



Mike DeWine, Governor
Jon Husted, Lt. Governor
Laurie A. Stevenson, Director

June 3, 2021

TRANSMITTED ELECTRONICALLY

Mr. Jay Trumble
Project Engineer
Engineering Division
Louisville District
U.S. Army Corps of Engineers
Youngstown Air Reserve Station 600
Dr. Martin Luther King Jr. Place
Louisville, KY 40202

RE: Youngtown Air Reserve Station
Remediation Response
Plans
Federal Facilities
Trumbull County
ID # 278000857002

Subject: Review of the Draft Final Uniform Federal Policy (UFP) Quality Assurance Project Plan (QAPP) Site Inspection Youngstown Municipal Airport (YMA), Formerly Used Defense Site (FUDS), Property G05OH0296

Dear Mr. Trumble:

The Ohio Environmental Protection Agency (Ohio EPA) received the “Draft Final UFP QAPP Site Inspection for the Youngstown Municipal Airport, FUDS Property G05OH0296” dated February 2021 on March 25, 2021. The document was prepared by the PARS-Gannett Fleming Joint Venture (The JV) on behalf of the United States Army Corps of Engineers. The purpose of the document is to support the finalization of a Site Inspection (SI). Since a previous SI was initiated in 2014/2015, additional work was required at two other Areas of Concern (AOCs): the former Old Fire Training Area (OFTA) and the former Drum Storage Area (DSA). This February 2021 YMA FUDS Draft UFP-QAPP addresses these two additional AOCs.

Ohio EPA provides the following comments on the QAPP.

Comments

Comment 1: Evaluation of potential release of AFFF-derived per- and polyfluoroalkyl substances (PFAS)

While the UFP-QAPP states that “Recognizing that the OFTA was used for burning of fuels as part of fire training activities, and that [trichloroethylene] TCE was detected in groundwater during the 2014/2015 SI, subsurface soils and groundwater will be evaluated for [benzene, toluene, ethylbenzene, and xylenes] BTEX, TCE and related daughter products, and select [polycyclic aromatic hydrocarbons] PAHs (fuel combustion by-

MR. TRUMBLE
YOUNGSTOWN AIR RESERVE STATION
JUNE 3, 2021
PAGE 2 OF 4

products detected during the 2014/2015 SI phase) to determine whether these chemicals are potential contaminants. To confirm that no fuel-related impacts exist in groundwater at the DSA, groundwater will be sampled and evaluated for fuel-related chemicals” (Page 24, Lines 635-640), there is no mention of evaluation of the OFTA for suspected aqueous film-forming foam (AFFF) release areas.

The 2014/2015 SI results do not appear to have addressed whether a potential release of AFFF-derived per- and polyfluoroalkyl substances (PFAS) occurred in ground water, surface water, surface soil, subsurface soil, or sediment due to historical fire training activities at OFTA. The former contents of the DSA drums may have contained AFFF or AFFF-contaminated materials. Separate AFFF investigations at Youngstown Air Reserve Station (YARS) have included evaluation of the Current Fire Training Area (CFTA) and the Former Fire Training Area (FFTA), which are separate and different from the Old Fire Training Area (OFTA) addressed in this current YMA UFP-QAPP. Please clarify how PFAS-related compounds have been ruled out as potential COCs at the OFTA and/or the DSA.

Comment 2: Soil Boring/Monitoring Well Installation Locations

Based on Figure 7 of the 2014/2015 SI report, MW-2 was located near the OFTA and encountered native clay at 2.5 feet below surface grade (bsg). However, soil borings B-6 and B-7 encountered native clay at five feet bsg. Additional wells in the OFTA area should include another source well deep enough to evaluate the lowest extent of the former OFTA burn pit area and potential ground water impacts associated with it (or provide clarification on the location/depth of MW-2 and if further evaluations will be within the burn pit area). Figure 4 of the February 2021 YMA FUDS Draft UFP-QAPP denotes six proposed new well installation locations around the OFTA area, while previous text in the submittal indicates only five new wells to be installed. Please clarify how many new wells are planned for installation. Additionally, while the Figure 4 denotes one upgradient well (based on 2015 SI Report ground water flow directions), it may be beneficial to install some of the perimeter wells more in cross-gradient locations to provide better all-around coverage of the OFTA area. Also, if soil boring locations are advanced prior to well installations and subsurface lithology is further defined, there may be an opportunity to install one of these proposed wells as a deeper source well within the lowest points of the former excavated OFTA area (as previously mentioned).

