REGION 7
LENEXA, KS 66219

Hannah Tompkins
Remediation Staff Engineer
Corteva Remediation Group
17990 Midvale Avenue N, Apt. 431
Shoreline, Washington 98133

Re: Supplemental Delineation Results, Lawrence Todtz Farm Landfill site, Camanche, Iowa;
Consent Decree (Civil Action No. 89-175-D-1)

Dear Ms. Tompkins:

The U.S. Environmental Protection Agency has reviewed the Supplemental Delineation Results, November 2023, dated April 4, 2024. Enclosed with this letter are the technical comments on the report. The report must be revised to address these comments and resubmitted for approval within 45 calendar days of your receipt of this letter. If you or your consultant would like to discuss any of these comments prior to revising the report, let me know and we will do so.

If you have questions about this matter or any others related to this site, you may reach me at (913) 551-7951 or at cook.charles@epa.gov.

Sincerely,

Digitally signed by Cook, Charles
Date: 2024.06.12 10:15:56 -05'00'

Charles Cook
Remedial Project Manager
Site Remediation Branch
Superfund and Emergency Management Division

Enclosure

cc: Mr. Matthew Graesch, IDNR
Mr. George Gregory, AECOM

EPA Comments
Supplemental Delineation Results, November 2023 Letter
Lawrence Todtz Farm Superfund Site

Comment Number	Comment Location	Regulator's Comment	PRP Response
1	Pages 4 and 5; Arsenic Results; page 10 Summary of Findings	EPA evaluated potential ecological risk due to PFAS by comparing arsenic concentrations in groundwater and surface water at the site to current chronic National Ambient Water Quality Criteria (NAWQC) for the protection of aquatic life (USEPA, 2022a; USEPA, 2022b). The maximum concentrations of dissolved arsenic in groundwater and surface water did not exceed current chronic NAWQC for protection of aquatic life (https://www.epa.gov/wqc/national-recommended-water-quality-criteria-aquatic-life-criteria-table). The maximum arsenic concentration was found at DU-10S (100 µg/L), which is below the chronic criteria of 150 µg/L. Arsenic was non-detect in surface water from Bandixon Lake. Revise to incorporate this evaluation into the appropriate sections of the report to provide a more detailed ecological evaluation of potential exposure to arsenic in surface water.	

2	**Pages 8-10**	**On April 10, 2024, EPA announced the final National Primary Drinking Water Regulation (NPDWR) for six PFAS; https://www.epa.gov/sdwa/and-polyfluoroalkyl-substances-pfas. This regulation established legally enforceable Maximum Contaminant Levels (MCLs) for PFOA, PFOS, PFHxS, PFNA, and HFPO-DA individually, and a Hazard Index MCL for PFAS mixtures containing at least two or more of PFHxS, PFNA, HFPO-DA, and PFBS (EPA, 2024c). Updated toxicity and slope factors, consistent with this regulation, have been applied to the Regional Screening Level (RSL) Calculator as part of the spring 2024 update (EPA, 2024a) and associated table development is underway.** **On April 19, 2024, the EPA announced that it was designating two types of PFAS, perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS) including their salts and structural isomers, as CERCLA hazardous substances. Information regarding the rulemaking is available from the Agency's Designation of Perfluorooctanoic Acid (PFOA) and Perfluorooctanesulfonic Acid (PFOS) as CERCLA Hazardous Substances web page; https://www.epa.gov/enforcement/pfas-enforcement-discretion-and-settlement-policy-under-cercla.** **(Continued below)**	

2	**(Continued from above)**	**Revise to include information regarding new PFAS regulations as appropriate for:** **a. All planning and reporting documents associated with PFAS investigation at this site should now integrate these MCLs and the spring 2024 RSLs (or more current), which apply toxicity and slope factors consistent with the final PFAS NPDWR and reflect the latest science.** **b. In addition, previously collected data of all media should be screened against these RSLs at an excess cancer risk of 1E-06 and a noncancer hazard quotient of 0.1 to account for cumulative risks.** **c. Based on this screening, the adequacy of current delineation efforts and the need for additional wells or sampling locations should be considered and, if necessary, the planning documents should be updated accordingly to ensure that the nature and extent of PFOA and PFOS are adequately characterized.** **d. Continue to apply the most current EPA regional screening levels, reflective of the latest science, in evaluating new and existing data, conducting investigation and delineation activities, assessing and mitigating risk, and decision making in general.**	

