

## Phase II Scope of Work Public Meeting Summary

September 4, 2018

Norfolk Public Library

Norfolk, Massachusetts

A public meeting was held on September 4, 2018 at 7:00 pm to present the Draft Phase II Scope of Work (SOW) for the Former Buckley & Mann Site located at 17 Lawrence Street in Norfolk, Massachusetts. The meeting was held in the community room of the Norfolk Public Library, 139 Main Street, Norfolk, Massachusetts. Mr. Stephen Vetere of Mabbett & Associates, the Licensed Site Professional (LSP) for the project, delivered a formal presentation with assistance from Mr. Paul McManus of EcoTec, Inc. A question and answer session was held after the presentation.

The presentation, with questions and answers, can be viewed on the internet at the following link: <https://www.youtube.com/watch?v=PEVmUWMDsQY>. A list of meeting attendees is provided as an attachment to these meeting notes.

### Introduction

Mr. Vetere opened the meeting with an update of the schedule for the Public Involvement Plan (PIP). The comment period for the Draft PIP closed on August 27, 2018. The project team is working on a response summary. The response summary and Final PIP report will be issued to the public by the end of September.

The purpose of this meeting was to present the investigation plan for the Phase II Comprehensive Site Assessment. The Draft Phase II SOW was uploaded to the MassDEP on-line document repository the morning of the meeting (link below). This public meeting marked the start of a 20-day public comment period for the Draft Phase II SOW document. The Draft Phase II SOW has been placed into the document repositories established at the Norfolk and Franklin Public libraries and uploaded to the MassDEP's Reportable Release File Viewer:

<http://eeaonline.eea.state.ma.us/EEA/fileviewer/Rtn.aspx?rtn=2-3000173>

Hard copies of the Draft Phase II SOW were made available for all attendees of the meeting. All comments on the Draft PIP should be delivered via email to [vetere@mabbett.com](mailto:vetere@mabbett.com). The public comment period for this document will close on September 24, 2018.

### Presentation

Mr. Vetere provided a brief overview of the site history and the nature of operations, followed by an overview of the Massachusetts Contingency Plan (MCP) process. After the 2017 Notice of Audit Findings, the 2001 Permanent Solution was retracted and the site is currently re-entering Phase II of the MCP process. The Phase II SOW is a step in that process that defines the scope of investigative activities planned to characterize the nature and extent of contamination, develop a conceptual site model, and characterize human health and ecological risks attributable to contamination. Decisions on cleanup strategy are made based on the characterization of potential risks.

Mr. Vetere reviewed the Phase II investigation plan. The Phase II plan builds on our understanding of historical operations and previous sampling data collected from the site. Each of the areas where contamination is known or suspected to have been either discharged or migrated to will be investigated. These areas include Lagoons 1, 2, and 3; the Tail Race; the Carbonizer Trench and Lagoon; the Mill River; Bush Pond; and areas where lagoon dredge materials were stockpiled during operation of the facility. No sampling is planned in the Area #10

consolidation area because this area has been covered with 3 feet of clean fill and is not expected to be disturbed, therefore direct exposure to human or environmental receptors is not a completed risk pathway.

After public comments have been addressed and the plan modified to incorporate public input, the project team is planning to perform investigations in October. Data reduction and analysis work will be performed in November and December. Additional sampling may be necessary based on the results of the initial data collection activities, which could push this schedule into 2019.

Paul McManus of EcoTec presented an overview of the MCP Environmental Risk Characterization process. One of the key objectives of the upcoming investigative work is the characterization of potential risks to ecological receptors. The MassDEP identified the lack of an environmental risk characterization as a deficiency of the 2001 Permanent Solution, which has triggered the additional site assessment work.

### Questions from the Meeting Attendees

Mr. Vetere opened the meeting up for questions at the conclusion of the presentation. There was a question and answer period of approximately 60 minutes, during which questions on the following topics were asked by the meeting attendees and answered by Mr. Vetere and Mr. McManus:

- Q: A commenter asked about the locations of the monitoring wells. A: The monitoring wells were shown on the Phase II investigation plan, but there was no legend entry for the well symbol. This will be corrected for future presentations of this information.
- Q: A commenter asked why the sediment sampling interval was limited to the upper 6 inches. A: The upper 6 inches of sediment is the sediment that is considered biologically available environmental receptors. Sediment that is deeper than 6 inches is typically not considered an exposure point for ecological receptors.
- Q: There was a follow-up question about potential contamination in deeper sediment that may have been covered over by years of sedimentation. The commenter's concern was that leaving this sediment in place could become an environmental concern in the future if the water body were to be dredged. A: The team answered that resuspension of sediments during future dredging would be carefully monitored, and measures taken to prevent the spread of contamination, through the permitting process that is required for dredging projects. The federal government reviews and issues dredging permits, and typically more detailed study is required to support a permit application to determine the contaminant levels in the dredged materials and prove that the dredging work will not resuspend contaminants into the water column or bring contaminated sediments into the biologically active zone.
- Q: A commenter asked whether the Tier Classification of the site was revisited. A: The site is currently classified as Tier 2. The site does not meet any of the Tier 1 criteria, therefore it has not been reclassified. However, it was noted that the site is located a Zone II so a detection of contaminants above reportable concentrations for Category GW-1 groundwater (RCGW-1) would require reclassification to Tier 1. (Note: A Zone II is "that area of an aquifer which contributes water to a well under the most severe pumping and recharge conditions that can be realistically anticipated.")
- Q: A commenter asked why there was not additional investigation planned for the area around the foundations, which was the location of former buildings. A: Although the historical sampling locations were not shown on the plan presented at the meeting, the project team believes there has been enough sampling to adequately characterize the soils in this area.
- Q: A commenter noted that the planned sampling in the Carbonizer Lagoon was focused on the outer areas of the lagoon, and wondered whether any further sampling was planned in the center of the lagoon, where presumably the highest contaminant levels are present. A: The 2018 sampling focused on obtaining

spatial coverage of the lagoon, including the center of the lagoon. High concentrations of metals are known to be present in the center of the lagoon. The focus moving forward is on the outer edges of contamination to determine the lateral extent of impacts and evaluate whether any contamination has migrated through the embankment and into the Mill River.