Comment 3: Appendix B Standard Operating Procedure (SOP) #1 Question – Project-Specific SOP

Appendix B PARS Standard Operating Procedures SOP #1 (electronic page #285/309) states “This Standard Operating Procedure (SOP) describes the procedures for obtaining permits and clearances required for fieldwork at the former Nike CD-78 Launch Area in Oxford, Ohio.”

While this may be a typo on this page only, please verify that the remaining SOP sections are applicable to the YMA FUDS property and project.

Comment 4: Appendix B SOP #7 Question – Well Installations

Appendix B PARS Standard Operating Procedures SOP #7 (Section 7.2.2, electronic page #298/309) states that a bentonite seal will be placed from the filter pack to four feet above the well screen and extend to within five feet of the surface grade, and that surface completion of the wells will be Portland cement with either a seven-foot-long steel stick-up casing or a surface flush mount well cover. This differs from text (QAPP Worksheet #17, page 43 of 84, lines 1072-1088) indicating only a one-foot-thick bentonite seal, and cement-bentonite grout to surface with a locking surface cover.

Please clarify which methods will be utilized, in accordance with Ohio EPA Technical Guidance Manual (TGM) for Hydrogeologic Investigations and Groundwater Monitoring (as stated in QAPP Worksheet #17, lines 1073-1074).

Comment 5: Appendix B SOP #8 Question – Ground Water Sampling Methodology

Appendix B PARS Standard Operating Procedures SOP #8 (Section 8.0, electronic page #303/309) states that ground water purging and sampling collection methods will be completed in accordance with Ohio EPA Technical Manual for Ground Water Investigations Chapters 10 Groundwater Sampling. However, Sections 8.2.4.1 Low-Flow Purge Method references submersible pump purging and 8.2.5 Analytical Sample collection references ground water sample collection by submersible pump or bailer. Collection of volatile organic compound (VOC) samples per the Ohio EPA TGM prefers low-flow methods such as air-bladder or other methods that potentially result in better VOC sample collection (less aeration and more representative VOC results).

Please clarify the groundwater sample collection in accordance with Ohio EPA TGM methodology and adjust the SOP as necessary (also including appropriate AFFF/PFAS/PFOA sampling methodology if needed).

Comment 6: Multi-incremental Sampling

It appears that a triplicate multi-increment sample will be collected from one of the intervals in the soil sampling at the OFTA. Clarify if a relative standard deviation (RSD) will be calculated to statistically evaluate the triplicate data. It is recommended that an RSD be calculated per Hawaii's guidance on multi-increment sampling: <http://hawaiidoh.org/tgm-Content/0402a.aspx?f=T>.

Comment 7: Replicates

Clarify how the representative concentration between the three replicates at the OFTA will be calculated. Ohio EPA recommends calculating a 95% upper confidence limit (UCL) of the mean as the representative concentration between the three replicates.

MR. TRUMBLE
YOUNGSTOWN AIR RESERVE STATION
JUNE 3, 2021
PAGE 4 OF 4

Conclusion

Ohio EPA may provide additional comments if actual conditions or circumstances are different from those represented, or if additional or newly discovered conditions or circumstances are subsequently identified.

As a precautionary response to COVID-19, Ohio EPA is currently operating with most staff working remotely. During this time, we will not be issuing hard-copy mail. This letter is an official response from Ohio EPA that will be maintained as a public record.

If you have any questions regarding this letter, you may contact me at (330) 963-1292, or via email at kevin.palombo@epa.ohio.gov.

Sincerely,



Kevin M. Palombo
Site Coordinator
Division of Environmental Response and Revitalization

KP/sc

ec: Natalie Oryshkewych, Ohio EPA, DERR, NEDO
Liam McEvoy, Ohio EPA, DERR, NEDO
Bob Princic, Ohio EPA, DERR, NEDO
Tom Schneider, Ohio EPA, DERR, SWDO
Corin Fogle, Ohio EPA, DERR, CO