From:	Hamlet, Robert, EMNRD
To:	"Raley, Jim": Ashley Ager
Cc:	Bratcher, Mike, EMNRD; Venegas, Victoria, EMNRD; Eads, Cristina, EMNRD; Billings, Bradford, EMNRD
Subject:	Remediation Conditional Approval - WPX - Swearingen #1 - (Incident #NAB1927155176) (2RP-5628)
Date:	Thursday, November 19, 2020 1:38:00 PM
Attachments:	image002.png
	image003.png
	Remediation Conditional Approval WPY Suparingon #1 ndf

Jim.

Sorry it took a few days to get back to you. We've had a couple discussions on this particular release the last few days in our environmental meetings. We have received your Workplan/Remediation Proposal for Incident #NAB192715517 Swearingen, thank you. This Workplan/Remediation proposal is approved with the following conditions:

- OCD requests additional background samples be obtained, preferably north of sample point BGO1 since it is located in a spot void of vegetation. Please obtain samples at bgs 3', 6', 9' and 12' intervals.
- Remediation of the Site will need to be completed through excavation of all remaining impacted soil containing chloride concentrations above the observed background concentrations. It is important that the excavated soil is below the observed background sample values at each 3 foot increment discussed above.
- Upon completion of excavation activities, closure samples will need to be obtained per 19.15.29 NMAC. Please do not backfill excavations without prior approval. OCD would like to evaluate the analytical data prior to backfill. Please advise once that analytical data has been received.
- After the sample data has been reviewed, the project will be reevaluated for possible additional requirements.
- Please, keep us informed of the results and let us know if you have any questions.

Regards,

Robert Hamlet • Environmental Eng. Tech. III Environmental Bureau EMNRD - Oil Conservation Division 811 S. First Street | Artesia, NM 88210 505.748.1283 | 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: Raley, Jim <James.Raley@wpxenergy.com>
Sent: Monday, November 16, 2020 3:12 PM
To: Hamlet, Nobert, EMINRD <Kobert, Hamlet@state.nm.us>; Ashley Ager <aager@ltenv.com>
Cc: Bratcher, Mike, EMNRD <mike.bratcher@state.nm.us>; Venegas, Victoria, EMNRD </ictoria.Venegas@state.nm.us>; Eads, Cristina, EMNRD <Cristina.Eads@state.nm.us>; Billings, Bradford, EMNRD
</ir>

WPX would like to request a virtual call to discuss the data and additional groundwater sampling request. Would it be possible to have a call before the end of the month?

Jim Raley | Environmental Specialist - Permian Basin 5315 Buena Vista Dr., Carlsbad, NM 88220 C: (575)689-7597 | james raley@wpxenergy.com

From: Hamlet, Robert, EMNRD <<u>Robert, Hamlet@state.nm.us></u> Sent: Friday, November 6, 2020 10:08 AM To: Raley, Jim <<u>james.raley@wpxenergy.com</u>>; Ashley Ager <<u>aager@ltenv.com></u> Cc: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Venegas, Victoria, EMNRD <<u>Victoria.Venegas@state.nm.us</u>>; Eads, Cristina, EMNRD <<u>Cristina.Eads@state.nm.us</u>>; Billings, Bradford, EMNRD <<u>Bradford, Billings@state.nm.us</u>>; Venegas, Victoria, EMNRD <<u>Victoria.Venegas@state.nm.us</u>>; Eads, Cristina, EMNRD <<u>Cristina.Eads@state.nm.us</u>>; Billings, Bradford, EMNRD <<u>Bradford, Billings@state.nm.us</u>>

Subject: [EXTERNAL] RE: Remediation Denied - WPX - Swearingen #1 - (Incident #NAB1927155176) (2RP-5628)

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Jim,

As you know, chlorides move down the soil column fairly rapidly depending on the soil type. This spill occurred almost 15 months ago. The picture that we're seeing now might not be the full picture. The OCD needs to take precautions and verify that chlorides didn't impact groundwater. This spill encompasses a large area on and off the pad. With high chlorides this close to the groundwater and the area being very close to the river, the OCD would like a groundwater sample taken. A shallow borehole will need to be drilled to 20 feet, temporary casing installed, and a groundwater sample taken. The groundwater sample will need to be drilled to 20 feet, temporary casing installed, and a groundwater sample taken. The groundwater sample will need to be drilled to 20 feet, temporary casing installed, and a groundwater sample taken. The groundwater sample will need to be drilled to 20 feet, temporary casing installed, and a groundwater sample taken. The groundwater sample will need to be drilled to 20 feet, temporary casing installed, and a groundwater sample taken. The groundwater sample will need to be drilled to 20 feet, temporary casing installed, and a groundwater sample taken. The groundwater sample will need to be drilled to 20 feet, temporary casing installed, and a groundwater sample taken. The groundwater sample will need to be drilled to 20 feet, temporary casing installed and a groundwater sample taken.

