From:	Hernandez, Emily, EMNRD
To:	Lindsay Dumas
Cc:	Carla S. Garcia; Adam Rankin; Ames, Eric, EMNRD; Polak, Tiffany, EMNRD; Griswold, Jim, EMNRD; Bratcher, Mike, EMNRD; Billings, Bradford, EMNRD; Smith, Cory, EMNRD
Subject:	Hilcorp_San Juan 28-6 Unit #125 Release_Objections to Conditions of Approval_OCD Response
Date:	Wednesday, June 16, 2021 8:45:02 AM

Ms. Dosescu,

In response to Holland & Hart's letter dated June 11, 2021 and submitted on behalf of Hilcorp regarding release incident #nRM2030132715 at the site of the San Juan 28-6 Unit #125 production well in Rio Arriba County, the OCD provides the following responses:

- **Timing of Sampling from the Spring**:
  - **Proposed**: Hilcorp proposes to sample the spring when water is flowing and capable of being collected directly from the spring.
  - **OCD Response**: The OCD agrees sampling from the spring should occur when water is flowing. There is no condition in the OCD's May 17, 2021 email requiring the sample be collected from either the holding or stock tanks.

- **Chloride Analysis**:
  - **Proposed**: It is unlikely inorganic constituents in the water would be elevated when organics are not detected. Therefore, Hilcorp objects to the analysis of chloride in water from the spring.
  - **OCD Response**: The OCD disagrees and continues to require the water sample be analyzed for general chemistry parameters (i.e. TDS, pH, and major anions/cations using EPA Method 300) so that it can determine whether the ground water is protectable.

- **TPH Groundwater Analytical Method:**
  - **Proposed**: Hilcorp objects to the use of EPA Method 8015 to measure total petroleum hydrocarbons in the water sample, especially without sample pretreatment using silica gel.
  - **OCD Response:** The OCD approves Hilcorp's request to remove EPA Method 8015 from the list of required analyses. However, given the release involved condensate, the Division requires that the sample be analyzed by Method 8260 for the full list of volatile organic compounds typically associated with the method, not just BTEX.

Regards,

Emily A. Hernandez ● Environmental Bureau Chief
EMNRD - Oil Conservation Division
1220 S. St. Francis Drive | Santa Fe, NM 87505
505.490.5472 | Emily.Hernandez@state.nm.us
http://www.emnrd.state.nm.us/OCD/

HOLLAND&HART LLP

Adam G. Rankin
Phone (505) 988-4421
Fax (505) 983-6043
agrankin@hollanhart.co

June 11, 2021

Mr. Cory Smith
Energy, Minerals and Natural Resources Department
Oil Conservation Division
1000 Rio Brazos
Aztec, NM 87410
Cory.Smith@state.nm.us

RE: Remediation plan for incident #nRM2030132715 at its San Juan 28-6 Unit #125 well (the "Site")

Dear Mr. Smith,

The purpose of this letter is to reach an agreement with the Division on an approvable characterization and remediation plan for the Site. For the avoidance of doubt, this letter is subject to the protections of Rule 11-408 and shall not be construed, understood, or interpreted to be an admission of liability on the part of Hilcorp. Hilcorp expressly denies that it or any entity associated with it is liable for any impacts to ground water. Subject to the foregoing:

Overview.

Hilcorp has reviewed the Division's May 17, 2021 email approving, with conditions, Hilcorp's proposed remediation plan for the Site. *See* C. Smith, May 17, 2021 email, enclosed herewith. Hilcorp objects to the conditions of approval proposed by the Division under Condition No. 6 and disagrees with the basis for them, as discussed in more detail below. In addition, Hilcorp has substantive concerns regarding the timing of the Division's requests for additional information under 19.15.29.11.C NMAC, its authority to require certain analyses, the scope of those additional analyses, and the reasonableness of the conditions imposed.

In an effort to work with the Division and reach a resolution on this issue, Hilcorp has prepared a revised sampling plan for the spring that directly addresses the Division's stated reasons for the proposed water sampling. Hilcorp's proposed plan targets the constituents that would most likely comprise the release. Hilcorp believes that its proposal to sample the spring is a fair and reasonable resolution that addresses its objections and concerns while protecting groundwater, public health, and the environment.

Hilcorp's Objections and Concerns.

