

**From:** [Ales, Stephen M -DNR](#)  
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**Cc:** [Ross, Issac A - DNR](#); [Ales, Stephen M -DNR](#); [Pope, Justin - DMA](#); [Sackett, Amelia A - DMA](#)  
**Subject:** MMP approval for the Small Arms Range Building  
**Date:** Tuesday, November 14, 2023 10:02:04 AM  
**Attachments:** [image001.png](#)  
[image002.png](#)  
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[image005.png](#)

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Mike:

On November 6, 2023, the Wisconsin Air National Guard (WANG) submitted a Materials Management Plan for construction of the Small Arms Range, a building housing an indoor shooting range. This submittal contained the results of soil borings completed in the area of the proposed range and included PFAS testing results from soil and groundwater. Soil samples were collected at the 1'-1.5' depth and the 12'-13' depth. Total depths of the borings ranged from 14'-18.5' deep so that groundwater samples could also be collected. Groundwater was encountered between 11.7' and 14.7'. The surface topography changes across the site by several feet and this is reflected in the variable depth to groundwater. Additional information on the location of the small arms building was submitted on November 7, 2023.

In addition to the three borings drilled for collecting soil and groundwater samples for PFAS analysis there were two additional geotechnical borings were completed.

Quantifiable levels of PFAS compounds were found in boring TR21-02 at depths of 1'-1.5' and 12'-12.5'. PFOS was measured at 2.6 ug/kg in the 1'-1.5' sample and 2.4 ug/kg at the 12'-12.5' samples. PFOS and other PFAS compounds were found at detectable, but not quantifiable levels in all three borings.

Groundwater samples were collected from borings TR21-01 and TR21-02. These samples contained numerous PFAS compounds.

Due to the quantifiable concentrations of PFAS in soil at boring TR21-02 the WANG is proposing to segregate soils from within 25 feet in all directions from this boring, and down to a depth of 20', and manage that as PFAS containing soil. This is in compliance with the July 21, 2021, approved materials management plan for this facility. Other soil excavated as part of this project may be managed as needed by WANG.

WANG does not anticipate needing to lower the water table in order to construct this building. PFAS is present in groundwater at this location. If it becomes necessary to remove groundwater the water must be contained and stored until treatment or disposal options can be selected.

Let me know if you have any questions.

Steve

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**Stephen M. Ales, P.G.**

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