Regards,

Robert J Hamlet State of New Mexico Energy, Minerals, and Natural Resources Oil Conservation Division 811 S. First St., Artesia NM 88210 (575) 748-1283 Robert.Hamlet@state.nm.us

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From: Raley, Jim <<u>James.Raley@wpxenergy.com</u>> Sent: Thursday, November 5, 2020 4:11 PM

To: Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>>; Ashley Ager <<u>aager@ltenv.com</u>>

Cc: Bratcher, Mike, EMNRD < mike.bratcher@state.nm.us>; Venegas, Victoria, EMNRD < Victoria Venegas@state.nm.us>; Eads, Cristina, EMNRD < Cristina, EAds@state.nm.us>; Billings, Bradford, EMNRD

<Bradford.Billings@state.nm.us>

Subject: [EXT] RE: Remediation Denied - WPX - Swearingen #1 - (Incident #NAB1927155176) (2RP-5628)

Robert,

Thank you for continuing to review and discuss the Incident #NAB1927155176 Swearingen #1. Please see the below response to your previous email, dated October 29th, 2020.

All soil borings were abandoned by filling the borings with hydrated bentonite; there is no way to currently get a groundwater sample. A temporary well casing was installed in SB01 to allow the groundwater table to equilibrate and obtain a measurement but has since been removed. WPX believes soil impacted by this release did not migrate to groundwater based on the analytical data provided from the terminal samples collected from CH01 and SB01, both of which are at least 7 feet shallower than identified depth to groundwater.

For clarification, is the OCD not accepting vertical delineation data to demonstrate groundwater has not been impacted? Our goal is to not activate or create potential conduits by continuing to bore at a site with shallow groundwater. We would like to proceed with the proposed remediation plan, targeting the agreed 1300 mg/kg for background chlorides and composite sampling of the standard 200ft2. Should excavation depth begin to approach groundwater, additional measures can be considered at that time.

Jim Raley | Environmental Specialist - Permian Basin 5315 Buena Vista Dr., Carlshad, NM 88220 C: (575)689-7597 | james raley@wpxenergy.com WPXENERGY

From: Hamlet, Robert, EMNRD <<u>Robert, Hamlet@state.nm.us</u>> Sent: Thursday, October 29, 2020 11:28 AM

To: Raley, Jim <<u>james.raley@wpxenergy.com</u>>; Ashley Ager <<u>aager@ltenv.com</u>>

Cc: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Venegas, Victoria, EMNRD <<u>Victoria.Venegas@state.nm.us</u>>; Eads, Cristina, EMNRD <<u>Cristina.Eads@state.nm.us</u>>; Billings, Bradford, EMNRD <<u>Bradford, Billings@state.nm.us</u>>; Eads, Cristina, EMNRD <<u>Cristina.Eads@state.nm.us</u>>; Billings, Bradford, EMNRD <<u>State.nm.us</u>>; Eads, Cristina, EMNRD <<u>State.nm.us</u>>; EMNRD <<u>State.nm.us</u>; Eads, Cristina, EMNRD <<u>State.nm.us</u>; Eads, Cristina, EMNRD <<u>State</u>

Subject: [EXTERNAL] RE: Remediation Denied - WPX - Swearingen #1 - (Incident #NAB1927155176) (2RP-5628)

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Jim,

I don't agree or disagree with your assumption pertaining to groundwater impact. Since, SB1 hit groundwater at 19.8' and has been temporarily cased, a groundwater sample will probably need to be collected and analyzed for TDS? After we see the results, we can move forward with outlining what type of remediation needs to be accomplished. Please, keep us informed of the results.

Thanks,

Robert J Hamlet State of New Mexico Energy, Minerals, and Natural Resources Oil Conservation Division 811 S. First St., Artesia NM 88210 (575) 748-1283 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: Raley, Jim <<u>James.Raley@wpxenergy.com</u>>

Sent: Tuesday, October 27, 2020 12:30 PM

To: Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>>; Ashley Ager <<u>aager@ltenv.com</u>>

Cc: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Venegas, Victoria, EMNRD <<u>Victoria.Venegas@state.nm.us</u>>; Eads, Cristina, EMNRD <<u>Cristina.Eads@state.nm.us</u>>; Billings, Bradford, EMNRD <<u>Bradford.Billings@state.nm.us</u>>;

Subject: [EXT] RE: Remediation Denied - WPX - Swearingen #1 - (Incident #NAB1927155176) (2RP-5628)

Robert,

Thank you for reviewing the remediation plan submitted for Incident #NAB1927155176 Swearingen #1. Below is our response to denial of the proposed remediation plan; attached is relevant maps and lab information supporting our response.

• A variance for each composite sample not exceeding 500 ft2 is denied. WPX accepts this condition and will collect confirmation composite samples at a 200 square foot frequency.

