

Site Review And Update

NORTHWEST 58TH STREET LANDFILL

MIAMI, DADE COUNTY, FLORIDA

CERCLIS NO. FLD980602643

SEPTEMBER 15, 1992

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Public Health Service

Agency for Toxic Substances and Disease Registry

Division of Health Assessment and Consultation

Atlanta, Georgia 30333

Site Review and Update: A Note of Explanation

The purpose of the Site Review and Update is to discuss the current status of a hazardous waste site and to identify future ATSDR activities planned for the site. The SRU is generally reserved to update activities for those sites for which public health assessments have been previously prepared (it is not intended to be an addendum to a public health assessment). The SRU, in conjunction with the ATSDR Site Ranking Scheme, will be used to determine relative priorities for future ATSDR public health actions.

SITE REVIEW AND UPDATE

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Prepared by

Florida Department of Health and Rehabilitative Services
Under Cooperative Agreement with the
Agency for Toxic Substances and Disease Registry

SUMMARY OF BACKGROUND AND HISTORY

The Northwest (NW) 58th Street Landfill Superfund site is in an industrial area west of Hialeah and Miami Springs, Dade County, Florida (Figures 1 and 2). An inactive incinerator borders the west side of the site, and the Miami Drum Superfund site is 1.5 miles to the east. Dade County owned and operated an open dump at this one square mile site from 1952 to 1982. This landfill is now 60 to 90 feet high and contains approximately 27 million cubic yards of municipal garbage, which includes small quantities of pesticides, paints, and solvents.

The Biscayne aquifer, 1 to 3 feet below land surface at this site, is the sole source of drinking water for Dade County. In 1975, the U.S. Geological Survey documented groundwater contamination coming from this landfill. The Northwest well field, 4 miles to the west of this site, and the Miami Springs and Preston well fields, 2 miles to the east, supply drinking water to approximately 1 million people. In the late 1970s, Dade County discovered low levels of solvents in the Miami Springs and Preston wells. In order to meet demand and drinking water standards, Dade County blended contaminated water from the Miami Springs and Preston wells with clean water from the Northwest wells.

In 1981, the Environmental Protection Agency (EPA) proposed that the NW 58th Street Landfill along with Miami Drum and Varsol Spill be added to the Superfund National Priorities List as one site: the Biscayne Aquifer Study Area. Each was eventually listed as a separate site, but the groundwater investigation and remediation remained combined. After conducting an area-wide groundwater study, EPA found that low-level solvent contamination was widespread in the Biscayne aquifer and that removal at the water treatment plant was the most effective remedy. In 1985, EPA decided on air stripping and estimated that air emissions would meet all state requirements and would not adversely affect human health. In 1987, EPA decided on a landfill cap, a leachate collection system, and connection to a municipal water supply to nearby homes and businesses as the remedy for the NW 58th Street Landfill site.

In 1986, the Agency for Toxic Substances and Disease Registry (ATSDR) reviewed the EPA endangerment assessment for this site. ATSDR identified the following contaminants of concern: arsenic, vinyl chloride, 1,1,2,2-tetrachloroethane, benzene, and trichloroethene. ATSDR found EPA's endangerment assessment did not adequately identify the exposed population or characterize the risk from drinking contaminated water. ATSDR concluded that the Biscayne aquifer is contaminated and that drinking water is the major route of exposure. ATSDR did not categorize this site but did recommend testing of nearby private wells. In 1986, people living around the water treatment plant were concerned that emissions from the air strippers would affect their health.

CURRENT SITE CONDITIONS

Randy Merchant of the Florida Department of Health and Rehabilitative Services (HRS) and Walter Livingstone of the Dade County Public Health Unit visited this site on July 8, 1992. They toured the site and observed that a leachate system had been installed and that construction of the landfill cap was nearing completion. Mr. Merchant also spoke with a local environmental activist about community health concerns. Since the 1986 ATSDR review, Dade County has provided municipal water to the nearby residents and constructed air strippers at the water treatment plant.

In its 1986 review, ATSDR failed to address the possible health effects of drinking water with low concentrations of solvents.

CURRENT ISSUES

Although the Florida HRS is concerned about area-wide groundwater contamination, the agency has no current site-specific health concerns through use of the groundwater since people in the area have been provided municipal water. However, the agency will evaluate air stripper emission estimates and/or actual monitoring data to evaluate the air pathway.

Community health concerns diminished after the municipal water supply met drinking water standards. People living around the water treatment plant are still concerned, however, that emissions from the air strippers may affect their health.

