

Hamlet, Robert, EMNRD

From: Hamlet, Robert, EMNRD
Sent: Thursday, July 16, 2020 2:46 PM
To: 'melanie.nolan@hollyenergy.com'
Cc: Bratcher, Mike, EMNRD; Venegas, Victoria, EMNRD; Eads, Cristina, EMNRD; Mann, Ryan
Subject: Remediation Denied - Holly Energy - Millman Station Crude Oil Release - (Incident #NRM2002952961)
Attachments: Remediation Denied - Holly Energy - Millman Station Crude Oil Release.pdf

Melanie,

We have received your Workplan/Remediation Proposal for **Incident #NRM2002952961 Millman Station Crude Oil Release**, thank you. This Workplan/Remediation proposal is denied.

- When nearby wells are used to determine depth to groundwater, the wells should be no further than ½ mile away from the site, and data should be no more than 25 years old, and well construction information should be provided. If evidence of depth to ground water within a ½ mile radius of the site cannot be provided, impacted soils will need to meet Table 1 Closure Criteria for ground water at a depth of 50 feet or less.
- A deferral cannot be granted on a release if the depth to water is <50' depth to groundwater. At that point, a hydrovac/shovel would need to be used to safely remove the contaminated soil around equipment and pipelines. The release will need to be remediated to the strictest closure criteria limits (600 mg/kg, Chlorides, 100 mg/kg TPH, etc.), which matches the closure criteria that Holly Energy Partners has elected to go with. If you feel the depth to groundwater is >50', a shallow borehole can be drilled to 51' allowing for verification of the depth. If water is not visible after reaching bottom-hole and waiting 72 hours, the OCD will accept this as evidence. We would just need a copy of the driller's log.
- In the future, there are a couple mandatory things that need to be accomplished for a deferral. All sample points, except the requested sample points for deferral, must have contaminated soil removed before a deferral request is uploaded to the payment portal. The only remediation that should remain are the sample points that are being requested for deferral. Also, specify exactly which sample points you are asking for a deferral on and the reason the contaminants can't be removed.
- The release will need to be cleaned up inside and outside the fence area unless depth to water has been determined through use of a borehole. The OCD wants to clarify that the entire release area will not be deferred, only the sample points that are around production equipment such as production tanks, wellheads and pipelines. The deferral may be granted so long as the contamination is fully delineated and does not cause an imminent risk to human health, the environment, or ground water. Final remediation and reclamation shall take place in accordance with 19.15.29.12 and 19.15.29.13 NMAC once the site is no longer being used for oil and gas operations.
- Please continue to horizontally delineate sample points AH-1 and TT-8 to 600 mg/kg for chlorides on the outer edges/periphery and include sample points in your next report after closure criteria limits have been met. While vertical definition of contamination that may be acceptable is almost exclusively driven by depth to water, as determined, and as driven by Table I in rule, horizontal definition if different. The edges (horizontal definition) of a liquid release must be determined as well. The only value for determination of horizontal impact are

derived by either “background” value as determined appropriate to Rule 29, or, for chloride, 600 mg/Kg in soils. This 600 mg/Kg value is discussed in detail in 19.15.29.13 D. (1). Therefore, horizontal soils delineation for chloride should be 600 mg/KG (again, or background) for all liquid releases, either on or off production pad. It is conceivable that in determining the horizontal extent of chloride that the edge of the production pad may be encountered, if last sample taken on pad limit, sample(s) must be obtained off pad to determine extent of release. If horizontal delineation samples on pad eventually reach a mechanical barrier, (such as pipeline or battery) sample(s) should be obtained as near as possible on the linear opposite side of said barrier and as close as possible to barrier. It is conceivable that a liquid release may occur with, for example, a surface soil chloride of 19,000 mg/Kg, and if it is reliably determined that groundwater is over 101 feet below ground surface, then that value may stand as a vertical definition, but nonetheless, the horizontal value(s) for lateral extent of liquid release would still, of Rule 29 necessity, be 600 mg/Kg chloride or less. This would be inclusive of both “on-pad” or “off-pad” release area. The above if laboratory data driven, not just reported visual extent of a liquid release or calculated and reported release volumes. As indicated in above portions, a scaled map with horizontal and vertical definition of actual laboratory values is required. Generally, the top one foot sample suffices for immediate horizontal evaluation and deeper contamination would likely be identified during actual remediation.

- If Holly Energy Partners wants to move forward with excavating, the shallow excavation areas will need to be excavated to the first clean (under closure criteria limit) sample point depth. The deeper contamination zones will need to be excavated to either the first clean (under closure criteria limit) sample point depth or until rock refusal.
- The report says, “A hard caliche layer was encountered at approximately 10 to 11 feet bgs, which caused refusal for both the backhoe and hand auger”. The OCD has a process in place for rock refusal, during the remediation process to satisfy the OCD and State of New Mexico:
 - a) If rock refusal interferes with the remediation process, use a back-hoe/track-hoe to remove the rock
 - b) If the rock is immovable and target depth cannot be reached, use a hydrovac to clean the contaminated soil off of the rock surface and outline specific locations and steps taken on the Closure Report
 - c) Use a rotary drill to drill a 18”-24” hole into the rock, pull sample to ensure contaminants haven’t permeated deep through the rock surface
 - d) layer the cleaned rock with Micro-Blaze or liquid with microbial strains, surfactants and nutrients designed to digest organics and hydrocarbons
 - e) Back-fill with clean material
- Please have soil samples analyzed for all components in Table 1 of the spill rule. The current spill rule may be viewed here: <http://164.64.110.134/parts/title19/19.015.0029.html>
- The variance request for 1,000 ft2 composite confirmation sample size is approved.
- The variance request for 100 linear feet of excavated sidewall for samples is approved.
- Please let us know if you are going to drill a borehole to properly assess depth to water and move forward with a formal deferral request.

Please let me know if you have any further questions.

Thank you,

Robert J Hamlet
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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.