PROJECT MEMORANDUM

TO: David Newton, Project Manager,
Sarah White, New England Community Involvement Coordinator,
United States Environmental Protection Agency (USEPA)

FROM: Alice Clemente, Blackstone River Watershed Council/
Friends of the Blackstone (BRWC/FOB) and
Christene Binger and Michael Webster, GeoInsight, Inc.

SUBJECT: Focused Comments on Two Components of the Proposed Plan
Peterson Puritan Superfund Site Operable Unit 2 (OU2)
Cumberland and Lincoln, Rhode Island

DATE: May 9, 2013

GeoInsight, Inc. and BRWC/FOB prepared this memorandum to provide comments on two aspects of the “proposed plan” for OU2 related to 1) access across the Nunes Parcel, and 2) leachate control. The BRWC/FOB requests that USEPA consider these comments during review of the Feasibility Study and selection of the Proposed Plan for OU2.

Nunes Parcel – Access

The BRWC/FOB requests that USEPA require that access be established and maintained across the Nunes Parcel as part of the Proposed Plan. It has come to the attention of the BRWC/FOB that one potential remedial approach for the Nunes Parcel may be to consolidate waste on the Nunes Parcel, and then restrict access via fencing. BRWC/FOB would like to express concern about restricting access across this parcel.

Attached is a letter from Fire Chief Brian Jackvony for the Town of Cumberland indicating that crossing the Nunes Parcel from the Stop and Shop plaza road is needed for accessing the Blackstone River upgradient of Pratt Dam for First Responders. Please see Chief Jackvony’s attached letter for details of what is needed and why it is needed.

As a matter of public safety, BRWC/FOB is requesting that USEPA include access across the Nunes Parcel for emergency vehicles and pedestrians from the Stop and Shop plaza to the existing bike path. This area should be cleaned up and illuminated to minimize future illegal dumping at the end of this road. The BRWC/FOB believes that it is possible to consolidate waste and construct a cap on this parcel that is aesthetically appropriate, protective of human health, and maintains access across or at the border of the parcel.
Leachate Control

The BRWC/FOB is concerned about leachate migration from areas of buried waste to the Blackstone River. The highest concentrations of volatile organic compounds (VOCs) and dissolved metals were detected in groundwater samples collected from monitoring wells located at or near the toe of the landfill. The presence of buried waste materials typically creates conditions that increase dissolution of metals and other inorganic and organic compounds, and facilitates their migration via groundwater.

BRWC/FOB believes that the chemical composition of the leachate should be assessed in greater detail to evaluate potential impacts to human and ecological receptors. The Remedial Investigation indicated that leachate samples were not obtained and it was suggested during the December 2012 public meeting that leachate samples would be collected to fill this data gap. The Human Health Risk Assessment utilized shallow groundwater samples to evaluate leachate. Most of the “shallow” groundwater included in the risk assessment was obtained from wells with a screened interval from 10 to 20 feet below ground surface. This sampling interval may be too deep to appropriately characterize leachate that is reportedly located in the top 10 feet of the saturated groundwater profile. Constituents of concern (COCs, e.g., metals and polynuclear aromatic hydrocarbons) may be underestimated for leachate using this approach. This condition of leachate migration from the landfill is part of the Superfund Site and must be evaluated as part of the Superfund process and considered in the remedial approach.

GeoInsight understands that several Site COCs attributable to the landfill are also widespread throughout the Blackstone River valley as a result of its industrial history; however, it is unlikely that elevated concentrations of VOCs and metals (i.e., benzene and arsenic) detected in groundwater proximate to the landfill are related to “background” conditions. Additionally, the waste materials from OU2 leach COCs to groundwater that causes “additional” loading of COC mass to this stretch of the river that is readily distinguishable from background conditions.

Photographs of surface water conditions taken by citizens in areas proximate to OU2 waste deposits indicate apparent leachate characteristics, including oxidation staining and surface sheens. Copies of photographs taken in April 2013 (copies attached) at Pond B (southwest side of JM Mills Landfill), Pond C (southeast side of JM Mills Landfill) and Pond I (north and adjacent to the Nunes Parcel waste deposits) indicate the presence of leachate that is likely the result of contact between groundwater and nearby waste materials at OU2. The locations represented in the photographs coincide with several areas of the Site where COCs are highest.

These photos highlight leachate migration as one of the greatest concerns of the BRWC/FOB and the requirement for leachate control. The BRWC/FOB wants to ensure that the presence of leachate is properly assessed, and, if appropriate, leachate control is considered as part of the Proposed Plan.
23 April 2013

To: Blackstone River Watershed Council

Re: J.M. Mills
Nunes Disposal

Mr. Newton,

As the responsible agency that provides fire and life safety protection at the former Nunes and J.M. Mills superfund site in the Town of Cumberland, we would like to remain involved in the remediation efforts at the site, specifically in regards to the design of access roads leading to the Pratt Dam, and design of an area of portage just north of the Pratt Dam. With the ever-increasing recreational use of the Blackstone River, a suitable staging and launch area is recommended by this agency to assist us in life saving efforts. We are recommending a thirty-foot wide access road from the entrance gate following the property line to the Pratt Dam. We also recommend that the staging area be a minimum of sixty feet wide and run northerly from the Pratt Dam on the east side of the river. An appropriate ramp should be built at the staging area that will allow portage of recreational users prior to reaching the dangerous use area of the Pratt Dam. This ramp will also be used by public safety agencies to launch rescue crafts in a northerly direction on the river. Also of assistance would be two anchor points, one on each side of the river above the Pratt Dam. These anchor points are necessary for emergency operations. They will provide quick locations where we can anchor our rescue systems when incidents occur at the Pratt Dam as have occurred in the recent past.
This department would like to have these suggestions considered when the remediation process is being designed. Please feel free to contact me if further information or explanation is needed. We make these suggestions in order to enhance safety for the public that will be using these areas and to increase the safety of first responders called to assist in emergencies.

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Chief Brian Jackvony
Valley Falls Fire District
401-722-5992
Ext 302
PHOTO KEY:

Pond B – labeled 2791, 92

Pond C - labeled 2781, 84, 85

Pond I - labeled 2762, 63
PHOTOGRAPHS OF OU2 AREAS – APRIL 2013
PETERSON PURITAN SUPERFUND SITE
CUMBERLAND, RHODE ISLAND

Pond I – April 2013 (labeled 2762, 63 on key)

Pond I – April 2013 (labeled 2762, 63 on key)
PHOTOGRAPHS OF OU2 AREAS – APRIL 2013
PETERSON PURITAN SUPERFUND SITE
CUMBERLAND, RHODE ISLAND

Pond I – April 2013 (labeled 2762, 63 on key)
PHOTOGRAPHS OF OU2 AREAS – APRIL 2013
PETERSON PURITAN SUPERFUND SITE
CUMBERLAND, RHODE ISLAND

POND C – April 2013 (labeled 2781, 84, 85 on key)

POND C – April 2013 (labeled 2781, 84, 85 on key)
Pond B – April 2013 (labeled 2791,92 on key)
PHOTOGRAPHS OF OU2 AREAS – APRIL 2013
PETEERSON PURITAN SUPERFUND SITE
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Pond B – April 2013 (labeled 2791, 92 on key)

Pond B – April 2013 (labeled 2791, 92 on key)