CONCLUSIONS

Dade County did not test the nearby private wells as recommended but did provide all of these homes and businesses with municipal water. The 1986 ATSDR conclusion--the Biscayne aquifer is contaminated and drinking water is the major route of exposure--is still valid. The air strippers at the water treatment plant will, however, remove the solvents and thus allow increased use of the contaminated groundwater. The air emission estimates and/or actual air monitoring data from these air strippers should be reviewed. In addition, health outcome data should be reviewed to determine if past drinking water exposures caused adverse health effects.

RECOMMENDATIONS

A health consultation should be performed at this site to review health outcome data, air stripper emission estimates and/or actual

monitoring data, and site conditions since Hurricane Andrew passed through the area.

The data and information developed in the site review and update have been evaluated to determine if follow-up actions may be indicated. Further site evaluation is needed to determine public health actions.

DOCUMENTS REVIEWED

The Florida HRS reviewed the following documents for this summary:

1. EPA Record of Decision, Biscayne Aquifer Sites, Dade County, Florida. September 1985.
2. Planning Research Corporation - NW 58th Street Landfill Endangerment Assessment. April 1986.
3. ATSDR Health Assessment for NW 58th Street Landfill. April 1986.
4. EPA Record of Decision, NW 58th Street Landfill, Dade County, Florida. September 1987.
5. EPA Superfund Fact Sheet, NW 58th Street Landfill. February 1992.

Preparer of the report: E. Randall Merchant, M.S.

