

October 17, 2024

TODD GIBBS CM
EASTERN IOWA AIRPORT
2515 ARTHUR COLLINS PKWY SW
CEDAR RAPIDS IA 52404-8952

**Re: The Eastern Iowa Airport (CID) (2515 Arthur Collins Pkwy SW, Cedar Rapids, IA 52404-8952)
Contaminated Sites Database Site ID No. 2732
Meeting Regarding Next Steps/Phase 2.2 Report ([Doc #41823](#))**

Dear Mr. Gibbs:

The Iowa Department of Natural Resources (DNR), representatives of the Eastern Iowa Airport (CID), Foth Infrastructure & Environment, LLC, and Mead and Hunt met to discuss the recently submitted Phase 2.2 Report (the report) on September 26, 2024.

Topics covered in the meeting included the report scope and results, priorities for next steps, known or potential source areas, migration pathways, and receptors, as well as anticipated timelines for additional work.

A focus of DNR commentary during the meeting was the low number of samples taken from surface water discharges at the CID property boundary. Experience with PFAS chemicals and their mobility in the environment has shown that surface water and tile drain conveyance is of significant importance. It was anticipated that all of the drainage outfalls leaving the property would be tested for PFAS as part of the Phase 2.2 report. In the DNR letter of September 1, 2023 ([Doc #40859](#)), the following was required:

“A survey must be completed to locate all tile drains and surface water conveyance structures that assist in draining the CID property in all directions. Adequate sampling for PFAS of all tile drains and stormwater culvert outfalls leaving the CID property must also be completed.”

The present report includes test results for only three drainage features (two from the airport and one from a farm field). The two drainages sampled from the airport proper were both located on the north side; while it is anticipated that PFAS is leaving the site to the north, the most significant offsite impacts appear to be south of the airport at this time. It will be necessary to sample all drainage features leaving the airport property, or rely on extant data collected by the United States Geological Survey (USGS), as discussed in the meeting. The USGS data suggest that PFAS are leaving the site to the south.

Private wells in the vicinity of CID have consistently tested positive for PFAS, and the fingerprint of PFAS compounds detected points to a fire-fighting foam source as likely. In addition, the PFAS fingerprints in downgradient wells generally matches the fingerprint found by the USGS at tile drainages leaving the airport property. The overall size of the area around the airport where drinking water wells have been impacted is not known. One of the main goals of contaminated site assessment in [567 IAC 133](#) is definition of the impacted area or plume to current regulatory levels. It is imperative that the area of impact be defined. Additional private

drinking water wells must be sampled for PFAS using EPA Method 1633 until the boundaries of the plume are known. Depth of the tested wells should be recorded whenever possible to assist in understanding plume dynamics in three dimensions. EPA maximum contaminant level (MCL) values will be used for assessing contamination at the site with the understanding that many private wells in the vicinity are apparently connected directly with surface water or shallow groundwater. Non-protected groundwater levels are not applicable despite generally low conductivity of the glacial overburden.

The total number of private drinking water wells that could be impacted is not known, though it is assumed that all dwellings in the area are using private wells since there are no public water supplies providing water in the area of interest. DNR can assist in locating as many wells as are known in DNR databases, and assistance of the Linn County and Johnson County sanitarians may yield more information on well locations.

PFAS data acquired before availability of newer test methods (approximately 2021 with EPA Methods 533, 537, and 1633) with appropriately low detection levels should not be used to “clear” areas of the site. Test results with detection levels greater than the present MCL should be included for informational purposes only.

A conceptual site model for understanding potential pathways by which PFAS are entering private wells and the local aquifer(s) will be necessary. A conceptual site model is often the best way to formulate a plan for decreasing contaminant migration to a receptor or aquifer. The subsurface geology of the area is potentially complex, but also generally understood.

Graphical representation of test results (maps) is important to understanding complex sites. A standardized system of representing PFAS species by color coding has been established in the scientific literature. This allows rapid assessment of PFAS fingerprints and concentrations, preferential transport of PFAS species, and an understanding of what other sources of PFAS may be present (meteoric waters for example). DNR can work with the site consultant to assist in creating standardized graphical representations of the data, or can provide examples if desired.

As discussed in the recent meeting, the typical approach to contaminated site assessment (finding the source area and working out) is less likely to yield results on a reasonable timeframe with PFAS chemicals due to their rapid spread in the environment. It has been more useful to define the area of impact, and then work in toward the source to find pathways of contaminant migration that can be used to best locate areas where remediation (such as soil excavation) can be effective. New groundwater samples from the CID property were not collected for the present report; however, DNR believes that priority should be given to testing private drinking water wells and defining the overall area of impact at this time. Additional onsite samples can be delayed until the area of impact is known, pathways of migration are known, and the source area is targeted for remediation.

Proposed next steps include, but are not limited to:

- Develop a plan and proposed timeline for sampling all drainageways leaving the CID property.
- Develop a plan and proposed timeline for defining the horizontal and vertical extent of contamination, including sampling of private drinking water wells.
- Create maps showing test results that are in line with norms recently developed for graphically representing PFAS data for multiple analytes on a common map.
- EPA has recently published PFAS standards for aquatic life. Assess the need to apply these standards to creeks connected to the site.

Please provide a workplan of anticipated next steps including a timeline for DNR review by December 2, 2024.

If you have any questions, or if we may be of further assistance, please contact me at matthew.graesch@dnr.iowa.gov or by phone at [\(515\) 250-1923](tel:515-250-1923). Thank you for your cooperation with this site.

Sincerely,

Matthew Graesch, P.G.
Environmental Specialist Senior
Land Quality Bureau

cc: Michael Sullivan
Iowa DNR Land Quality
6200 Park Ave, Suite 200
Des Moines, IA 50321

Gina Wilming
Foth Infrastructure & Environment, LLC
411 6th Ave SE, Suite 400
Cedar Rapids, IA 52401

DNR Field Office 1, Manchester