



KAFB-BFFS
ST-106/SS-111
From AQS
Re: AF request to
not install GWM well
Drilling in Same Area

From: [sbrandwe](#)
To: [Andress, Lane, NMENV](#)
Subject: [EXT] Re: FW: Response to your request for a summary of the step-out boring issue
Date: Friday, December 4, 2020 12:21:19 PM

Lane,
Here's some thoughts:

1. The well will help define the area of the highest concentration of contaminants in the groundwater and is in the area of highest LNAPL concentrations in the past. Refinement of the knowledge of highest concentrations should be considered for defining future plans and determining time duration of cleanup. This well is a great opportunity to gain this information relatively cheaply and has no drawbacks to the technical nature of the project.
2. The well will supply the only occasion of geophysical log within a cored borehole. This is extremely important in coming up with a competent conceptual site model. All previous site models and the present sequence stratigraphy model are found wanting or downright unacceptable.
3. The AF had plenty of time to think about this situation. In order to "minimize and reduce the time to get the CME phase of project" the Air Force should not wait to the last minute to try to not do something they agreed to do in an approved work plan. Future requests will be made If NMED thinks it is necessary for adequate completion of necessary steps toward cleanup even if "additional modifications or drilling requests will delay the completion of RFI Phase 2 project completion by several more years. NMED may not agree that "sufficient data exist in multiple horizons both on base and off that the nature and extent of contamination has been satisfied" until it reviews a complete RF report!. This well may help insure that sufficient data exists.

Sid

----- Original Message -----

From: Andress, Lane, NMENV <Lane.Andress@state.nm.us>
To: sbrandwe <sbrandwe@q.com>
Cc: Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>, Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us>
Sent: Fri, 04 Dec 2020 10:57:59 -0500 (EST)
Subject: FW: Response to your request for a summary of the step-out boring issue

Thanks for your write up Sid! Here is the AF request to not install a GMW.

KAFB5154



From: Pierard, Kevin, NMENV <Kevin.Pierard@state.nm.us>

Sent: Friday, December 4, 2020 8:20 AM

To: Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>; Andress, Lane, NMENV <Lane.Andress@state.nm.us>; Murphy, Robert, NMENV <Robert.Murphy@state.nm.us>

Subject: FW: Response to your request for a summary of the step-out boring issue

Please develop a response that I can send Kate. I think the focus should be on the 4th para in her email (An additional monitoring well at this location) based on our discussion yesterday. Please cite the workplan an approval language to the extent possible and outline our rationale. Given the timing I will need the response today. thanks

From: LYNNES, KATHRYN D HQE USAF AFGSC 377 MSG/SAF/IEE
<kathryn.lynnes@us.af.mil>

Sent: Thursday, December 3, 2020 2:46 PM

To: Pierard, Kevin, NMENV <Kevin.Pierard@state.nm.us>

Cc: SEGURA, CHRISTOPHER G GS-14 USAF AFCEC/CZO

<christopher.segura.2@us.af.mil>; KOTTKAMP, SHEEN T GS-13 USAF AFCEC AFCEC/CZOW <sheen.kottkamp.1@us.af.mil>;

GILLESPIE, JOHN L GS-14 USAF HAF AFCEC/CZTE <john.gillespie.3@us.af.mil>;

Stapleton, Mark <Mark.Stapleton@noblis.org>; Stringer, Stephanie, NMENV

<Stephanie.Stringer@state.nm.us>

Subject: [EXT] Response to your request for a summary of the step-out boring issue

Hi Kevin:

As we discussed during our 01 December 2020 conference call, the Air Force is proposing to abandon the KAFB-106S10 step-out boring rather than completing it as a monitoring well. A summary of the rationale for this change is provided below.

