Public Involvement Plan Meeting Former Raytheon Facility Wayland, MA

Large Meeting Room Wayland Town Hall Wayland, MA

September 28, 2000

Meeting Agenda

- Introduction
- Presentation of Site Conditions
- Question Period
 - Important to identify speakers (name and address)
 - Comments need to be documented
- Accept additional names for public mailings

Introduction

Presentation of Site Conditions

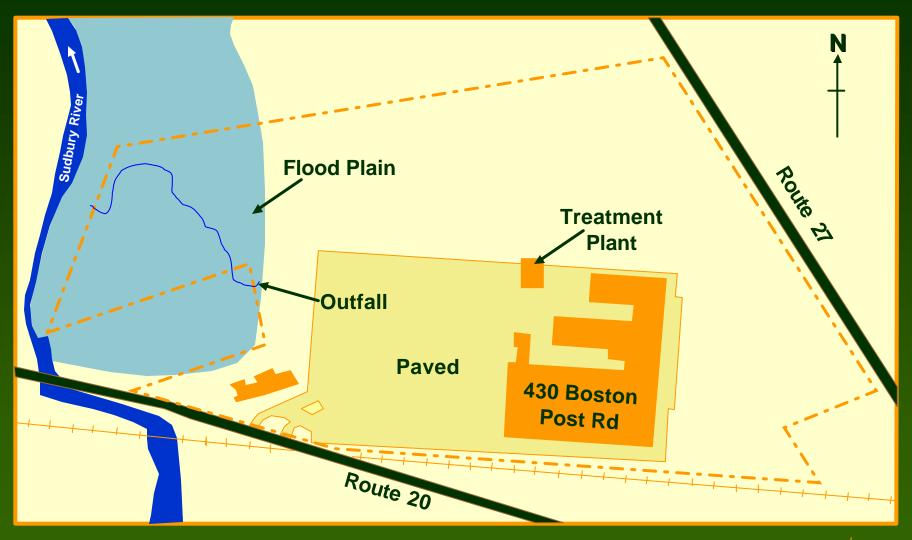
Land-Use History

- Size of land 83 acres
- 1955 Previously undeveloped land
- 1955-97 Raytheon leased property (never owned)
- 1957-95 Raytheon operations
- Property located in Water Supply Protection Zone II
- Wetlands located on property
 - Adjacent to Sudbury River
 - Contiguous with Great Meadows NWR
 - Outfall





Site Plan



Raytheon Operations History

- Research and development facility for defense electronics
- Radar development and testing
 - Test radars on roof
 - Targets on towers
- Prototype electronic equipment
 - Antennae and transmitters
 - Design and test of manufacturing processes
- Retrofit of defense electronic field equipment

Site/Regulatory History

1995-96 - Site closure activities

– RTN # 1783	CERCLIS review	1987 (C)
_ RTN # FRRn92-1340	LIST Removal	1992 (C)

- May 1995 Initiated a Phase I Investigation
 - Identified several areas of concern

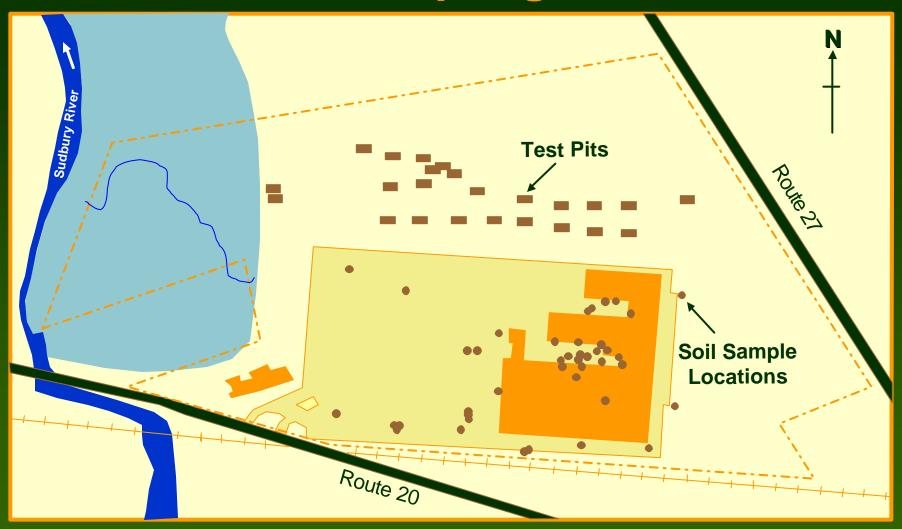
– RTN # 3-13302	Fuel Oil Release	1996 (C)
- RTN # 3-13574	VOCs in groundwater	1996
- RTN # 3-14042	PCBs in Soil	1996

