manager-Permian

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From: Billings, Bradford, EMNRD < Bradford. Billings@state.nm.us>

Sent: Friday, July 13, 2018 8:44 AM

To: Jennifer Knowlton <jknowlton@hrlcomp.com>; Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>;

Hernandez, Christina, EMNRD < Christina. Hernandez@state.nm.us>

Cc: gerald@3bearllc.com; scott@3bearllc.com **Subject:** RE: 1RF-24 Libby Recycling Containment

Hello all.

OCD does not have a set parameter nor specific guidelines for selection of technique/protocol for testing liner integrity post a tear/leak. We rely on your professional opinion and then evaluate data.

If the specialist feels that the ASTM technique indicated is adequate to the task, fine, however, we do like details of what is done, the data following repair for our own evaluation and the attested opinion of those performing the test/repair.

The dye test is not mandated by us at this time. I have used dye test for other projects almost like a validation of repairs made. OCD would still like a plan forward, regarding how leak evaluation will be made in future. What will you look for to ascertain a "new" leak, if one were to occur?

Thank you,

Brad Billings EMNRD/OCD Santa Fe

From: Jennifer Knowlton < <u>iknowlton@hrlcomp.com</u>>

Sent: Friday, July 13, 2018 8:26 AM

To: Billings, Bradford, EMNRD < Bradford.Billings@state.nm.us>; Yu, Olivia, EMNRD

<<u>Olivia.Yu@state.nm.us</u>>; Hernandez, Christina, EMNRD <<u>Christina.Hernandez@state.nm.us</u>>

Cc: gerald@3bearllc.com; scott@3bearllc.com **Subject:** RE: 1RF-24 Libby Recycling Containment

Importance: High

Mr. Bradford,

I am following up on this email from earlier this week. If you would like to discuss anything, please give me a call.

Jennifer Knowlton, PE | Regional Manager-Permian

HRL Compliance Solutions, Inc.
112 S. 6th Street | Artesia, NM 88210
main 575.616.7398 Ex. 414 | mobile 505-238-3588

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From: Jennifer Knowlton

Sent: Monday, July 09, 2018 3:09 PM

To: Billings, Bradford, EMNRD < Bradford.Billings@state.nm.us; 'Yu, Olivia, EMNRD'

< <u>Olivia.Yu@state.nm.us</u>>; Hernandez, Christina, EMNRD < <u>Christina.Hernandez@state.nm.us</u>>

Cc: gerald@3bearllc.com; 'scott@3bearllc.com' <scott@3bearllc.com>

Subject: 1RF-24 Libby Recycling Containment

Mr. Billings,

In lieu of a dye test, can 3Bear use an electrical liner integrity survey (also known as a spark test, ASTM D7240)?

Jennifer Knowlton, PE | Regional Manager-Permian

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From: Yu, Olivia, EMNRD

To: <u>Jennifer Knowlton</u>; <u>Billings, Bradford, EMNRD</u>

Cc: <u>Hernandez, Christina, EMNRD</u>; <u>gerald@3bearllc.com</u>; <u>scott@3bearllc.com</u>

Subject: RE: soil sampling for the 1RF-24 Libby Recycling Containment

Date: Friday, July 6, 2018 2:19:00 PM

Attachments: image003.png

Ms. Knowlton:

NMOCD still would need the appropriate dye test to be conducted as another parameter to assess containment integrity.

Thanks, Olivia

From: Jennifer Knowlton < jknowlton@hrlcomp.com>

Sent: Friday, July 6, 2018 1:21 PM

To: Billings, Bradford, EMNRD < Bradford. Billings@state.nm.us>

Cc: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Hernandez, Christina, EMNRD <Christina.Hernandez@state.nm.us>; gerald@3bearllc.com; scott@3bearllc.com

Subject: Re: soil sampling for the 1RF-24 Libby Recycling Containment

Brad,

The initial email mentioned something about a die test after repairs are made. The repairs are being done today and every weld is being pressure tested. Is that sufficient or do you have further requirements?

Jennifer Knowlton | Regional Manager Permian Basin HRL Compliance Solutions, Inc.

main 970.243.3271 | mobile 505-238-3588 Web | vCard | Map | \square | \square



On Jul 2, 2018, at 10:29 AM, Billings, Bradford, EMNRD < Bradford.Billings@state.nm.us wrote:

July 2, 2018,

All Concerned,

The proposal made below to mark leak location via GPS and to focus on this area at

closure of containment is approved. There is no need for additional sampling at this time relative to reported loss.

