

**Spring Valley FUDS Groundwater Path Forward  
September 11, 2020  
Spring Valley Project Conference Call**

<b>Name</b>	<b>Organization/Address</b>	
Brian Barone	DOEE	<b>X</b>
Todd Beckwith	USACE - Baltimore	<b>X</b>
Kathy Davies	EPA Region III	<b>X</b>
Whitney Gross	ERT – Community Outreach Team	<b>X</b>
Holly Hostetler	ERT	<b>X</b>
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Dan Noble	USACE – Baltimore	<b>X</b>
Joe Vitello	EPA Region III	<b>X</b>

**Summary of 11 September 2020 Spring Valley Groundwater Path Forward Conference Call**

**Consensus Decisions**

- The Partners agreed to wait for the November regional screening level (RSL) update for any change in perchlorate RSLs or changes to the drinking water advisory level before conducting additional perchlorate sampling.

**11 September 2020 Action Items**

- In response to a request from U.S. Army Corps of Engineers (USACE) Baltimore, Environmental Protection Agency (EPA) Region III agreed to share with the Partners the recommendation from the EPA Region III toxicologist on whether 2 rounds of below- maximum contaminant level (MCL) arsenic (As) sampling is sufficient to close the sampling for As.

**Friday 11 September 2020**

**The goal of this segment of the meeting was to determine the path forward for the Groundwater Investigation.**

**A. Groundwater Sampling Results**

The data results from the June 2020 groundwater sampling look similar to the data results from the September 2019 sampling. The As levels at MP-2 for both sampling events were below the MCL, but there were persistent perchlorate concentrations above the drinking water advisory level.

**B. Perchlorate Standard**

In response to a question from USACE Baltimore, EPA Region III confirmed that EPA Region III is continuing to research the appropriate comparison criteria for a perchlorate standard level. Based on EPA-published webpages and guidance documents, 15 parts per billion (ppb) is still the screening criteria.

EPA risk-screening levels are updated every 6 months; the last update was in May 2020. The EPA decision to not pursue an MCL for perchlorate occurred in June 2020, and the risk screening guidance had not been updated. EPA Region III did not know if the next round of updates in November will include changes for risk-screening guidance, based on the decision to not pursue the MCL.

In response to a question from Kathy Davies, EPA Region III, Joe Vitello, EPA Region III explained that he submitted a request for consultation to the EPA Region III toxicologist and the toxicologist was assigned, but J. Vitello had not heard back from the toxicologist yet.

K. Davies pointed out that EPA cannot move forward on the perchlorate issue until input from the EPA Region III toxicologist is received.

Department of Energy and Environment (DOEE) agreed that DOEE that more input from the EPA technical side would be helpful. He noted that the last couple of numbers for perchlorate are encouraging, but until there is a positive determination from EPA on a different number, the 15 ppb level will have to be used. There may be a new screening number when the regional screening levels (RSLs) are updated. He suggested another round of sampling since it is now September.

### **C. Confirmation Sampling for As**

There have been 2 rounds of groundwater sampling with results below the MCL for As. A trend test has not been run on those specific intervals but could be conducted.

In response to USACE Baltimore's question if there sufficient data now to consider sampling complete for As at MP2 if a trend test were run and all the results are shown to be at attainment of the standards, EPA Region III explained that since there has not been a groundwater remedy, EPA's groundwater remedy completion guidance would not pertain to the issue. At this point, the As is below the MCL. Since there was no groundwater remedy, the guidance does not apply. The data results show a decreasing trend below the MCL, according to the last 1-2 years of data. The EPA Region III toxicologist could be consulted to determine if a statistical method is necessary to evaluate the issue.

In response to a question from USACE Baltimore, EPA Region III explained that for a typical Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) site, there is a certain number of samples that toxicologists use to determine unacceptable risk. Since CERCLA sites vary and site risk assessments require different types of data, EPA Region III did not know how many rounds of sampling would be necessary to show trending, or if more than 2 rounds would be necessary. EPA Region III would have to defer to the EPA Region III toxicologist to determine if there is sufficient data to determine no unacceptable risk from As. Once unacceptable risk has been triggered and the need for a groundwater remediation remedy takes place, then the remedy must meet Applicable or Relevant and Appropriate Requirements (ARARs), which are the MCLs. Once the remedy is chosen and implemented, then the groundwater completion guidance applies, which addresses meeting the remediation goal and demonstrating that the levels will not increase over time. Since no specific action for groundwater has taken place in this instance, EPA Region III believed the remedy requirements are not triggered. The EPA Region III toxicologist will need to determine how many rounds are necessary in a Groundwater Remedial Investigation (RI) for a CERCLA site.