First, Hilcorp disagrees with the basis for the Division's request to sample the spring given that lateral and vertical delineation of a hydrocarbon release at the site has been documented. Delineation data indicates there is at least 30 feet of vertical separation between the deepest impacts from the release and greater than 650 lateral feet of distance between the spring and the farthest edge of the delineated release. Given the vertical and horizontal distances and the

documented delineation, there is no basis to suggest that there is a reasonable probability that the release may have impacted groundwater; that conclusion is not substantiated by the data.

Moreover, the spring does not appear to be producing any surface water at this time and, even when it does, water is pumped from the spring to a steel holding tank and stock tank. It is best practice to sample water prior to influence from contact with mechanical or storage equipment, as these can affect water sampling results. A sample location would ideally be as close to the spring as possible, and at a location before the spring water contacts any holding container, as the previous contents are unknown. Upon visual inspection on June 8, 2021, the spring and both tanks were empty. *See* **Enclosure A** (hand-drawn diagram of the spring location and associated pumps, lines, and tanks, and with photographs of conditions encountered as of June 8, 2021). The pump was turned off and the potential sump/cistern was inaccessible. Without further investigation or knowledge of all construction materials, design, and past use of this equipment, a pragmatic sampling location is unavailable at this time. Collecting a water sample through the pump or from the tanks would introduce additional concerns about establishing background water quality. For all these reasons, Hilcorp proposes that sampling from the spring should be conducted only when water is flowing and present at the spring and capable of being collected directly from the spring.

Second, Hilcorp objects to the list of analytes required by the Division. Many of the analytes appear inapplicable to determine if the water sourcing the spring has been impacted by this release. Soil analytical data from the incident site clearly indicates that hydrocarbons characterize the release, as documented by elevated total petroleum hydrocarbon (TPH) results in soil samples collected from the site. Chloride, which may be elevated following impact from a produced water release, has not been identified at elevated concentrations in the soil samples and indicates that produced water was not a component of the original source. While hydrocarbon releases can affect general water quality characteristics, it is unlikely that inorganic constituents would be elevated when organics are not detected.

Third, Hilcorp objects to the proposed use of EPA Method 8015 to measure total petroleum hydrocarbons. Method 8015 is not specific to petroleum hydrocarbons and can result in falsely elevated concentrations due to the presence of non-petroleum hydrocarbons and non-hydrocarbons. Appendix A of the Interstate Technology Regulatory Council (ITRC) TPH Risk Evaluation at Petroleum-Contaminated Sites states that EPA Method 8015 measures all organics present in the samples that can be extracted using an organic solvent and elutes on a gas chromatograph column within a selected boiling-point range. An example of these other potential organics that may be present in samples is natural organic matter (*e.g.*, humic acids) that may be present in the groundwater or spring water. Hilcorp would prefer to exclude TPH from the analyte list or, at least, be authorized to apply a silica-gel cleanup (SGC) to the water sample prior to analysis. SGC helps reduce "false positives" by removing the polar organic structures from the sample prior to laboratory analysis and yielding a more accurate assessment of the spring water quality as it relates to potential hydrocarbon impact.

Hilcorp's Sampling Plan.

Because the Division is concerned that this condensate release has potentially impacted groundwater, the sampling focus should be on constituents that would most likely comprise the release.

At this Site, condensate produced from the natural gas well is the contaminant of concern, of which BTEX constituents are the common drivers for human health /ecological risk assessments. BTEX concentrations would be compared to NMWQCC standards and TPH concentrations would be compared to New Mexico Environmental Department (NMED) screening levels presented in Table 6-4 of the document titled Risk Assessment Guidance for Site Investigations and Remediation, Volume I (February, 2019). If these constituents are present in the spring, further risk evaluation would be conducted to assess potential detrimental impacts to human health and the environment.

In summary, while Hilcorp objects to and has concerns with the Division's proposed conditions of approval under Condition No. 6, it is nevertheless willing to work with the Division to reach an agreement to sample the spring. That agreement would be as follows:

(1) sample the spring when water is flowing and present and is capable of being collected directly from the spring;
(2) sampling for BTEX 8260; and
(3) sampling for TPH using EPA Method 8105 with SGC. Hilcorp would not be required to measure TDS, pH, VOCs using EPA Method 8260, or for inorganic cations/anions using EPA Method 300.0/300.1.

For the reasons stated herein, Hilcorp's proposed sampling plan for the spring is a fair and reasonable resolution that addresses the Division's concerns and Hilcorp's objections. For the avoidance of doubt, Hilcorp's proposal to conduct sampling at the spring in this case shall not be used as precedent in any other matter. Hilcorp reserves all its rights.

