



February 21, 2014

Mr. Gerard Martin  
Massachusetts Department of Environmental Protection  
Southeast Regional Office  
Bureau of Waste Site Cleanup  
20 Riverside Drive, Lakeville, Massachusetts 02347

Dear Mr. Martin:

Re: Phase V Status and Remedial Monitoring Report  
100 Neponset Street  
Walpole, Massachusetts  
RTN 4-3024222

On behalf of Baker Hughes, Inc. (BHI), AMEC Environment and Infrastructure (AMEC) is providing this Phase V Status and Remedial Monitoring Report (RMR) for the Bird Machine Company Site at 100 Neponset Street in Walpole, Massachusetts. BHI is submitting this RMR pursuant to 310 CMR 40.0890 of the Massachusetts Contingency Plan (MCP). The Site is listed as Release Tracking Number (RTN) 4-3024222 under the MCP.

This RMR documents the operation of a Comprehensive Remedial Action that is expected to be a Permanent Solution for the Site, and that was installed as described in the Phase IV Final Inspection Report. A Permanent Solution will achieve a condition of No Significant Risk for current and reasonably foreseeable site uses. As documented in the Class C-2 Response Action Outcome Statement submitted to the Massachusetts Department of Environmental Protection (MassDEP) on December 16, 2011, the Site already achieves the requirements of a Temporary Solution.

A copy of the Executive Summary of this report is attached to this letter, which is being sent by US Mail to members of the Public Involvement Plan (PIP) mailing list. A paper copy of the RMR is being provided to the PIP repository at the Walpole Public Library (Telephone Number: 508-660-7341) at 143 School Street. The electronic report has been uploaded to the MassDEP (<http://public.dep.state.ma.us/SearchableSites/Search.asp>) and is also being provided today to the Town of Walpole for upload to their website: <http://www.walpole-ma.gov/economic-development/pages/bird-machine-information>.

Comments on this RMR can be submitted to Chris Clodfelter of Baker Hughes at the following address:

Chris Clodfelter  
Senior HS&E Specialist  
Baker Hughes Incorporated  
2929 Allen Parkway  
Suite 2100  
Houston, Texas 77019-2118  
Office: 713.439.8329 | Fax: 713.439.8383



Please contact me if you have any questions regarding the Public Involvement process for this document.

Sincerely,

A handwritten signature in black ink, appearing to read "Kim M. Henry". The signature is fluid and cursive, with a large loop at the end.

Kim M. Henry  
LSP No. 7122

cc:

Mr. Michael Boynton, Walpole Town Administrator  
Ms. Robin Chapell, Walpole Health Agent  
Ms. Landis Hershey, Walpole Conservation Agent  
Ms. Deborah Burke, Key Petitioner  
Public Involvement Plan Mailing List

Enclosure:

Copy of Phase V RMR Executive Summary



## **COPY OF PHASE V RMR - EXECUTIVE SUMMARY**

On behalf of Baker Hughes, Inc. (BHI), AMEC Environment & Infrastructure, Inc. (AMEC) completed this Phase V Status and Remedial Monitoring Report (RMR) for the former Bird Machine Company (BMC) Site located in Walpole, Massachusetts. BHI is submitting this RMR pursuant to 310 CMR 40.0890 of the Massachusetts Contingency Plan (MCP). This RMR documents the operation of a Comprehensive Remedial Action that is expected to be a Permanent Solution for the Site, and that was installed as described in the Phase IV Final Inspection Report (FIR; AMEC 2012). A Permanent Solution will achieve a condition of No Significant Risk (NSR) for current and reasonably foreseeable site uses. As documented in the Class C-2 Response Action Outcome (RAO) Statement submitted to the Massachusetts Department of Environmental Protection (MassDEP) on December 16, 2011, the Site already achieves the requirements of a Temporary Solution (AMEC 2011a).

Release Abatement Measures (RAMs) have been conducted at several locations between 2005 and 2011 to reduce the mass and concentrations of contaminants at the Site. The Phase II Comprehensive Site Assessment (CSA) reports (AMEC 2011b, AMEC 2011c) indicate that a condition of NSR exists for all areas of the Site except groundwater, where some monitoring well concentrations exceed drinking water criteria (Massachusetts Maximum Contaminant Levels or MMCLs). It is unlikely that groundwater at the Site will be used for drinking water, but the Site is within a Potential Drinking Water Source Area designated by the Town of Walpole (Walpole 2007). Considering this designation, groundwater at the Site is categorized as GW-1 under the MCP. The CSA reports found no current pathway between Site contaminants and the Town's water supply wells to the northeast, but the potential for contaminant movement from a portion of the Site warrants further monitoring. Background information including a description of RAMs and Site characteristics is summarized in Section 1 of this RMR.

Areas of groundwater contamination exceeding MMCLs have been identified for arsenic, chlorinated Volatile Organic Compounds (cVOCs), and 1,4-dichlorobenzene (DCB). A Monitored Natural Attenuation (MNA) remedy consisting of active monitoring of natural processes was selected to achieve cleanup goals, and was installed in accordance with Phase IV of the MCP. MNA is considered an Active Remedial Monitoring Program under the MCP and has been designed and constructed to provide a Permanent Solution that achieves a condition of NSR, as described in the FIR (AMEC 2012).

The August 2013 Phase V Status and Remedial Monitoring Report (RMR; AMEC 2013) coincided with one year of initial process monitoring as described in the FIR (AMEC 2012). At that time, it was determined that initial process monitoring had confirmed that key MNA processes were underway and a transition to long-term performance monitoring was appropriate. Long-term monitoring is designed to confirm that site conditions remain suitable for MNA, and that overall contaminant concentrations and mass are decreasing within a reasonable timeframe.

The long-term monitoring program includes continued quarterly sampling at six locations within the plumes that have had significant fluctuations in recent contaminant concentrations above



the MMCLs. Semiannual sampling is performed for 9 other wells within the horizontal and vertical extent of the plume areas where previous quarterly sampling shows little variation in concentrations. Annual sampling is performed for 23 wells along the plume lateral or vertical edges where concentrations are below MMCLs. Analytes for long-term monitoring consist of the contaminants exceeding MMCLs and their primary breakdown products.

Wells sampled during the September round included the subset of wells sampled on a quarterly basis. Wells sampled during the December/January round included the subset of wells sampled on a quarterly and semi-annual basis.

Section 1 of this report provides background information for the site. Section 2 describes monitoring procedures, and Section 3 documents any modifications from the plans presented in the FIR. Section 4 of this RMR provides monitoring results and evaluations of MNA effectiveness, and Section 5 includes an updated Conceptual Site Model (CSM) and recommendations for future monitoring. This RMR documents that a remedial monitoring well network to support an Active Remedial Monitoring Program is being operated in accordance with the plans and specifications presented in the FIR.