

RESOLUTION

by Badger Restoration Advisory Board Members

Calling on WDNR to Expand Environmental Testing Requirements for Explosives and other Contaminants at the Former Badger Army Ammunition Plant

FINAL - January 26, 2023

BACKGROUND:

- A routine prescribed burn of vegetation by the Wisconsin Department of Natural Resources (WDNR) ignited an underground fire that burned from August 26-28, 2020. Despite millions spent on cleanup, residual soil contamination at the former Badger Army Ammunition Plant still poses a risk to human health and the environment.
- The underground fire happened on land that is now owned by the State of Wisconsin and includes a series of interconnected settling ponds that received industrial and sanitary wastewater during the plant's active production years.
- Between 2009 and 2012, the Army removed approximately 71,500 cubic yards of contaminated soil from the Settling Ponds. The fire occurred within the 5.4-acre Settling Pond #2.
- One month after the fire, the WDNR issued a letter to the Army requesting a response action to include additional soil testing, describing the incident as producing "multi-colored smoke and high intensity flames."
- Soil sampling in June 2021 detected two forms of DNT (2,4-DNT and 2,6-DNT) at concentrations as high as 87 mg/kg, exceeding the soil cleanup goal of only 11.4 mg/kg. According to the [USEPA](#), DNT is "considered toxic to most organisms, and chronic exposure may result in organ damage."
- Even more concerning, the total concentration of DNT in soil may actually be higher than the Army reports. The WDNR has still not required the Army to test contaminated soils for the additional four forms of DNT (2,3-DNT, 2,5-DNT, 3,4-DNT and 3,5-DNT) present at Badger.
- **All six forms of DNT have been found in groundwater at levels exceeding Wisconsin's Groundwater Enforcement Standard of 0.05 ug/L for the summed-total concentration of DNT.**
- The Army's 2013 site investigation also identified [dozens of other contaminants](#) that do not have enforceable (WDNR) soil cleanup goals including benzene, dibutyl phthalate, ethyl ether, mercury, nitrocellulose, naphthalene, aluminum and diphenylamine.
- However, EPA Region 5 soil screening levels for protecting wildlife suggest that these unregulated contaminants may be problematic. For example, mercury concentrations are reported as high 7.2 mg/kg at the Settling Ponds – far above the ecological soil screening level of only 0.1 mg/kg.
- Groundwater sampling by the U.S. Army at the southern plant boundary recently detected elevated levels of [PFAS](#). These "forever chemicals" are a concern because they do not break down in the environment, can move through soils and contaminate drinking water sources, and build up (bioaccumulate) in fish and wildlife.

Purpose of the Badger Restoration Advisory Board (RAB):

The purpose of the RAB is to serve as an avenue for communications between the installation, state and Federal officials, and the community about the environmental restoration activities at the former Badger Army Ammunition Plant (AAP). It is a citizen- based, government supported board that meets all federal guidelines required by the Department of Defense, Department of the Army, and Environmental Protection Agency (EPA). The primary goal of the RAB is to allow community representatives to review progress, participate in a dialogue with, and provide comments, advice and recommendations to the Army concerning environmental restoration matters at the former Badger AAP.

RESOLUTION and RAB Member Supporters:

As members of the Badger Restoration Advisory Board, we urge the Wisconsin DNR to order expanded soil and sediment testing for ALL six (6) forms of the explosive DNT at and near the former Badger Army Ammunition Plant, and to identify and enforce protective cleanup goals for all known and suspected contaminants including PFAS, mercury and asbestos.

Charlie Wilhelm, At Large Member

Chris Hanson, At Large Member

Craig Walch, Town of Prairie du Sac

Doug Gjertson, Town of Sumpter

Laura Olah, CSWAB

Michele Hopp, RAB Community Co-Chair, Village of Merrimac

Mary Carol Solum, At Large Member

Mary Jane Koch, At Large Member

Mike Gleason, Lake Wisconsin Alliance

Roger Heidenreich, Town of Merrimac

Valerie McAuliffe, Sauk County Board

Wendy Carlson, CSWAB, Alternate

William Stehling, Village of Sauk City

References:

<https://cswab.org/badger-soil-cleanup-may-not-be-protective/>

<http://cswab.org/wp-content/uploads/2013/02/Settling-Ponds-deFur-CSWAB-Comments-AFS-January-20131.pdf>

<https://cswab.org/army-finds-contamination-at-site-of-underground-fire/>

<https://cswab.org/wp-content/uploads/2022/03/MAP-of-Settling-Pond-2-Site-Inspection-Report-Underground-Fire-Feb-2022.pdf>

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