Leaks/releases are evaluated relative to different values for the purpose of identification of a release. The standards as outlined for "closure" at time of decommissioning are not necessarily the same.

Thank you for your time and efforts. If there are any questions please contact this office.

Sincerely,

Bradford Billings EMNRD/OCD Santa Fe

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.

6/27/2108.

From: Jennifer Knowlton < <u>jknowlton@hrlcomp.com</u>>

Sent: Friday, June 29, 2018 5:08 PM

To: Yu, Olivia, EMNRD < <u>Olivia.Yu@state.nm.us</u>>

Cc: Hernandez, Christina, EMNRD < christina.Hernandez@state.nm.us>; Billings, Bradford, EMNRD < Bradford.Billings@state.nm.us>; gerald@3bearllc.com; scott@3bearllc.com;

Subject: RE: soil sampling for the 1RF-24 Libby Recycling Containment

Ms. Yu,

After conducting the initial sampling at the Libby Recycle Containment, I believe that I

mentioned that we did have samples that were above the chloride threshold of 600 mg/kg for one of the five sampling points.

Sample Identification	Depth	Results
SP1	Surface	592
	1 ft bgs	64
SP2	Surface	672
	1 ft bgs	656
SP3	Surface	128
	1 ft bgs	96
SP4	Surface	576
	1 ft bgs	144
SP5	Surface	288
	1 ft bgs	32

I would like some clarification on the source of your stated chloride threshold of 600 mg/kg.

In the approved application for the Libby Recycling Facility (1RF-24-0), the closure standards for the facility are per NMAC 19.15.34.14. No variances to these standards were requested. Per 19.15.34.14 Table 1 lists the applicable closure standard for this location as 20,000 mg/kg chlorides.

The location obviously meets the current closure standards and it isn't appropriate to apply standards from the spill rule to the subsurface of a recycling facility. We propose to mark SP2 via GPS marker so when the facility is closed, this area can be characterized in more detail during the closure process.

Jennifer Knowlton, PE | Regional Manager-Permian

HRL Compliance Solutions, Inc.

112 S. 6th Street, Unit Bldg A | Artesia, NM 88210

main 575.616.7398 Ex. 414 | mobile 505-238-3588

Web | vCard | Map | <image001.jpg> | <image001.jpg>

<image002.jpg>

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From: Yu, Olivia, EMNRD < <u>Olivia.Yu@state.nm.us</u>>

Sent: Wednesday, June 20, 2018 8:43 AM

To: Jennifer Knowlton < <u>iknowlton@hrlcomp.com</u>>

Cc: Hernandez, Christina, EMNRD < christina.Hernandez@state.nm.us>; Billings,

 $Bradford, EMNRD < \underline{Bradford.Billings@state.nm.us}; \underline{gerald@3bearllc.com}$

Subject: FW: soil sampling for the 1RF-24 Libby Recycling Containment

Good morning Ms. Knowlton:

I received your call this morning at 8:17 am MST, regarding the liner at 1RF-24. Please

see below for requirements in terms of release characterization. Please note that if 1 ft. bgs samples are not within permissible levels, then samples further in depth would be required. Will the samples be collected by dry vacuuming or another process?

As for your question regarding remediation permit, no. A 1RP has not been issued, although current release guidelines are in effect. This incident will be documented under 1RF-24.

Thanks, Olivia

From: Scott Spicher < scott@3bearllc.com>
Sent: Thursday, June 14, 2018 8:17 PM

To: Yu, Olivia, EMNRD < <u>Olivia.Yu@state.nm.us</u>>

Cc: Billings, Bradford, EMNRD < <u>Bradford.Billings@state.nm.us</u>>; Griswold, Jim, EMNRD

<<u>Jim.Griswold@state.nm.us</u>>; Hernandez, Christina, EMNRD

<<u>Christina.Hernandez@state.nm.us</u>>; Gerald Wyche <<u>gerald@3bearllc.com</u>>; Bo Buescher <<u>bbuescher@3bearllc.com</u>>; Mike Solomon <<u>msolomon@3bearllc.com</u>>

Subject: Re: soil sampling for the 1RF-24 Libby Recycling Containment

Ms. Yu,

Nice to meet you today as well. We will coordinate the sampling and testing per your guidance and keep you and Mr. Billings informed of all results.

