From: Heather Leven
To: Yu, Olivia, EMNRD
Cc: Dena
Subject: RE: OWL Spills
Date: Wednesday, February 28, 2018 3:59:24 PM
Attachments: Updated Deferral Request.pdf

Ms. Yu,

As indicated by the email below, we have updated the coordinates for the Deferral request. Please find attached, the Deferral request and figure.

Please let me know if you have any questions. Thanks again for your help!

Thanks,

Heather Leven, KJE
Project Manager

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Wednesday, February 28, 2018 10:59 AM
To: Heather Leven <heather@kjenvironmental.com>
Cc: Dena <dena@kjenvironmental.com>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: RE: OWL Spills

Good morning Ms. Leven:

Thanks for the summary. Please provide a conference line and code for Mr. Billings and I to call in at 1 pm MST.

Olivia

From: Heather Leven [mailto:heather@kjenvironmental.com]
Sent: Wednesday, February 28, 2018 9:36 AM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>
Cc: Dena <dena@kjenvironmental.com>
Subject: OWL Spills

Good Morning,

In anticipation of our upcoming phone conference, please find attached, a copy of the boring locations overlaid with the Deferral Area and Excavations, the analytical data, and emails regarding the monitoring well that you are proposing. As you can see, NMOCD approved a boring to a depth 10 feet below the highest chloride concentration impact in lieu of a monitoring well for both Spill 1 and Spill 2. SS-01 was advanced in Spill 1 to a depth of 21 feet below ground surface (bgs) and SS-02 was advanced to a depth of 24.5 feet bgs for Spill 2. The GPS coordinates for all sampling points are provided on the analytical data table and attached figure.

Regarding the precautionary excavation, as indicated by the analytical data, PLS4 through PLS40 were advanced along the southern deferral boundary in an effort to further delineate chloride impacted soil. In consideration of the analytical data, in which concentrations of chloride did not exceed applicable criteria, this boundary has been delineated and the area of impact lays solely within the requested deferral area. However, upon further review, it appears that SB-11 is within the outside area of the deferral, as such, we are requesting that we amend the Deferral Plan to include this area, as it lies solely within the pipelines/ buffer zones, as depicted on the attached figure. Regarding the northern boundary, SB-16 exceeded applicable criteria and was located within the excavated area, this excavated area was not precautionary as chloride concentrations exceeded the applicable criteria.

As indicated in the December 2017 meeting, moving forward we will collect sidewall confirmation samples at the excavation locations, which will be included in the scope of work outlined in each workplan. We would request not to collect sidewall samples, as that was not indicated in the approved workplan; however, if we must, we will collect six samples from the two excavation areas. I hope that this clears up some of the confusion. As we have stated, we feel that we have completed delineation and remediation activities in accordance with approved NMOCD plans.

Regarding 1RP-4820, as you well know, it is difficult to determine 10 feet past the known area of impact while in the field. After the field work was completed and upon reviewing the analytical data, it appears that there are three soil borings that exceed the applicable criteria, one of which meets the 10 feet vertical delineation stipulated; however, the other two appear to be delineated six and five feet, respectively, beyond the impact above criteria. Will this suffice? I have attached the figure with analytical table for your review.

Regarding spills moving forward, the lab analytical data seems to corroborate the field screening, as such, we would like to continue to collect samples from the surface to the depth specified by NMOCD; however, we would request that samples actually analyzed be up to our discretion. Meaning that in general, we would like to analyze the 0-2 foot, deepest field indication interval, and boring termination interval. This will greatly reduce laboratory costs while still accomplishing the overarching goal of delineating the vertical and horizontal extent of impact.

We can discuss each of these during the phone conversation, we just wanted to provide you with the information prior to beginning.

Thanks,

Heather Leven, KJE
Project Manager

From: "Yu, Olivia, EMNRD" <Olivia.Yu@state.nm.us>
Date: February 23, 2018 at 5:29:34 PM CST
To: Dena <dena@kjenvironmental.com>, "Naranjo, Mark" <MNaranjo@slo.state.nm.us>
Cc: "Kegel, Conrad J." <ckegel@slo.state.nm.us>, Phillip Sanders <psanders@oilfieldwaterlogistics.com>, "Billings, Bradford, EMNRD" <Bradford.Billings@state.nm.us>
Subject: RE: Spill 1 Documentation

Ms. Vandenberg:

I have not completed my review of the submitted documents for 1RP-4497 yet. Briefly, NMOCD will agree that bottom confirmatory samples are not necessary for lined areas. Still, except for rare circumstances, confirmation sidewall samples are required. If GPS coordinates were taken for the soil bore locations, please provide.

