ARMY RESPONSE TO SENATE APPROPRIATIONS COMMITTEE – MILITARY CONFERENCE REPORT

Completed and Planned Actions for the Former Badger Army Ammunition Plant Groundwater Restoration

Office of the Secretary of the Army

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The estimated cost of this report or study for the Department of Defense is approximately $1,450 for the 2018 Fiscal Year. This includes $50 in expenses and $1,400 in DoD labor.
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Senate Report 115-130 Legislative Provisions

Badger Army Ammunition Plant. – In 2011, an Army Feasibility Study concluded that an offsite drinking water treatment system was needed as part of a comprehensive groundwater cleanup remedy for the former Badger Army Ammunition Plant [BAAP]. Accordingly, in 2015, the Town of Merrimac, Wisconsin, designed and approved a sanitation district required by the Army to support such a system, and as recently as May 2016, the Army noted in writing that ‘‘design of the municipal drinking water system has been initiated.’’ Recently, however, the Army reversed its plans to construct and operate the drinking water system. The Committee is concerned about this decision, its potential to delay the provision of clean drinking water to homes near the site, and the Army’s lack of public communication regarding the decision.

Therefore, the Committee expects the Army to conduct required human health risk assessments expeditiously, and if needed, use expedited contracting authorities. Additionally, the Committee urges the Army to hold regular public meetings to update and engage with local stakeholders. The Committee expects the Army to integrate local priorities in its remediation plans. Furthermore, within 90 days of the date of enactment of this act, the Secretary of the Army shall submit to the Committee a report and provide a corresponding briefing regarding the Army’s rationale and process for approving plans to construct and operate a drinking water system and its subsequent decision to terminate such plans, as well as the Army’s completed and planned actions for environmental restoration at the site.

A. Executive Summary

As directed by language contained in the Senate passed National Defense Authorization Act, this report provides the progress of the Secretary's human health risk assessment and describes the rationale and process of past and on-going cleanup under the Defense Environmental Restoration Program (DERP) to address contamination that occurred during the Plant's decades of operation, including the decision to terminate plans for the construction and operation of a municipal drinking water system in the Town of Merrimac, Wisconsin.

B. Background

Badger Army Ammunition Plant (AAP) was constructed in 1942, and over its 33 years of operation it was used to produce propellant for cannon, rocket, and small arms ammunition during World War II, Korean War, and Vietnam War. Past munitions production and waste disposal practices, that were common at the time, resulted in soil and groundwater contamination.

In 1998, the Army declared Badger AAP excess to its needs and it was permanently closed. The majority of the property comprising the former Badger AAP has been transferred and is being used as agricultural and grazing land (U.S. Department of Agriculture), Highway 78 (Wisconsin Department of Transportation), recreational land (National Park Service (NPS)/Wisconsin Department of Natural Resources (WDNR)), agricultural land (Bureau of Indian Affairs and the NPS), and a wastewater treatment plant (Bluffview Sanitary District). The Army still maintains two cemeteries on the Badger AAP that consist of 3.6 acres.

C. Environmental Cleanup

The Army began assessing potential waste management areas that may be sources of soil and groundwater contamination in 1980. When the Army applied for a Resource Conservation and Recovery Act (RCRA) permit in 1988, the State of Wisconsin did not have authorization to implement certain elements of RCRA, known as the Hazardous and Solid Waste Amendments, so the Army operated under a dual federal-state permit, where WDNR regulated the RCRA operating and/or closure requirements and the Environmental Protection Agency addressed RCRA corrective action requirements. The Defense Environmental Restoration Program (DERP) was formally established by Congress in 1986 and provided for the cleanup of Department of Defense (DOD) sites like Badger. Additionally, in 1987 Federal agencies to include the Army were authorized by Executive Order 12580 to implement environmental restoration/cleanup under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), which incorporates applicable or relevant and appropriate federal and state laws into the cleanup process.

In 1990, the Army, in accordance with its RCRA permit, began operating an interim groundwater pump and treat system to address groundwater impacted by propellant production areas that had been regulated under the permit. In 1996, the Army augmented groundwater treatment by adding a second pump and treat system. Over the years, contaminated soil was also removed or capped, eliminating the source for further groundwater contamination. The Army's RCRA permit expired in 2009 and was not renewed. Over time, the groundwater treatment systems were no longer removing significant quantities of contamination, and contaminant removal rates reached a point of diminishing return that led the Army to re-evaluate the Badger AAP groundwater strategy on a more comprehensive basis. By August 2015, the Army, after coordination with and concurrence from WDNR, discontinued the groundwater pump and treat systems and optimized its groundwater monitoring program to observe the contamination that remained in groundwater plumes emanating from the former Badger AAP. Groundwater monitoring indicates that contamination continues to decrease due to natural processes; however, the Army and WDNR continue to work toward identifying a final groundwater remedy for the former Badger AAP.

