

Magnolia Avenue Ground Water Contamination Various Locations Wall Township & Sea Girt & Manasquan Boroughs Monmouth County

BLOCK: Various **LOT:** Various

Community Relations Coordinator: Heather Swartz (609) 984-7135

SITE DESCRIPTION/RESOLUTION OF ENVIRONMENTAL CONCERNS:

This case is also known as the White Swan Cleaners Ground Water Contamination site and the Wall Township Ground Water Contamination site. In 1997, the Monmouth County Health Department (MCHD) was notified that analytical testing by a resident had revealed several irrigation wells on Magnolia Avenue in Wall Township were contaminated with tetrachloroethylene (also known as perchloroethylene, or PCE). PCE is a volatile organic chemical that is commonly used as a dry cleaning solvent and degreasing agent. MCHD subsequently performed testing that confirmed irrigation wells in the Magnolia Avenue area were highly contaminated with PCE, as well as with lower levels of trichloroethylene (TCE). In 1999, MCHD and NJDEP's Remedial Response Element conducted a joint study to delineate the PCE contamination in the ground water and evaluate the risk to Sea Girt's municipal supply wells. The ground water study included sampling additional private irrigation wells, testing the surface water at Wreck Pond in Sea Girt Borough and Spring Lake Heights and monthly sampling of Sea Girt's municipal supply wells. The study revealed that a plume of shallow ground water contamination extended eastward from Route 35 in Wall Township into Sea Girt Borough and a small part of northern Manasquan Borough, and that low levels of PCE were present in the surface water in a portion of Wreck Pond. The federal Agency for Toxic Substances and Disease Registry (ATSDR) reviewed the sampling results and concluded that the ground water was safe to use for irrigation. MCHD and NJDEP also determined that the water from Sea Girt's municipal supply wells met New Jersey Drinking Water Standards. However, as a precautionary measure, Sea Girt Borough installed a treatment system at its well field to remove potential volatile organic contamination. There are no private potable wells at risk of being contaminated due to the ground water plume.

In 2001, NJDEP completed an investigation that identified two defunct dry cleaning establishments and an active gas station in Wall Township as likely sources of the ground water contamination. Extensive soil and ground water contamination was subsequently confirmed at one of the locations, the former White Swan Dry Cleaners on Sea Girt Avenue (now a bank). Based on these findings, in late 2001 NJDEP decided to test the indoor air at residences and a commercial business near the bank for PCE vapors. The testing showed that the indoor air in several adjacent buildings had significantly elevated levels of PCE vapors and the indoor air at some of the more distant properties exhibited low levels of PCE vapors. NJDEP and USEPA installed ventilation systems at several buildings close to the bank to reduce the PCE vapors to acceptable levels. The bank excavated 820 cubic yards of contaminated soil from its property in December 2001 and backfilled the excavation with clean soil under the oversight of NJDEP's Responsible Party Remediation Element. The Potentially Responsible Parties for the two other suspected sources of the ground water contamination, the former Sun Cleaners and a service station on Route 35, have not conducted any investigative or cleanup work at their properties.

In early 2002, USEPA began addressing the Magnolia Avenue Ground Water Contamination site under its Removal Program. Under this program, USEPA is conducting additional indoor air testing at residential and commercial properties, installing subsurface vapor mitigation (ventilation) systems at properties with high levels of PCE vapors and investigating the two other possible sources of the PCE contamination. NJDEP is installing subsurface vapor mitigation systems in buildings where low levels of PCE vapors have been confirmed. As of December 2002, USEPA had tested the indoor air at more than 250 properties in Wall Township, Sea Girt Borough and Manasquan Borough and installed subsurface vapor mitigation systems at nine properties. NJDEP has installed subsurface vapor mitigation systems at 18 residences. Monitoring and maintenance of those systems is underway. NJDEP plans to conduct an investigation to delineate the shallow ground water contamination in 2003. This information will be used to plan future

indoor air testing. USEPA has proposed adding this site to the National Priorities List of Superfund sites (NPL).