

**EXPLANATION OF SIGNIFICANT DIFFERENCE
BAIRD & MCGUIRE SUPERFUND SITE
HOLBROOK, MASSACHUSETTS
OPERABLE UNITS 1 AND 2
GROUNDWATER AND SOURCE CONTROL REMEDIES**

Site Name: Baird & McGuire Superfund Site

Location: Holbrook, Massachusetts

Lead Agency: U.S. Environmental Protection Agency

Support Agency: Massachusetts Department of Environmental Protection

Under Section 117(a) of the Comprehensive Environmental Response, Compensation and Liability Act (CERCLA), and promulgated in 40 C.F.R. Sections 300.435(c)(2)(I) and 300.825(a)(2), if the United States Environmental Protection Agency (EPA) determines that the remedial action at the site differs significantly in scope, performance or cost from the Record of Decision (ROD) for the Baird & McGuire Superfund Site (site), EPA shall publish an explanation of significant difference between the remedial action being undertaken and the remedial action set forth in the ROD and the reasons such changes are being made.

This Explanation of Significant Difference (ESD) addresses changes to the Operable Units (OUs) 1 and 2 - Source Control and Groundwater ROD (ROD I). Included in this ESD is a brief history of the site, a description of the remedies selected in the ROD I signed on September 30, 1986, and a description of and rationale for the changes to this ROD.

This ESD and other supporting documents can be found in the Administrative Record located at EPA's Region I Records Center, located at One Congress Street, Suite 1100, Boston, Massachusetts, 02114-2023 with hours from Monday thru Friday 8 a.m. - 1 p.m. and 2 p.m. - 5 p.m., and at the Holbrook Public Library, 2 Plymouth Street, Holbrook, Massachusetts 02343.

I. Site History

The site consists of approximately 32.5 acres and is located on South Street in Holbrook, MA. The site includes the location of a former chemical mixing and batching company (Baird & McGuire, Inc.), property that had Baird & McGuire ownership, privately owned lots and property owned jointly by the Towns of Holbrook and Randolph. Land use in the general vicinity of the site (i.e., to the north and south of the site along South Street; on Center and Union Street and the Cochato Industrial Park located to the east of the site) is primarily industrial/commercial. The area west of South Street is primarily residential. The Cochato River forms the eastern perimeter of the site.

Baird & McGuire, Inc. operated a chemical mixing and batching company from 1912 until 1983. The State became involved with the site in the period between 1954 and 1977 when the company was fined at least thirty-five times for numerous violations of the Federal Insecticide, Fungicide and Rodenticide Act of 1947 (FIFRA). In 1981 and 1982 the Massachusetts Department of Environmental Quality Engineering (DEQE) documented a number of questionable disposal practices. From February through April 1982, Baird & McGuire voluntarily undertook a series of remedial actions. In October 1982 the site was proposed to the National Priorities List (NPL) and finalized on September 8, 1983. EPA initiated a removal action at the site which included the removal of 1,000 cubic yards of contaminated soil, the construction of a clay cap, the installation of a groundwater interception/recirculation system and construction of limited fencing. On May 2, 1983, the Board of Selectman of Holbrook revoked the Baird & McGuire's permit to store chemicals at the site and ordered it to dismantle its existing storage facilities. As a result of this order, Baird & McGuire was forced to cease operations.

II. Summary of Remedy

EPA has issued three RODs for four remedial operable units at the site (EPA, 1986; 1989; 1990). The first ROD, issued in September 1986, included OU 1, groundwater extraction and treatment at an on-site plant to address groundwater and OU 2, to address soil excavation and treatment at an on-site incinerator (ROD I). The second ROD, issued in September 1989, addressed contamination in the Cochato River sediment (OU 3). The final ROD, Operable Unit 4, was issued in 1990, and called for the reopening of the Donna Road Wellfield as an alternate water supply for the community (Alternate Water Supply ROD).

ROD I specified groundwater extraction and on-site treatment to address a groundwater contaminated plume that originated from the Baird & McGuire property and extending beyond the Cochato River. The current system consists of seven extraction wells that pump contaminated groundwater to a groundwater treatment facility and four recharge basins for discharge of treated groundwater back to the aquifer. This plant has been operating for approximately twelve years. Subsequent to the 1986 ROD, it was determined that light non-aqueous phase liquid (LNAPL) is present in the central part of the site plume. A LNAPL remediation system became operational in March 1999 and continues to operate. This ROD also specified the excavation and treatment of contaminated soils. This action was completed in 1997. The OU 3 Cochato sediment excavation and restoration was completed in 1996.

