



CONDUCTORLAB

DRAFT PERMANENT SOLUTION STATEMENT

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Honeywell

AGENDA

- Current Regulatory Status
- Update Since Last Meeting
- Overview of Draft Permanent Solution Statement (PSS)
- Conditions of PSS and Future Site Use

CURRENT REGULATORY STATUS

- Site managed under Massachusetts Contingency Plan (MCP) in coordination with Massachusetts Department of Environmental Protection (MassDEP)
- Site is currently at a Temporary Solution and has achieved a condition of No Significant Risk and met other requirements for a Permanent Solution with Conditions

2023 UPDATE

Since our last update on July 27, 2022, Honeywell:

- Submitted the Temporary Solution Operation, Maintenance, and Monitoring Report (January 2022 – June 2022) on September 21, 2022
- Submitted the Temporary Solution Operation, Maintenance, and Monitoring Report (July 2022 – December 2022) on March 28, 2023
- Activity and Use Limitation (AUL) for a Portion of the Conductorlab Property (430 Main Street) is being signed prior to recording.
- Completed the draft Permanent Solution Statement

PERMANENT SOLUTION STATEMENT (PSS)

The contents of the Permanent Solution Statement meet the regulatory requirements at 310 CMR 40.1056

Executive Summary

1.0 Introduction

2.0 Disposal Site History

3.0 Site Geology and Hydrogeology

4.0 Conceptual Site Model

5.0 Risk Characterization

6.0 Representativeness Evaluation and Data Usability Assessment

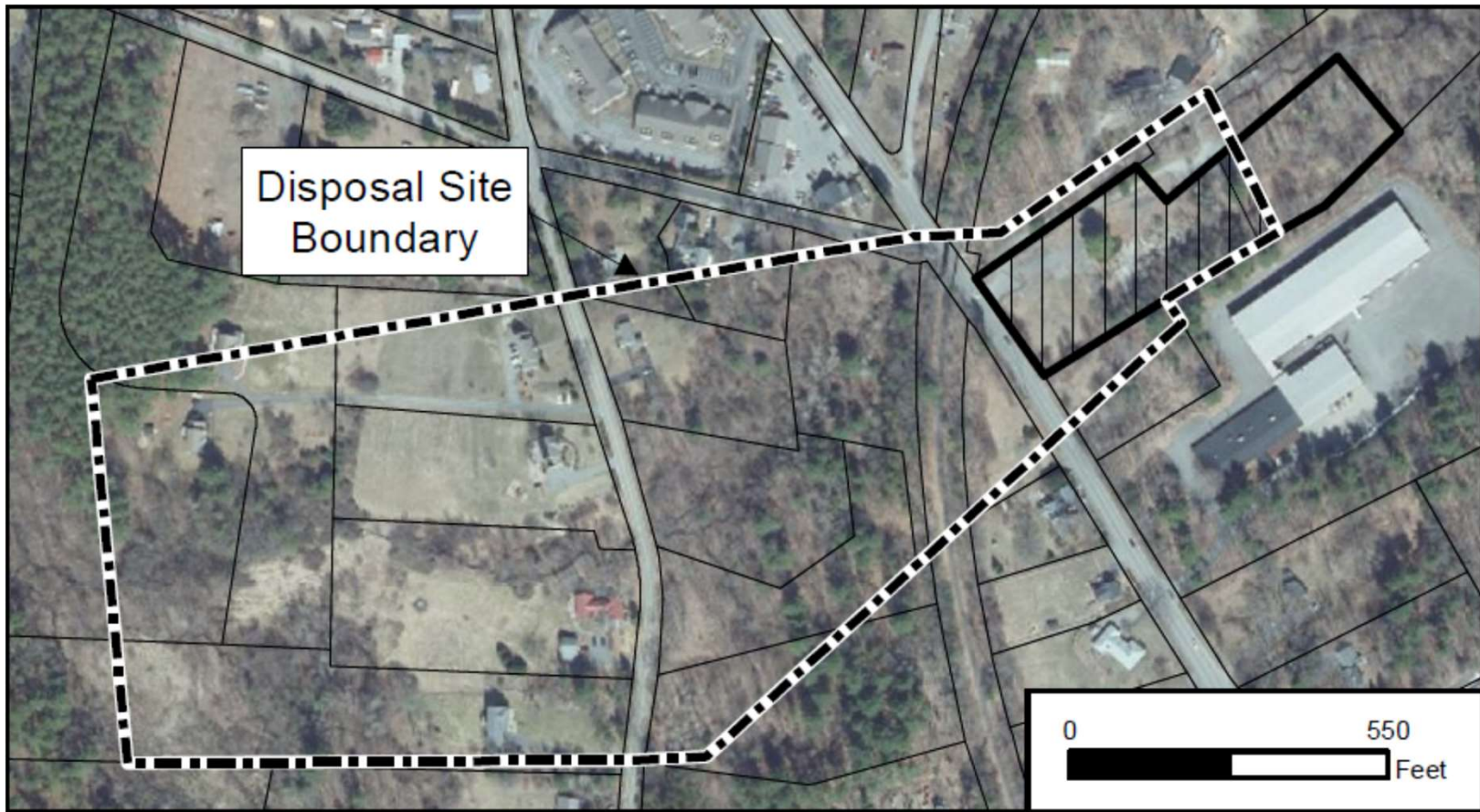
7.0 Conditions of the Permanent Solution Statement

