Tysons Dump (III-36) Upper Merion Township, Pennsylvania 30 June 1985

Location and Nature of Site

Tysons Dump is an abandoned, privately owned five-acre waste dump located in an industrial area. From 1962 to 1973, sludges and liquid hazardous wastes, primarily chlorinated and other organic and non-organic solvents (toluene, benzene, xylene) were dumped into

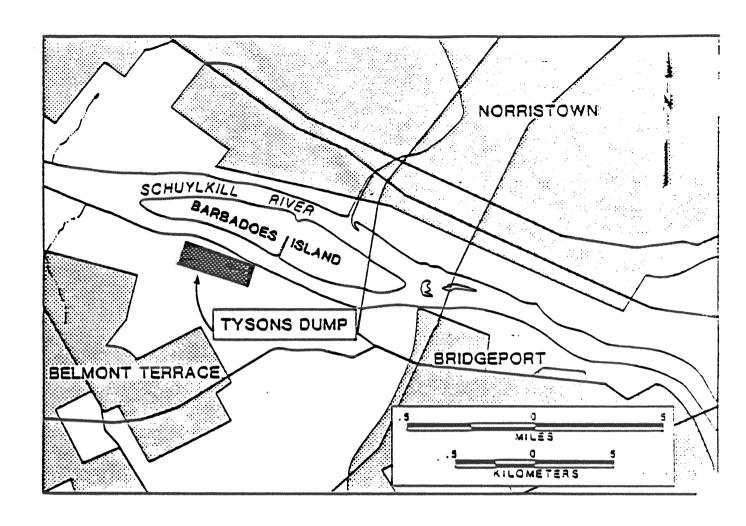
seven small lagoons on a terrace above the Schuylkill River. Wastes have leached into a small stream that flows about 90 meters into the Schuylkill, which then flows into the Delaware River, about 32 kilometers downstream.

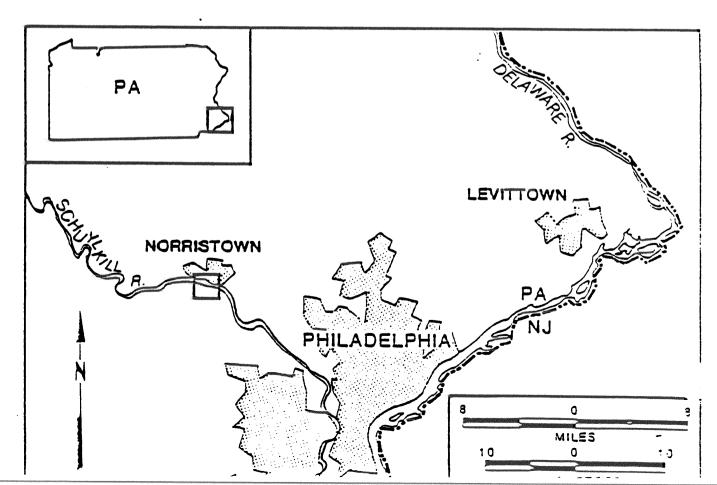
An Immediate Removal Action was initiated in 1983 to install a leachate collection and an air stripping system for removal of organics from the leachate stream. The backfilled lagoons were stabilized with soil and hydro seed. No soil or water was removed from the site during this action.

Proximity of Chemical Hazard to Marine Resources

EPA records of sampling and analysis show contamination by, primarily, 1-2-3 trichloropropane and other organics. Concentrations in the groundwater were in the percent range (in excess of 10,000 ppm); testing of offsite groundwater indicated 100 ppm concentrations. Subsurface test borings taken on the site documented a 100 ppm contamination level over an extensive area and as deep as six meters in some locations. Offsite contamination in the Schuylkill River flood plain was not evaluated.

Surface waters from the Tysons Dump site lead to the Schuylkill River. The discharge from the Tysons site has been described as "minimal" since the 1983 removal action. Seepage from the site has been reported to have coated nearby wetlands with an oily sheen.





Marine Resources at Risk

The Tysons Dump waste site may affect the fishery resources of the Schuylkill River from the vicinity of Norristown to its confluence with the Delaware River at Philadelphia. Two dams are located on the Schuylkill River below Norristown; the Fairmount dam, about 14 kilometers upstream from the Delaware River, has an operating fish ladder. Anadromous fish (striped bass, alewife, American shad, and blueback herring) and the catadromous American eel, are known to utilize the fish ladder in their seasonal migrations up the Schuylkill River. The Flatrock dam near Bala-Cynwyd, approximately ten kilometers upstream of the Fairmount dam, is about six meters high and was constructed without a fish ladder. Once a fish ladder is completed for this dam, all anadromous species will be able to ascend upriver past Barbados Island and the waste site.

The Pennsylvania Fish Commission conducts a hatchery program for stocking juveniles of American shad in portions of the Schuylkill River between Reading and Philadelphia. The purpose is to re-establish spawning runs from the Delaware River into the Schuylkill River by 1990. Currently, released juveniles are able to survive downstream passage over dams but returning adult shad can migrate upriver only to reaches below the Flatrock dam. Any toxic substance discharge into the Schuylkill River may impact the hatch rate and larval survival rates for anadromous fish intended to benefit from efforts of the restoration program.

The Pennsylvania Department of Environmental Resources at Norristown operates a chemical monitoring station for the Schuylkill River. A time series of data for chemical contaminants of water and fish flesh is available from this agency. At present, fish flesh sampled between Reading and Philadelphia have concentrations of lead, PCB's, and chlordane registering above Federal standards for human consumption. At EPA's request, the U.S. Department of the Interior will review the Tysons Dump site this year to evaluate damage to natural resources, and determine whether to grant a release from future natural resources claims.

Site Chronology

1962-1973 Operation of the Tysons Dump site.

1973 Pennsylvania orders the site closed.

1983 EPA receives notification of the site.

March 1983 Site investigation and immediate removal action completed.

Sept. 1983 Proposed addition of the Tysons Dump site to the NPL.

Dec. 1983 RI/FS completed.

May 1985 Site construction design contract signed.

March 1986 Projected construction scheduled.

NOAA Reviewer: Ann Hayward Rooney, NOAA Hazardous Materials Response Branch

EPA Contact: Phillip G. Retallick, On-Scene Coordinator

References

CERCLA Emergency Response/Immediate Removal Actions: Project Summaries, FY '83, 1983. U.S. Environmental Protection Agency Region III, Vol II., Suite #17.

Koffman, Mike, 1985. Personal Communication. Reg. Fisheries Biology, PAAA Fish Commission, Revere, Pennsylvania.

Tysons Dump Site Files, U.S. Environmental Protection Agency Region III,

CERCLA Removal Enforcement Section.