

ONONDAGA LAKE NPL SUBSITE EVALUATION

1. SITE NAME	
LCP Bridge Street - Operable Unit 02	
Subsite _____	Not a Subsite <input checked="" type="checkbox"/> _____
Potential Subsite _____	February 9, 2004
Matthews Ave., Solvay, NY	
<p>The approximately 2-acre site is located west of Syracuse in the Village of Solvay in an industrial area south of the New York State Fairgrounds. The site is adjacent to NAKOH Chemical, the Matlow Company, a Conrail right-of-way and north of the West Flume. The West Flume is a "Class C" tributary which discharges to Geddes Brook, a tributary of Onondaga Lake via Ninemile Creek. From 1955 to 1969, Allied Chemical Corporation (predecessor to Honeywell) used hydrogen gas to manufacture hydrogen peroxide at the OU-2 Site. The hydrogen peroxide was manufactured using the 2-ethylanthraquinone (2-EAQ) process. The "working solution" in which the reactions took place consisted of 13% to 14% 2-EAQ, 25% to 30% xylene, 8% acetophenone and 30% capryl alcohol (2-octanol and CH₃(CH₂)₅COOH-CH₃).</p> <p>In 1979, the entire facility (now the LCP OU-1 and OU-2 Sites) was sold to LCP Chemicals. The OU-2 Site was not used for manufacturing by LCP Chemicals. LCP Chemicals ceased manufacturing at the OU-1 Site in 1988. The parent company for LCP Chemicals, the Hanlin Group, declared bankruptcy in 1992. In October of 1995, Honeywell, under a Stipulation to the Onondaga Lake Consent Decree, commenced an RI/FS for the entire facility.</p> <p>In October 1999, the New York State Department of Environmental Conservation (NYSDEC) obtained groundwater samples from the NAKOH property. Laboratory analysis characterized the groundwater as having high xylene concentrations in the well adjacent to the former Hydrogen Peroxide portion of the site. NYSDEC subsequently defined the former Hydrogen Peroxide portion of the site as Operable Unit-2.</p> <p>As part of the Record of Decision (ROD) for the LCP OU-1 Site, issued by NYSDEC in September 2000, the top three feet of soil from the LCP OU-2 Site will be excavated and consolidated on the OU-1 Site under a Part 360 equivalent cap. The OU-2 site sewers will also be addressed at the same time as the soil excavation. As part of a building demolition interim remedial measure (IRM), the buildings on the OU-2 site were demolished. This IRM commenced in May 2000 and was completed in August 2001. The NYSDEC approved closure report for the IRM is dated September 2001.</p> <p>In September 2002, Honeywell commenced an RI/FS for LCP OU-2. Sediment, soil, groundwater and surface water samples were obtained and analyzed during the RI. Results from the sediment samples obtained in the West Flume indicate localized xylene contamination from the site (up to 232 ppm). Approximately 150 feet downstream of this sample, the xylene concentrations dropped to 0.040 ppm in sediment. Sediment samples obtained as part of the LCP OU-1 RI at the mouth of the West Flume (downstream of the facility) were non-detect for xylene. Sediment samples also detected total concentrations of PAHs in the range of 42.6 ppm to 66.8 ppm in the vicinity of the LCP OU-2 Site. Upstream sediment samples from both the OU-1 and OU-2 RIs indicated total concentrations of PAHs at approximately 24 ppm. However, the downstream sample at the mouth of the West Flume obtained as part of the OU-1 RI indicated total concentrations of PAHs in sediment at approximately 3 ppm. In addition, a sample obtained from Geddes Brook upstream of the confluence of the West Flume and Geddes Brook indicated total concentrations of PAHs in sediment at approximately 80 ppm. Arsenic, chromium, copper, iron, lead, mercury, nickel, zinc, ethylbenzene, xylene and several semi-volatile organic compounds were detected in onsite soil samples at concentrations exceeding NYSDEC soil cleanup objectives. Surface water samples in the West Flume were below standards for xylene and ethylbenzene.</p>	
Site Work Completed to Date: <input type="checkbox"/> Phase I <input type="checkbox"/> Phase II <input type="checkbox"/> PSA <input checked="" type="checkbox"/> RI <input type="checkbox"/> FS <input type="checkbox"/> PA/SI <input checked="" type="checkbox"/> Other: NYSDEC Groundwater Sampling	
<p>Is the release historic or ongoing? Groundwater and soil contamination exist on-site. The sampling results summarized below indicate that hazardous substances have been disposed at the site. Historical use of xylene at the facility has resulted in localized contamination of sediment in the West Flume. However, the xylene contamination rapidly decreases downstream of the site and does not extend to the mouth of the West Flume. The West Flume will be remediated as part of the OU-1 Site.</p>	
<p>What is the location and nature of the release? Historical use of xylene at the facility has resulted in localized contamination of sediment in the West Flume, a tributary of Onondaga Lake. However, the xylene contamination does not extend to the mouth of the West Flume, and does not extend to Geddes Brook or Ninemile Creek. In addition, the West Flume will be remediated as part of the OU-1 Site.</p>	
<p>What is the location and nature of the threat? A portion of the groundwater from the site contaminated with xylene continues to migrate to the West Flume. Localized contamination of sediment in the West Flume has resulted. However, the xylene contamination does not extend to the mouth of the West Flume, and does not extend to Geddes Brook, Ninemile Creek or Onondaga Lake. In addition, the West Flume will be remediated as part of the OU-1 Site. The groundwater contamination will be addressed in the OU-2 ROD.</p>	
Xylene, acetophenone, 2-Ethylanthraquinone, 2-octanol and ethylbenzene	

() Air (X) Groundwater (X) Surface Water (X) Sediment (X) Soil () Waste () Leachate

The following provides a summary of the range of contaminant concentrations reported for various contaminants detected at extremely high levels and/or above standards, criteria or guidance values (SCGs).