The Alternate Water Supply ROD required that an alternate water supply be developed to address the risk that was thought to exist due to the loss of the South Street Wellfield, located within 1,500 feet of the site. The Alternate Water Supply ROD required the reactivation of the Donna Road Wellfield to supplement the Great Pond Reservoir system water supply. In August 2003 an ESD to ROD I incorporated an on-going municipal water supply expansion project to increase the capacity of Upper Reservoir/Great Pond to provide for a greater safe yield through partial funding to replace the lost demand from the South Street Wellfield.

Also in August 2003, a second ESD changed the third ROD by not requiring the reactivation of

the Donna Road Wellfield due to the change in ROD I and that no further action will be taken for OU4.

III. Explanation of Significant Difference

When the 1986 ROD was signed, the future use of the site was a not a primary concern. EPA policy now encourages future use of the site where compatible with the remedy. To ensure that the current remedy is not disturbed through future use and in order to prevent unacceptable exposure to contaminants and to prevent further migration of contaminants, the ROD remedy needs to be modified to include administrative and/or legal controls (known as “institutional controls”). The form of the institutional controls may include deed restrictions, easements, grant restrictions, notices and/or zoning ordinances. The institutional controls will impose certain groundwater and land use restrictions on the site in order to: (1) prevent the extraction, consumption or utilization of groundwater or the migration of contaminated groundwater; (2) prevent land uses that could result in unacceptable exposure to contaminants, such as soil excavation; (3) prevent interference with the remedy and to ensure its effectiveness and maintenance; (4) protect all wells, piping, appurtenances; and (5) provide access to EPA and/or DEP and their representatives.

The institutional controls for groundwater and the protection of the remedy are expected to remain in effect until the remedial action goals are achieved, while the one for soils are expected to remain as long as the waste remains in place. Implementation of the institutional controls is expected to be completed within a three-year time frame.

The institutional controls will include restrictions for parcels of property identified in Figure 1. Modification to this figure may be made during the development and implementation of the institutional controls. Objectives of these restrictions will include:

- ! Groundwater under the properties will not be extracted, consumed or utilized to prevent public exposure to contamination or to cause the migration of contaminated groundwater. However, groundwater may be removed and tested for purposes of evaluating groundwater quality only.
- ! The properties will not be used in a manner that would cause recontamination of clean soil, interfere with the operation and maintenance of the remedy, or which may result in unacceptable exposures (e.g., prohibition on residential development on some parcels).
- ! Excavations on the properties identified in Figure 1 within the limit of the excavation area will be prohibited unless certain conditions are satisfied.
- ! Provide access for EPA and/or DEP and their representatives on all parcels where restrictions will be placed until EPA and DEP determine that controls are no longer necessary.

Specific prohibitions and conditions to implement these objectives will be outlined in greater detail during implementation of these Institutional Controls. To the extent that deed restrictions, grants of environmental restrictions or easements are implemented as institutional controls, appropriate survey plan, subordination, title and other requirements shall be satisfied.

IV. Support Agency Comments

The Massachusetts Department of Environmental Protection has reviewed this ESD and has concurred with the changes to the remedies described herein.

V. Affirmation of Statutory Determinations

ROD I did not specify the need to implement, maintain and enforce institutional controls. Institutional controls are necessary to ensure that the remedy remains protective of human health and the environment for as long as the remedy is required. EPA and DEP believe that the remedy as revised by this ESD will provide further protection of human health and the environment. All activities that take place associated with the implementation, maintenance and enforcement of these institutional controls shall be conducted in accordance with all applicable laws. In addition, the revised remedy utilizes permanent solutions to the maximum extent practicable for this site and it is cost-effective.

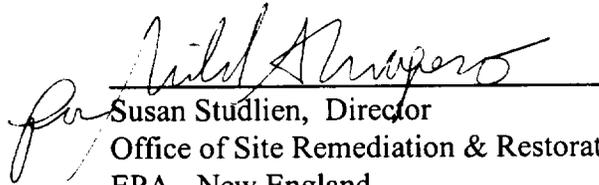
VI. Public Participation Activities

This ESD and supporting information are available for public review at the locations and times identified in the introduction of this document. In addition, a notice of availability and brief description of the ESD will be provided to the Patriot Ledger, a local newspaper of general circulation.