Hilcorp is ready to proceed with its proposed sampling plan. Please confirm the Division approves this approach. Hilcorp is also available to set a time for a technical meeting with the Division to answer any questions about its proposed sampling plan and discuss next steps. We appreciate your consideration of these concerns and proposed resolution and look forward to your response.

Sincerely,

Adam G. Rankin

Attorney for Hilcorp Energy Company

Encls.

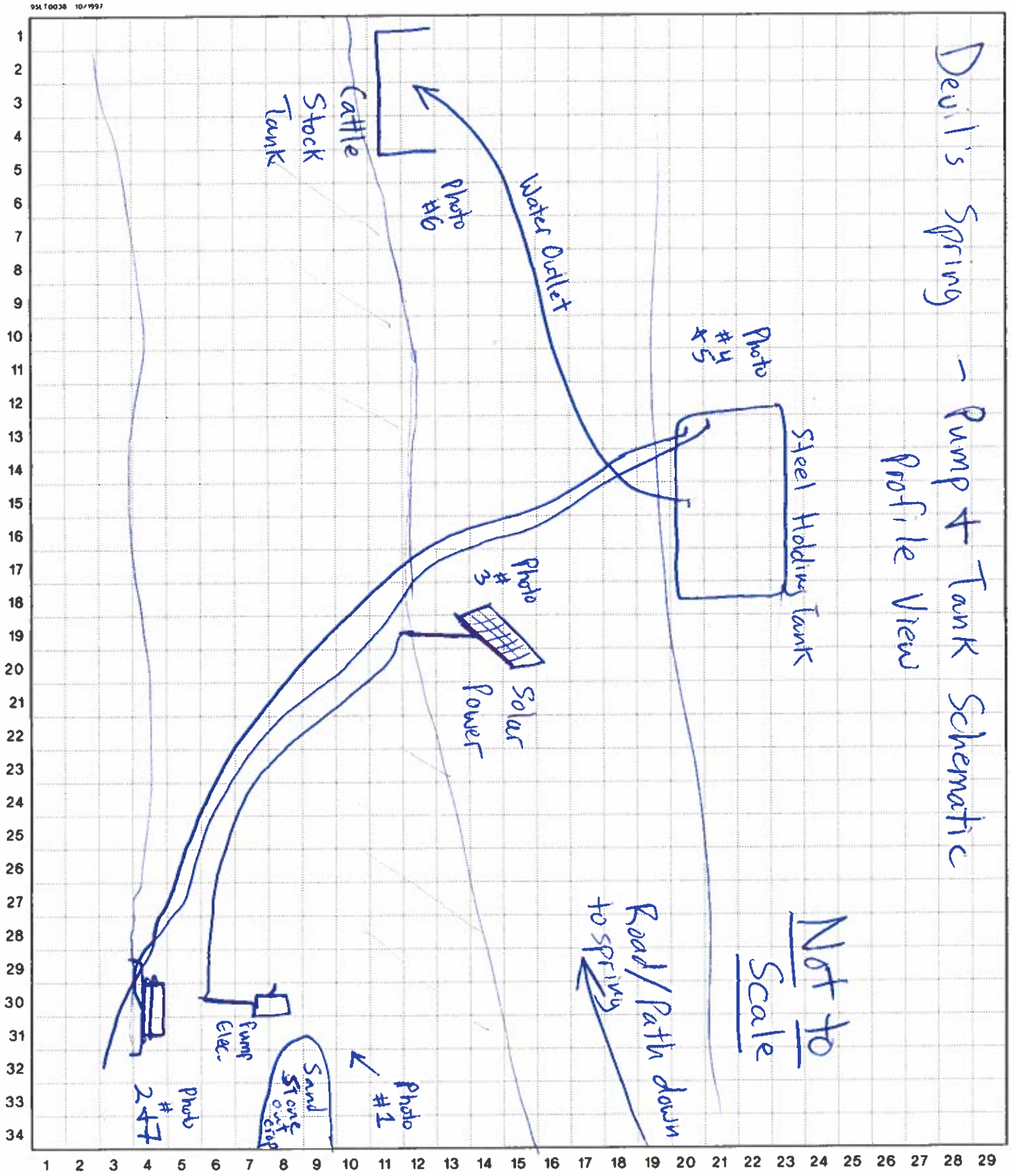
cc: Tiffany Polak, NMOCD Tiffany.Polak@state.nm.us
Emily Hernandez, NMOCD Emily.Hernandez@state.nm.us
Jim Griswold, NMOCD Jim.Griswold@state.nm.us
Bradford Billings, NMOCD Bradford.Billings@state.nm.us

16877932_v1

ENCLOSURE A

PROJECT
PROJECT MANAGER
JOB No.
LOCATION

DATE
CONT. No.
BY CHK'D
SHEET No. OF



ENCLOSURE A

PHOTOGRAPHIC LOG		
Hilcorp Energy Company	San Juan 28-6 #125 Rio Arriba County, New Mexico	TE017820020

Photo No.	Date
1	June 8, 2021

View of spring from above, looking down at pump electrical connection and potential sump/cistern.

