



KAFB BFFS  
ST-106/SS-111  
Soil Vapor Sampling

**From:** [Wear, Benjamin, NMENV](#)  
**To:** [Cobrain, Dave, NMENV](#)  
**Subject:** RE: Analytical method and data quality issues raised during 06 January meeting  
**Date:** Friday, January 15, 2021 9:32:00 AM

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Agreed. And KL wants to change the permit language, and KP and SS would likely go along with it.

**Ben Wear**  
Environmental Scientist Supervisor  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6313  
(505) 476-6041

**From:** Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>  
**Sent:** Friday, January 15, 2021 9:23 AM  
**To:** Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us>  
**Subject:** RE: Analytical method and data quality issues raised during 06 January meeting

First, no one contended that the samples were diluted in the field but if it happened the samples would be invalid. Second, the Permit does not care if DoD or DOE approve of a test method, the requirement is for EPA and NELAP requirements to be met. The convenience of DoD and DOE to establish requirements that rule out new or improved analytical methods is compliance avoidance.

**From:** Wear, Benjamin, NMENV <Benjamin.Wear@state.nm.us>  
**Sent:** Friday, January 15, 2021 9:13 AM  
**To:** Cobrain, Dave, NMENV <dave.cobrain@state.nm.us>  
**Subject:** FW: Analytical method and data quality issues raised during 06 January meeting

FYI

**Ben Wear**  
Environmental Scientist Supervisor  
Hazardous Waste Bureau  
New Mexico Environment Department  
2905 Rodeo Park Drive East, Building 1  
Santa Fe, NM 87505-6313  
(505) 476-6041

**From:** Wear, Benjamin, NMENV  
**Sent:** Friday, January 15, 2021 9:13 AM  
**To:** Pierard, Kevin, NMENV <Kevin.Pierard@state.nm.us>; Andress, Lane, NMENV <Lane.Andress@state.nm.us>  
**Subject:** RE: Analytical method and data quality issues raised during 06 January meeting

KAFB5163



Some things to consider before the next meeting.

As we are requiring the FWDA to evaluate all laboratory/method options to achieve meeting the screening levels with analytical detection limits, KAFB should be required to do the same. I found two labs that could meet, or better meet, the requirement. KAFB immediately shot them down in an email with no supporting information. We have required FWDA to contact all DoD ELAP certified labs in their effort. KAFB should be required to do the same. We don't accept bad data bc someone tells us they can't meet the requirements. They have to demonstrate that they made a concerted effort to find a lab/method that is appropriate. It is not NMED's job to find a lab/method for them. There are approximately 64 DoD certified labs. KAFB needs to contact more than one of them (and preferably all) to find a lab/method that can achieve the requirements. If none of the labs can meet the requirement, that's another issue, but KAFB needs to demonstrate that they made the effort to meet that requirement. We all know that KL makes things up. Taking her word for anything is not recommended.

Also, as I stated previously, while there isn't a huge issue if they don't meet the requirements in the highly contaminated areas because they are not pushing for CAC there, yet, the problem comes when they bias and/or misrepresent this data and try to use the biased misrepresentations to prove that there are no issues elsewhere. That is exactly what the Permit strictly prohibits. There is nothing to work on regarding the Permit language...this is a data quality requirement for all of our facilities. Whether dilution is required or not, the data quality requirement does not change.

The main question we should be asking KL is, "So, you would be OK if your drinking water supplier used a laboratory that had a detection limit for benzene that was 50 mg/L when the MCL is 5 µg/L and they just reported the value as ND?" This is exactly what the AF has been doing and have been presenting to the public and NMED as ND, which is interpreted by those who don't know better to mean zero. I spoke with an ALS representative (the lab that the AF uses), who when I described this situation, stated that it was a complete misrepresentation of the data.

We are wasting a lot of time arguing about minutia when the AF could be out installing wells and getting data that can be relied upon and that NMED can defend. This seems to be a deliberate method to delay the work. We have taken several steps backwards on the Shallow Soil Vapor project...we were discussing issues with the approach of the work plan, now we're back entertaining arguments about whether a work plan is needed. Everyone but the AF agrees that they need to take shallow vapor samples below or as close to below the structures in question, in contact with conduits where vapors migrate, and under large paved areas. This will likely be the lowest cost project related to the BFFS. Five direct push sampling point locations would likely cost less than 10K all said and done and reported on. And we've now agreed to accept documents that are not appropriate (conceptual outline) because KL does not want the public to know that they are making their best effort not to look where contamination is most likely.

Kate has still not provided the report and approval that she discussed in the last meeting after they took a break. We have no record of what she alluded to, she claimed she had something that would refute my point that there was widespread vapor contamination under the VA and neighborhoods

according to their report, then we don't see or hear anything else about it. This is why meetings are useless. We are forced into a position of arguing each bit of information as they present it, then when we do, Kate's tactic is to "set that aside for now" claiming something out there that we don't know or don't understand, then dropping it afterwards. We are stuck in an endless loop of arguing minutia and setting aside important issues.