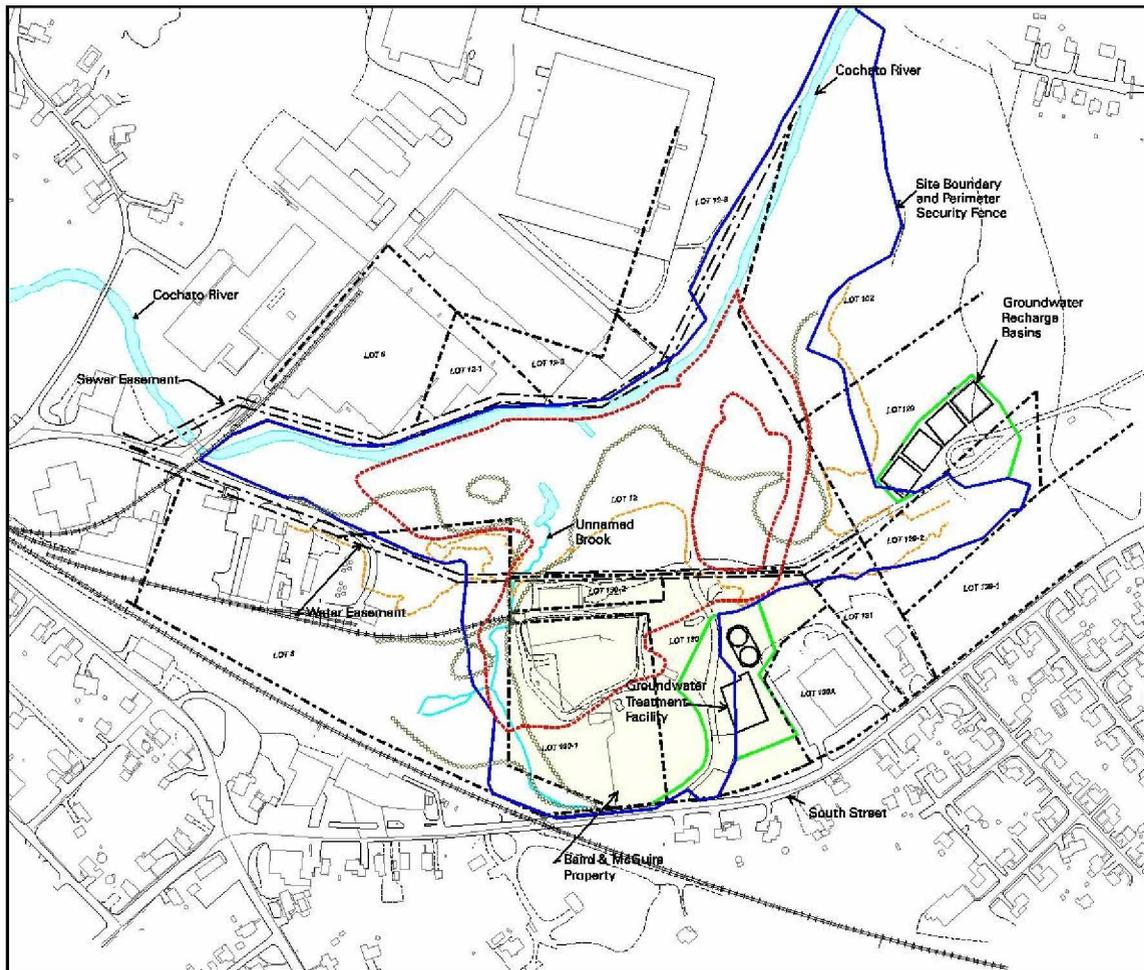
VII. Declaration

For the foregoing reasons, by my signature below, EPA is issuing this Explanation of Significant Difference for the Baird & McGuire Superfund Site in Holbrook, Massachusetts.

4-6-05
Date



Susan Studlien, Director
Office of Site Remediation & Restoration
EPA - New England



LEGEND

- Limit of Excavation
- - - Property Lines
- - - Easement
- Site Boundary and Perimeter Security Fence
- Additional Fencing
- Roads
- Streams
- Wetland Delineation
- 100 Year Floodplain
- Ponds and Waterbodies
- Baird & McGuire Property

MAP SOURCE:
 Shaw Map to Town, Eastern Topographical (May 4, 1999).
 Site features are compiled from numerous project
 plans and documents. All locations are approximate.

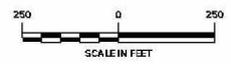
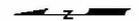


Figure 1.
 BAIRD & MCGUIRE
 SITE FEATURES.

BAIRD & MCGUIRE SUPERFUND SITE
 M&E Print Date: May 21, 1998