

# ENVIRONMENTAL ISSUES

## KNOWN CONTAMINATED SITES

A 2001 NJDEP inventory of Known Contaminated Sites reported 124 contaminated sites in Salem County. Five of these sites are located in Woodstown Borough and six are located in Pilesgrove Township. See **Appendix I: Known Contaminated Sites and Underground Storage Tanks**. See also **Map 18: Known Contaminated Sites**.

The New Jersey *Known Contaminated Sites List* includes former factory sites, landfills, locations of current or former leaking underground storage tanks, sites where chemicals or wastes were once routinely discharged, and places where accidents have resulted in spills and pollution. Contamination may have affected soil, groundwater, surface water, or a combination of site conditions. The most dangerous sites, from a human health standpoint, can be listed as Superfund sites, which make them eligible for federal cleanup funds. Other sites are handled by state or individual programs, or through private funds. There are five Superfund sites in Salem County, none of which are in Woodstown or Pilesgrove.

One site of special concern for borough and township residents is the Woodstown-Pilesgrove Sanitary Landfill, a 44-acre inactive landfill jointly owned by both municipalities. The landfill was in operation from 1980 to 1985, after which NJDEP ordered the site closed when a general operating permit expired. According to NJDEP procedures, the municipalities were supposed to submit a “Closure and Post-Closure Care Plan” for the landfill, but a plan has not been submitted to date. Woodstown and Pilesgrove periodically sample on-site groundwater monitoring wells and NJDEP’s Bureau of Field Operations is currently implementing closure actions to prevent the release of methane, a greenhouse gas, and to mitigate the impact of landfill leachate. In 2003, NJDEP planned to conduct, but never released, an “Immediate Environmental Concern Assessment” to identify conditions that threaten human health or the environment.

## Underground Storage Tanks

There are a number of private residences and private properties in Woodstown Borough and Pilesgrove Township that still have underground storage tanks, used primarily to hold heating oil. As these tanks age and rust they often begin to leak, which becomes a serious threat to the groundwater below them. These sites sometimes overlap with Known Contaminated Sites, but are often less contaminated and require a lower level of remediation. See **Appendix I: Known Contaminated Sites and Underground Storage Tanks**.

Site Remediation and Waste Management (SRWM), formerly known as SRP (Site Remediation Program), provides financial aid and technical guidance in cleaning up the state’s more serious contaminated sites that pose a danger to human health and the environment. SRWM maintains an inventory of 38,000 sites, of which 25,000 require no further remediation action. Despite full remediation, those sites remain on the NJDEP database of *Known Contaminated Sites* or *Underground Storage Tanks*. Thus, use of the lists is constrained by the need to determine the

current status of any site of interest. A case manager is assigned to every *Known Contaminated Site* and *Underground Storage Tank* case and can provide further information on each site. To learn more about a contaminated site, contact one of the lead agencies overseeing the case or visit the website: <http://www.state.nj.us/dep/srp/>.

## **RADON**

Radon is a radioactive gas that comes from the natural decay of uranium found in nearly all soils. It is invisible, odorless, and tasteless. It moves up through the ground to the air above, and into all types of homes through cracks and other holes in foundations. A build-up of radon-contaminated air (internal alpha particle exposure hazard) within a home can pose a long-term health hazard to residents, specifically for lung cancer. The only method of detection is to conduct a test for alpha particles in the air within a home. Fortunately, radon testing is inexpensive. All radon test results conducted in the state are reported to DEP by certified companies, which perform the tests or manufacture the test kits. This data is used to classify municipalities into a three-tier system, which identifies the potential for homes with indoor radiation problems.

NJDEP classifies municipalities into three categories – high (Tier 1), moderate (Tier 2), or low (Tier 3) – as to the risk of having high radon levels. Woodstown Borough is listed as a Tier 1 municipality with high risk of having high radon levels in homes. In January 2005, Pilesgrove Township was upgraded from Tier 2 to Tier 1. In a 2005 press release, NJDEP reported that it will provide municipalities whose radon designation was upgraded with materials to develop an outreach program for homeowners. New homes in Tier 1 municipalities are required by the Radon Hazard Subcode to incorporate radon resistant construction techniques to prevent radon from entering buildings from soils. Candlelight Village, an 80-home subdivision built between 1999 and 2003, has incorporated these passive radon prevention systems into design and construction.

The criteria for a Tier 1 municipality designation is that five or more homes, of 25 or more homes tested, have radon concentrations greater than or equal to 4 picocuries per liter in air. The level at which homeowners should take immediate action is 4.0 picocuries per liter in air. If radon levels are high in a home, NJDEP suggests that the homeowner take the following actions: (1) prevent radon from entering the house by repairing cracks and insulation and (2) dilute radon concentrations currently in the house by installing a radon extraction system and/or frequently ventilating indoor air. NJDEP maintains [www.njradon.org](http://www.njradon.org) as an information source for concerned citizens. Free information packets are available upon request. All companies conducting radon testing and mitigations are certified by NJDEP and listed on their website.