8.0 Permanent Solution Statement

9.0 References

DISPOSAL SITE BOUNDARY

- Defined as area where compounds from a release have come to be located
- Permanent Solution Statement addresses the entire area within Disposal Site Boundary (indicated by dashed line)
- Activity and Use Limitation (AUL) is being implemented at a Portion of 430 Main Street (hachured area)



CONCEPTUAL SITE MODEL

- Oil and/or Hazardous Materials (OHM) at the site consist primarily of trichloroethylene (TCE) and hexavalent chromium (Cr^{+6})
- Sources of OHM have been addressed by multiple phases of remediation including groundwater pump and treat, soil removal, in-situ chemical oxidation, in-situ chemical reduction and zero valent iron
- Extent of OHM remaining on-Property and off-Property
 - **On-Property:** soil and groundwater
 - **Off-Property:** groundwater, sediments and surface water

CONCEPTUAL SITE MODEL (CONTINUED)

- Extent of OHM in various media
 - **Soil:** to depth of approximately 20 feet within Activity and Use Limitation (AUL) area on-property, exposures to be controlled by AUL
 - **Groundwater:** defined by extent of Disposal Site west of Main Street, remaining concentrations pose No Significant Risk
 - **Sediments:** in Unnamed Brook, detections in sediment demonstrated to pose No Significant Risk to humans and ecological receptors
 - **Surface Water:** in Unnamed Brook, detections in surface water demonstrated to pose No Significant Risk to humans and ecological receptors
- Vapor Intrusion Pathway Ruled Out (based on investigations in 1991, 1993, and 2015) on developed parcels

RISK CHARACTERIZATION

- Section 5.0 of the PSS summarizes the findings of the human health and ecological risk characterizations
- Details of the risk characterizations are found in Appendices C and E of the PSS.
- The Method 3 Human Health Risk Characterization:
 - Evaluates complete exposure pathways for current and possible future receptors for exposure to compounds of concern in affected media
 - Calculates cumulative risks posed to various hypothetical receptors
 - For each receptor, compares risks to MassDEP criteria of 1×10^{-5} (cancer) and 1 (non-cancer)

HUMAN HEALTH RISK CHARACTERIZATION

- Conclusions of Human Health Risk Characterization
 - Notices Restricting Use of Groundwater prohibit personal, domestic or industrial uses of groundwater for almost all parcels within the Disposal Site Boundary
 - No Significant Risk for Current Receptors (on- and off-Property trespasser, on- and off-Property emergency utility worker, and off-Property nearby residents)
 - No Significant Risk for Potential Future Receptors (on-Property commercial/industrial worker, on- and off-Property construction worker, and on- and off-Property utility worker [planned non-emergency work])
 - For On-Property and at other undeveloped parcels where groundwater concentrations exceed GW-2 standards, a vapor intrusion evaluation must be conducted prior to future building construction
 - An Activity and Use Limitation will prohibit sensitive uses on a portion of the Conductorlab Property (residential, school, daycare, active recreational use, agricultural uses and gardening for human consumption)