ENCLOSURE A

PHOTOGRAPHIC LOG		
Hilcorp Energy Company	San Juan 28-6 #125 Rio Arriba County, New Mexico	TE017820020

Photo No.	Date
2	June 8, 2021

Close up potential sump/cistern, with 1" pipe.

ENCLOSURE A

PHOTOGRAPHIC LOG		
Hilcorp Energy Company	San Juan 28-6 #125 Rio Arriba County, New Mexico	TE017820020

Photo No.	Date
3	June 8, 2021

Solar power array; 2” and 1” piping up to steel holding tank.

Photo No.	Date
4	June 8, 2021

Steel holding tank. Empty at time of investigation. Foreground piping coming/going to spring. Background piping is outlet to stock tank.

ENCLOSURE A

PHOTOGRAPHIC LOG		
Hilcorp Energy Company	San Juan 28-6 #125 Rio Arriba County, New Mexico	TE017820020

Photo No.	Date
5	June 8, 2021

Close up view of steel holding tank piping connections.

ENCLOSURE A

PHOTOGRAPHIC LOG		
Hilcorp Energy Company	San Juan 28-6 #125 Rio Arriba County, New Mexico	TE017820020

Photo No.	Date
6	June 8, 2021

Cattle stock tank. Dry at time of investigation.

ENCLOSURE A

PHOTOGRAPHIC LOG		
Hilcorp Energy Company	San Juan 28-6 #125 Rio Arriba County, New Mexico	TE017820020

Photo No.	Date
7	June 8, 2021

Photo of 2” piping going in or coming out of spring/rock wall. No standing water in spring area.

From: Smith, Cory, EMNRD
To: Lindsay Dumas; Hernandez, Emily, EMNRD
Cc: Polak, Tiffany, EMNRD; Griswold, Jim, EMNRD; Billings, Bradford, EMNRD
Subject: RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715
Date: Monday, May 17, 2021 7:54:00 PM

Lindsay,

After our discussion and reviewing the HilCorp April 7, 2021 email the OCD has approved the proposed remediation plan with the following conditions of approval:

1. HEC will provide email notice to the OCD at least two business days prior to the start of delineation activities.

2. OCD approves the proposed delineation borehole with the following conditions of approval:
    a. If the proposed borehole location (Blue dot) needs to be changed for any reason, HEC will notify and get OCD approval prior to drilling the delineation borehole
    b. The borehole will be logged by a trained professional
    c. The delineation borehole needs to be sampled utilizing a split spoon sampler
    d. In addition to the highest observed impacts and the bottom hole sample, HEC will collect a laboratory grab sample at every 5' interval and analyze it for constituents in Table I

3. OCD recommends that the pilot test be done in a phased approach by only install enough SVE wells to conduct the pilot test before completing the rest of the SVE system. This approach will ensure proper screen length and borehole distances for efficient remediation.

4. New SVE boreholes will be:
    a. Logged by a trained professional
    b. Sampled utilizing a split spoon sampler
    c. Laboratory sampled at a interval of every 5' for the constituents in Table I in addition to the bottom hole sample

5. OCD also requires that radius of effect also be included into the report following the pilot test.

6. As discussed there is reasonable probability due to the distance, lithology, depth to water and the unknown nature of the release that it may have impacted ground water. The OCD is requiring HEC to collect a water sample of the spring identified in previous emails for the protection of fresh water, human health and the environment. HEC will analysis the water for the following constituents and submit the findings:
    a. Total Dissolved Solids
    b. pH
    c. Total Petroleum Hydrocarbon EPA method 8015
    d. Volatile Organic Compounds EPA Method 8260 (Full)
    e. Cation / Anions EPA Method 300.0/300.1

7. HEC will conduct the required delineation and any other needed delineation within 30 days of this email depending on driller availability. HEC will notify the OCD if there is an expected delay via email as soon as possible.

