Site Review and Update

STANDARD AUTO BUMPER

HIALEAH, DADE COUNTY, FLORIDA

CERCLIS NO. FLD004126520

NOVEMBER 26, 1997

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
Agency for Toxic Substances and Disease Registry
Division of Health Assessment and Consultation
Atlanta, Georgia

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.

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Prepared by:

Florida Department of Health
Bureau of Environmental Toxicology
Under Cooperative Agreement with the
Agency for Toxic Substances and Disease Registry

Background and History

The purpose of this report is to review public health issues and recommendations since our 1990 Preliminary Public Health Assessment have been addressed and to recommend follow-up activities, if necessary.

The Standard Auto Bumper Corporation (SAB) Superfund hazardous waste site occupies 0.8 acres in Hialeah, Dade County, Florida (Figure 1-3). The site is at 2500 West Third Court, approximately six miles northwest of downtown Miami. The area around the site includes industry, warehouses, retail operations, and residential housing. The Red Road Canal is approximately 300 feet west of the site. The nearest resident is approximately 350 feet west of the site. While in operation, there was an industrial well on-site that supplied process water (ATSDR 1990).

In 1959, SAB started operation as a bumper warehouse. In the mid 1960s, they added an electroplating process. SAB discharged untreated wastewater from their electroplating process behind the facility and the wastewater drained north, eventually percolating into the ground. In 1972, SAB installed a wastewater treatment system. SAB treated approximately 60,000 gallons of plating rinse water and 750 gallons of strip solutions each month. SAB discharged the treated wastewater to an underground drain field. In 1979, with a permit from Dade County Department of Environmental Resource Management (DERM), SAB began to discharge the treated wastewater to the Hialeah sewer system. Despite the treatment system, the Dade County DERM periodically cited SAB for illegal discharges. In 1983, DERM issued a final notice for them to cease any further illegal discharges (ATSDR 1990).

In March 1985, the Environmental Protection Agency (EPA) conducted a site screening investigation. EPA found inorganic contamination in the soil and groundwater (EPA 1993a). In 1987, EPA performed an expanded site investigation to further analyze site problems and potential public health and environmental threats. They determined that the contamination was confined to the shallow portion of the Biscayne aquifer. The Biscayne aquifer beneath the site is the sole source of drinking water for southeast Florida. The chemicals of concern at this site were chromium, nickel, and copper. In May and September of 1989, SAB removed contaminated soils and disposed of them at the South Dade Landfill. In October 1989, EPA added the SAB site to the Superfund National Priorities List (NPL). On February 28, 1990, SAB entered into consent order with EPA to perform a remedial investigation/feasibility study (RI/FS) (EPA 1991).

In the May 31, 1990, Public Health Assessment, the Florida Department of Health (formerly the Florida Department of Health and Rehabilitative Services) concluded the site was a potential public health concern (ATSDR 1990). Recommendations included:

1. The location of high capacity industrial wells in the area should be determined and the effect that these well(s) and the on-site industrial well have on the flow rate and the

groundwater flow direction should be analyzed. Based on this information, it should be determined if the on-site well is down gradient of the plume, and if there could be worker exposure to contaminants from the groundwater in the plating process. If worker exposure could occur, then this water and indoor air should be monitored for metals.

2. Based on the determined direction of groundwater flow, the area down gradient of the site should be surveyed for private potable wells.

3. Based on the available data, there are contaminants in soil and groundwater on the Standard Auto Bumper Corporation site, and what is presumed to be down gradient of the site. Sampling has not been sufficient to delineate contamination plumes in any of these media. Once these plumes have been defined, then plume movement can be established. Hydrogeologic properties in the area will also have to be established and the above recommendations may need to be altered based on the determination of the contamination plume size direction, and movement rate, or as more information becomes available about the site.

4. It should be determined whether groundwater enters the Red Road Canal west of the site; and if it does, this off-site surface water should be monitored for metals. If surface water monitoring reveals contaminants at levels of concern for health, then it should be determined if edible biota, fish, etc., from the canal are consumed.

