Mottolo Superfund Site – Raymond, New Hampshire

June 2010 Update

For a more detailed summary of the Mottolo Superfund Site land use history, past investigations, cleanup actions, and monitoring, please follow this hyperlink "*Mottolo Site Summary*," or use web address provided at the end of this update.

Summarizing recent events, a public meeting was held on March 24, 2010 at Raymond High School. At the meeting, the technical team presented the key findings, conclusions and recommendations of the "*Mottolo 2009 Draft Data Evaluation Report*." To view or download the PowerPoint presentation from the March 24 meeting, follow this hyperlink "March 2010 Public Meeting Presentation." The essential findings of the 2009 Data Report were as follows:

- Elevated arsenic concentrations in groundwater samples that were collected from certain residential wells on Windmere Drive and nearby residences on Blueberry Hill Road are likely associated with Site related changes in groundwater geochemistry.
- Residential well pumping adjacent to the western and southern Site boundaries likely influence the direction of groundwater flow in certain bedrock fractures in the area.
- The current arsenic groundwater concentrations in the Strawberry Lane area are similar to naturally occurring distributions of arsenic that are typical of southeastern New Hampshire. However, since Site-related contaminants had been observed at two residences along Strawberry Lane in the past, it is possible that the groundwater geochemical conditions in the area continue to be altered by the Site.
- Elevated uranium concentrations detected in residential wells are likely associated with the presence of naturally occurring uranium in the granitic bedrock in the area, and not related to the Site.
- Further study is required to determine more precisely what areas have been impacted or may be impacted, due to changes in the groundwater flow characteristics under various supplied water options to be considered.

1. ACTIVITIES PERFORMED SINCE MARCH 24 PUBLIC MEETING

a. Conducted quarterly residential well sampling of 52 area homes.

b. Performed multiple geophysical surveys:

   i. Surficial geophysical survey to determine the optimum location of a new on-site bedrock well and to generate bedrock fracture information to further understand bedrock fractures in the area and groundwater flow patterns from the former source area to and from surrounding areas;

   ii. Residential bedrock well and on-site monitoring well borehole geophysical study to better understand fracture size, orientation and groundwater flow to facilitate a better understanding of area-wide hydraulic behavior; and

   iii. Field reconnaissance of bedrock features exposed at the ground surface to identify consistencies or anomalies with other geophysical investigations.

c. Installed new on-site deep bedrock well at a location recommended by an analysis of geophysical surveys for additional groundwater quality and flow tests.

d. Conducted pump test utilizing new on-site deep bedrock well to evaluate interconnectivity of Site bedrock fractures with area residential bedrock wells. This test required installation of instruments in approximately 20 select residential wells in order

to monitor the groundwater elevation response to pumping of the on-Site deep bedrock well.

e. Performed sampling of on-site monitoring wells.

f. Currently considering three primary options to address existing site-related groundwater impacts for further evaluation in a Focused Feasibility Study Report, including: (1) extend town water to the area; (2) construct localized community water treatment and distribution system; and (3) continue use of existing residential wells with installation of whole house treatment systems.

2. NEXT STEPS

A. June 2010

GZA GeoEnvrionmental Inc. will prepare a draft Focused Feasibility Study Report that will assimilate historical data and data collected since the March 2010 public meeting and evaluate various response alternatives. The draft Focused Feasibility Study Report will provide the basis for selecting a preferred remedy for addressing the groundwater impacts associated with the Mottolo Site.

B. July 2010

EPA and DES will review and comment on the draft Focused Feasibility Study. EPA expects to release a Proposed Plan that details the evaluation process and preferred alternative for public comment.

C. August 2010

A public meeting will be held to present the Proposed Plan and answer questions. This public meeting will mark the beginning of a 30-day public comment period.

D. September 2010 & beyond

- A public hearing will be held to provide an opportunity for the public to offer comments on the Proposed Plan. Public comments can be provided verbally at the public hearing or by letter or e-mail during the 30-day comment period.
- EPA will prepare a response to all comments received and select the preferred remedy in an Amendment to the 1991 Record of Decision for the Mottolo Site.
- DES & EPA will work with the Town of Raymond to implement the preferred remedy.

The documents referred to in this update can be accessed individually at:
http://des.nh.gov/organization/divisions/waste/hwrb/fss/superfund/mottolo_pig_farm.htm