

Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Northeast Regional Office • 205B Lowell Street, Wilmington MA 01887 • 978-694-3200

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APR 1 7 2019

U.S. Environmental Protection Agency Region 1 5 Post Office Square, Suite 100 Mail Code: OSRR 02-2 Boston, MA 02109-3912

Attention: Ted Bazenas, Chief

Emergency Response and Removal Section I

Dear Mr. Bazenas:

RE: **SALEM**Gallows Hill Park Neighborhood
RTN 3-0035355; 3-0035400
Request for EPA Assistance

The Massachusetts Department of Environmental Protection (MassDEP) respectfully requests the assistance of the U.S. Environmental Protection Agency (EPA) for the assessment and remediation of contaminated soil at Gallows Hill Park and targeted bordering residential properties. A portion of Gallows Hill Park, located at 50 Proctor Street in Salem, MA, is a listed disposal site with MassDEP, and is identified with Release Tracking Number (RTN) 3-0035355. The Langdon Street neighborhood, located adjacent to the northern boundary of Gallows Hill Park, is identified with RTN 3-0035400 and currently includes residential properties at 1, 3, and 5 Langdon Street. An area map is included as Attachment 1.

Gallows Hill Park is an approximately 23.3-acre recreational complex owned by the City of Salem (City) and is comprised of two tax parcels, including the 21.8-acre 53 Hanson Street property, and the 1.5-acre 50 Proctor Street property. The Gallows Hill Park disposal site is comprised of the eastern 1.5-acre 50 Proctor Street property, and is bounded to the west by the remaining portion of Gallows Hill Park, to the north by the Langdon Street residential neighborhood, to the east by Proctor Street beyond which are residential properties, and to the south by Mansell Parkway beyond which lies a residential neighborhood.

Historical data indicates the Gallows Hill Park disposal site was used from approximately 1890 to the late 1920s for tannery and leather currier operations. A 1906 Sanborn image depicts a four-building facility identified as the former "Morrill Leather Company Morocco Factory". A historical 1912 photograph depicts the facility with a similar orientation, with a pond or water body located west of the buildings. An April 1911 "Plan of Land of Ellen D. Looney" obtained from the South Essex Registry of Deeds indicates the former 50 Proctor Street property was previously 2.34 acres in size. The illustrated property boundaries on the April 2011 Plan of Land indicate the

property extended south across land currently occupied by Mansell Parkway and includes an area of land that now contains portions of four residential properties. The April 2011 Plan of Land is included as Attachment 2. A review of historical aerial photographs shows most of the tannery facility was demolished by 1938, the Mansell Parkway first appears in a 1952 aerial photograph, and the park is defined in its present configuration in a 1978 aerial photograph. A landscaped lawn used as a soccer field and a basketball court occupy the 50 Proctor Street portion of the park. The western side of Gallows Hills Park located at 53 Hanson Street contains ball fields, a playground and a surface parking lot.

During an investigation completed by Tighe and Bond on behalf of the City of Salem in December 2018, arsenic, chromium, and lead were identified in surface soil samples collected from a depth of 0-1 foot on the 50 Proctor Street parcel of Gallows Hill Park at levels which exceeded applicable Massachusetts Contingency Plan (MCP) Reportable Concentrations. The sampling was performed to characterize soil prior to anticipated park renovations planned by the City. Arsenic concentrations in three of the surface soil samples ranged from 221 to 633 mg/kg, which represent a Could Pose Imminent Hazard Condition and an MCP Two-Hour Reportable Condition. After receiving the sampling results, the City fenced off the 50 Proctor Street area of Gallows Hill Park, including the playground area. MassDEP assigned RTN 3-0035355 to the Site.

Soil analytical data collected to date from the Gallows Hill Park Site shows an area of arsenic-contaminated soil generally found in the top four feet of soil, with the highest concentrations located in the center and northern regions of the 50 Proctor Street parcel. This area contains 17 sample intervals at which arsenic concentrations exceed 500 mg/kg, the MCP Upper Concentration Limit, with a maximum arsenic concentration of 12,300 mg/kg. A figure summarizing the arsenic concentrations and corresponding sampling depths collected to date is included as Attachment 3.

Elevated arsenic concentrations have also been identified on residential properties adjacent to the northern boundary of the Gallows Hill Park. Arsenic concentrations ranging from 17.8 to 266 mg/kg, with two samples exceeding the 50 mg/kg MassDEP threshold for a Could Pose Imminent Hazard Condition, were identified in surface soil samples collected from a depth of 0-1.5 feet as part of a property transaction at 1 Langdon Street. Subsequent surface soil sampling (0' – 1') was performed by MassDEP at 1, 3, 5, and 12-14 Langdon Street. Concentrations of arsenic were identified above 50 mg/kg at 5 Langdon Street. MassDEP has installed temporary chain-link fencing to restrict access to exposed areas of soil on both 1 and 5 Langdon Street. Based on the arsenic concentrations identified in surface soil at 1, 3, and 5 Langdon Street, MassDEP believes these properties require additional soil characterization to determine the extent of contamination within the top three feet to evaluate long-term risk and potential cleanup options.

Due to limited state and municipal resources, MassDEP is requesting EPA's assistance with further defining the extent of arsenic contamination at the Gallows Hill Park disposal site, the adjacent Langdon Street neighborhood where current arsenic concentrations present a direct contact risk above 50 mg/kg in surface soils, and at four residential properties south of Mansell Parkway. Based on existing data and any additional assessment data collected by EPA, MassDEP is also requesting EPA's assistance with implementation of appropriate remedial measures at the Gallows Hill Park Site and the targeted bordering residential properties, where necessary.

MassDEP appreciates EPA's attention to this matter. Please contact Erik Johnson (978-694-3392) or Joanne Fagan (978-694-3390) at your earliest convenience to discuss this request.

Sincerely,

Stephen M. Johnson, Deputy Regional Director, Bureau of Waste Site Cleanup

Attachments:

1 – Area Map

2 – Plan of Land of Ellen D. Looney, Proctor Street, Salem, MA. April 1911.

3 – Soil Arsenic Summary

Cc: John McKeown, EPA, mckeown.john@epa.gov

James Carew, EPA, carew.james@epa.gov

Tom Devine, City of Salem, tdevine@salem.com

Todd Kirton, LSP, Tighe & Bond, tdkirton@tighebond.com

File/Data Management, C&E/REFOTH



Area Map Gallows Hill Park Neighborhood Salem, MA

Gallows Hill Park Disposal Site (RTN 3-0035355)

Targeted Residential Property Boundaries

Feet 160

120

8

20 40

0

Temporary Fencing (1 Langdon St. & 5 Langdon St.)

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Attachment 3. Soil Arsenic Summary Gallows Hill Park, Salem, MA RTN 3-0035355