**United States Army Corps of Engineers – New England District**

**Cold Regions Research and Engineering Laboratory (CRREL)**

**Restoration Advisory Board**

**Minutes of Meeting #28**

**Wednesday, February 17th, 2021**

**Virtual via MS Teams**

Attending: Scott Calkin – Wood E&IS – Scott.Calkin@woodplc.com

Rod Rustad – Wood E&IS – Rod.Rustad@woodplc.com

Darrell Moore (Chair) – USACE - Darrell.A.Moore@usace.army.mil

Roelof Versteeg Community Member - Roelof.versteeg@gmail.com

Kristine McDevitt – Community Member – Kristinemcd@hotmail.com

Terry Harwood – Cold regions Research and Engineering Lab (CRREL) Bartlett.Harwood@USACE.army.mil

Chief Martin McMillan – Hanover Fire Dept. Martin.McMillan@hanovernh.org

Jack Besse – Wood E&IS - Jack.Besse@woodplc.com

Bree Carlson - Dartmouth College – bree.e.carlson@dartmouth.edu

Stephanie Monet – NHDES- Stephanie - Monet@DES.nh.gov

Observing: Amy Rosenstein – USACE- Amy.B.Rosenstein@USACE.army.mil

 Amy Quintin -Wood E&IS, Inc. Aimy.Quintin@woodplc.danielcom

 Steven Lamb – GZA – Steven.Lamb@gza.com

 Jeff Pickett – Wood E&IS – Jeffrey.Pickett@woodplc.com

Agenda:

Subject Matter

* Approve Meeting Minutes
* Feasibility Study
* Proposed Plan and Decision Document
* HAPSITE® Full Scan Program
* Indoor Air Trends in the Main Lab
* Groundwater Treatment Plant
* Question and Answer
* Adjourn

Items, comments, and notes:

Introduction and comments by Corp of Engineers New England District (COE NAE). COE NAE welcomes the group and thanks Wood for setting up the meeting. Darrell Moore called meeting to order at 1604 via Microsoft Teams. Review of the October 2020 RAB meeting minutes that were sent out previously to RAB Member with the invite to the February 2021 meeting. Review and acceptance of meeting minutes. Introductions: Stephanie Monet and will be taking over for Robin as POC for NH DES. NHDES indicates Robin M. will not be in attendance this afternoon

No changes needed to the meeting minutes and motion to accept October 2020 meeting minutes; motion is seconded and meeting minutes from October 2020 are accepted.

 COE NAE suggests that a conceptual site model meeting in the next 6 to 8 weeks to review the Site conceptual model with NHDES and Dartmouth College reps since both are new to the RAB.

Begin with agenda slide to start the meeting.

COE NAE cannot see the slide so will follow along with the latest pdfs.

Wood E&IS Personnel (Wood) reviews the Agenda slide for the group.

The FS was finalized in January 2021 and has been uploaded to the NHDES one stop site and Wood personnel reviews the FS alternatives.

Six alternatives are associated with cleanup of groundwater, and three alternatives are associated with cleanup of soil gas.

Wood moves to a slide showing the status of the project and explains that we are about halfway through the CERCLA process. Next step is the proposed plan (PP) and the Decision Document (DD) to formally document the Army’s plan to clean up the CCREL site. PP is currently planned for December 2021, while the follow-up Decision Document is planned for May 2022.

The proposed plan process is a public, formal process and involves public meetings, a comment period, and recording of the comments. These documents will be available for RAB and public review and include 45-day public review cycle and a public meeting. COE NAE adds in that the project is on a fairly aggressive schedule for the PP and the DD and the above dates are an aggressive goal.

Wood moves to the next slide which is an overview of the full scan mode using the HAPSITE® to run full scan analysis. Wood has about 1 year of data and full scan analyses have been run once a week. So far most of the full scan analysis using the HAPSITE®have not identified any issue that would cause a health risk to workers at CRREL.

Wood moves to next slide which shows two years of HAPSITE®IA data and plenum data which is the space between the ceiling on the second floor of the main lab and the roof of the main lab. COENAE has installed some air purifying equipment up in the plenum space Since early 2020 the fans have been off and in 2020 saw some increases but not enough to cause us to turn on the purifying units in the plenum spaces.

Wood shows next slide which is IA for the second floor for 2020 saw some increases in concentration in the working spaces in the offices on the second floor of the main lab, however HAPSITE® analyses were consistently below the 8.8 µg/m3 action limit.

Move to similar slide for the 1st floor and we see very low concentrations on 1st floor

Move to the Basement slide showing the IA for the Basements area. Overall, 2020 IA concentrations of TCE were typically below the 8.8 µg/m3 action level in the Main Lab, with limited, isolated instances of exceedances during the summer of 2020 potentially in conjunction with facility power outages.

Wood personnel provide an overview of the 60% design effort for the new groundwater treatment facility. Presents and talks through the layout of the GW treatment plant extraction wells, piping runs and proposed GW treatment plant building location.

The object of the new smaller GW Treatment plant is to reduce the operating costs and collect less GW continue hydraulic control of the TCE plumes at CRREL and prevent any TCE discharge to the CT River. Wood personnel present a slide that slides shows generically the process for the new groundwater treatment system.

Likely water will initially need to be treated with Granular activated carbon. GW treatment plant design is currently underway.

Wood reviews the upcoming offsite and on-site sampling of soil gas for the spring of 2021. This data will be useful to see if we have reduced the TCE mass in the shallow and deep soils with ongoing SVE pilot testing.

Indoor air (IA) and sub slab (SS) sampling at the Richmond middle School (RMS) we will be sampled again in August 2021. Likely after the August 2021 event, sampling will move to once every 5 years. Schoolboard in concurrence with the transition to sampling once every 5 years.

Ongoing and upcoming work at CRREL includes:

* Continue to monitor the indoor air and active mitigation systems at CRREL.
* Currently working on the supplemental CT River SI and the path forward with Groundwater reclassification scenario for small area of GW in VT

Wood presents a slide acknowledging Dan Adam his dedication to work at CRREL and his future path forward as a settled pastor for a church on Northport NH,

Wood explains that we do have a replacement for Dan Adam.

COE NAE indicates that we are likely to have the next RAB meeting in May 2021.

No Questions were put forth by the RAB members and the February 2021 RAB meeting was adjourned at 1640.