

STATE OF
COLORADO**Doc# 02573005**
Email Correspondence
Facility ID 374696
20190612

Heil - DNR, John <john.heil@state.co.us>

Form 27 for TEP's KP 22-16 Pit Closure Submitted - Doc. Number 402071332

4 messages

Mike Gardner <MGardner@terraep.com>
To: John Heil <john.heil@state.co.us>

Wed, Jun 12, 2019 at 7:50 AM

Good Morning John,

As we discussed, this is just a quick note to let you know that I have submitted the above Form 27 for your review. The facility ID for the pit being closed is 374696. If you could please review this document at your earliest opportunity ... it would be greatly appreciated. We have equipment staged at the location and are ready to proceed with closure activities upon your concurrence. Please let me know if you have any questions.

Thank you.

Mike Gardner

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Heil - DNR, John <john.heil@state.co.us>
To: Mike Gardner <MGardner@terraep.com>
Cc: Alex Fischer - DNR <alex.fischer@state.co.us>

Wed, Jun 12, 2019 at 10:52 AM

Hello Mike,

I am currently reviewing the F27 Supplemental that you sent over for the TEP's KP-22-16 Pit and a few issues have caught my eye:

1. background SAR values range from 0.045-0.035 and the provided sample results range from 37-87.
2. background EC values range from 0.41-1.4 and the provided sample results range from 6.0-14.

The magnitude of difference between the background values and the provided sample results, along with Rule 910.3.D warrant me to keep this remediation open until those issues can be addressed. I will be talking with Alex today to figure out a way to proceed with this remediation.

Please provide the depths for the sample locations so I can get a better understanding of the situation.

Thanks,
[Quoted text hidden]

--

John Heil
Environmental Protection Specialist



COLORADO
Oil & Gas Conservation
Commission
Department of Natural Resources

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Mike Gardner <MGardner@terraep.com>
To: "Heil - DNR, John" <john.heil@state.co.us>
Cc: Alex Fischer - DNR <alex.fischer@state.co.us>

Wed, Jun 12, 2019 at 11:22 AM

John,

The pit bottom sample location is probably 20' bgs, and each of side wall locations were collected approximately 5' up from the bottom ... therefore all of the sidewall sample points are ~ 15' bgs. In all of the locations, these elevated inorganic readings will easily be covered by 15 – 20 feet of clean fill which should easily fulfill the > 3-feet guidance in FAQ #32. I suspect that the inorganics are high simply because the sample points were all collected from lower locations within the pit.

I have two questions:

- If it would help, I can collect another round of inorganic samples from higher up on the side walls, yet still below the 3-foot mark below ground surface. Would that be of any help in this situation?
- Secondly, could you elaborate more on your comment about the magnitude of the difference between the background value and the actual sample value? Is there a "quantitative limit" on the difference in magnitude that is acceptable / allowed, and if so, what is it?

As you can see from the lab data, there are virtually no organics or BETX constituents identified in any of the samples. The main thing that we are seeing here are indications of salt impacts from the produced water in the deeper portions of this pit, but these areas will be safely covered with many feet of clean fill dirt. As per FAQ #32 ... "elevated levels of pH, SAR, and EC in deeper soils should not adversely affect the successful reclamation of the site, which is the objective of these concentrations levels."

I'm available to have a discussion with you and Alex if it would help us to figure out a path forward on this.

Mike Gardner

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