8. HEC will submit to the OCD via the E-permitting portal, an updated remediation plan no later than July 18, 2021(60 days from approval) that meets all of the requirements of 19.15.29.12 NMAC and in addition, include the following:
    a. Findings of the SVE pilot testing
    b. A schematic of the radius-of-influence, radius of effect and SVE zones
    c. A diagram of the SVE system (including blower, knockout tank, etc.)
    d. A diagram of SVE well construction

e. Timeline of proposed SVE installation and start of remediation

If you have any additional questions please let us know as soon as possible.

Thank you,

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Lindsay Dumas <ldumas@hilcorp.com>
Sent: Wednesday, April 28, 2021 8:38 AM
To: Hernandez, Emily, EMNRD <Emily.Hernandez@state.nm.us>
Cc: Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: [EXT] RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Good Morning Emily – Hilcorp is available on Thursday May 6th at 9AM. Please send the Teams meeting at your earliest convenience. Thank you!

Kind regards,

Lindsay Dosescu
Environmental Specialist
Hilcorp Energy – L48 West
Office: 832-839-4585
Mobile: 281-794-9159

From: Hernandez, Emily, EMNRD [mailto:Emily.Hernandez@state.nm.us]
Sent: Wednesday, April 21, 2021 11:51 AM
To: Lindsay Dumas <ldumas@hilcorp.com>
Cc: Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Greetings Lindsay. With new management in place, myself included, the OCD is looking to enhance our review practices in order to move forward in a more proactive and consistent fashion. The OCD still has a few questions and concerns with regard to your plan that we feel would be better served in discussion. In terms of prep, if your team is prepared to talk about the proposed plan and rationale that is all the prep you need. I look forward to meeting everyone.

I offer the following 10 dates & times (MT) for a Teams Meeting the first week in May:

1. Monday May 3rd – 11:00 AM to 12:00 AM
2. Monday May 3rd – 3:00 PM to 4:00 PM
3. Tuesday May 4th – 11:00 AM to 12:00 AM

4. Tuesday May 4th – 1:00 PM to 2:00 PM
5. Wednesday May 5th – 9:30 AM to 10:30 AM
6. Wednesday May 5th – 4:00 PM to 5:00 PM
7. Thursday May 6th – 9:00 AM to 10:00 AM
8. Thursday May 6th – 1:00 PM to 2:00 PM
9. Friday May 7th – 10:00 AM to 11:00 AM
10. Friday May 7th – 3:00 PM to 4:00 PM

Thank you,

Emily A. Hernandez ● Environmental Bureau Chief
EMNRD - Oil Conservation Division
1220 S. St. Francis Drive | Santa Fe, NM 87505
505.490.5472 | Emily.Hernandez@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Lindsay Dumas <ldumas@hilcorp.com>
Sent: Monday, April 19, 2021 2:36 PM
To: Hernandez, Emily, EMNRD <Emily.Hernandez@state.nm.us>
Cc: Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: [EXT] RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Hi Emily – Those dates and times will not work for us. Could you please provide dates/times that work for NMOCD for the first week in May?

Hilcorp provided a thorough response to NMOCD's deficiencies, can you provide us a detailed response as to what needs to be discussed further in this meeting? Hilcorp would like to be prepared for meeting discussion topics. Thank you!

Kind regards,

Lindsay Dosescu
Environmental Specialist
Hilcorp Energy – L48 West
Office: 832-839-4585
Mobile: 281-794-9159

From: Hernandez, Emily, EMNRD [mailto:Emily.Hernandez@state.nm.us]
Sent: Monday, April 19, 2021 1:24 PM
To: Lindsay Dumas <ldumas@hilcorp.com>
Cc: Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>; Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Subject: RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Good afternoon Ms. Dosescu. We have reviewed Hilcorp's responses and would like the opportunity to meet and discuss in order to move the plan forward. Below are a few dates & times, please let me know which will work for you and your team and I will send the Teams Meeting invite.

4/23/21: 1:00 PM – 2:00 PM
4/26/21: 2:30 PM – 3:30 PM
4/27/21: 1:00 PM – 2:00 PM

Thank you,

Emily A. Hernandez ● Environmental Bureau Chief
EMNRD - Oil Conservation Division
1220 S. St. Francis Drive | Santa Fe, NM 87505
505.490.5472 | Emily.Hernandez@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Lindsay Dumas <ldumas@hilcorp.com>
Sent: Monday, April 19, 2021 12:01 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Hernandez, Emily, EMNRD <Emily.Hernandez@state.nm.us>; Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: [EXT] RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Cory – Just checking on the below email. Hilcorp is ready to move forward with the project after NMOCD approves. Please let me know if you have any questions.