## **OTHER ENVIRONMENTAL CONCERNS**

### **Toxic Releases**

According to the U.S. EPA annual Toxics Release Inventory (TRI), Dupont's Chambers Works facility in Deepwater, Salem County ranks high in the release of toxic chemicals to the environment in New Jersey. In 2002 (the most recent data available), approximately 3.7 million pounds of toxic chemicals were released to land, air, and water by the facility. Salem County, as a whole, ranks first statewide in toxic releases with a total of 14 facilities cumulatively releasing 4.4 million pounds.

The Chambers Works facility is located in Deepwater, about ten miles west of Woodstown, on the Delaware River. Air releases from industrial sources pose a direct health and environmental risk to the Woodstown-Pilesgrove area, particularly with prevailing winds from the west. Point source and fugitive air emissions accounted for more than 1.1 million pounds of the toxic releases in Salem County during 2002. Chambers Works accounted for approximately 547,000 pounds of air pollutants, followed by the Deepwater Generating Station with nearly 458,000 pounds.

### **Hazardous Materials Facilities and Handlers**

Woodstown and Pilesgrove are home to several companies engaged in transporting bulk quantities of chemicals and other hazardous materials. NJDEP and U.S. EPA closely regulate businesses that transport hazardous materials; they must receive appropriate permits and submit periodic monitoring reports. Other federal and state agencies also may require them to submit reports or meet additional requirements in order to protect surrounding human populations and employees. Since September 11, 2001, hazardous material transportation companies must utilize effective security measures to guard against terrorist attacks.

SJ Transportation, located on Route 40 near East Lake Road, is a hauler of hazardous, industrial and infectious wastes, as well as bulk material, throughout the United States and eastern Canada. Monarch Environmental (formerly C. R. Warner), also located on East Lake Road, is a recycler and processor of used and waste oils, oil filters, and lubricants, received in bulk shipments. Used oil is delivered to the facility, then chemically or thermally treated, and stored on site. Recovered oil is sold as fuel oil after it reaches consumer specifications. The Salem County Short Line, operated by the Southern Railroad Company of New Jersey, is an active railroad line that runs through Woodstown and Pilesgrove. The 17-mile line, that runs from Swedesboro, Gloucester County, to Salem City, delivers material to large-scale manufacturers such as Mannington Mills and Anchor Glass. In Woodstown, the railroad delivers agricultural chemical and fertilizer components to South Jersey Farmers Exchange, located on East Avenue in Woodstown. Helena Chemical is a national supplier of agricultural chemicals, seed, fertilizers, and related products and has a Woodstown facility located in the Erdners Busy Corner warehouse complex off North Main Street. The South Jersey Farmers Exchange, located on East Avenue in Woodstown, also provides bulk quantities of fertilizers and crop protection products to area farmers.

## **PSE&G Salem Nuclear Generating Station**

The Woodstown-Pilesgrove area is about 12 miles northeast of three Public Service Electric & Gas (PSE&G) nuclear reactors – Salem 1, Salem 2 and Hope Creek – located in Lower Alloways Creek Township. Woodstown and Pilesgrove are outside of the Emergency Planning Zone, or “Plume” Zone, which extends out in a ten-mile radius of the facility. The Plume Zone is the area in which immediate evacuation and other protective actions would be taken in the event of a nuclear accident. NJDEP operates the Forward Command Post in Pilesgrove, about one mile south of Woodstown. The Forward Command Post functions as the primary command center during an emergency. From the command post, environmental officials would determine the location and extent of radioactivity and the appropriate responses. For example, scientists dispatched from the command post can take radioactive measurements from air, soil, water, shellfish, natural vegetation, crops and milk from dairy cattle, within a 50 mile radius of the nuclear facility to determine the extent of environmental and food contamination.

## **Historic Pesticides**

New Jersey is one of the first states in the nation to address issues relating to toxic pesticide residuals, such as dichloro-diphenyl-trichloroethane (better known as DDT), arsenic and lead that remain in the soil from past agricultural operations. In 1996, NJDEP convened a task force to study the extent of the historic pesticide problem in New Jersey and to develop strategies for protecting human health. The task force’s findings were issued in an April 1999 report. While the task force examined 18 agricultural sites throughout New Jersey (none in Salem County), it is estimated that 5 percent of the state’s land area is impacted by residues from agricultural pesticides. The primary human health concern of residual contamination is the ingestion of contaminated soil. Therefore, small children who may ingest soil are at the greatest health risk. This issue may affect residents of homes and subdivisions built on former cropland and orchards. Homeowners can take precautions such as maintaining grass coverage and washing hands and toys after playing in exposed soil. Some developers may be willing to address this problem by testing and removing the existing topsoil and bringing in clean topsoil before construction commences.



*Source: DVRPC*

*Irrigation at a sod farm in Pilesgrove*