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NEWSPAPER ARTICLE "EFFECTIVENESS OF PNS LANDFILL CAP QUESTIONED" NSY
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Effectiveness of PNS landfill cap questioned

DEP wants assurance
Jamaica Island plan
stops harmful seepage

By James Buchanan
Staff Writer

As the Navy moves toward finalizing its decision to cap and not clean the Jamaica Island Landfill, there is concern the cap may not be enough to provide protection for a unique problem.

The Jamaica Island Landfill comprises approximately 25 acres in the northeast portion of Portsmouth Naval Shipyard. Between 1945 and 1978, the Navy used the area as a landfill for a variety of wastes.

The area the landfill encompasses on the shipyard, which itself is basically one large island in the Piscataqua River, also represents a portion of the shoreline of the shipyard.

"What is atypical of this facility, is that not all landfills receive a tidal flush twice a day," said Meghan Cassidy, a scientist with the federal Environmental Protection Agency, at a panel discussion Wednesday sponsored by the Seacoast Anti-Pollution League. "It is not surprising that what was put in there 40 years ago was washed out with the next tide."

However, Doug Bogen, of Clean Water Action, responded that Cassidy's assessment that much of the toxic materials within the landfill may have long ago leached out only addresses toxins below sea level.

"What is above sea level is still there," Bogen said. "We have had a 100-year flood one year, and then what they said was a 500-year flood a year after that. What are the odds of that happening? There are erosional events that have not been figured into the Navy's plan."

Bogen said the Navy's capping plan also did not address seepage from the edge of the landfill that is shoreline. Essentially, the cap would block rainwater from filtering down through and washing toxins out the sides of the landfill into the river.

Iver McLeod, of the Maine Department of Environmental Protection, adds that rainwater leeching only accounts for one-third of the wa-

ter flowing through the landfill. The other two-thirds include tidal in-flow and groundwater.

Bogen said it would be necessary to build a cut-off barrier surrounding the landfill's perimeter to reduce seepage from these water sources.

"The ocean impacts into the landfill about 100 yards," Bogen said. "So if it looks like it is too daunting to protect the entire border around the landfill, perhaps there is a way to deal with the groundwater leeching in and take on a larger portion of the problem."

In a faxed statement to the Portsmouth Herald, the Navy states: "Based on information collected to date and the analysis of this data, with regard to protection of human health and the environment, the seeps do not require any control at this time."

To which McLeod responded: "The Navy has to show us that the seeps are not causing harm to the environment. They also have to comply with state and federal regulations in terms of surface-water criteria. The approach for doing that is somewhat in dispute, as is the schedule for doing that."

One of the controversies surrounding the seeps deals with the allowance of a "mixing zone." This term refers to the area between where the seepage from the landfill enters the river, travels, and is consequently diluted to a point where the level of any toxins that are present do not exceed state or federal regulations.

Toxin levels are generally measured as a ratio to the volume of water. For example, state limits could be measured as 10 parts toxins per-million parts water.

The conflict comes when deciding whether to only test water that is beyond the mixing zone and, if so, what the distance from the source of the seepage to the end of the mixing zone should be.

"The water seeping out is contaminated and the question is, 'What happens at low tide when the seeps are not immediately diluted?'" Bogen said. "There needs to be a cap, but if that is only dealing with one-third of the problem; you are building a house and putting a really good roof on it, but no walls, and so you haven't really solved the problem."

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