According to the approved work plan, Work Plan For Data Gap Monitoring Well Installation KAFB-106248 to KAFB-106252 and KAFB-106S10 Bulk Fuels Facility,

<Lane.Andress@state.nm.us>; Murphy, Robert, NMENV <Robert.Murphy@state.nm.us>
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Sent: Thursday, December 3, 2020 2:46 PM
To: Pierard, Kevin, NMENV <Kevin.Pierard@state.nm.us>
Cc: SEGURA, CHRISTOPHER G GS-14 USAF AFCEC/CZO <christopher.segura.2@us.af.mil>; KOTTKAMP, SHEEN T GS-13 USAF AFCEC AFCEC/CZOW <sheen.kottkamp.1@us.af.mil>; GILLESPIE, JOHN L GS-14 USAF HAF AFCEC/CZTE <john.gillespie.3@us.af.mil>; Stapleton, Mark <Mark.Stapleton@noblis.org>; Stringer, Stephanie, NMENV <Stephanie.Stringer@state.nm.us>
Subject: [EXT] Response to your request for a summary of the step-out boring issue

Hi Kevin:

As we discussed during our 01 December 2020 conference call, the Air Force is proposing to abandon the KAFB-106S10 step-out boring rather than completing it as a monitoring well. A summary of the rationale for this change is provided below.

According to the approved work plan, Work Plan For Data Gap Monitoring Well Installation KAFB-106248 to KAFB-106252 and KAFB-106S10 Bulk Fuels Facility, Solid Waste Management Units ST-106/SS-111 dated September 2020, the primary objective of the source area part of this effort was to identify the single point of discontinuity where the LNAPL from the fuel leak migrated down to the water table. This would be achieved by identifying the single point where no upper or lower clay units exist and, based on Figure 5.1 in the approved work plan, would be declared the migration pathway.

The work plan identified an initial boring location and allowed for a step-out boring if a discontinuity was not found. The initial boring location encountered a significant clay layer, which was not expected based upon both NMED's and

the Air Force's review of the available logs. As result NMED and the Air Force held a conference call on 13 November 2020 to select a step-out boring location. The Air Force's subject matter expert(s) indicated during the 13 November 20 conference call with NMED that the step-out location that had the greatest chance of identifying the point of discontinuity was west of the proposed coring location KAFB-106V3 (see attached Tech Memo). NMED instead directed the Air Force to drill the step-out boring KAFB-106S10 in the location shown on the attached figure. Unfortunately, the KAFB-106S10 step-out boring also encountered significant clay at both the upper and lower units and failed to achieve its overall objective. In other words, neither location identified the LNAPL migration pathway to the aquifer.

An additional monitoring well at this location will provide no additional resolution to the nature and extent of contamination at this site. KAFB already has a significant number of monitoring points surrounding the KAFB-106V3 coring location as well as KAFB-106S10 step-out location (see Figures 2.2 and 2.3 of the approved work plan). The BFF monitoring network in this area is comprised of 35 monitoring wells. Seventeen of those wells have submerged screens, which are available to monitor the dissolved phase plume in the source area. Eighteen monitoring wells that have screens extending above the water table which are available for both LNAPL monitoring and dissolved phase plume monitoring. In addition, the KAFB-106S10 step out location is in close proximity to KAFB-106154-484 which is not a submerged point.

Lastly, of the 35 groundwater monitoring wells, seven were coring locations that were completed as groundwater monitoring wells that were used to determine submerged saturated residual concentrations on-base. The addition of the saturated matrix coring sampling at the KAFB-106S10 step-out location will provide valuable information for conceptual site model and the overall mass determination for the Corrective Measure Evaluation (CME).

Finally, the Air Force posits that upon the completion of the coring at KFB-106S10 step-out and the installation of the five additional data gap monitoring wells at the approved target locations, that the sufficient data exist in multiple horizons both on base and off that the nature and extent of contamination has been satisfied. Any additional modifications or drilling requests will delay the completion of RFI Phase 2 project completion by several more years.

With the abundance of monitoring wells and coring locations in the immediate subject area, the USAF does not believe that an additional groundwater monitoring well at the KAFB-106S10 step-out location is necessary and will provide no additional illumination on the nature and extent of contamination in the source area. The Air Force requests that upon the completion of the KAFB-106S10, given its redundant nature, that the well casings not be installed and the well borehole be properly abandoned. Given the time sensitive nature of this request (coring of KAFB-106S10 step-out is scheduled to be

completed by Monday 7 December 20), we would like to receive your concurrence on this request by COB on 7 December 20.

Thank you for taking the time to meet with us and to work collaboratively to resolving this friction point. We hope that additional meetings and conversations can be conducted like this in the future to minimize and reduce the time to get the CME phase of project.

Regards,

Kate

Kathryn (Kate) Lynnes

Senior Advisor, SAF/IEE

Bulk Fuels Facility Remediation

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