

FACT SHEET
Notification of Environmental Investigation and Cleanup
Lockheed Martin
199 Borton Landing Road, Moorestown, NJ 08057 (Block 6700/ Lot 10)
NJDEP Preferred Identification #014885
Date Prepared: September 2019

In accordance with New Jersey Department of Environmental Protection (NJDEP) regulations for "Notification and Public Outreach" (N.J.A.C. 7:26C-1.7(l)), Lockheed Martin is providing information relating to environmental conditions and remedial activities being conducted at the above referenced site.

Former/Current Operations Conducted at the Site

The facility located at 199 Borton Landing Road in Moorestown, NJ opened in 1954. Originally a vegetable farm, the land was purchased and converted into a manufacturing site by RCA, which later became part of General Electric Company (GE). In 1993, Martin Marietta, a predecessor to Lockheed Martin, purchased the facility from GE. Currently, the site is split into two operations, the Main Campus and Radar Test Range. The site serves as the headquarters for surface systems providing engineering, research, testing, and development of radar surveillance systems.

During its history, the site used chlorine-based solvent chemicals in metal parts cleaning operations. The site also stored fuel oil in underground storage tanks to feed the boilers. In 1975, the existing fuel oil storage tanks were closed, and in 1987 the site installed two new tanks made of double-walled fiberglass with leak sensors.

In 1987, when the site was acquired by GE from RCA, traces of the chlorine-based chemical solvents and fuel oil were found on-site in the soil and shallow groundwater at depths of 25 feet or less. Immediately upon discovery, a plan to mitigate the impact of those constituents to soil and shallow groundwater was developed in coordination with the New Jersey Department of Environmental Protection (NJDEP). Investigation of the deep aquifer system demonstrated no impacts from site operations.

Sampling conducted under the direction of NJDEP over the next two years identified 15 areas of concern (AOCs) at the site, six of which did not require further action. A cleanup plan was submitted to the NJDEP and approved in 1992. Three additional AOCs were identified subsequent to the 1992 cleanup plan bringing the total number of AOCs to 18. In 1994, treatment systems were installed to mitigate constituents in the on-site soil and shallow groundwater. Since then, 13 of the AOCs have been remediated to current levels determined acceptable by the NJDEP. Five AOCs are under active mitigation or reporting in accordance with applicable regulations. Below are steps taken to mitigate the impacts, along with the operating status of each remedial component:

- Recovery wells were installed near former fuel oil storage tanks to recover fuel oil that leaked into shallow groundwater (active);
- A groundwater treatment system and a vapor extraction system were installed near a former chemical dispensing shed to remove the solvents from both water and soil (system inactive; active remediation completed);

- An in-situ bioremediation pilot test was conducted to treat source material (active);
- An extensive monitoring well network was installed to monitor groundwater quality beneath, across and beyond the site boundaries (active); and
- A perimeter system was designed and installed along Borton Landing Road to prevent further migration of constituents in shallow groundwater across the property boundary (system inactive; active remediation completed).

Description of Current Groundwater Conditions

The principal constituent found in shallow groundwater associated with former site operations is trichloroethene (TCE). It was mainly used as a solvent to remove grease from metal parts. TCE can be found in low concentrations in some household products, including typewriter correction fluid, paint removers, adhesives, and spot removers. Further information on TCE can be accessed at the end of this fact sheet.

Three monitoring wells in a small central area of the Lockheed Martin property also contain residual fuel oil on the shallow water table. Surrounding monitoring data indicates the fuel oil is not migrating. A recovery system actively removes fuel oil from this area.

In 1991, GE installed four off-site groundwater monitoring wells. Monitoring has been conducted annually as directed by the NJDEP. Two of these wells (OMW-1 and OMW-4) showed no evidence of impact during a three-year period of sampling and were closed in coordination with the NJDEP. The third well (OMW-2), which Lockheed Martin continues to monitor, has never shown the presence of TCE or related compounds. The fourth well (OMW-3) has shown steadily decreasing trends of TCE.

In 2009, Lockheed Martin installed five additional off-site wells to further delineate shallow groundwater across Borton Landing Road. Lockheed Martin also installed an off-site monitoring well to delineate shallow groundwater south of Marne Highway under the direction of NJDEP. All properties adjacent to the facility are currently connected to the municipal water system.

NJDEP approved and established a groundwater Classification Exception Area (CEA) and Well Restriction Area (WRA) for the onsite and offsite shallow groundwater impacts in March 2002. The CEA and WRA are expected to be in effect through 2042.

Lockheed Martin continues to evaluate the environmental conditions at the site to ensure that impacts from shallow groundwater are promptly mitigated.

Because of recent studies of the potential for vapor intrusion (the potential for volatile organic compounds in groundwater to affect the quality of indoor air) to occur under certain circumstances, Lockheed Martin expanded its remediation efforts in 2007 to include vapor intrusion testing in cooperation with the NJDEP.

Actions to Minimize Impact to the Public

The information below identifies actions by Lockheed Martin in response to site conditions.

- The potential for exposure to constituents in shallow groundwater potable wells was eliminated in 1989 with the connection of adjacent residential properties to the Moorestown municipal water supply system.
- The perimeter remediation system actively removed and treated TCE and other constituents from shallow groundwater from 1995 to 2018.
- NJDEP established a CEA and WRA for the area of the plume, including the area under the Wexford development in 2002, to restrict use of groundwater in the area.
- Lockheed Martin has assessed the potential for vapor intrusion conditions at 52 properties in the area since 2007. No further assessment is required at the properties assessed and none of the sampling results have triggered the need for vapor mitigation systems.

Contact Information

Documentation associated with these remediation activities, including reports and sampling results, is available through the NJDEP. For additional information on TCE, the following online resources are recommended:

<http://www.atsdr.cdc.gov/toxfaqs/tf.asp?id=172&tid=30>

<http://nj.gov/health/eoh/rtkweb/documents/fs/1890.pdf>

For additional information regarding the site, please contact Jeff Thomas of Lockheed Martin at 301-548-2184, jeff.s.thomas@lmco.com or the NJ Licensed Site Remediation Professional (LSRP), Marion Craig of AECOM at 973-883-8689.