



KAFB BFFS
ST-106/SS-111
Bioremediation Pilot Test
and LNAPL

From: [Cobrain, Dave, NMENV](#)
To: [Pierard, Kevin, NMENV](#)
Subject: RE: Bioremediation Pilot test comments
Date: Thursday, September 17, 2020 2:30:15 PM

The comment is not part of the scope of the pilot test true, but the comment asks them to prepare a work plan, that is not part of the bioremediation pilot test report, to determine the extent of vapor phase contamination. The work plan doesn't rely on the pilot test. If you want to wait until they verify that the pilot test is successful or not and then do it, that will add 2+ years to the CME schedule. No matter what the pilot test results indicate, they still have to determine the extent of contamination in all media before they can submit a CME. Getting them started now, helps keep the schedule, waiting until this pilot test is complete will result in a delay in the schedule for something they have to do anyway.

From: Pierard, Kevin, NMENV <Kevin.Pierard@state.nm.us>
Sent: Thursday, September 17, 2020 1:42 PM
To: Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>
Cc: Suzuki, Michiya, NMENV <Michiya.Suzuki@state.nm.us>; Andress, Lane, NMENV <Lane.Andress@state.nm.us>
Subject: RE: Bioremediation Pilot test comments

As I said the concern with the comment is it a scope issue, that is KAFB will come back to us and say this comment is beyond scope. I agree with you that we will need to address extent at some point, assuming the pilot test was successful.

We could include the comment as advisory, essentially saying the bioremediation pilot confirmed the technology works and if this is considered a viable technology that will move forward to the CME phase more information will be necessary concerning the extent of contamination, and leave it at that – no revision to the report etc.

From: Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>
Sent: Thursday, September 17, 2020 12:15 PM
To: Pierard, Kevin, NMENV <Kevin.Pierard@state.nm.us>
Cc: Suzuki, Michiya, NMENV <Michiya.Suzuki@state.nm.us>; Andress, Lane, NMENV <Lane.Andress@state.nm.us>
Subject: Bioremediation Pilot test comments

Kevin,

See the original comment and your and Stephanie's comments below. I see a problem with taking this comment out of the letter. If the issue of extent isn't addressed, then the CME can't be submitted because you can't select any remedy without having fully defined the extent of contamination. If you haven't determined the requirements for implementation which includes having defined the extent of contamination, you can't evaluate the feasibility of a remedy since you don't know what it is you need to remediate. The sooner a work plan is

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prepared to address the issue of extent, the better. This should be addressed in this letter and in any other letter that's evaluating remedial options. The sooner the Air Force fully defines the extent of contamination, the sooner the CME can be prepared.

Dave

2. Section 1.2, Bioventing Pilot Test Objectives and Scope, page 1-1

Permittee Statement: "The bioventing pilot test is being performed to evaluate the feasibility of this technology for the Corrective Measures Evaluation Report."

NMED Comment: In order to maximize the effectiveness of a selected remedial technology, delineation of the extent of hydrocarbon contamination is crucial. In order to discern whether this is a feasible technology for purposes of the corrective measures evaluation (CME), the Permittee must clarify whether or not the extent of contamination has been fully delineated. Please either confirm that the extent of contamination has been fully delineated or submit a work plan to delineate the extent of the vadose zone contamination (e.g., Laser-Induced Fluorescence) with the revised Report, if necessary.

Stephanie's comment:

Does this need to be confirmed in this report if the purpose is to evaluate feasibility?

Kevin's comment:

This is a scope issue. This is a pilot only, I think your question might be related to scaling up the technology. That would come later and I am not certain it is worthwhile to bring this up here. Possibly some language like "In order to fully ascertain the feasibility of this technology the full extent of contamination will need to be determined. No revision is necessary."