- May 1996 Phase I submitted to MADEP
- 1997 MCP Tier 1B Classification
- Several remedial actions to date

Investigation in Process

- Investigative activities included samples of soil groundwater, sediments, surface water; and aquifer testing
- Soil evaluation and removal actions
 - 67 samples analyzed for metals, VOCs, PAHs, and PCBs
 - 24 test pits completed in northern portion
 - 4 Limited Removal Actions ("LRAs") performed
 - Two Release Abatement Measures ("RAMs") performed
 - tank removal and Activity and Use Limitation ("AUL") by new owner, Wayland Business Center ("WBC")
 - soil removal for RTN # 3-14042
 - Soil concentrations are below MCP standards with exception of the restricted areas (WBC AUL)

Soil Sampling Plan

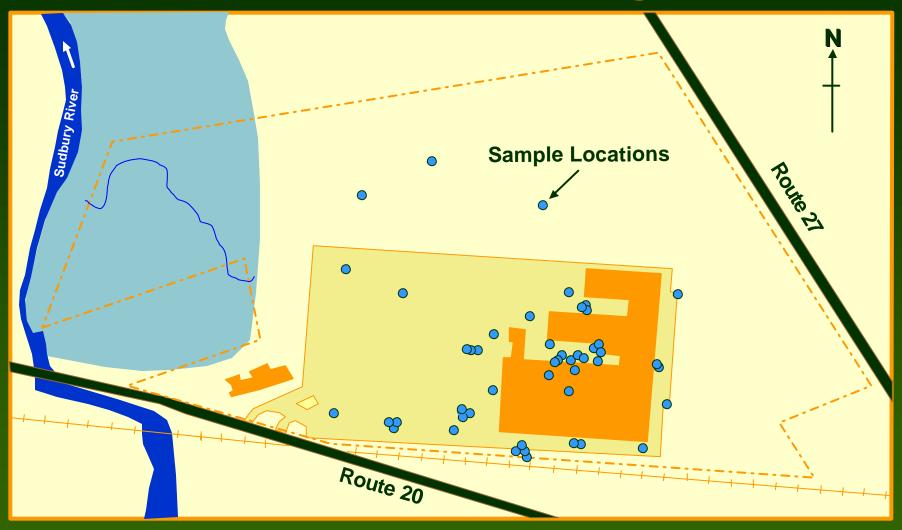


Investigation in Process

Groundwater evaluation

- Site located in Zone II for Baldwin Pond Wells (1/2 mile)
- 58 GW wells installed to date (shallow, intermediate, deep and bedrock wells)
- Iterative process, 5 phases of drilling
- > 100 analyses of samples since 1996
- Analyzed for VOCs, metals, TPH and inorganic compounds
- VOCs exceed applicable MCP guidelines
- Groundwater remediation will be required