If precautionary excavation was conducted on the Northwest side of SB17/SB19 area, is there a rationale for not conducting the equivalent on the Southwestern area represented by SB26/SB27? These 2 locations show elevated BTEX and TPH concentrations.

Due to the size of the area for deferral for 1RP-4497 and 1RP-4498, NMOCD requests that the establishment of a groundwater monitoring well for each of the respective releases. These downgradient wells would provide NMOCD with the requisite data to determine the implications of leaving elevated chloride levels in situ, in addition to BTEX and TPH for 1RP-4497.

Thanks,
Olivia

From: Dena [mailto:dena@kjenvironmental.com]
Sent: Friday, February 23, 2018 9:47 AM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Naranjo, Mark <MNaranjo@slo.state.nm.us>
Cc: Kegel, Conrad J. <ckegel@slo.state.nm.us>; Phillip Sanders <psanders@oilfieldwaterlogistics.com>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: RE: Spill 1 Documentation

Ms. Yu,

Thank you for your prompt response!

Regarding the borings and excavated soils, you are correct that those are representative of the areas of excavation; however, SB16 was within the 1,725 square foot area and SB20 was in proximity to the 4,838 square foot area. Being that these two areas were the only areas outside of the requested Deferral Area and the only areas that could be accessed due to the pipelines, the approach to remove soil in these areas was taken as an extra precaution to ensure soil that was outside of the Deferral Area was below applicable criteria.

Confirmation sidewall and bottom samples were not included within the approved remediation plan, which included an approved addendum regarding backfilling. The request for sidewall samples was made in the December 2017 meeting and will be implemented moving forward on subsequent spills. It would not make sense to collect a bottom sample, since liner was installed at 4 feet, with the intent to leave deeper soil in

place since potential groundwater impact is not a concern. Nor would it make sense to collect a sample from the southeast wall, since it is the border of the deferral area. However, simply based on the analytical data from the initial borings (13, 17, 18), horizontal delineation was complete for the chloride exceedance at 16.

We provided a map both in this submittal and in the deferral request which identifies the extent of the excavations, determined by GPS, compared to the remediation areas depicted in the remediation report. Please let me know if there is any remaining confusion. I appreciate your help and effort regarding these matters!

Dena Vandenberg signature

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Friday, February 23, 2018 9:15 AM
To: Dena <dena@kjenvironmental.com>; Naranjo, Mark <MNaranjo@slo.state.nm.us>
Cc: Kegel, Conrad J. <ckegel@slo.state.nm.us>; Phillip Sanders <psanders@oilfieldwaterlogistics.com>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: RE: Spill 1 Documentation

Ms. Vandenberg:

The area to be backfilled is 1RP-4497, correct? To approval backfill, NMOCD requires confirmation sidewall and bottom samples from the excavated areas. Were these samples taken?

A cursory review of the documents indicate that the excavated areas do not match the areas in which chlorides levels are exceeded on the delineation map dated December 12, 2016. If soil bore SB47 represents the area for the 4838 square feet excavation and soil bores SB15, 17, 18, and 19 for 1725 square feet area, the delineation data do not show exceedance. Please inform if mistaken. I think Amber Groves had this concern as well.

I will be out in the field this morning, but will review submitted documents more thoroughly when I am back in the office.

Thanks for your patience,
Olivia

From: Dena [mailto:dena@kjenvironmental.com]
Sent: Friday, February 23, 2018 7:48 AM

To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Naranjo, Mark <MNaranjo@slo.state.nm.us>
Cc: Kegel, Conrad J. <ckegel@slo.state.nm.us>; Phillip Sanders <psanders@oilfieldwaterlogistics.com>
Subject: RE: Spill 1 Documentation

Good morning, Olivia!

