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TO: michael.oettinger.2@us.af.mil and william.myer.2@us.af.mil, Air National Guard
FROM: Lenny Siegel, Center for Public Environmental Oversight
SUBJECT: Stewart ANG Base EE/CA
DATE: September 7, 2025

Thank you for the opportunity to comment on the July 2025 "Engineering Evaluation/Cost Analysis [EE/CA] Non-Time Critical Removal [NTCRA] of Per- and Polyfluoralkyl Substance [PFAS] in Groundwater and Stormwater Infrastructure, Stewart Air National Guard [ANG] Base, Newburgh, Orange County, New York.[1] I have been asked by a member of the RAB to review the document, and I have agreed, not just because the Removal Action is necessary to protect the local community, but because each PFAS Remedy or Removal Action implemented by a Defense Component sets a national precedent.

My comments will focus on the groundwater response. In summary, I support the selected alternative for removing and destroying PFAS in groundwater released from the base. However, more should be specified to protect the local drinking water supply and public health.

On the positive side, I support the selected alternative, primarily the Foam Fractionation and Hydrothermal Alkaline Treatment. For several years, the Defense Department has been supporting the development of safe, thorough PFAS destruction technologies. However, installations and activities appear reluctant to implement innovative approaches. I am pleased to see these two technologies selected for the high-profile Stewart Base.

However, the description of the use of Granular Activated Carbon (GAC) to "polish off" the treated groundwater is incomplete. It states (page 3-10), "Spent GAC will be removed and disposed of at a hazardous waste disposal facility." What "disposal" method will be used? How

[1] https://www.105aw.ang.af.mil/Portals/6/documents/250813_Final%20Engineering%20Evaluation_Cost%20Analysis_Stewart%20ANGB.pdf

can the neighbors of the hazardous waste disposal facility be assured that they are going to be protected from additional PFAS exposure? Is the EE/CA deliberately vague because the Air National Guard hopes that Congress or the Trump Administration will overturn the ban on incineration?

Page 2-2 of the EE/CA refers to the Assistant Secretary of Defense [ASD] Memorandum dated September 3, 2024[2] to justify setting Removal Action Objectives (RAOs) at three times the applicable drinking water standards. I and other environmental leaders have objected to that policy in general, but it is particularly unacceptable at Stewart. As noted on page 2-2 of the EE/CA, the purpose of that weakening factor was to set priorities among impacted private wells. However, adopting the less protective RAOs at Stewart could impact the response. If indeed there are locations where the groundwater concentrations of target PFAS are between the drinking water standards and three times those standards, the EE/CA should identify those locations and explain how the use of the less protective RAOs to guide cleanup decisions might impact the response. This is particularly important because PFAS pollution from the Stewart ANG Base has indeed impacted public water supplies, as well as private wells, so drinking water standards should apply. Furthermore, using the drinking water standards directly as objectives may be efficient in the long run because, as the EE/CA suggests on page 5-1, the selected alternative could be part of a permanent remedy.

I was pleased to read in the EE/CA (pages 3-8 & 3-9), "Performance and compliance monitoring are necessary to assess whether additional response actions are needed to mitigate potential health risks in the future." That's good, but there is no description of the monitoring strategy, which is essential to evaluating the success of the Removal Action. What PFAS analytes will be targeted? What analytical method will be used? Will total organic fluorine be measured? Data from past sampling at the Stewart Base show locations where the concentrations of other PFAS significantly exceeded measured values of PFOS and PFOA.[3] Roger Brewer's work shows that exposure risk is a function of all PFAS, not just the two well-known compounds for which there are drinking water standards. [4]

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[2] Assistant Secretary of Defense, Energy, Installations and Environment, "Prioritization of Department of Defense Cleanup Actions to Implement the Federal Drinking Water Standards for Per- and Polyfluoroalkyl Substances Under the Defense Environmental Restoration Program," September 3, 2024. https://www.acq.osd.mil/eie/eer/ecc/pfas/docs/policies/epa-mcl-implementation-memo.pdf

[3] U.S. Army Corps of Engineers, "Phase I Per- and Polyfluoroalkyl Substances (PFAS) Remedial Investigation Uniform Federal Policy, Quality Assurance Project Plan, Addendum 1, Stewart Air National Guard Base, Newburgh, New York," March, 2025. https://extapps.dec.ny.gov/data/DecDocs/336089/Work%20Plan.HW.336089.2025-03-19.Stewart%20ANG%20PFAS%20RI%20QAPP_ADDENDUM%201_FINAL_with_Mobe_1_Results.pdf

[4] Roger Brewer, "Testing and Risk Assessment of Complex Mixtures of PFASs in Wastewater and Sludges," Healthy Water Solutions Conference, Syracuse, New York, May 2025. https://www.youtube.com/watch?v=AqNNY3F358o