Groundwater (range): Ethylbenzene (ND-6,100 ì g/L), total xylene (ND-59,300 ì g/L), Acetophenone (ND-3,700 ì g/L), 1,2-Dichlorobenzene (ND-5 ì g/L), 2,4-Dimethylphenol (ND-460 ì g/L), 2-Ethylanthraquinone (ND-430 ì g/L), 4-Methylphenol (ND-81 ì g/L), Phenol (ND-29 ì g/L), 2,4,5-Trichlorophenol (ND-3 ì g/L), 2-Octanol (ND-8,800 ì g/L), Antimony (ND-4.6 ì g/L), Arsenic (ND-402 ì g/L), Iron (18.8-18,300 ì g/L), Magnesium (804-52,300 ì g/L), Manganese (ND-909 ì g/L), Mercury (ND-0.72 ì g/L), Nickel (ND-269 ì g/L), Sodium (21,200-17,920,000 ì g/L), Thallium (ND-10.2 ì g/L). Many of the miscellaneous metal concentrations exceeded groundwater standards in groundwater from monitoring well NMW-2S (including the only mercury exceedance). Previous sampling of this well has indicated that mercury does not exceed the groundwater standard for mercury (0.7 ì g/L).

Surface water (range): Mercury (0.02-0.03 ì g/L), Sodium (139,000-166,000 ì g/L).

Sediment (range): The following are results from the OU-2 sampling in the West Flume: Ethylbenzene (ND-21,000 ì g/kg), total Xylene (ND-232,000 ì g/kg), total Non-Carcinogenic PAHs with sediment criteria exceedances for Fluorene and Phenanthrene (7,020-42,490 ì g/kg), total Carcinogenic PAHs with sediment criteria exceedances for all 7 compounds (7,210-38,400 ì g/kg), 2,4-Dimethylphenol (ND-330 ì g/kg), total PCBs (140-990 ì g/kg), Arsenic (3.6-12.3 mg/kg), Cadmium (0.1-0.99 mg/kg), Chromium (20.1-43.0 mg/kg), Copper (42.4-593 mg/kg), Iron (11,600-51,200 mg/kg), Lead (37-138 mg/kg), Manganese (232-662 mg/kg), Mercury (ND-5.2 mg/kg), Nickel (17.4-149 mg/kg), Zinc (72.1-715 mg/kg).

Soil (range): Ethylbenzene (ND-880,000 ì g/kg), Methylene chloride (ND-1,200 ì g/kg), total Xylene (ND-7,540,000 ì g/kg), total Non-Carcinogenic PAHs with soil cleanup objectives exceedances for Naphthalene, Phenanthrene and Pyrene (ND-691,000 ì g/kg), total Carcinogenic PAHs with soil cleanup objectives exceedances for all 7 compounds (ND-393,000 ì g/kg), Dibenzofuran (ND-14,000 ì g/kg), 2-Ethylanthraquinone (ND-120,000 ì g/kg), 2-Methylnaphthalene (ND-5,800 ì g/kg), Dioxins (Total TEQ Humans, 1.58-77.6 ng/kg, total TEQ birds, 2.64-1005 ng/kg), Arsenic (0.97-40.3 mg/kg), Chromium (5.1-42.4 mg/kg), Copper (9.2-781 mg/kg), Iron (6,220-36,600 mg/kg), Lead (3.3-565 mg/kg), Mercury (ND-14 mg/kg), Nickel (6.7-49.0 mg/kg), Zinc (19.2-337 mg/kg)

Total PAH contamination upstream of the facility is approximately 24 ppm, and 3 ppm at the mouth of the West Flume. Total PAH contamination in a Geddes Brook sample, obtained upstream of its confluence with the West Flume as part of the OU2 RI, was approximately 80 ppm. Based on the site data, it appears that OU2 Site is contributing only xylene and ethylbenzene contamination to the West Flume. The contamination appears to be localized in the West Flume sediment adjacent to the OU2 Site, as it drops off rapidly in sediment, and was not detected in sediment at the mouth of the West Flume. Surface water samples in the West Flume were below standards for xylene and ethylbenzene. Thus, based on the data, the site does not contribute contamination to Geddes Brook, Ninemile Creek and Onondaga Lake.

Based upon the insignificant impact to the Onondaga Lake System, no further action under the Onondaga Lake NPL Site Remedial Program is recommended. Complete the RI/FS process under the State program to address site contamination, including soil and groundwater.

12. SITE OWNER'S NAME	13. ADDRESS	14. TELEPHONE NUMBER
Current Owners: LCP Chemical PRP: Honeywell International	Matthews Ave., Solvay, NY 13209 Suite 700, 5000 Brittonfield Parkway East Syracuse, NY 13057	Al Labuz: (315) 431-4443