I'm a little confused on why it wouldn't be, considering the remediation was executed according to the remediation plan approved by OCD, and there was no additional requirement to get approval prior to backfilling in the area of 1RP-4498. Can you please elaborate on your concerns? Thank you!

Dena Vandenberg signature

From: Yu, Olivia, EMNRD [mailto:Olivia.Yu@state.nm.us]
Sent: Friday, February 23, 2018 8:18 AM
To: Dena <dena@kjenvironmental.com>; Naranjo, Mark <MNaranjo@slo.state.nm.us>
Cc: Kegel, Conrad J. <ckegel@slo.state.nm.us>; Phillip Sanders <psanders@oilfieldwaterlogistics.com>
Subject: RE: Spill 1 Documentation

Ms. Vandenberg:

Please be advised that NMOCD has not reviewed the documents submitted for 1RP-4497 yet and thus, backfill approval is not granted.

Olivia

From: Dena [mailto:dena@kjenvironmental.com]
Sent: Thursday, February 22, 2018 4:25 PM
To: Naranjo, Mark <MNaranjo@slo.state.nm.us>
Cc: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Kegel, Conrad J. <ckegel@slo.state.nm.us>; Phillip Sanders <psanders@oilfieldwaterlogistics.com>
Subject: Re: Spill 1 Documentation

Thanks so much, Mark!

Dena M. Vandenberg

On Feb 22, 2018, at 5:19 PM, Naranjo, Mark <MNaranjo@slo.state.nm.us> wrote:

Dena,

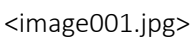
Sorry for the delayed response, I have been out of the office. You have NMSLO permission to backfill this site 1RP-4497. Please contact Conrad Kegel in the Santa Fe office for the ROW at 505-827-5789. Thank you.

Mark Naranjo
Assistant Division Director
Field Operations Division
575.623.4979 Office
575.626.2678 Cell
575.623.9200 Fax
New Mexico State Land Office
1001 S. Atkinson
Roswell, NM 88203
MNaranjo@slo.state.nm.us
NMStatelands.org

From: Dena [mailto:dena@kjenvironmental.com]
Sent: Tuesday, February 20, 2018 1:58 PM
To: Naranjo, Mark <MNaranjo@slo.state.nm.us>
Cc: 'Yu, Olivia, EMNRD (Olivia.Yu@state.nm.us)' <Olivia.Yu@state.nm.us>
Subject: Spill 1 Documentation

Good afternoon, Mark!

Attached are the documents for Spill 1 (1RP 4497) which have been previously submitted, but are being submitted in one document to help expedite the SLO review process. Currently, KJE and OWL are awaiting the Right of Entry Permit, which according to Amber Groves, was previously approved, but was being held until this compiled information was reviewed. We hope to be able to move forward with the backfilling of the existing excavation, as the stockpiled soil has been blended down to 800ppm or less as requested by SLO, and the existing excavation causes a hazard for the cows in the area. Due to the identified damage of the existing poly liner, we will add new poly lining to the excavation prior to backfilling. Please let us know if you have any questions. We look forward to hearing from you. Thank you!



This email has been scanned by the Symantec Email Security.cloud service.
For more information please visit http://www.symanteccloud.com

From:	Yu, Olivia, EMNRD
To:	Dena; Phillip Sanders
Cc:	Billings, Bradford, EMNRD; Naranjo, Mark
Subject:	clarifications requested for 1RP-4497 and 1RP-4498
Date:	Tuesday, February 27, 2018 3:33:00 PM

Ms. Vandenberg:

NMOCD requests the following clarifications regarding the delineation and remediation work completed thus far for 1RP-4497 and 1RP-4498:

1. Based on the addendum dated on April 14, 2017, approved on April 18, 2017, the areas with > 600 mg/kg chlorides outside of the 10 ft. horizontal buffer from the pipelines will be excavated for both 1RP-4497 and 1RP-4498. As provided for 1RP-4497, please submit an appropriately scaled map with the excavated and lined area(s) for 1RP-4498 with the dimensions demarcated with GPS coordinates.
2. The remediation report, dated February 16, 2017, mentioned quarterly TPH monitoring for the area represented by SB-4 (1RP-4497). Was this addressed or approved by Dr. Oberding? Please be advised that neither NMAC 19.15.17 nor NMAC 19.15.34 apply to releases. NMED regulations are not applicable to NMOCD, except for specifically defined circumstances.
3. As requested on May 8, 2017, was a comparison completed to determine the accuracy of the chloride readings from the Horiba meter and laboratory analyses? If this question is addressed by the data submitted on June 13, 2017 (TSS1-6), please plot the field-screened data from the meter with laboratory analysis of chlorides to facilitate review.
4. Approval for permissible chloride levels at 1000 mg/kg is not apparent in any of the documents or email communications. However, email dated June 14, 2017, requested backfilling using blended soil with < 750 mg/kg chlorides tested by the Horiba meter for every 20 cubic yards. This proposal was approved by Dr. Oberding on June 19, 2017 for both 1RP-4497 and 1RP-4498? Therefore, all laboratory analyses of blended soil every 10^{th} sample (200 cubic yards) should be in the range of 750 mg/kg, correct? Verification can be determined via the correlation requested in #3.
5. Please provide a key for the Sample ID abbreviations in the Excel files. (ex. ASP, BSP, etc). On a map, annotate the approximate sections of the excavated areas where the blended soil piles came from.
6. Two permanent groundwater monitoring wells (one each for 1RP-4497 and 1RP-4498) are still requested as the majority of the chloride- impacted soil (plus BTEX and TPH extended for 1RP-4497) are in the area among the 4 pipelines for deferral.

NMOCD will upload the relevant and aforementioned emails.

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: "Heather Leven"; Billings, Bradford, EMNRD
Cc: Dena
Subject: RE: Summary of Phone Conference Between KJE and NMOCD
Date: Wednesday, February 28, 2018 4:02:00 PM

Ms. Leven:

Thank you for the summary regarding 1RP-4497 and 1RP-4820. Several points of clarification:

- For #1, please demarcate on the map, SS-01 and SS-02 sample locations and release points. Pardon if I missed them.
- Is #2 proposed for 1RP-4497 and 1RP-4498 or in general?
- If available, please provide documentation of full closure intent for 1RP-4498 from the beginning. I asked Tomáš and he told me that he was not aware of this.

Olivia

From: Heather Leven [mailto:heather@kjenvironmental.com]
Sent: Wednesday, February 28, 2018 3:23 PM
To: Yu, Olivia, EMNRD <Olivia.Yu@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Cc: Dena <dena@kjenvironmental.com>
Subject: Summary of Phone Conference Between KJE and NMOCD

Good Afternoon,

Thank you for taking the time to conduct a phone conference. Below summarizes the agreed-upon actions/ conclusions moving forward:

- For Spills 1 and 2, KJE will provide a map that separates the blending areas for each respective spill.
- In lieu of groundwater monitoring wells, KJE will vertically delineate soil borings to depths 10 feet below the depth of the soil concentrations exhibiting concentrations below NMOCD approved criteria.
- NMOCD will not alter previously approved plans.
- NMOCD requests stockpile sampling be submitted for lab verification on a more frequent basis than 1 per every 200 cubic yards.
- NMOCD mandates that moving forward, all efforts must be made to advance borings beyond refusal. If a boring cannot be advanced to the mandated depth, KJE will notify NMOCD.
- NMOCD mandated 10 foot vertical delineation for 1RP-4820; however, two borings were only delineated to 5 and 6 feet respectively. NMOCD approved the vertical delineation to those depths and does not require further vertical delineation.
- KJE will collect the samples at 2.5 ft intervals and run laboratory analysis, as previously represented.
- KJE will add the release points to the maps.
- KJE will run TPH & BTEX at the point nearest to the release and/or gathering points at every

interval and then in a manner sufficient to determine whether the constituents will be present, based on field judgment.

- KJE will provide data regarding the soil amendment to be considered as a remediation option, assuming there are sufficient studies to demonstrate post-remedial, long-term effects in similar environments.

Please feel free to update this bullet list with anything that we may have missed. Thank you both again for taking the time to speak with us!

Sincerely,

KJE
ENVIRONMENTAL & CIVIL ENGINEERING

HEATHER LEVEN
Environmental Project Manager
500 Moseley Rd Cross Roads, TX 76227
O (940)387-0805 F (940)387-0830