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Cc: [Martin, Steven L - DNR](#)
Subject: Hagen Farm
Date: Wednesday, May 13, 2020 9:31:27 AM

Hi Judy:

I was finally able to start looking at the Superfund sites you wanted me to review and make a recommendation, or not, for PFAS testing. I started with Hagen Farm located outside Stoughton in Dane County.

- Site was a sand & gravel operation prior to the late 1950's.
- Pits were estimated at 14'-18' deep when the gravel operation stopped.
- Waste filling occurred from the late 1950's to the late 1960's.
- City of Stoughton (entire time) and Uniroyal (1962-1966) have been identified as taking waste to the site.
- Waste from Stoughton was municipal refuse.
- Wastes from Uniroyal included solvents and other organic chemicals (acetone, vinyl chloride, 1,2-DCE, tetrahydrofuran (THF) and numerous others).
- Groundwater samples during the site investigation (SI) found benzene, ethylbenzene, xylene, toluene, TFH and other VOC's.
- Most recent groundwater data indicates things have cleaned up a lot. Vinyl chloride exceeds the ES but is less than 2 ug/l. No other VOC exceedances in groundwater. Still has metals exceedances (iron, manganese).
- PFAS were developed in the late 1940's to early 1950's. A growth into the commercial markets started in the mid 1960's. Thus municipal refuse from earlier than the mid-1960s isn't likely to contain much, if any, PFAS.
- From what I've been able to learn, Uniroyal makes a fabric back vinyl material (Naugahyde) that is used in furniture, seat cushions, anywhere that moisture and stain repellent properties are needed. The best example is the vinyl fabric on benches located in restaurant booths. This vinyl material doesn't absorb liquids so it doesn't easily stain or soil of food gets dropped on it. I was not able to find that PFAS would be used in the making of this vinyl fabric.

Summary: I think there is low likelihood that PFAS is present in groundwater from contamination that may have come from the Hagen Farm disposal site. The disposal period is before, or in the early years of PFAS being used in commercial products. The vinyl material that Uniroyal made/makes is water and stain repellent by nature of being a vinyl. It doesn't rely on a coating on fabric to get the moisture and stain repellent properties provided by PFAS compounds. Based on the information I've been able to review I would not recommend sampling for PFAS at Hagen Farm.

Let me know if you have any questions.

Steve