

Northwest 58th Street Landfill
(Biscayne Aquifer Area-Wide Groundwater Contamination)
8831 Northwest 58th Street
Miami, Florida
County: Miami – Dade
District: Southeast
Site Lead: EPA
Placed on the National Priorities List: October 23, 1981
Delisted: October 11, 1996
ERIC ID # 3777
HWC # 004

Site Description and History

The Northwest 58th Street Landfill consists of a one square mile area in Miami – Dade County in Section 16, Township 53S, Range 40E at 25° 50' 00.0000" N, 80° 20' 50.0000" W. The landfill operated from 1952 to September 1982 when it was closed except for disposal of construction debris. During its 30 years of operation, the disposal rate for garbage and liquid waste was estimated to be approximately 90,000 tons per month and 1 million liters per month, respectively. From 1979 to 1982 the landfill operated as an unpermitted sanitary landfill in violation of a 1979 Consent Order between the Florida Department of Environmental Regulation (FDER, now DEP) and Dade County. Resistivity investigations by the U.S. Geological Survey and Technos, Inc. in the mid-1970s determined that leachate from the landfill had infiltrated the Biscayne Aquifer beneath and adjacent to the landfill site. In 1982 and 1983, EPA contractors sampled numerous wells in the vicinity of the landfill. Several metals, volatile organic compounds, extractable organic compounds, pesticides and PCBs were detected in high concentrations. The NW 58th Street Landfill was placed on the National Priority List in September 1983.

Threat

The landfill is less than five kilometers up-gradient (west) of the Miami Springs and Preston municipal well fields and two kilometers from the abandoned Medley well field. The close proximity of public well fields to the landfill and previously observed groundwater contamination stimulated much concern. Subsequent closure of the landfill and hookup of area residents to municipal water has been effective in minimizing both the contaminant source as well as potential exposure to contaminated groundwater through private potable wells.

Response Strategy and Status

This site is part of a group of Superfund sites being addressed by the EPA under the Biscayne Aquifer Study Area. As a result of that Study, the area-wide groundwater contamination associated with this site, other Superfund sites and non-Superfund sites in this area of Dade County is being addressed by treatment of contaminated groundwater by air stripping at the Preston and Miami Springs well fields for the dual purpose of area groundwater remediation and providing potable drinking water to the community, in accordance with the September 1985 Record of Decision (ROD).

EPA signed a separate ROD in September 1987, identifying landfill closure in accordance with Chapter 17-701, Florida Administrative Code, as the selected remedial action for the Northwest 58th Street landfill site. Closure includes leachate control through a combination of grading, drainage control and capping to minimize filtration of storm water into the landfill, and long term monitoring and operation and maintenance of the closure. In addition, municipal water was to be provided to an area of private well users east of the landfill.

In April 1988, Dade County signed a Consent Decree with EPA for the Remedial Action. The County submitted a Remedial Design/Remedial Action (RD/RA) Closure Plan in August 1988. Municipal water lines were extended to private well users in January 1989. A leachate collection trench was installed on the east side of the landfill in March 1989 to prevent discharge of landfill leachate to groundwater. FDER issued a landfill closure permit to the County in August 1990. The closure permit required that the adjacent wetlands be protected during landfill closure activities and that the wetlands be maintained and enhanced during the post- closure period.

Dade County awarded the construction contract for closure of the landfill in December 1990 and the construction contract was signed in March 1991. Completion of the landfill cap construction was delayed by Hurricane Andrew in August 1992. Landfill closure including the 20 acre cap construction was completed in March 1995 and the Final Close-Out Report was completed in September 1995. The report documents that the selected remedial alternative has been completed in accordance with the requirements of the ROD and the closure permit.

DEP provided a letter of concurrence to the EPA proposal of delisting in June 1996. The site was delisted from the National Priorities List in October 1996. Long term operation and maintenance activities required as part of the DEP post-closure permit will continue to be performed by the County. Activities include monitoring of groundwater, landfill gas and leachate; inspection and maintenance or repair of the cap system; leachate collection and disposal and wetland maintenance.

Five-Year Reviews (FYRs) will be conducted by EPA to confirm that the remedy remains protective, as required under Superfund. The initial FYR occurred in January 1994. A review of the groundwater monitoring results in the subsequent 2000 and 2005 FYR concluded that none of the 8 contaminants of concern identified in the 1987 ROD were being detected at levels exceeding federal drinking water standards. Monitoring included chloride and ammonia to support an evaluation of the effectiveness of the leachate collection system. The FYRs concluded that the remedy remained protective of human health and the environment.