Kind regards,

Lindsay Dosescu
Environmental Specialist
Hilcorp Energy – L48 West
Office: 832-839-4585
Mobile: 281-794-9159

From: Lindsay Dumas
Sent: Wednesday, April 7, 2021 9:52 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Hernandez, Emily, EMNRD <Emily.Hernandez@state.nm.us>; Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Cory - Please see responses to the stated deficiencies below:

1. Hilcorp plans to advance an additional boring in the approximate location of the blue dot on the attached figure. This location may require adjustment to accommodate drill rig access based on topography, fencing, vegetation, and/or landowner agreement. This boring will be advanced to an anticipated depth of 50 feet below ground surface based on the depth of impact discovered in other onsite borings. Soil samples will be collected from the borehole every foot and field screening will be conducted using a photoionization detector (PID). If field screening results measure greater than 100 parts per million (ppm) at a depth of 50 feet, the boring will be advanced deeper until at least two consecutive PID readings are less than 100 ppm. At least two samples will be collected for laboratory analysis: one sample from the total depth and one sample from the

interval with the highest field screening result. The samples will be analyzed for BTEX and TPH. Drilling will be conducted within 30 days of approval of this email, dependent on driller availability.

2. Hilcorp plans to install the 10 SVE wells in the locations proposed in the *Site Characterization Report and Remediation Work Plan* prepared by WSP (dated December 23, 2020). As discussed in the work plan, these wells will consist of four shallow-screened wells (screen 5 to 15 feet bgs) and six deep-screened wells (screen 15 to 35 feet bgs). These SVE wells will be installed concurrently with advancing the additional delineation boring addressed in Comment 1 above (again within 30 days of approval of this email). Using the SVE wells, Hilcorp will conduct a pilot test and provide the NMOCD with the requested information, including radius-of-influence, specifications of SVE equipment, and the need for passive air inlets. Proposed runtimes and maintenance schedules also will be provided based on the type of system recommended for the site. In addition, if the new delineation boring (comment 1) indicates petroleum hydrocarbon impacts greater than the NMOCD Table 1 Closure Criteria, that boring also will be completed as an SVE well. The pilot test will be conducted using a vacuum truck to induce a vacuum in one SVE well at a time and measure induced vacuum in the surrounding SVE wells. This information will be used to size the SVE equipment in order to successfully induce vacuum in impacted areas of the site. The pilot test will be conducted within 30 days after installation of the SVE wells.

3. A schematic of the radius-of-influence and SVE zones, as well as a diagram of the SVE system (including blower, knockout tank, etc.), will be provided within 30 days of completing the pilot test.

4.

    a. Based on review of the cathodic well report, Hilcorp agrees that groundwater at the site may be less than 100 feet. However, borings advanced during delineation activities confirmed that groundwater was not present at depth up to 55 feet bgs. Regardless, Hilcorp has already accepted the most stringent NMOCD Table 1 Closure Criteria set forth in 19.15.29.12 NMAC for site remediation based on the proximity of the site to a significant watercourse. Additionally, because the subsurface soil impacts have been vertically delineated and have not been shown to impact groundwater, the actual depth to groundwater below the site does not currently affect the planned remediation.

    b. Hilcorp will need additional information regarding the purpose of a “baseline” sample of the spring. A baseline sample is typically collected to establish background conditions prior to an activity to ensure that activity does not impact a potential receptor. If any constituents are elevated in the baseline sample requested, will NMOCD allow for those concentrations to serve as background? If the sampling is actually being requested to evaluate potential impact to the spring by this release, why is that necessary if the release is delineated at some distance from the spring? Why would a historical release of condensate that has been fully delineated to demonstrate it has not impacted the spring or remediation of that release over any timescale affect the TDS, pH, cation, or anion concentrations of the spring when volatile organic compounds are contaminants of concern based on the known source and results of source characterization? Why is TPH required if it is not regulated by NMWQCC standards?