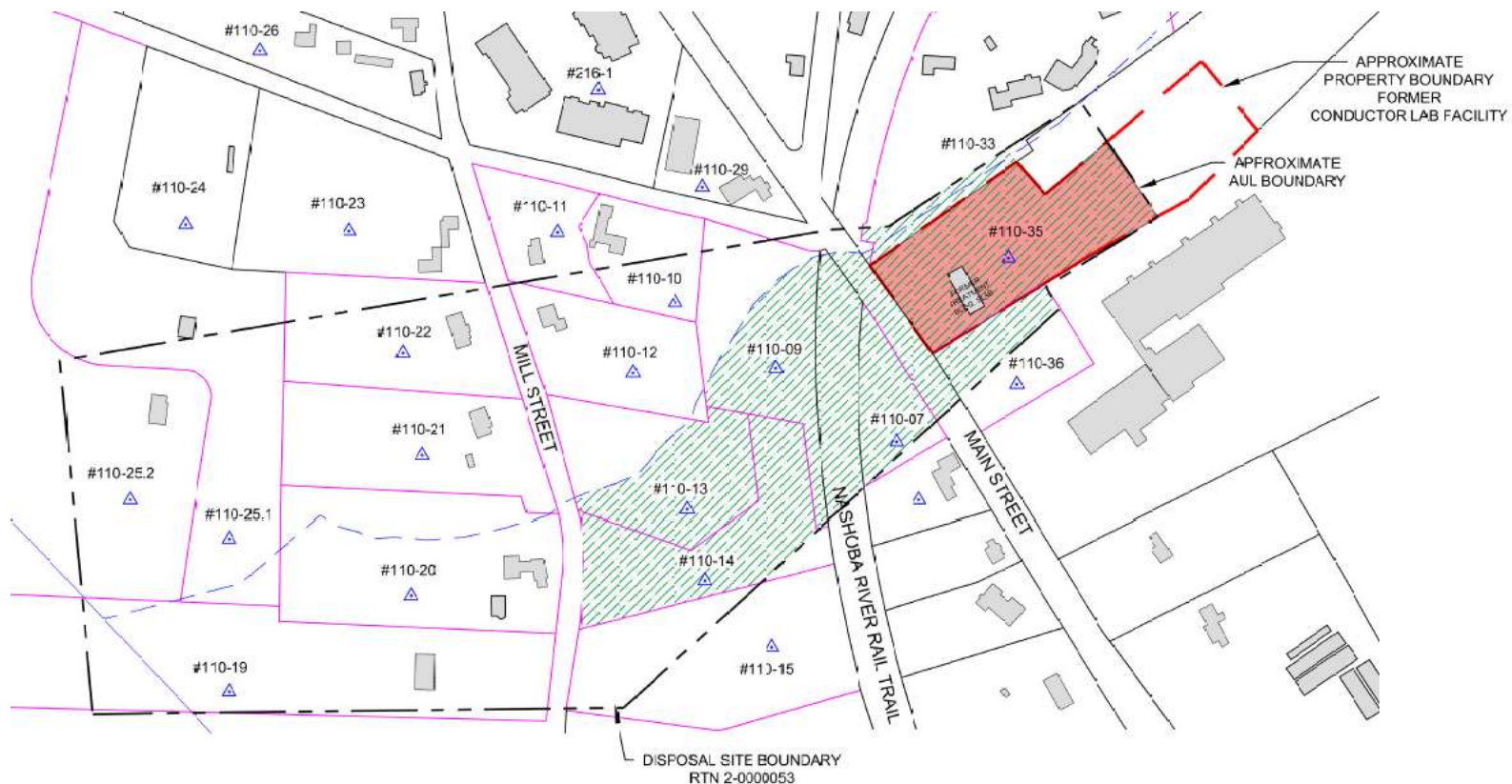
ECOLOGICAL RISK CHARACTERIZATION

- Updated Ecological Risk Characterization includes a Stage I Environmental Screening for sediments and Stage II Environmental Risk Characterization for surface water and terrestrial soil
- Ecological Risk Characterization concluded No Significant Risk of harm to the environment
 - No physical evidence of a continuing release to surface water and wetland that significantly affects environmental receptors
 - No evidence of biologically significant harm
 - Although concentrations of hexavalent chromium exceed Surface Water Quality Standards, they are below a site-specific lowest-observed-effect-concentration of 90 ug/L. Also, field observations indicate that the aquatic community is not impaired.

CONDITIONS OF THE PERMANENT SOLUTION

The following Conditions must be met to maintain No Significant Risk at the Disposal Site:

- Notices Restricting Use of Groundwater remain in effect
- On undeveloped land where groundwater concentrations exceed GW-2 standards, vapor intrusion evaluation must be conducted prior to future building construction (green hatching)



CONDITIONS OF PSS (CONTINUED)

The following Conditions must be met to maintain No Significant Risk at the Disposal Site:

- Groundwater generated during utility work within the Main Street public way contains residual concentrations of Site-related compounds and must be properly managed.
- An Activity and Use Limitation (AUL) has been applied to a portion of the Conductorlab Property



ACTIVITY AND USE LIMITATION (AUL)

The Activity and Use Limitation (AUL) addresses concentrations of site-related compounds that remain in soil:

- Prohibits sensitive uses: residential, school, daycare, and active recreational uses such as playground or playing fields
- Prohibits agricultural uses (including gardening for growing produce for human consumption)
- Allows commercial and industrial uses (including landscaping and grounds-keeping)
- Health and Safety and Soil Management Plans are required for subsurface activities associated with construction and utility work

The AUL also reinforces the requirement for a vapor intrusion evaluation, as groundwater concentrations exceed GW-2 standards in the AUL area.

REQUIREMENTS FOR PERMANENT SOLUTION

In addition to achieving No Significant Risk, these requirements for a Permanent Solution have also been met:

- Remediation has eliminated or controlled sources of contamination.
- A feasibility evaluation was performed, and it is infeasible to achieve or approach background for contaminants in soil, groundwater and surface water.
- Levels of contaminants have been reduced to the extent feasible.
- Remediation has resulted in groundwater concentrations that are stable or declining.
- Vapor intrusion is not occurring in occupied buildings within the Site and any vapor-phase concentrations in the vadose zone will continue to decline.
- Non-Aqueous Phase Liquid (NAPL) is not present.
- Exposure point concentrations in soil and groundwater do not exceed applicable Upper Concentration Limits.

NEXT STEPS

- Finalize Permanent Solution Statement (PSS) based on comments from the Conductorlab Oversight Committee
- Submit PSS electronically to the Massachusetts Department of Environmental Protection
- Evaluate options for sale and potential redevelopment of the parcels owned by Honeywell or its wholly-owned subsidiary, Grimes Aerospace.
- Prepare fact sheet for public that documents site closure

**THANK
YOU**

Honeywell