

Venegas, Victoria, EMNRD

From: Bynum, Tom (Contract) <Tom.Bynum@dvn.com>
Sent: Friday, May 1, 2020 12:30 PM
To: Venegas, Victoria, EMNRD; Hamlet, Robert, EMNRD; Billings, Bradford, EMNRD; Bratcher, Mike, EMNRD; Griswold, Jim, EMNRD; Eads, Cristina, EMNRD; Marcus, Ramona, EMNRD
Cc: Robison, Jason; Davis, Amanda; Mathews, Wesley; Carrasco, Lupe; DeHoyos, Kendra; Bob Allen; Kathy Purvis
Subject: [EXT] Rejection for work plan on incidents NRM2003159278 & NAB1905153070

Dear Victoria,

After much discussion within our team and with our consulting firm, we would like to express a couple more concerns regarding the rejection of the remediation plan for the incidents on the Thistle Unit 44H. Incident #s are NRM2003159278 and NAB1905153070.

In the matter of the “depth to ground water determination:”

- [19.15.29.11](#) does not mention water wells no further than ½ mile from the site, and data no more than 25 years old, and providing well construction information. Devon strives to stay compliant with regulations, however, those are prescriptive protocols that are not listed in the regulation for the general public to follow. The consultant on this project used a reasonable determination based on published well data from the US Geological Service.

Copied from your response in the previous email:

- **Please, see [19.15.29.11](#) SITE ASSESSMENT/CHARACTERIZATION: Depth to ground water. The responsible party must determine the depth to ground water where the release occurred. If the exact depth to ground water is unknown, the responsible party must provide a reasonable determination of probable ground water depth using data generated by numeric models, cathodic well lithology, water well data, published information or other tools as approved by the appropriate division district office. If the responsible party uses water well data, the responsible party must provide all pertinent well information.**

If the OCD still does not agree with our initial determination, then we would like to utilize a method of “triangulation” in order to determine our depth to ground water in this case. We would do this by combining water well data from wells that surround this incident’s location. This would provide more than a reasonable determination of the ground water depth in the area of these releases. Would the OCD agree with this method?

In the matter of “horizontal delineation:”

- We’re confused in the ambiguity of the recommended remediation action level for horizontal delineation. Horizontal and vertical delineation are specifically addressed in [19.15.29.11](#) (A)(5)(b) “the responsible party must delineate the release horizontally and vertically using Table I of [19.15.29.12](#) NMAC constituents”... The remediation plan clearly shows vertical delineation on pad to less than 20,000 mg/kg however it does not indicate a clear sidewall sample. It is hard to make the argument for approval without a sidewall sample however based on the citation the sample should meet the constraints of Table 1.

Copied from your response in the previous email:

- **Samples can be collected during the remediation process. In respect to horizontal delineation, it has not been completed. 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 the spill rule, horizontal definition is 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. 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, samples(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 the 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" of "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 the spill rule, 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.

We would have no problem at all giving you the full horizontal delineation of these releases if we could be granted approval to start on the remediation. This would allow us to gather sidewall samples during the excavation process that would be the most accurate in obtaining the true horizontal extent of these releases. We are currently working on gathering more samples here for the purpose of having full delineation, as well as gathering a background sample or two to help us be as accurate as possible to what our closure criteria will be.

Thank you.

TOM BYNUM
EHS CONTRACTOR
580-748-1613

Devon - Internal

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