Thanks,

**Ben Wear**  
**Environmental Scientist Supervisor**  
**Hazardous Waste Bureau**  
**New Mexico Environment Department**  
**2905 Rodeo Park Drive East, Building 1**  
**Santa Fe, NM 87505-6313**  
**(505) 476-6041**

**From:** Pierard, Kevin, NMENV <[Kevin.Pierard@state.nm.us](mailto:Kevin.Pierard@state.nm.us)>  
**Sent:** Friday, January 15, 2021 7:50 AM  
**To:** Wear, Benjamin, NMENV <[Benjamin.Wear@state.nm.us](mailto:Benjamin.Wear@state.nm.us)>; Andress, Lane, NMENV <[Lane.Andress@state.nm.us](mailto:Lane.Andress@state.nm.us)>  
**Subject:** FW: Analytical method and data quality issues raised during 06 January meeting

FYI. We can discuss this more at next week's meeting

**From:** LYNNES, KATHRYN D HQE USAF AFGSC 377 MSG/SAF/IEE <[kathryn.lynnes@us.af.mil](mailto:kathryn.lynnes@us.af.mil)>  
**Sent:** Thursday, January 14, 2021 3:13 PM  
**To:** Stringer, Stephanie, NMENV <[Stephanie.Stringer@state.nm.us](mailto:Stephanie.Stringer@state.nm.us)>; Pierard, Kevin, NMENV <[Kevin.Pierard@state.nm.us](mailto:Kevin.Pierard@state.nm.us)>  
**Cc:** KOTTKAMP, SHEEN T GS-13 USAF AFCEC AFCEC/CZOW <[sheen.kottkamp.1@us.af.mil](mailto:sheen.kottkamp.1@us.af.mil)>; WORTMAN, RYAN J GS-13 USAF AFCEC AFCEC/CZO <[ryan.wortman.3@us.af.mil](mailto:ryan.wortman.3@us.af.mil)>; SEGURA, CHRISTOPHER G GS-14 USAF AFCEC/CZO <[christopher.segura.2@us.af.mil](mailto:christopher.segura.2@us.af.mil)>; HAMLETT, PAMELA P GS-13 USAF HAF AFCEC/CZTE <[pamela.hamlett@us.af.mil](mailto:pamela.hamlett@us.af.mil)>; Stapleton, Mark <[Mark.Stapleton@noblis.org](mailto:Mark.Stapleton@noblis.org)>  
**Subject:** [EXT] Analytical method and data quality issues raised during 06 January meeting

Good Afternoon:

As we discussed earlier this week, the Air Force has looked into the analytical method and data quality issues raised during 06 January meeting. I am working with our counsel to develop a proposal to address the permitting question in Part 6.5.18 but I wanted to share the technical information our experts have pulled together.

The Air Force stands behind the data in question. Samples are collected according to NMED approved work plans and analyzed by Environmental Laboratory Accreditation Program (ELAP) accredited labs using EPA methods. No soil vapor or groundwater samples are diluted in the field

prior to submission to certified environmental laboratories. The TO-15 soil vapor method requires that the sample container be purged to remove an aliquot of the soil vapor sample out of the Summa Canister for analysis. If a sample contains a high concentrations of target analytes the EPA Method prescribes that the samples must be diluted as part of the analytical process in order to achieve optimal accuracy for the analytes (TO-15 Method Section 10.8.6). That is, the dilution is performed in accordance with the method requirements.

During the shallow soil vapor meeting, Ben Wear stated he knew of a an Air Toxics analytical procedure incorporating a "slice method" that would resolve the J-flag and dilution issues we encounter for some BFF samples. According to the Technical Director at Eurofins Air Toxics, the TO-15 HSS method is not DoD ELAP certified and is, therefore, not approved for DoD or DOE projects.

The email that Ben Wear sent as a follow up to the 06 January call stated that the ALS laboratory has a TO-15 SIM method that is able to achieve reporting limits over an order of magnitude below the method the Air Force currently uses. We contacted ALS and they informed us that their SIM instruments are reserved for ultra-low level, trace analysis of indoor/outdoor air. ALS never uses the SIM instruments for higher concentration samples like the BFF's because there is a significant risk that the contamination levels from BFF samples would damage the SIM instrument or render it inoperable for some time. Therefore, the TO-15 SIM method in unsuitable for BFF.

I hope this resolved the technical questions. I look forward to working with you both on the permit language.

Kate

Kathryn (Kate) Lynnes  
Senior Advisor, SAF/IEE  
Bulk Fuels Facility Remediation  
2000 Wyoming Blvd. SE  
Kirtland AFB, NM 87117  
Office: 505-846-8703