During the site characterization performed in the fall of 2020, borings were advanced up to 55 feet bgs and did not encounter groundwater at the site. In addition, soil samples collected and analyzed from the terminus of each boring indicated that TPH and BTEX were not present at concentrations above the strictest NMOCD closure criteria in any boring. Based on the data collected during drilling activities, petroleum hydrocarbon impacts do not extend greater than 35 feet bgs and have not impacted groundwater. Based on NMOCD’s request, Hilcorp plans to advance an additional boring southeast of the assumed release/source. If data collected from this additional delineation boring confirm that impacts do not extend further to the southeast, and also do not extend to groundwater (if encountered during drilling), Hilcorp does not agree with the NMOCD request to sample water from the spring located approximately 650 feet directly south of the site. The purpose of the additional delineation boring is to further demonstrate the historical nature of the release did not affect the spring. Based on the forthcoming data and information collected from that boring plus additional information from NMOCD regarding the purpose of a baseline

sample, Hilcorp and NMOCD can further discuss sampling of the spring.

Kind regards,

Lindsay Dosescu
Environmental Specialist
Hilcorp Energy – L48 West
Office: 832-839-4585
Mobile: 281-794-9159

From: Lindsay Dumas
Sent: Thursday, April 1, 2021 4:08 PM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Hernandez, Emily, EMNRD <Emily.Hernandez@state.nm.us>; Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Cory - Based on internal discussions, Hilcorp doesn't believe a Teams meeting would be beneficial. We are preparing a response to each deficiency in writing, which will include a timeline. Our response will be submitted no later than Wednesday, April 7th.

Kind regards,

Lindsay Dosescu
Environmental Specialist
Hilcorp Energy – L48 West
Office: 832-839-4585
Mobile: 281-794-9159

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Thursday, April 1, 2021 2:21 PM
To: Lindsay Dumas <ldumas@hilcorp.com>
Cc: Hernandez, Emily, EMNRD <Emily.Hernandez@state.nm.us>; Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Good Afternoon Lindsay,

Just wanted to follow up on the below email and get a status update.

Cory Smith • Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410

505.334.6178 x115 | Cory.Smith@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Smith, Cory, EMNRD
Sent: Friday, March 26, 2021 11:20 AM
To: Lindsay Dumas <ldumas@hilcorp.com>
Cc: Hernandez, Emily, EMNRD <Emily.Hernandez@state.nm.us>; Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Good Morning Lindsay,

Currently OCD is unable to hold in-person meetings due to Covid-19 safe practices. If needed the OCD can host a Microsoft Teams virtual meeting. Does Hilcorp still wish to meet on April 15th at 10AM? If so I can verify with OCD staff if the proposed time will be acceptable.

In regards to your questions, the spring is located approximately 770' South/ South East of the San Juan 28-6 #125 well pad. The approximate Latitude/Longitude of the spring is 36.647143° , -107.466682°

Cory Smith ● Environmental Specialist
Environmental Bureau
EMNRD - Oil Conservation Division
1000 Rio Brazos | Aztec, NM 87410
505.334.6178 x115 | Cory.Smith@state.nm.us
http://www.emnrd.state.nm.us/OCD/

From: Lindsay Dumas <ldumas@hilcorp.com>
Sent: Friday, March 26, 2021 10:32 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Hernandez, Emily, EMNRD <Emily.Hernandez@state.nm.us>; Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: [EXT] RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Cory - Could you clarify which down gradient spring you are suggesting to be sampled? Please provide an approximate location or distance from the well pad, so we can ensure we are all talking about the correct spring. Thank you!

Kind regards,

Lindsay Dosescu
Environmental Specialist
Hilcorp Energy – L48 West

Office: 832-839-4585
Mobile: 281-794-9159

From: Lindsay Dumas
Sent: Friday, March 26, 2021 11:04 AM
To: Smith, Cory, EMNRD <Cory.Smith@state.nm.us>
Cc: Hernandez, Emily, EMNRD <Emily.Hernandez@state.nm.us>; Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: RE: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Good Morning Cory – Hilcorp has reviewed your deficiencies outlined below and would like to discuss the items further in an in person meeting. Would everyone be available to meet in **Santa Fe on April 15th at 10AM**? I will follow this email with a meeting invitation as well.

