NEW YORK TATE
DEPARTMI T OF

ENVIRONMENTAL
CONSERVATION

Availability Session:
(for question and answer in an informal setting)
Tues, Aug 27, 1996
3-5 P.M.

Public Meeting:
Tues. Aug. 27, 1996
7 - 9 P.M.

Both to be held at:
St. Mary's Parish Hall
Church St.
Nassau, NY 12123

Fact Sheet
Loeffel Site Environs
Remedial Investigations Continue

Remedial investigations to deal with PCB contamination in the Nassau Lake watershed continue, as do investigations into groundwater contamination near the site. PCB concentration, distribution and movement in the watershed has been almost fully defined. Groundwater contamination near the site has been documented; however, the entire affected area is not fully identified. Additional data gathering is required before corrective remedial alternatives can be discussed. This fact sheet and the scheduled public meeting (see sidebar at left) are intended to keep you informed and up to date about the site related problems, and the efforts to address them.

Citizen Participation

The public meeting scheduled will include structured presentations about the progress of investigating contamination from the Loeffel Site, which will be followed by a question and answer session The meeting is designed to encourage public questions and discussion.

Document Repositories. Two locations provide you access to project information:

Nassau Library
Church Street
Nassau, NY 12123

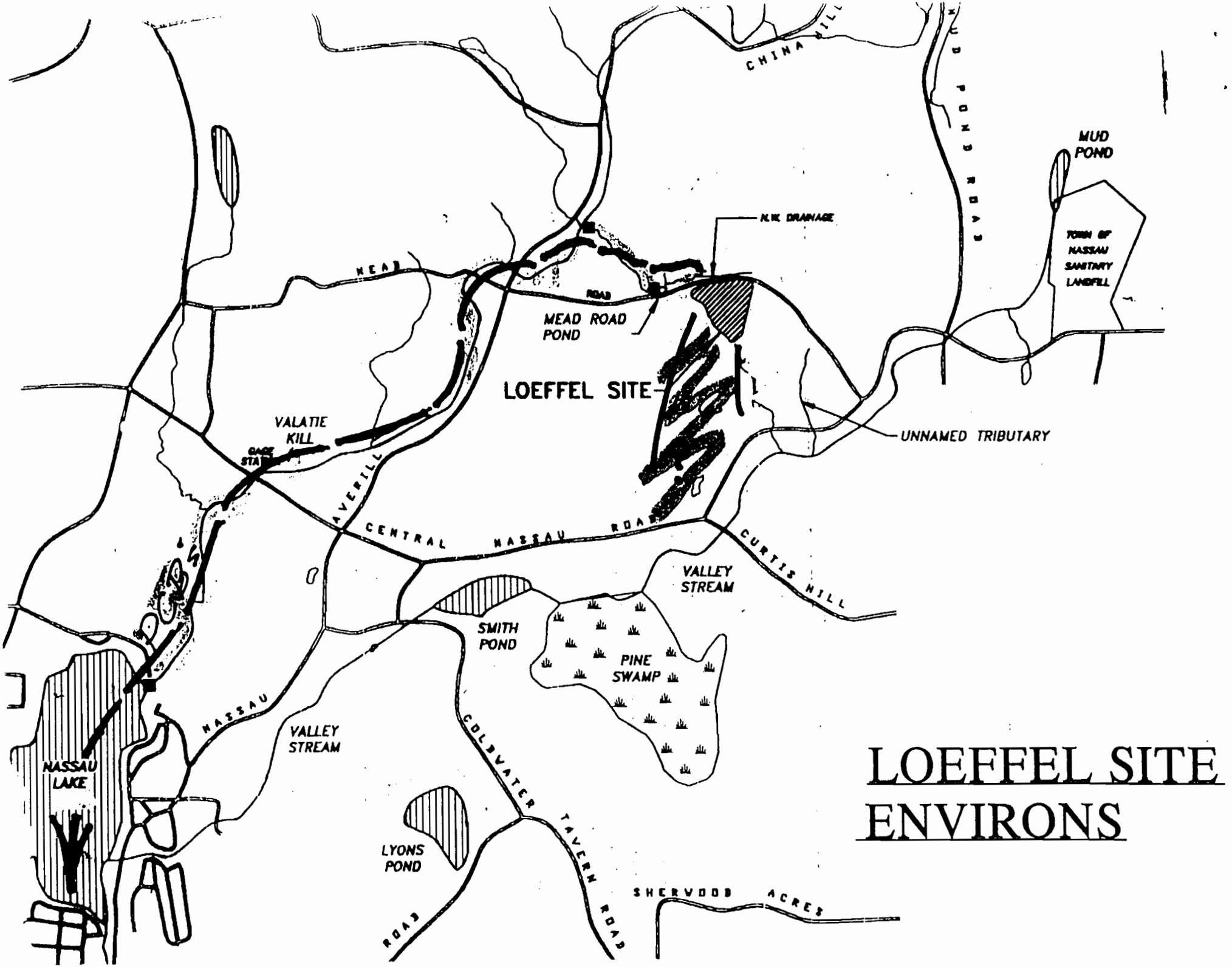
NYSDEC
Region 4 Office
1150 N. Westcott Rd.
Schenectady, NY 12306-2014