Groundwater Sampling Plan



Investigation in Process

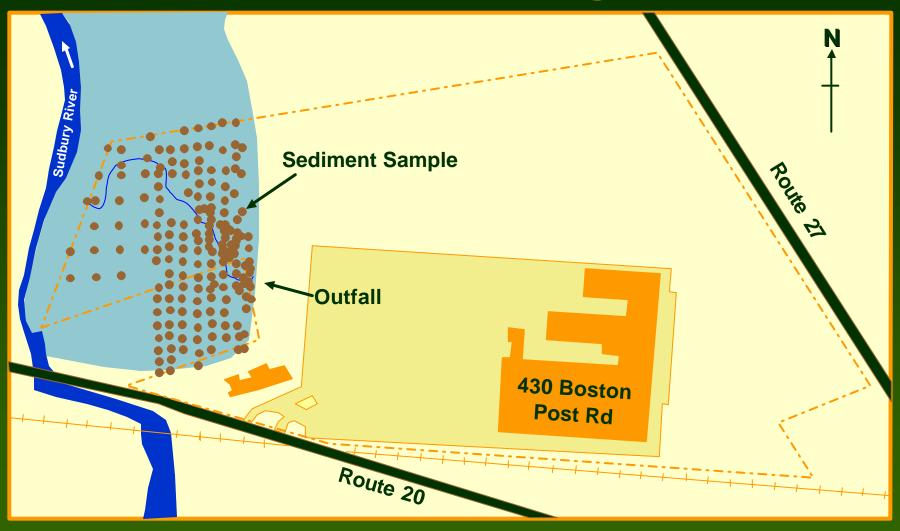
Sediment evaluation

- 1986-91 U.S. Fish & Wildlife ("USFW") sampling of Great Meadows National Wildlife Refuge
 - mercury, arsenic, lead, cadmium, chromium, copper and PCBs detected
- 1990 Raytheon identified improperly connected plumbing
 - collected sediment and surface water samples near outfall
 - detected metals and PAHs
 - non-detect for butyl cellusolve, PCBs and pesticides
 - closed under prior regulations
- 1995 additional sediment samples collected, could not duplicate USFW data
- 1995 Response Action Outcome ("RAO") filed for 1990 release

Investigation in Process

- Sediment evaluation (con't)
 - Phase II evaluation indicated need for additional sediment sampling
 - late 1998 detected metals, petroleum, and PCBs near outfall
 - retained wetland and ecological specialists
 - 1999 completed 2 additional sampling rounds
 - January 2000 specialists identified vegetation with stunted growth (historic)

Sediment Sampling Plan



Regulatory Implication

- 310 CMR 40.0955 Imminent Hazard Risk Characterization "The following conditions shall constitute an Imminent Hazard to the environment; a) evidence of stressed biota attributed to the disposal site"
 - Area of stunted vegetation coincides with contaminants
 - April 26, 2000 Raytheon verbally notified MADEP
 - May 4, 2000 MADEP site inspection
 - May 10, 2000 NOR issued (RTN # 3-19482) Wetland
 - May 25, 2000 Tier IA Permit Application submitted to MADEP
 - June 26, 2000 Imminent Hazard Evaluation, IRA plan
 - August 23, 2000 Public Involvement Plan
 - September 7, 2000 MADEP response (Tier 1B appropriate)

Public Involvement Plan ("PIP")

- Citizens can become formally involved in the planning of response actions by submitting a petition
- Purpose of PIP is to:
 - Provide public with site information and an opportunity for comment to draft documents
- June 24, 2000, received a petition for the PIP
- June 28, 2000, delivered a presentation to the Town
- August 22, 2000, completed the PIP interview with the Town Officials
- August 23, 2000, the Draft PIP was submitted to the PIP members

Public Involvement Plan

- 20-day public comment period following this meeting
- Written response is due to Raytheon before October 13, 2000
- A summary of the comments received and a response to those comments will be prepared
- Documents will be made available at the information repositories (Public Library and Board of Health)
- Notice of availability of the documents will be sent to the PIP mailing list

Public Involvement Process

- Future opportunities for the public to comment on submittals:
 - Phase II Comprehensive Site Assessment
 - Phase III Remedial Action Plan
 - Phase IV Remedy Implementation Plan
 - IRA and RAM Plans
 - RAOs (including AULs)

Future Actions

- Finalize Notice of Proposed Permit Decision received from MADEP (comments due to MADEP 10/4/00)
- Finalize PIP
- Complete Phase II & Phase III Site Investigations
 - additional sediment, surface water and biota sampling and analyses may be needed
 - biota survey
 - human and ecological risk assessments
 - evaluate remedial alternatives
- Schedule dependent on MADEP, EPA and PIP reviews
- Perform remedial actions

Question Period

Accept Additional Names for Public Mailings