The only background sample that follows current protocol is BG01. The other boreholes are on an active well pad or sandwiched between roads and the well pad. The clarification states, "A grab, not composite, sample(s) should be gathered in areas undisturbed by oil and gas activities, nominally uphill from the release area, and no closer than 50 feet but no farther than 100 feet from the lateral and horizontal extents of a release's impact. The Chloride value of 1,300 mg/kg will be the background value that the release should be horizontally/vertically delineated too. WPX agrees to a background value of 1,300 mg/kg for chloride for remediation. During exavation, WPX will conduct field screening to direct progress. Remediation to 1,300 mg/kg chloride laterally and vertically will be confirmed with laboratory analytical results from excavation confirmation samples collected from the sidewalls and floor at the above-stated frequency.

a groundwater (monitoring) wells will be required. One in the center of the release, one down gradient, and one up gradient to be used for collecting groundwater samples. The monitoring well up gradient will be placed off pad north of pothole PHO2 to a monitoring well or rill one in very close proximity to this location for the one in the center of the release, one down gradient, and one up gradient to be used for collecting groundwater samples. The monitoring well up gradient will be placed off pad north of pothole PHO2 off pad for the down gradient monitoring well about 50 feet southwest of PHO9 off pad for the down gradient monitoring well. The groundwater is impacted soil additional information. The vertical extent of impacted soil was defined and requests MMOCD for consider the requirement to install monitoring wells based on the following clarification and additional information. The vertical extent of impacted soil was defined at PHO2 by a sample collected from 10 feet to 12.2 feet bgs in SB01. That sample contained 1,130 mg/kg chloride, which is below the background directed by NMOCD of 1,200 mg/kg. Similarly, vertical defineation was achieved in other potholes and boreholes within the release extent including PHO3, PHO4, and SB06. WPX acknowledges that the terminal sample collected from SB02 (at the location of PHO1) exceeds NMOCD' background concentration. As such, WPX collected additional samples the week of October 5, 2020. Investigate core drilling was conducted utilizing a Shaw Portable Core Drill near PHO1/SB02 to supplement vertical elaboratory analysis from the bottom of those coreholes. The laboratory analytical results for chloride indicates the vertical elatent of impacted soil and groundwater. Similarly the laboratory analysis from the test gs. Those results suggest there is greater than 7 feet of soil between the deeps to beserved impacted soil and groundwater. Similarly the laboratory analytical results for chloride indicates the vertical elatent of impacted soil and groundwa

Based on this information, WPX requests to proceed as soon as possible with the original remediation work plan under the condition that background chloride is 1,300 mg/kg for chloride. Additional areas exceeding this value will be addressed simultaneously with remediation activities.

Jim Raley | Environmental Specialist - Permian Basin 5315 Buena Vista Dr., Carlshad, NM 88220 C: (575)689-7597 | james raley@wpxenergy.com WPXENERGY

From: Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>> Sent: Monday, September 28, 2020 3:29 PM To: Raley, Jim <<u>james.raley@wpxenergy.com</u>>; Ashley Ager <<u>aager@ltenv.com</u>> Cc: Bratcher, Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Venegas, Victoria, EMNRD <<u>Victoria.Venegas@state.nm.us</u>>; Eads, Cristina, EMNRD <<u>Cristina.Eads@state.nm.us</u>>; Billings, Bradford, EMNRD <<u>Bradford.Billings@state.nm.us</u>>; Billings, Bradford, Billings@state.nm.us}; Billings@state.nm.us>; Billings@state.nm.us>; Billings@state.nm.u

Subject: [EXTERNAL] Remediation Denied - WPX - Swearingen #1 - (Incident #NAB1927155176) (2RP-5628)

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James and Ashley,

We have received your Workplan/Remediation Proposal for Incident #NAB1927155176 Swearingen #1, thank you. This Workplan/Remediation proposal is denied. Sometime in the near future we will all need to get on a call and discuss this release. With high chloride levels on potholes PH01 and PH02 at 8' and 8.5' and the groundwater table measured at 19.8', it's likely groundwater has been impacted. I will try to get Brad Billings to join the call and assist in answering any questions.

- A variance for each composite sample not exceeding 500 ft2 is denied.
- The only background sample that follows current protocol is BG01. The other boreholes are on an active well pad or sandwiched between roads and the well pad. The clarification states, "A grab, not
 composite, sample(s) should be gathered in areas undisturbed by oil and gas activities, nominally uphill from the release area, and no closer than 50 feet but no farther than 100 feet from the lateral and
 horizontal extents of a release's impact. The Chloride value of 1,300 mg/kg will be the background value that the release should be horizontally/vertically delineated too.
- 3 groundwater (monitoring) wells will be required. One in the center of the release, one down gradient, and one up gradient to be used for collecting groundwater samples. The monitoring well up
 gradient will be placed off pad north of pothole PHO2. Convert pothole PHO2 to a monitoring well or drill one in very close proximity to this location for the one in the center of the release. Finally, drill a
 monitoring well about 50 feet southwest of PHO9 off pad for the down gradient monitoring well. The groundwater is most likely moving from north to south down toward the river.

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Please apply for the permits on the 3 monitoring wells with the OSE Office as quickly as possible. A 90 extension will be granted to apply for the permits and to move forward on drilling the monitoring
wells. Samples will need to be taken as quickly as possible after the monitoring wells are installed. This will give us insight into the groundwater impact and whether additional steps need to be taken.

Please let me know if you have any further questions. Regards,

Robert J Hamlet State of New Mexico Energy, Minerals, and Natural Resources Oil Conservation Division 811 S. First St., Artesia NM 88210 (575) 748-1283 Robert.Hamlet@state.nm.us

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