Kind regards,

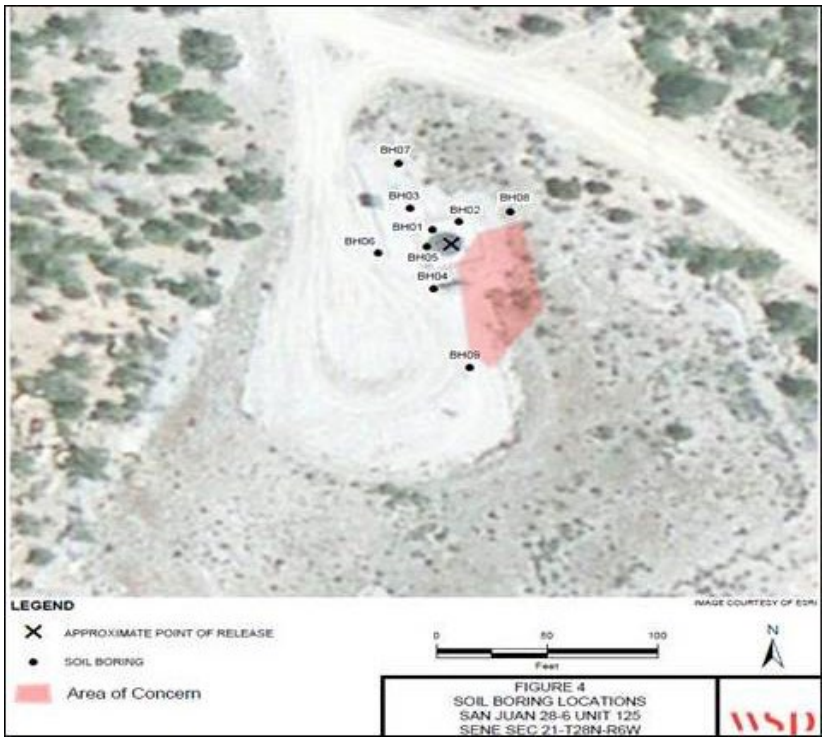
Lindsay Dosescu
Environmental Specialist
Hilcorp Energy – L48 West
Office: 832-839-4585
Mobile: 281-794-9159

From: Smith, Cory, EMNRD [mailto:Cory.Smith@state.nm.us]
Sent: Monday, March 15, 2021 11:29 AM
To: Lindsay Dumas <ldumas@hilcorp.com>
Cc: Hernandez, Emily, EMNRD <Emily.Hernandez@state.nm.us>; Polak, Tiffany, EMNRD <Tiffany.Polak@state.nm.us>; Griswold, Jim, EMNRD <Jim.Griswold@state.nm.us>; Powell, Brandon, EMNRD <Brandon.Powell@state.nm.us>; Billings, Bradford, EMNRD <Bradford.Billings@state.nm.us>
Subject: [EXTERNAL] San Juan 28-6 Unit #125 incident# nRM2030132715

Ms. Dumas,

OCD has reviewed the Site Characterization and Remediation Plan for the San Juan 28-6 Unit #125 incident# nRM2030132715 submitted to the OCD on December 30, 2020 and has denied the report due to the following deficiencies:

1. The area downgradient of the suspected release source has not been sufficiently delineated. Therefore, OCD requests that additional delineation, pursuant to 19.15.29.11 NMAC, between BH-8 and BH-9.



2. The remediation plan provided did not provide adequate information to assess the effectiveness of the proposed SVE system. OCD requests that an SVE pilot test be performed to confirm the following:
    a. Radius of effect/influence for proposed placement of SVE well locations,
    b. That the length of the proposed screen intervals will be sufficient for effective remediation in both the shallow sands and deeper sandstones,
    c. That the size of the required pump is sufficient to reach all impacted areas,
    d. The potential for passive air inlets at specific depths for effective remediation.

    Upon completion of the pilot test, OCD requests information regarding proposed zone runtimes and SVE maintenance schedules.

3. OCD requests a schematic of the SVE zones, SVE well construction, and SVE pump/knock-out-tank assembly – which were not include in the December 23rd Site Characterization and Remediation Plan.

4. Hilcorp's depth to water assessment of greater than 100' was found to be inaccurate. OCD review of ground water in the area indicates that depth to water could be less than or equal to 75' at the San Juan 28-6 #125.
    a. This data originated from a cathodic well report located at the San Juan 28-6 Unit #60 approximately 650' north west.
    b. Due to the historical nature of the release and the length of proposed remediation, OCD is requesting that the spring downgradient be sampled to established a baseline. The spring water should be analyzed for TDS, pH, Cation, Anion, BTEX (EPA 8260(Long list), TPH(EPA 8015)

1. Within the next two weeks Hilcorp will need to schedule a meeting with the OCD to discuss a proposed timeline that Hilcorp can acquired the required information for resubmission of the Site Characterization and Remediation plan. Upon completion of the meeting, the OCD will provide an updated version of this letter of deficiencies to include a timeline for submission to the OCD E-permitting portal.

Thank you,

Cory Smith ● Environmental Specialist
Environmental Bureau

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http://www.emnrd.state.nm.us/OCD/

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