For more information, call or write the following for specific project information:

Jim Ludlam - NYSDEC
Div. of Environmental Remediation
50 Wolf Rd. - Rm. 228
Albany, NY 12233-7010
(518) 457-5637

John Sheehan - NYSDOH
Bur. of Env. Exp. Investigation
2 University Place
Albany, NY 12203-3399
(518) 458-6310

or call NYSDEC's Hazardous Waste Site Toll-Free Information Number:
1-800-342-9296



LOEFFEL SITE ENVIRONS

LOEFFEL SITE ENVIRONS: UPDATE

Site Background

The Loeffel Site is an 11-acre inactive hazardous waste landfill located on Mead Rd., 2.5 miles upstream from Nassau Lake in Rensselaer County. The site was operated from 1952 to 1980 as a disposal facility for approximately 43,000 tons of waste materials, much of which was generated at General Electric, Schenectady Chemical (now Schenectady International) and Bendix, the responsible parties. Persistent organic chemicals such as polychlorinated biphenols (PCBs) and volatile organic compounds (VOCs) are the compounds of concern.

In 1983 and 1984, the site itself was remediated by on-site containment. This consisted of the construction of an impermeable cap with vegetative cover, placement of a vertical perimeter "clay" curtain wall keyed into bedrock, and installation of surface water drainage controls to limit surface water intrusion onto the site and to enhance surface water runoff from the site. A system designed to collect contaminated water (leachate) from within the containment system was also installed, as were groundwater wells to monitor containment effectiveness over time.

Downstream surface water and sediment monitoring efforts disclosed evidence that fish in the Nassau Lake drainage basin had, and continue to, exhibit high PCB levels of contamination. In fact, PCB content in fish fat acquired from the drainage basin have remained virtually unchanged since monitoring began in the 1970s. The levels of PCB in Nasaau Lake and Valatie Kill fish were expected to drop after remediation of the disposal site, but did not. These data prompted the State's lawsuit against GE in 1989. It is important to understand that existing PCB levels in Lake and Valatie Kill sediments are generally lower than cleanup goals for PCBs in other water bodies, but are significant due to the very persistent and bioaccumulative nature of the particular PCB mixture present in the Lake and Kill.

GE agreed to obtain information necessary to assess any potential risk to human health and the environment, to identify and select appropriate clean-up alternatives, and to support the natural resource damage assessment. As part of the work, the sources of PCBs and other substances identified as contaminants of the Loeffel Site, and the extent of this contamination in the off-site areas, would be determined. These investigations are the primary focus of this update.

On-going Investigations

Due to the complex nature of the PCB problem associated with the site, the Remedial Investigation (RI) was phased from the outset. The first phase sought to define the areal and vertical extent of PCB and other potential site related contaminants and to investigate and determine if any immediate clean up actions (known as Interim Remedial Measures, or IRMs) was required. In Phase II of the RI, additional data needs as defined by the Phase I efforts would be gathered for use in the Feasibility Study (the evaluation of remedial alternatives), to determine the nature and extent of injury to the State's natural resource (i.e. damage), and to assess potential risk to human health and the environment.