In response to a question from EPA Region III, USACE Baltimore explained that the As sampling was reduced to 1 well with 8 sampling ports at different depths.

In response to a question from USACE Baltimore, EPA Region III reiterated that the EPA Region III toxicologist would need to determine if the 2 sampling events below the MCL for As produced sufficient data to state there is no unacceptable risk posed by As at that location.

DOEE noted that the Excel spreadsheet appears to show a downward trend and that the concentration level for As has been below the MCL for 2 years. That data would typically be sufficient for DOEE to close sampling. He will wait to hear the report from EPA Region III. He will be satisfied with either outcome; closing the sampling for As or conducting another round sampling.

USACE Baltimore and EPA Region III agreed that, for both USACE Baltimore and EPA Region III, a single sample below the MCL paired with a confirmation sample below the MCL is typically sufficient to close sampling, but that both USACE Baltimore and EPA Region III will wait for the toxicologist's recommendation.

EPA Region III pointed out that one point to take into consideration is that the suspected source material and soil was removed.

In response to a request from USACE Baltimore, EPA Region III agreed to share with the Partners the recommendation from the EPA Region III toxicologist on whether 2 rounds of below-MCL As sampling is sufficient to close the sampling for As.

#### **D. Perchlorate at Kreeger Hall: Plume vs. Single Point**

In response to a question from USACE Baltimore, EPA Region III explained that the EPA position on single point locations vs. a plume is that if there is an exceedance at one well and there are other wells that have been sampled to show that the data is not the result of a poor monitoring network or poor evaluation, then the distribution of contamination, potential source, and any actions taken to mitigate the source material are reviewed. If the exceedance is located at 1 monitoring point, then a plan for remediation of groundwater and monitoring the remediation is determined. If the concentration fluctuates to a significant degree to show that there is an input somewhere and the monitoring network is not sufficient, that could be reason enough to evaluate for a plume. If the concentration stays the same and there are no other samples of equal concentrations or greater, then the focus turns to remediation and monitoring that remediation. Several years ago, a White Paper was released from EPA that addresses guidance and establishing an exposure point concentration. The White Paper also addresses how to review data from wells to determine if there is a plume, a volume of contaminated groundwater in the aquifer.

In response to a question from USACE Baltimore, EPA Region III confirmed that the White Paper would address determining a contamination plume. She could not remember the year the White Paper was released but would find the document.

In response to a question from EPA Region III, USACE Baltimore and DOEE explained that an extensive monitoring-well network in the area was sampled multiple times and the investigation has now been narrowed down to very specific locations. The other locations had historically not shown any significant groundwater contamination, so were not considered to be a significant groundwater issue. For example, the As from MP-2, considered old historical contamination from WWI, had the potential to migrate downgradient and result in similar or higher concentrations. The downgradient wells did not show any As contamination. The concentrations present at MP-2 seemed to be decreasing and were not appearing in

downgradient wells. Even with some dilution, the As was not going to show up at higher concentrations in downgradient wells.

### **E. Additional Perchlorate Sampling**

DOEE noted that if EPA releases higher screening values that will change the path forward. He suggested 2 more rounds of perchlorate sampling for now.

In response to a question from DOEE, USACE Baltimore confirmed that USACE Baltimore would be prepared to conduct 2 more rounds of perchlorate sampling if the Partners agree that is the appropriate plan.

In response to a question from USACE Baltimore, DOEE explained that 2 more rounds may show a decreasing level of perchlorate. If the levels do not decrease or stay the same, then the Partners might review the guidance from the White Paper on single-point concentrations.

In response to a question from USACE Baltimore, EPA Region III confirmed they had no concerns about conducting 2 more rounds of perchlorate sampling.

In response to a question from EPA Region III, DOEE and USACE Baltimore suggested that conducting sampling for perchlorate in September would be consistent with the past sampling. The release of a new RSL may change that plan.

USACE Baltimore suggested that the perchlorate sampling wait until the new RSL is released.

In response to a question from DOEE, EPA Region III confirmed that the RSLs should be updated in November; the RSLs were last updated in May.

DOEE agreed to holding the perchlorate sampling until the new RSLs are released.

The Partners agreed to wait for the November RSL update for any change in perchlorate RSLs or changes to the drinking water advisory level before conducting additional perchlorate sampling.

In response to a question from USACE Baltimore, EPA Region III explained that the EPA Office of Water is in charge of the process to officially change a drinking water advisory level.

### **F. Adjourn**

The meeting was adjourned at 10:37.