Site Information:
For 70 years, the 63-acre (25 hectare) Teterboro Landing site in New Jersey operated as Bendix Aviation Corporation. Activities at the site included manufacturing aircraft technology to supply both World Wars, guiding the Jet Age and pioneering the Space Age. In its heyday, the site employed 15,000 people. In March 2007, a developer purchased the property with plans to redevelop the site into a transit-oriented development with connections throughout the Meadowlands Region.

TerraTherm was contracted to remediate source area contamination. Remediation at the Teterboro Landing site was completed in 2013. This site is noteworthy because it is the largest In Situ Thermal Desorption (ISTD) project to ever be completed, covering an area of 3.2 acres (1.3 hectares).

Remediation Goals and Results:

- Remedial goals met
- Project Completed On-Time and Under Budget
- A total of 34,000 lbs (15,000 kg) of contaminants removed.

Approach:
- In Situ Thermal Desorption (ISTD)
- Target temperature: 100°C
- Target treatment zone
  ◊ Area: 138,085 ft² (12,830 m²)
  ◊ Volume: 122,000 cubic yards (93,300 m³)
- Thermal wells: 907
- Temperature monitoring points: 80
- Pressure monitoring points: 25
- Multi-phase extraction wells: 35
- Maximum depth: 40 ft (12 m)
- Thermal oxidizer for off-gas treatment (2,500 scfm)

For further information:
TERRAHERM, Inc.
151 Suffolk Lane
Gardner, MA 01440
(978) 730-1200
info@terratherm.com
www.terratherm.com
Heating Method:
In Situ Thermal Desorption (ISTD)

Location: Teterboro, New Jersey

Regulatory Oversight:
New Jersey Department of Environmental Protection and; Licensed Site Remediation Professional:
Gary Angyal - O’Brien & Gere
(732) 638-2930

Time Frame:
Nov. 2011 - Nov. 2013

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TerraTherm worked closely with O’Brien & Gere, who developed the Conceptual Site Model for the treatment area, specified the remedial objectives, and provided multi-media permitting and regulatory/operations support throughout the program. The team executed a hot soil sampling protocol to demonstrate compliance attainment.

The ISTD system operated for 8 months, at which time interim soil sampling showed that all but one sampling location had met the remedial goal of 1 mg/kg. A small area with high starting concentrations proved to be recalcitrant, with soil concentrations plateauing at levels between 5 and 20 mg/kg. Four additional heater wells were installed, and 10 days later the remedial goals were achieved in this location. The energy used for heating was 23 million kWh, equal to 225 kWh/cubic yard treated. An estimated contaminant mass of 34,000 lbs (15,000 kg) was recovered and destroyed on-site through the thermal oxidizer treatment system.

Client Remarks:
I wanted to write to thank you and the rest of the TerraTherm team for your work on this important project. Your company was a pleasure to deal with. You clearly understand your business and the application of the thermal technology to the remediation of chlorinated organic compounds. I found your company to be thoughtful, responsive and capable. The objectives for the project were clearly defined at the outset, and contractually structured so everyone was clear on what was going to take place. The treatment objectives were successfully met within the time frame that was established at the beginning of the project. I found Ken Parker to be a pleasure to work with, as was the rest of your staff that I had the opportunity to interact with.

Sincerely,
Prologis

Steven E. Campbell, Senior Vice President
Head of Global Environmental, Engineering, and Sustainability

View of ISTD and Treatment Equipment