Venegas, Victoria, EMNRD

From:	Venegas, Victoria, EMNRD
Sent:	Monday, March 30, 2020 4:04 PM
То:	'Joel Lowry'; Hamlet, Robert, EMNRD; Bratcher, Mike, EMNRD; Eads, Cristina, EMNRD; 'teffanies@eeronline.com'
Cc:	Mann, Ryan
Subject:	RE: NRM2008661323 NC STATE SWD WELL #1 @ 30-025-28695

NRM2008661323 NC STATE SWD WELL #1 @ 30-025-28695

Hi Mr. Lowry,

Yes, the sidewalls need to be less than 600 mg/kg for chlorides, even though the depth to groundwater is over 100' and the release is on-pad. 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, 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.

Thank you,

Victoria Venegas State of New Mexico Energy, Minerals, and Natural Resources Oil Conservation Division 811 S. First St., Artesia NM 88210 (575) 748-1283 Victoria.Venegas@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: Joel Lowry <joel@etechenv.com>
Sent: Monday, March 30, 2020 3:45 PM
To: Venegas, Victoria, EMNRD <Victoria.Venegas@state.nm.us>
Subject: [EXT] RE: NRM2008661323 NC STATE SWD WELL #1 @ 30-025-28695

Victoria,

Thank you very much! This approval came at a great time. It has been really challenging to keep everyone busy with the current price of crude oil coupled with COVID-19.

I am not sure that it is applicable to this situation, but just so I understand:

If a release is confined to an active production pad and qualifies for a 20,000 ppm chloride closure would the sidewalls need to be advanced until Chloride is less than 600 ppm or would you use the 20,000 ppm from Table 1?

I am well aware that the uppermost 4 Ft. within any pasture area must be less than 600 ppm chloride regardless of the Site Ranking. Thanks.

Respectfully,

Joel Lowry

From: Venegas, Victoria, EMNRD <<u>Victoria.Venegas@state.nm.us</u>>
Sent: Monday, March 30, 2020 3:23 PM
To: Teffanie Fawks <<u>teffanies@eeronline.com</u>>; Hamlet, Robert, EMNRD <<u>Robert.Hamlet@state.nm.us</u>>; Bratcher,

Mike, EMNRD <<u>mike.bratcher@state.nm.us</u>>; Eads, Cristina, EMNRD <<u>Cristina.Eads@state.nm.us</u>> Cc: Joel Lowry <<u>joel@etechenv.com</u>>; CFO_Spill, BLM_NM <<u>blm_nm_cfo_spill@blm.gov</u>> Subject: NRM2008661323 NC STATE SWD WELL #1 @ 30-025-28695

NRM2008661323 NC STATE SWD WELL #1 @ 30-025-28695

Ms. Fawks,

The OCD has approved the Site Characterization and Remediation Plan for incident # NRM2008661323 NC STATE SWD WELL #1 @ 30-025-28695 with the following conditions of approval:

- The floor and sidewalls of the excavated area will be advanced until laboratory analytical results indicate impacted soil affected above the NMOCD Closure Criteria has been removed. Be advised, that the values for the determination of the horizontal impact -the edges of a liquid release- are derived by either "background" value or 600 mg/Kg for chlorides. Wall samples should be below 600 mg/Kg, or background, for chlorides.
- The proposed alternative sampling plan for this site is approved.

The signed C-141 can be found in the online image data base under the incident # Thank you,

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

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