



# At a Glance

## Why We Did This Review

We conducted this review to assess whether hyperspectral imaging (HSI) data can be used to assess stress in vegetation as an indication of pollutant concentrations at deleted Superfund sites. This work was part of an effort by the U.S.

Environmental Protection Agency (EPA) Office of Inspector General (OIG) to assess the feasibility of the OIG using remote sensing technologies to assess the effectiveness of EPA cleanup actions. We reported on this separately in September 2014.

We collected and analyzed HSI data and soil sample results, and conducted site visits at deleted Superfund sites in three states located in EPA Region 3. Deletion of sites from the National Priorities List may occur once all response actions are complete and all cleanup goals have been achieved. In August 2011, we reported on our observations regarding five sites in Maryland and Virginia. This report presents our observations for 11 sites in Pennsylvania and results of an OIG review of actions the EPA took in response to our 2011 report.

**This report addresses the following EPA goal or cross-agency strategy:**

- *Working to make a visible difference in communities.*

Send all inquiries to our public affairs office at (202) 566-2391 or visit [www.epa.gov/oig](http://www.epa.gov/oig).

The full report is at: [www.epa.gov/oig/reports/2014/20141110-15-P-0013.pdf](http://www.epa.gov/oig/reports/2014/20141110-15-P-0013.pdf)

## ***No Significant Residual Contamination Found at Deleted Superfund Sites, But Security Fences Were Damaged at Some Sites***

### What We Found

HSI indicated vegetation stress at three Pennsylvania sites, but the results of soil testing at these sites did not always confirm that the stress was due to elevated metals. We did not identify any significant residual soil contamination at the 11 Pennsylvania sites reviewed. However, lead exceeded the EPA risk-based screening level for industrial land use in one sample collected at the Taylor Borough Dump site, Taylor, Pennsylvania. In addition, on-site observations found significant amounts of debris, metal equipment, and other discarded material at two sites—the Taylor Borough Dump and the Hranica Landfill, Buffalo Township, Pennsylvania.

When we visited the sites, we noted operations and maintenance concerns at the Taylor Borough Dump site and the Lackawanna Refuse site, Old Forge, Pennsylvania. Operations and maintenance procedures are designed to ensure a Superfund remedy remains protective of human health and the environment when hazardous materials are left on-site. At the Taylor site, the fence surrounding the remediated areas was damaged and the site showed evidence of trespassing and vandalism. The un-remediated portions of the site contained considerable amounts of trash and debris from the prior landfill operations and showed indications of all-terrain vehicle (ATV) use. This site also showed signs of continued dumping of new trash. Since our visit to the site, the EPA completed a 5-year review of the Taylor Borough Dump. That review noted that the damaged fences had been repaired. At the Lackawanna site, the fence was damaged and portions of it had been removed. The site showed evidence of ATV use and vandalism.

Region 3's actions were sufficient to address the intent of recommendations from our 2011 report.

### Recommendations and Planned Agency Corrective Actions

We recommend that Region 3 establish procedures for ensuring that corrective actions have been completed before attesting to its completion in the EPA's tracking system, place the results of our reviews for the 11 deleted Superfund sites in their respective case files, and verify whether repairs were made to the damaged fence at the Lackawanna site. Region 3 has taken action to address our recommendations. All recommendations are resolved and closed.

**Generally, pollutant levels were within acceptable levels, but continued security breaches at some sites could impair the effectiveness of the remedy to protect human health and the environment and could expose trespassers to safety or health risks.**