

October 21, 2024

MARK RAHM
CITY OF MASON CITY
10 1ST STREET NW
MASON CITY IA 50401

**Re: Evan's Preserve Former Shooting Range/Bicycle Recreation Area
Contaminated Sites Database Site ID [No. 2821](#)
Soil Sampling Report ([Doc #42022](#))**

Dear Mr. Rahm:

The Iowa Department of Natural Resources (DNR) received a report on October 21, 2024 detailing soil sampling at Evan's Preserve in Mason City. The report was produced on your behalf by Terracon, and was in response to a citizen's tip to DNR Field Office 2 in Mason City regarding a possible former shooting range located on the Evan's Preserve property, which has recently been re-purposed as a mountain bike off-road trail area.

DNR Field Office, Central Office, and representatives of the City of Mason City held an online meeting on September 27, 2024 to discuss the possible former shooting range, planned future uses of the property, and what sampling was required to ascertain risk from lead in soil. Potential solid waste issues related to a potential pre-regulation landfill were also discussed, but subsequently found to be of no immediate concern).

Aerial imaging (LiDAR) indicates that a manmade berm exists on the property, and is shaped in the manner commonly used for shooting ranges. Since the property will be used by the public, and the potential for airborne dust is high, it was decided to test the soil at the berm, as well as at a background location away from the berm, for lead and other metals (RCRA metals).

Two locations (one on each side of the berm) were sampled for metals in soil. A background sample location was selected approximately 250' north of the berm, and was also sampled for metals in soil. A sample was collected at the surface, and at 1'-2' depth at each of the three locations (six total samples).

All four of the soil samples collected from the berm area exceed the Iowa Statewide Standard for lead in soil (400ppm) and the federally-recommended screening level for lead in soil (200ppm). Inhalation or ingestion of airborne dust is the pathway most likely for lead in soil to come into contact with humans. During dry times, bicycles riding in the area are likely to produce dust, which could be inhaled or ingested. Both samples from the background location had results <10% of those from the berm area.

Management of risk from lead-contaminated soils is required at Evan's Preserve. It is necessary to mitigate lead-containing dust by either excavating and replacing lead-containing soil, or capping with clean soil (2' minimum). An environmental covenant should be prepared for the property to ensure that DNR is consulted in the event of future land use changes or construction projects. **Please submit a plan for soil remediation or capping by December 21, 2024.** This plan should include the preferred strategy for risk mitigation, a disposal

plan should any soil be excavated, a sampling plan to ensure that remaining surface soils are not in excess of health standards, and a plan for submission of an environmental covenant (DNR can provide a template).

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:5152501923).

Sincerely,

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

cc: Michael Sullivan
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DNR Field Office 2, Mason City