- Q: The commenter asked a follow up question about whether samples of groundwater have ever been collected from under the lagoon. A: No, there is no groundwater data from beneath the lagoons, but there is a well downgradient from the lagoon that is not contaminated, which provides an indication that metals are not leaching from the lagoon into groundwater. Surface water samples will be collected from the lagoon during the Phase II, which will provide an additional data point to determine the extent to which metals are leaching into water.
- Q: A commenter made a comment about the differences between the plan presented at the meeting and the recommendations made by Weston & Sampson in their report to the Town. A: The developer's LSP and the Town's LSP have been working together to identify the investigations required to characterize the site. At present, there is a difference of opinion on the approach to characterization, but at the end of the process both parties are working toward the same goal, which is a definitive conclusion about the nature and extent of contamination, and the risks present, so that the proper remedial actions will be taken. The developer is committed to working with the Town to ensure the cleanup plan is protective of human health and the environment.
- Q: A commenter asked a question about who collected the historical data for the site, and whether this data was valid if not collected by an LSP. A: Any environmental data collected by a qualified environmental professional can be relied upon to make remedial decisions, provided that it was collected in accordance with certain industry standard procedures.
- Q: A commenter asked a question about historical power generation at the facility. A: The facility was reportedly powered by hydroelectric power (water wheel) and water flowed from a point of high elevation in Bush Pond through a water wheel, which drove a turbine to generate electricity. Water that passed through this mechanism was conveyed through the Tail Race and back to the Mill River downstream from the site. The difference in elevation between Bush Pond and the Mill River was the driving force for this system.
- Q: A commenter asked a question about a proposed boathouse, and whether it would be advisable to construct a boathouse in an area near the former textile facility. A: The human health risk assessment will evaluate a recreational exposure scenario that will answer this question.
- Q: A commenter asked a question about the source of historical information on the site operations. A: The historical information about site operations was provided by former owners and operators of the facility and presented in the initial Phase II documents prepared in the 1990s.
- Q: A commenter asked a question about the historical use of the site prior to the Buckley & Mann facility. A: The site was reportedly the location of a mill dating back to the mid-1800s.
- Q: A commenter asked how we know that the dredged materials weren't placed elsewhere during operation of the facility. A: All of the historical accounts and descriptions of site operations have indicated that the areas being investigated are the locations where dredged materials were stockpiled. In the 1990s, CDM did a thorough screening of soils in Area #10 to identify waste materials, and suspect materials were either taken off-site or consolidated into the on-site area.
- Q: A commenter asked a question about blank cells in one of the tables presenting soil sampling data for the Carbonizer Lagoon. A: Cells that do not have values in them indicate that particular sample was not

analyzed for that constituent. For instance, not all of the soil samples were analyzed for hexavalent chromium as this is not a standard analyte for the metals analytical method. There are some locations where additional hexavalent chromium analysis is warranted to verify that there are not higher concentrations present in soil.

- Q: A commenter asked a question about the toxicity of hexavalent chromium. A: Chromium, the element, is present in the environment predominantly in two forms: trivalent chromium and hexavalent chromium. Trivalent chromium is naturally-occurring but hexavalent chromium is usually produced by industrial processes. Hexavalent chromium is more toxic and more mobile than trivalent chromium, therefore of much greater concern to risk assessors and environmental engineers.
- Q: A commenter asked a question about sample collection planned near the dam immediately downstream from the dam. A community member identified potential evidence of contamination in the undeveloped northeast portion of the site and expressed support for sampling the Mill River at this location. This community member also suggested additional evaluation of ground conditions in this area to evaluate whether additional sampling is warranted. A: This area will be evaluated further for potential evidence of contamination.
- Q: A commenter suggested an approach whereby patterns of illnesses are evaluated for Town residents, and through evaluation of this data, one could work “backwards” through the process to identify contaminants that are known to cause these illnesses. This community member presented data about stomach cancer rates and noticed a high incidence of this type of cancer among community members. One of the contaminants linked to stomach cancer is hexavalent chromium, therefore this community member advocated for comprehensive testing of environmental media for hexavalent chromium. A: In consideration of the information presented by this commenter, additional hexavalent chromium analysis appears warranted for this project.
- Q: A commenter asked how wastewater was conveyed from the dyehouse to the two lagoons. A: There was reportedly a trench that conveyed liquid waste from the dyehouse to Lagoons 1 and 2. This trench has since been filled in and is no longer present. Q: The community member suggested testing in this former trench area.
- Q: A commenter asked how one determines whether chromium is natural background or the results of contamination. A: Site sampling results are compared to MassDEP-published natural background levels or sampling results collected from other un-impacted areas near the site, and a statistical comparison is made between these groups of samples to determine whether the chromium concentrations (or any other naturally occurring metal) are similar to background.
- Q: A commenter asked whose responsibility it is to address contamination that is downgradient from the site. A: The property owner is responsible for addressing the release of contaminants wherever they have come to rest. Any work on downgradient properties that is needed to characterize the extent of the release would be performed by the party responsible for the release and subject to access agreements from the property owners. There are regulatory mechanisms available to protect downgradient property owners from liability for contamination that has migrated from an upgradient site onto their property.
- Q: A commenter suggested that Town wells located downgradient from the site should be sampled. A: The team will consider sampling available downgradient wells.