



August 27, 2012

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 IV Final Inspection Report  
Former Bird Machine Company  
100 Neponset Street  
Walpole, Massachusetts  
RTN 4-3024222

On behalf of Baker Hughes, Inc. (BHI), AMEC Environment and Infrastructure (AMEC) is submitting the Phase IV Final Inspection Report (FIR) for the Bird Machine Company Site at 100 Neponset Street in Walpole, Massachusetts. BHI is submitting this FIR pursuant to 310 CMR 40.0870 of the Massachusetts Contingency Plan (MCP). The Site is listed as Release Tracking Number (RTN) 4-3024222 under the MCP. A public comment draft of the attached document was distributed on July 17, 2012, and comments on the draft were received at a public meeting in Walpole on July 31, 2012. The comment period for this document closed on August 6, 2012. Responses to comments on the draft document are included in Appendix F of the attached report.

This Phase IV FIR documents the construction of a Comprehensive Remedial Action that is expected to be a Permanent Solution for the Site, and that was planned in the Phase IV Remedy Implementation Plan. 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 copied to members of the Public Involvement Plan (PIP) mailing list. A paper copy of the Final Phase IV FIR 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://db.state.ma.us/dep/cleanup/sites/Search.asp>) and is also being provided today to the Town of Walpole for upload to their website: <http://walpole-ma.gov/BirdMachine.htm>.

Please contact me if you have any questions on this document.

Sincerely,

A handwritten signature in black ink, appearing to read "Kim M. Henry", with a long, sweeping horizontal stroke extending to the right.

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 Final Phase IV FIR Executive Summary



## **COPY OF FINAL PHASE IV FIR - EXECUTIVE SUMMARY**

On behalf of Baker Hughes, Inc. (BHI), AMEC Environment & Infrastructure, Inc. (AMEC) completed this Phase IV Final Inspection Report (FIR) for the former Bird Machine Company (BMC) Site located in Walpole, Massachusetts. BHI is submitting this FIR pursuant to 310 CMR 40.0870 of the Massachusetts Contingency Plan (MCP). This FIR documents the construction of a Comprehensive Remedial Action that is expected to be a Permanent Solution for the Site, and that was planned in the Phase IV Remedy Implementation Plan (RIP; 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 FIR.

Areas of groundwater contamination exceeding MMCLs have been identified for arsenic, chlorinated Volatile Organic Compounds (cVOCs), and 1,4-dichlorobenzene (DCB). Monitored Natural Attenuation (MNA) consists of active monitoring of natural processes to ensure attainment of cleanup goals, and was selected for implementation in Phase IV. 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 RIP (AMEC 2012).

AMEC mobilized to the Site in April 2012 to conduct interim investigations to refine the conceptual MNA well locations in accordance with the RIP. Section 2 of this FIR provides the results of these investigations and the refined layout of MNA wells based on the results. AMEC mobilized to the Site again in June 2012 to construct and sample the MNA wells; Section 2 includes the construction details and sampling results for this monitoring system. The potential areas of groundwater contamination above MMCLs are illustrated in three dimensions using a plan view and cross-sections, and the Conceptual Site Model (CSM) is updated.

Section 3 of this FIR summarizes the Operation, Maintenance, and Monitoring (OMM) program based on the plan presented in the RIP, including sampling methods and locations, analytical

parameters, and monitoring frequencies, along with data evaluation and reporting methods. Initially the program will include 42 water quality monitoring wells and 19 additional water level monitoring points (wells or surface water benchmarks) measured on a quarterly basis. Methods of determining MNA effectiveness and procedures for changing this program over time are summarized in Section 3, and a list of permits and regulatory approvals relating to the MNA system is provided.

This FIR documents that a remedial monitoring well network to support an Active Remedial Monitoring Program has been designed and constructed in accordance with the plans and specifications presented in the RIP. This program will be implemented under Phase V of the MCP, and the results of performance monitoring conducted through groundwater sampling and data evaluation will be presented in semiannual Remedial Monitoring Reports.