D. Decision Document (DD)

In 2012, a Draft Decision Document (DD) that proposed Monitored Natural Attenuation (MNA) as the final groundwater remedy began routing within the Department of Army for approval. Due to the relatively long time for MNA to achieve the proposed cleanup levels, the DD proposed supplementing the Army's MNA remedy by including construction and operation of a municipal drinking water system that would provide residents in the communities surrounding the Former Badger AAP with drinking water while groundwater contamination continued to diminish over time. The operation of the municipal drinking water system was proposed to transition to the Town of Merrimac at a future undetermined point when certain funding parameters requested by Merrimac were met. Prior to appropriate Army approvals on a remedy or agreement on the details of the proposed drinking water system, the Army's representative at Badger AAP submitted a petition requesting the Town of Merrimac establish a sanitation district.

E. Decision Document (DD) Review

Remedial actions at Army cleanup sites, including the former Badger AAP, are selected pursuant to DERP. Department of Defense (DoD) policy (DoD Manual (DoDM) 4715.20) requires the Military Components to have an approved DD. The DD must: (1) identify the applicable legal authority for the response action; (2) summarize the response alternatives considered and show how the preferred alternative was selected; (3) identify cleanup objectives of the selected response action; (4) summarize the results of the human health and ecological risk assessments; (5) describe the response action in general terms and specify the elements of the response action; (6) list the entities responsible for implementing and maintaining the selected response action; (7) document the legal requirements and standards applying to the response action; (8) demonstrate involvement by the appropriate regulatory agency and the community; and

(9) provide a declaration, approval, and signature by the DoD Component official with delegated authority.

In 2012, DDs selecting remedies greater than $10 million required approval by the Assistant Chief of Staff for Installation Management (ACSIM), which is a Headquarters Department of the Army (HQDA) organization. The 2012 Draft Badger AAP Groundwater DD proposed a remedy that was greater than $10M, so the DD was submtted to HQDA for staffing before approval by the ACSIM. The HQDA staff identified several areas where the draft DD did not meet the DoDM 4715.20 requirements. Specifically, a human health risk assessment was not prepared, incorrect legal standards were identified for the selected groundwater remedy; and key components of the proposed response action were outside the Army's authority.

Construction and operation of a municipal drinking water system is outside the Army's authority. The municipal drinking water system was not being proposed to address unaccepable risk to human health and was not contemplated to treat contamination from Army operations at the former Badger AAP. Additionally, if the municipal drinking water system had been constructed in accordance with the 2012 Draft DD, it would have provided drinking water to residents outside the areas impacted by contamination attributed to Army activities, which the Army has no authority to accomplish.

To align with DERP remedy selection and funding authorities, a Supplemental RI/FS has been prepared and is currently under Army review. The Army anticipates completing that review by mid-June 2018 and will then provide the draft report to WDNR and the community for review. The Supplemental RI/FS will incorporate a human health risk assessment, identify federal and state Applicable or Relevant and Appropriate Requirements (ARARs), and present the remedial alternatives being considered. The Army will prepare presentations for the community to explain the report and ensure the community has an opportunity to provide input.

F. Ongoing Environmental Cleanup Activities

Delays in approving a final Badger AAP groundwater remedy have not affected the ongoing groundwater monitoring that has been coordinated with and agreed to by WDNR. In addition to non-drinking water monitoring wells installed by the Army, ongoing groundwater sampling includes sampling of a number private drinking water wells. Groundwater data is submitted to WDNR for review and shared with the community. The community has expressed concerns about private drinking water wells being impacted by contamination. The Army is reviewing the results of the most recent evaluation of private wells to consider if additional sampling should be conducted.

Additionally, the Army has requested the U.S. Geological Survey (USGS) to conduct a review of the current groundwater monitoring program. Data has been provided to USGS for evaluation to ensure that the monitoring program is sampling the appropriate wells (to include private wells), Should this review identify data gaps in the monitoring program, the Army will work with USGS and WDNR to fill those data gaps and improve

the long-term monitoring. The Army has already taken action on an early USGS suggestion to add another private drinking water well into the monitoring program. That well has been included in the April 2018 round of sampling that is underway. Additonally, Army will work with USGS to ensure that their efforts are transparent and shared with the community.

To foster community involvement at the former Badger AAP, the Community Involvement Plan (CIP) was revised in Fall 2017 and incorporated feedback received from the community. Fulfilling a specific community request that was received at a public meeting in July 2017, the Army has re-established a dedicated Badger AAP Restoration website. The CIP utilized interviews and questionnaires to evaluate how the community wanted information provided on the cleanup program. The CIP identified that the community wanted more frequent communication from the Army. Additional public meetings will be held to discuss groundwater as well as the remaining contaminated sediment in Gruber's Grove Bay. Information on projects will be posted on the website and a mailing list has been updated to ensure information is provided in a timely manner.

Finally, Gruber's Grove Bay sediments will be re-sampled in early summer 2018 to delineate remaining contamination, and a plan to remove those contaminated sediments is projected to be finalized and provided to WDNR in late summer 2018. A sediment removal project is scheduled for 2019.

G. Conclusion

The Army recognizes the determination that a municipal drinking water system could not be included as a component of the Badger AAP groundwater remedy has been negatively received by the community. Significant work remains to improve the relationship between the Army and the community and the Army has taken steps to prepare a plan to better communicate the status of the cleanup projects via a website, mailings, and more frequent public meetings. The independent review being conducted by the USGS will identify gaps in the groundwater monitoring program and hopefully provide the community with assurance that plumes of contaminated groundwater emanating from the former Badger AAP are being monitored such that private drinking water wells are and will remain protected.