Return to Use Initiative
2004 Demonstration Project

H.O.D. Landfill: Antioch, Illinois

The H.O.D. Landfill was the first Superfund Redevelopment Initiative pilot awarded to a site where the construction of the remedy had been completed. Stakeholder activities conducted at the H.O.D. Landfill site informed EPA about the needs and issues associated with getting construction complete sites back into use and led to the development of the Return to Use initiative.

THE SITE: The H.O.D. Landfill site occupies 121 acres in Antioch, Illinois, 51 of which constitute the landfill itself. After its closing in 1984, the landfill was covered with a continuous clay cap. Subsequent remedial action addressed leachate and gas extraction, waste cap improvements, and monitored natural attenuation of ground water.

THE OPPORTUNITY: EPA issued a Preliminary Closeout Report in June 2001 and selected the site for Superfund Redevelopment Initiative pilot support in 2002. Approximately 14,300 people live within three miles of the site. The site lies just east of the Antioch Community High School, which is in need of athletic fields. The school superintendent saw the cleaned up, grass-covered landfill and its associated wetlands as potential amenities for the high school, and the site's potentially responsible party (PRP), Waste Management Inc., had cleaned up the site in a way that would facilitate future use as athletic fields.

THE BARRIERS: EPA worked with stakeholders at the site to determine what barriers prevented redevelopment. They were: uncertainty of the site's safety; a fence prohibiting access to the site; and site access restrictions that prohibited use of the site for recreational purposes.

THE SOLUTION: EPA worked with the local stakeholders to update the risk assessment and demonstrated that the remedy would remain protective under a recreational use scenario. EPA then issued an Explanation of Significant Differences to remove the unnecessary requirements of the remedy that were impeding reuse, and prepared a Ready for Reuse (RfR) Determination to reassure Antioch residents that the site is protective for use as sports fields.

THE SCHOOL FACILITIES: Methane gas extracted from the landfill currently supplies heat and electricity to the school. The school district estimates a savings of $100,000 per year by reducing energy costs and selling the electricity generated during nights and weekends to ComEd,

Barriers:
Institutional controls impeding reuse; Superfund site stigma

Solution:
Innovative thinking by local stakeholders; Explanation of Significant Differences; revised risk assessment; Ready for Reuse Determination

Before:
Cleaned up landfill; 121 acres of grass-covered land near Antioch Community High School

After:
Athletic fields, power supply for the high school, and restored wetlands

updated August 2007

the energy services company that serves the Antioch area. The wetlands area along one side of the site offers an example wetlands habitat for environmental education and school science projects. Thirty acres of the H.O.D. Landfill are being converted to athletic fields to serve the adjacent Antioch County High School. When completed, the athletic facility will include five soccer and field hockey fields, three softball fields, and 12 tennis courts. Thus far, three soccer and field hockey fields have been completed to be used in the fall of 2007. The tennis courts on the site are now also complete; in fact, the 2005 conference championships were held on the new courts. Construction of the remaining athletic fields is underway. A concession stand and restroom building to serve students and spectators have also been constructed.

FOR MORE INFORMATION, CONTACT: Tom Bloom, Region 5 Superfund Redevelopment Coordinator, at (312) 886-1967 or bloom.thomas@epa.gov or Karen Mason-Smith, the site Remedial Project Manager, at (312) 886-6150 or mason-smith.karen@epa.gov.