

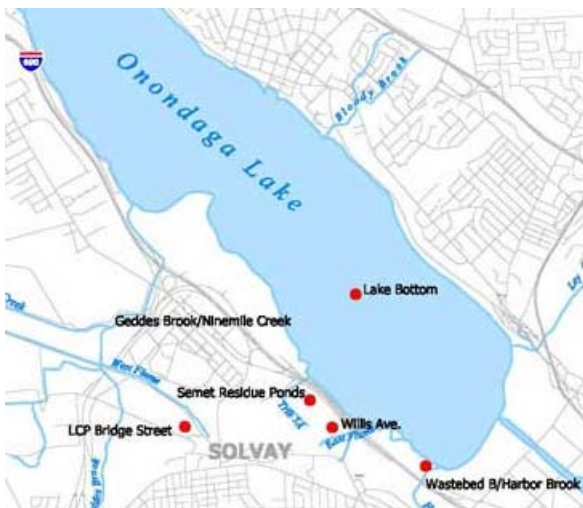
## ***LCP Sub-Site Under Review***

As every year passes, the dream of a swimmable Onondaga Lake itches closer and closer towards reality. To ensure that this trend remains on course, the EPA conducts periodic inspections on several of the Onondaga Lake Sub-Sites. July 2009 marked the scheduled fifth year EPA review of Honeywell's effort to remediate the LCP (Linden Chemical and Plastics) Bridge Street Sub-Site.

A "Sub-Site" is any setting around the Onondaga Lake NPL (National Priority List) site which has been identified by the EPA as releasing or threatening to release contamination to the Lake and its tributaries. The LCP Sub-Site is located approximately two miles west of Syracuse in the Village of Solvay and Town of Geddes. Spanning around 20 acres in size, the fenced in area previously contained industrial, storage, and office buildings and is presently home to a problematic pool of mercury.



Concerned individuals overlook the West Flume



Mercury is an extremely toxic substance that must be handled with great care. Although not considered a carcinogen, mercury and its compounds are potent neurotoxins. For instance, a single gram of mercuric chloride will produce severe neurological effects, which last months or even years. To humans, a dose of only a few grams of this toxin is fatal.

Mercury is extremely mobile. At high vapor pressure, metallic mercury may volatilize, allowing the hazardous material to transfer from one medium to another.

Additionally, all forms of the toxin may dissolve in water, which can then migrate. In many instances, metallic mercury has been known to flow freely through the pores of soil, such as those found on the LCP Sub-Site.

So, what are we dealing with? The LCP Sub-Site contains two types of mercury; compounds which are incorporated into the soil, as well as the more mobile, liquid mercury. There is great evidence that suggests this liquid mercury has migrated some 55 feet downwards in the LCP site and that there are most likely tens of tons of liquid

mercury within the fenced in area. Overtime, this toxin has seeped into and contaminated the bordering West Flume, and thus Geddes Brook, and thus Onondaga Lake.

On July 29<sup>th</sup>, 2009, representatives from the EPA stepped on site to witness and evaluate firsthand Honeywell's effort to remediate the LCP site. These individuals were primarily concerned with how loyal Honeywell has been to the Superfund Sub-Site's Final Design Report.

This report, completed in March 2004 (revised September 2004), presents Honeywell's proposed method of remediation for the Onondaga Lake Superfund LCP Sub-Site. Based on components of the selected remedy as specified in the September 2000 Record of Decision (ROD), many are under the impression that Honeywell's plan fails to adequately address the high level of environmental degradation on the LCP Sub-Site.



EPA, NYSDEC, Onondaga Nation, and ASLF personnel walk the LCP Sub-Site

Present efforts to remediate the LCP site include the following:

- The excavation of sediment and construction of a low permeability cap (over approximately 18.5 acres).
- Onsite sewer system cleaning and filling.
- The construction of a cut-off-wall around the facility to contain site-impacted shallow and deep groundwater. This barrier wall is installed to a depth of approximately 55 feet into the glacial till.
- The installation of groundwater extraction wells and an onsite groundwater treatment system.



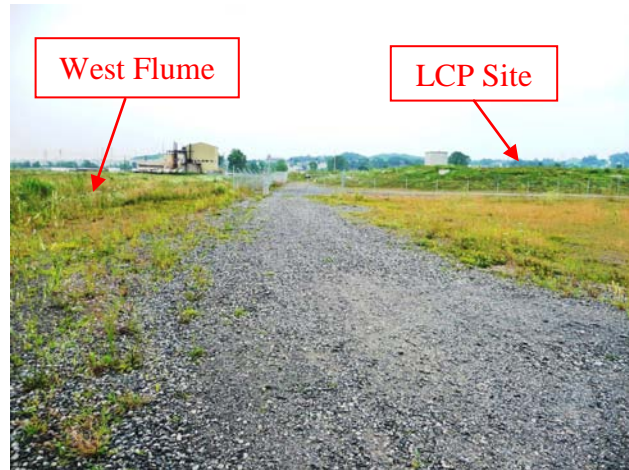
Touring the onsite groundwater treatment facility



While at the July 29<sup>th</sup> inspection, staff from the Environmental Protection Agency, NYS Department of Environmental Conservation, Onondaga Nation, and Atlantic States Legal Foundation witnessed firsthand how these plans have been carried out over the past five years.

Is Honeywell doing enough?

One of the leading concerns surrounding the current remediation effort is that the selected remedy addresses only surface soils. These surface soils are appropriately identified as principle threat materials due to the presence of high levels of mercury. Yes, the excavation and treatment of these soils is a good thing; however, what about the deeper soils (over six feet)? These deeper soils contain significantly greater quantities of liquid mercury in comparison to the surface soils.



The Proposed Remedial Action Plan states that the elemental mercury in deep soils on the LCP Sub-Site “appears to be stable (i.e. not likely to be mobile), and is not contributing significantly, in terms of areal extent, to dissolved mercury concentrations in the lower aquifer.” p.9

Who is to say that this elemental mercury is stable? There is always the high probability that this substance will continue to migrate in the same manner that it always has, downward. Since 1953, the mercury on site has moved downward 50-55 feet. This migration will continue, and without deep borings there is no assurance that this is not already happening. Even a 1% failure of the system could release hundreds of pounds of toxic mercury into the environment!



SUNY-ESF students restore a salt marsh on an Onondaga wastebed

What does the future hold for LCP Sub-Site? The answer to this is uncertain. According to one Honeywell employee at the July inspection, there has been a great interest in converting the landscape into parking space for the neighboring State Fair Grounds. Some interested parties have also proposed utilizing the space for industrial purposes. These concepts are definitely viable

uses; however, they completely neglect the opportunity for environmental restoration. By tapping into neighboring resources, such as Syracuse University, SUNY College of Environmental Science and Forestry, and Atlantic States Legal Foundation, it may be possible to restore or create a healthy ecosystem of native flora and fauna on the LCP Sub-Site. Such a project would allow the entire Syracuse Community to reap the benefits of a healthy ecosystem while simultaneously contributing job opportunities to a growing green workforce.

There is no denying the fact that Honeywell has been extremely loyal to the provisions laid out in the 2000 Record of Decision; however, the current effort to remediate this land is not a permanent remedy. Long-term ecological stability on the LCP Sub-Site ought to outweigh the benefits of temporary pollutant containment.