Thanks,

Scott

On Jun 14, 2018, at 5:03 PM, Yu, Olivia, EMNRD < Olivia. Yu@state.nm.us > wrote:

Mr. Spicher:

A pleasure meeting you this morning, June 14, 2018, around 9 am MST, at the 3Bear Libby Recycling Containment (1RF-24) location. A summary of NMOCD's field visit regarding the incident at 1RF-24:

- NMOCD was shown 3 locations where the primary and secondary liners were not intact.
- NMOCD advised 3Bear to collect discrete samples from each of the identified areas where the liner(s) have been torn. Soil samples will be collected by an environmental professional and sent to an accredited laboratory.
- Samples will be taken from the surface and at least 1 ft. bgs for verification. Soil samples will be tested for BTEX, TPH extended

(GRO, DRO, and MRO), and chlorides via these respective EPA methods 8260 or 8021, 8015, and 300. Permissible levels are 10 mg/kg Benzene, 50 mg/kg BTEX, 5000 mg/kg TPH, and 600 mg/kg chlorides.

- Windblown soil currently in the containment must be removed to complete inspection of the liner for any additional defects affecting liner integrity.
- Please contact Mr. Bradford Billings to obtain more specific instructions on the use of a tracer dye for leak detection after repairs are completed.
- 3Bear will inform NMOCD of subsequent site visit opportunities and will provide photo documentation of the repair process.

Please confirm or inform if the above information was misunderstood or miscommunicated. Also, please pass this message to Mr. Gerald White. I do not have his email address.

NMOCD appreciates 3Bear Energy's cooperation and compliance with NMOCD environmental regulations.

Thanks,

Olivia Yu Environmental Specialist NMOCD, District I Olivia.yu@state.nm.us 575-393-6161 x113

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: Yu, Olivia, EMNRD

To: Jennifer Knowlton

Cc: Hernandez, Christina, EMNRD; Billings, Bradford, EMNRD; gerald@3bearllc.com

Subject: RE: soil sampling for the 1RF-24 Libby Recycling Containment

Date: Thursday, June 28, 2018 3:36:00 PM

Ms. Knowlton:

I received your voicemail from this afternoon. As there is impacted soil below the secondary liner, a 1RP will be issued to document this incident at 1RF-24. To facilitate the remediation timeline, a full delineation workplan will not be required. However, please submit a report with a summary of the work completed thus far, current laboratory analyses with chain of custody, and other pertinent information.

Thanks, Olivia

From: Jennifer Knowlton < jknowlton@hrlcomp.com>

Sent: Wednesday, June 20, 2018 9:11 AM

To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>

Cc: Hernandez, Christina, EMNRD < Christina. Hernandez@state.nm.us>; Billings, Bradford, EMNRD

<Bradford.Billings@state.nm.us>; gerald@3bearllc.com

Subject: RE: soil sampling for the 1RF-24 Libby Recycling Containment

Thank you, Olivia. I wanted to make sure we met your expectation for this project.

Due to the location, I think we will be using an auger to collect the samples. The sampling will be conducted once 3Bear has cleaned and inspected the liner, we are shooting for next week.

Jennifer Knowlton, PE | Regional Manager-Permian

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Subject: FW: soil sampling for the 1RF-24 Libby Recycling Containment

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To: Yu, Olivia, EMNRD < <u>Olivia.Yu@state.nm.us</u>>

Cc: Billings, Bradford, EMNRD < <u>Bradford.Billings@state.nm.us</u>>; Griswold, Jim, EMNRD < <u>Jim.Griswold@state.nm.us</u>>; Hernandez, Christina, EMNRD < <u>Christina.Hernandez@state.nm.us</u>>; Gerald Wyche < <u>gerald@3bearllc.com</u>>; Bo Buescher < <u>bbuescher@3bearllc.com</u>>; Mike Solomon < <u>msolomon@3bearllc.com</u>>

Subject: Re: soil sampling for the 1RF-24 Libby Recycling Containment

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Olivia Yu Environmental Specialist NMOCD, District I Olivia.yu@state.nm.us 575-393-6161 x113

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