Numerous work plans (which are a pre-determined scope of proposed work) have been prepared, reviewed and approved. Each time additional tasks and data needs are defined, a new or amended work plan is developed. Work plan development began as soon as the NRD claim was filed in September 1989. However; due to definition of tasks and level of effort needed, together with significant analytical methodology problems, final approval did not occur until September, 1992. Data gathering to establish the data base and to define contaminant distribution started in October 1991 prior to the official approval of the work plan. A detailed Sampling and Analysis Plan was developed as was a Health and Safety Plan.

In October 1993, the Interim Phase I Remedial Investigation Report was submitted addressing PCB distribution in the watershed between the site and the Lake, and additional data needs; in February 1994, the Environs Remedial Phase I addendum was submitted which was followed by the Final Environs Phase I report in April 1995. Concurrently with the Environs (surface water pathways) investigation effort, near site groundwater contaminated with VOCs (and not PCB) took a separate track, as it is a site-related problem independent of the surface water issues. A work plan to address near site hydrogeology was prepared and the Interim Hydrogeological Remedial Investigation Report was submitted in August 1994. Additional groundwater data needs were identified and addressed in the Final Hydrogeological Remedial Investigation submitted in March 1996.

Additional information is needed before detailed evaluations of remedial alternatives can be done. Currently, the State is working with GE to further

define PCB distribution in discrete areas in the Valatie Kill and in the unnamed tributary between the site and the Valatie Kill. Installation of additional groundwater wells south of the site, which are needed to define the limits of the VOC plume in the groundwater, continue. Preliminary discussions regarding remedial alternatives and their potential effectiveness have been initiated with GE. It is the State's desire to complete further investigation on this project as quickly as practicable, and move into detailed discussion on remedial alternatives in a timely fashion.

In addition to the above discussed level of effort, other project tracking information has been gathered. Analytical results on domestic water supplies and residential well filters is collected and submitted to the State and to respective homeowners monthly. GE prepares and submits a quarterly progress report; this report summarizes work completed in the last quarter and proposes schedules and defines level of effort anticipated for the following quarter.

Site Monitoring Activities

Long-term site monitoring and maintenance are also continuing. These activities include near-site ground and surface water quality assessment, monitoring of fish in the Nassau Lake/Valatie Kill drainage system, leachate removal and disposal from the landfill and general site grounds maintenance including security fence repair, erosion control and mowing of the grass. Long-term monitoring is conducted by a consultant under contract and supervision with by DEC.

In 1992, site-related contaminants were discovered in nearby residential groundwater wells. This discovery prompted a re-evaluation of the site long-term monitoring network, which resulted in the installation by the State of 6 new wells and piezometers. These wells, together with the concurrent installation of 34 new monitoring wells by GE, are being used to enhance o[illegible]rstanding of groundwater c[illegible]on near the site.

Long-term monitoring of surface water indicates PCB is not a continuing release from the site proper to the drainage basin. Sources of PCB releases to the Lake are believed to be residual PCB in the drainage basin deposited there prior to site closure in 1984.

Since 1992, over 1/2 million gallons of leachate has been removed from within the site. Leachate removal, at the rate of 125,000 gallons per year, is expected to continue for the next several years.

Future Activities

In July 1996, as a result of data gaps identified to date, GE submitted three new work plans. They are described below, and are expected to take the project through to completion of the investigation stage:

- **Phase II Remedial Investigation Work Plan for Loeffel Site Environs.** Additional data would be obtained to define contaminated sediments/soils in portions of the North Drainage Basin (between the site and the Lake) which would be used to evaluate potential remedial alternatives.

- **Work Plan for Remedial Investigation of Loeffel Site Environs - Phase II Hydrogeologic Investigations.** Collection of additional data to complete groundwater characterization southwest and North of the landfill and to support preparation of a focused feasibility study to address groundwater contaminants at the site.

- **Phase II Remedial Investigation Work Plan for proposed activities within the existing contaminant system.** This report will fulfill d[illegible] needs to assess how effective site containment has been. It is necessary to determine if additional site controls are needed to address the off-site groundwater contaminant plume.

The State is working with GE to finalize the proposed Work Plans as soon as possible so that the work can go forward.