3	**Pages 8-10**	**Groundwater and surface water samples were analyzed for a limited list of PFAS compounds using Method 537 Modified, a modified drinking water method. Since planning was completed for this investigation, EPA finalized Method 1633, "Analysis of Per- and Polyfluoroalkyl Substances (PFAS) in Aqueous, Solid, Biosolids, and Tissue Samples by LC-MS/MS" (EPA, 2024d).** **Future PFAS analyses should employ EPA Method 1633, which is more appropriate than a modified Method 537 drinking water method for the analysis of samples other than drinking water.**	
4	**PFAS data Page 6022**	**Analysis Method is listed as 537 (modified). As this is modification has created a non-standard method from the EPA Method 537.1, documentation of what the modifications need to be captured within the body of this report. Future readers of this report will not have sufficient information concerning the analytical method used to determine these results without full documentation of those modifications.** **Revise to include information regarding the analytical method modifications.**	

EPA Comments
Supplemental Delineation Results, November 2023 Letter
Lawrence Todtz Farm Superfund Site

5	**PFAS Results section of the main report Pages 8-10; PFAS data starting Page 6020; Certificates of analysis starting Page 6178**	**Table 3 & the PFAS Results section of the main report and the Supplemental Delineation analytical report contain different chemical synonyms and different naming conventions/abbreviations for the various PFAS. While a rigorous path to cross reference the different nomenclature might exist via checking the CAS numbers within the Certificates of Analysis, the 488 pages of text and figures within said Certificates creates an unreasonable barrier to finding congruency between the summary information presented at the beginning of the report and the raw data attached at the rear. This is especially relevant for the majority of private citizens whom are not expected to be professional scientists but are interested in reviewing the results.** **Revise to include information describing the difference in nomenclature between the different sections and a table detailing the crosswalk of the different nomenclature using the CAS numbers along with the chemical names/abbreviations from each section to ensure continuity between all parts of the report.**	

6	**Pages 8-10; PFAS Results; page 10 Summary of Findings**	**EPA evaluated potential ecological risk due to PFAS by comparing PFOA and PFOS concentrations in groundwater and surface water at the site to current draft chronic National Ambient Water Quality Criteria (NAWQC) for the protection of aquatic life (USEPA, 2022a; USEPA, 2022b). Maximum PFHxS, PFNA, PFBA, PFDA and PFBS concentrations were compared to surface water screening levels developed by Grippo et al. (2021).** **The maximum PFOS concentration in groundwater was found at DU-06S (7.1 µg/L), which is below draft aquatic life criteria (8.4 µg/L). The maximum PFOA concentration in groundwater was found at DU-06S (0.76 µg/L), which is also below the draft aquatic life criteria (94 µg/L). The maximum PFHxS concentration was found at 2023PZ-01 (0.047 µg/L), which is below the screening level (28.8 µg/L), and the maximum concentration of PFNA (0.018 µg/L) was found at 2023PZ-01, which is below the screening level (16.4 µg/L). Other PFAS compounds were non-detect with reporting limits below screening levels.** **(Continued below)**	

6	**(Continued from above)**	**Groundwater concentrations provide a starting point for evaluating potential surface water concentrations since surface water features at the site are heavily influenced by the groundwater table. However, one surface water sample was collected from Bandixon Lake to evaluate surface water directly. Detected PFOA (0.05 µg/L) and PFOS (0.52 µg/L) were below the current draft criteria. Other PFAS compounds were below detection limits with reporting limits below screening levels.** **Although PFOA and PFOS concentrations at the site do not appear to be above aquatic life criteria currently, it is important to keep in mind that final aquatic life criteria are still in development as additional data becomes available, and the draft criteria may be lower in the future. Also, there are other surface water features on-site that were not sampled. However, given that groundwater concentrations should be indicative of surface water concentrations across the site, there does not currently appear to be a concern in surface water.** **Revise to incorporate this evaluation into the report to provide a more detailed ecological evaluation of potential exposure to PFAS in surface water.**	
7	**Page 11 – Path forward**	**The EPA agrees that a meeting would be a preferred method to getting all parties to common understanding of the presented topics. Please begin the coordination efforts for this meeting. The EPA requests meeting notes be taken and submitted for review & acceptance to be added to the response-to-comment for this report.**	