MAP OF FLORIDA

SHOWING COUNTY OF INTEREST

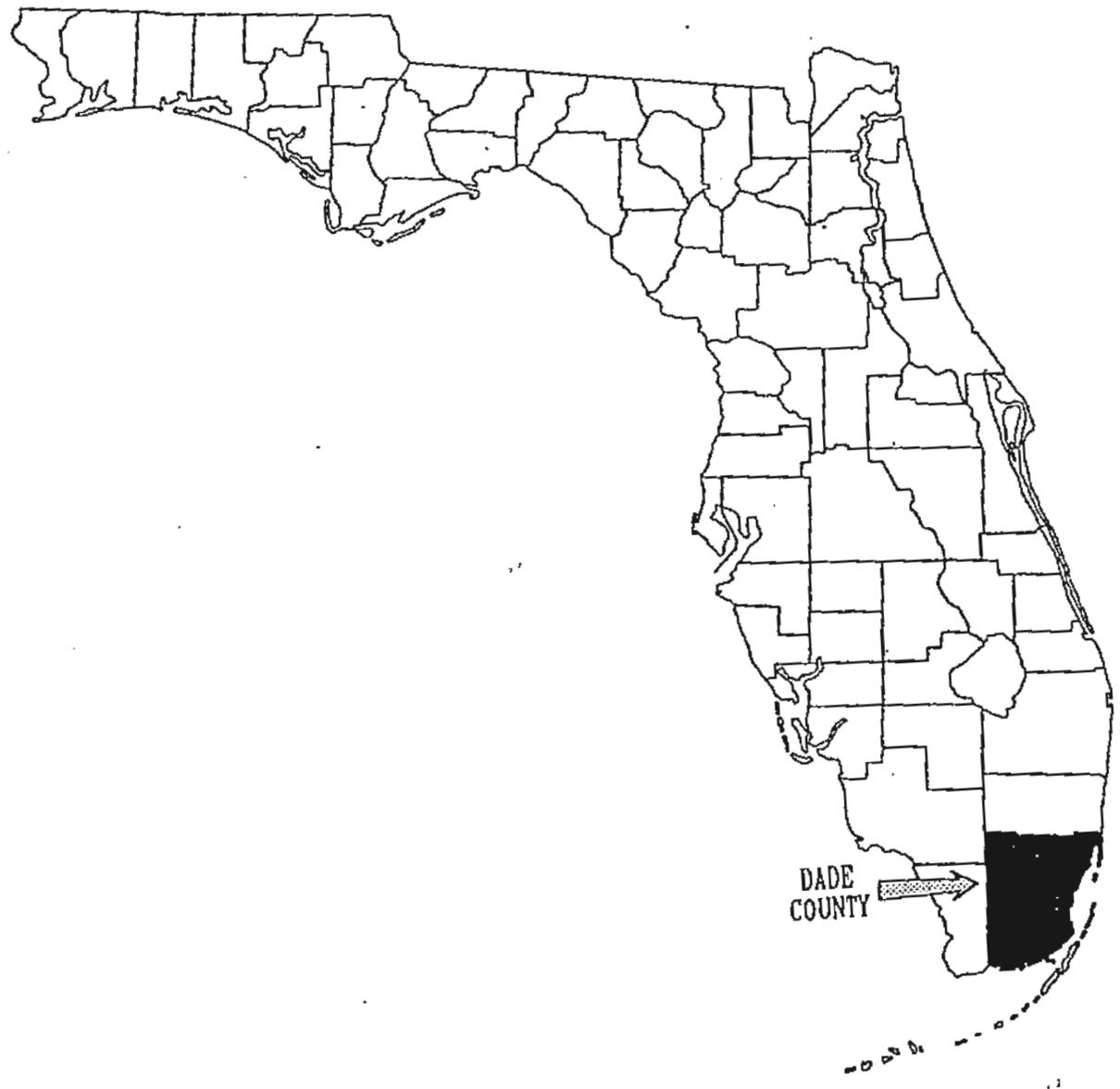


Figure 1. Area Map

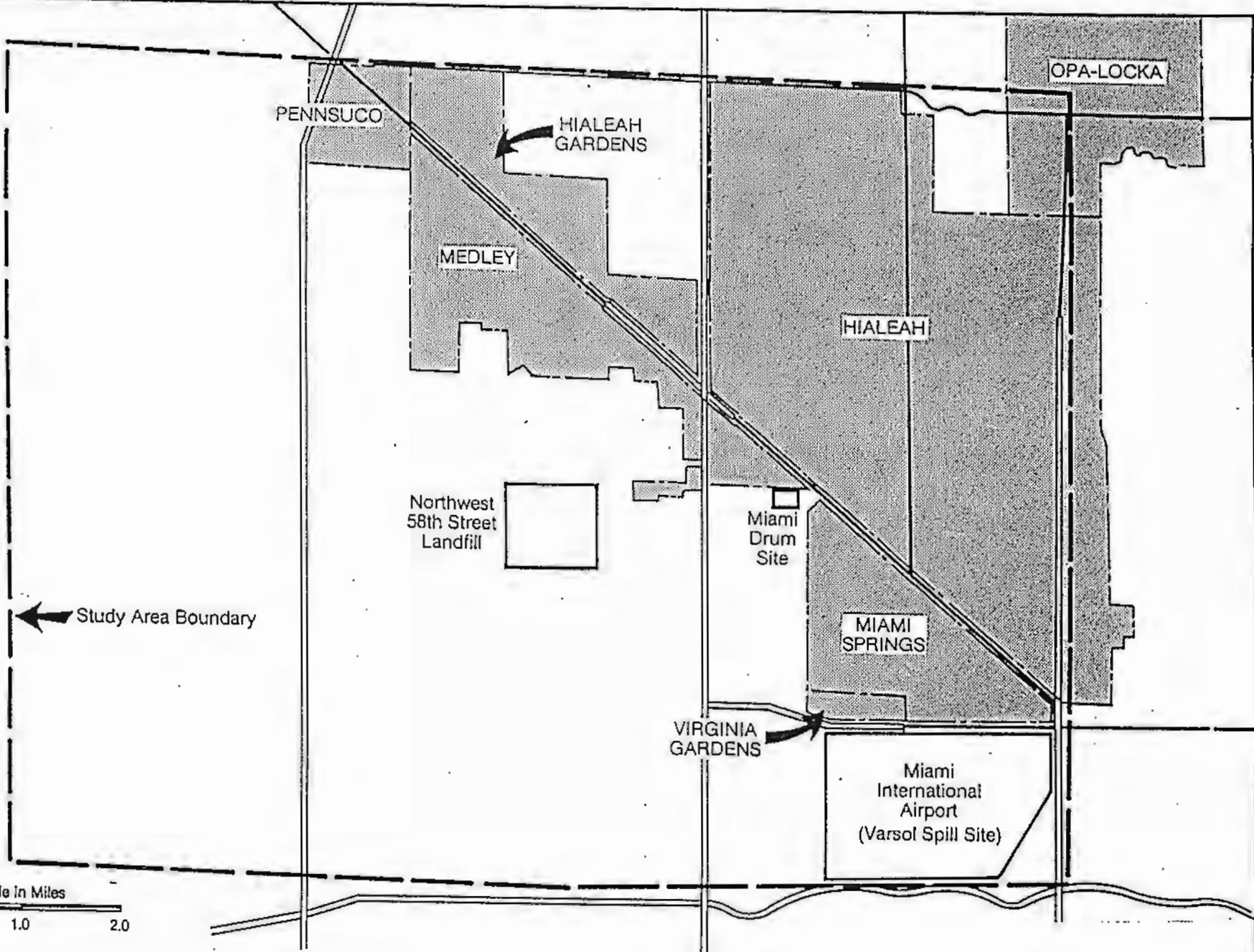


Figure 2. Local Map