In February 1991, SAB ceased remedial investigation/feasibility study (RI/FS) activities and EPA took over (EPA 1993d). EPA divided the site into two operable units (OU). OU-1 contained the contaminated soil, which is the source of contamination. OU-2 consisted of contaminated groundwater. In April 1991, EPA collected soil and groundwater samples. They proposed to remedy the soil by excavation, stabilization/solidification, and on-site disposal. EPA identified chromium, copper, lead, nickel, and zinc as contaminants of concern (EPA 1992).

As part of the RI/FS, EPA completed four rounds of groundwater sampling from April 1991 to November 1992. They detected numerous heavy metals in the groundwater. By November 1992, the concentrations of metals in the groundwater decreased considerably. By 1993, nickel was the only metal still at concentrations of concern in the groundwater (EPA 1993a). EPA proposed to clean up groundwater by extraction and treatment. In 1992, SAB abandoned the facility. SAB left behind drums containing unknown substances and tanks filled with processing water (EPA 1993d). In the June 1993 Record of Decision (ROD) for OU-1, EPA decided to excavate and dispose of the soil off-site (EPA 1993b).

Current Site Conditions

On February 25, 1997, Julie Smith of the Department of Health, Bureau of Environmental Toxicology, and Gary Miller of the Dade County Health Department visited the site. The site was fenced, but the gate was open allowing access to the site. There were no buildings on the site. The site was covered with loose gravel and scrub bushes. Barrels and tires were stored

on the northern edge of the site. Trash and debris were deposited on the east side of the site along West Third Court. A building bordered the west side of the site, J. Mori Painting Corporation bordered the north side, and Floor Samples, Inc. bordered the south. Rasto's Used Auto Parts was across West Third Court on the east side of the site.

Current Issues

There was no new documented community health concerns. There appear to be no other public health issues at this site. EPA has implemented the recommendations of the 1990 Public Health Assessment as evidenced by actions described below.

> 1. **The location of high capacity industrial wells in the area should be determined and the effect that these well(s) and the on-site industrial well have on the flow rate and the groundwater flow direction should be analyzed. Based of this information, it should be determined if the on-site well is down gradient of the plume, and if there could be worker exposure to contaminants from the groundwater in the plating process. If worker exposure could occur, then this water and indoor air should be monitored for metals.**

Regional groundwater flow in the Biscayne aquifer is towards the east and/or southeast. In November 1992, the groundwater levels indicated a northerly flow. Different groundwater directions indicate the influence of nearby canals or wells on the highly permeable Biscayne aquifer. Since operations ceased in 1992, worker exposure is no longer a concern.

> 2. **Based on the determined direction of groundwater flow, the area down gradient of the site should be surveyed for private potable wells.**

The Dade County Health Department has determined that there are no residential wells within a quarter mile radius of the site (Miller 1997).

> 3. **Based on the available data, there are contaminants in soil and groundwater on the Standard Auto Bumper Corporation site, and what is presumed to be down gradient of the site. Sampling has not heen sufficient to delineate contamination plumes in any of these media. Once these plumes have been defined, then plume movement can be established. Hydrogeologic properties in the area will also have to be established and the above recommendations may necd to be altered based on the determination of the contamination plume size direction, and movement rate, or as more information becomes available about the site.**

In the last round of groundwater sampling, nickel was the only chemical found. Of the 13 wells sampled, only four were contaminated. Two of these were on-site, and two were off-site. Of the four wells, only one off-site well showed levels of contamination above comparison values. EPA concluded that groundwater contamination is mainly below the site.

EPA was unable to define an obvious contamination plume.

4. It should be determined whether groundwater enters the Red Road Canal west of the site; and if it does, this off-site surface water should be monitored for metals. If surface water monitoring reveals contaminants at levels of concern for health, then it should be determined if edible biota, fish, etc., from the canal are consumed.

In 1992, EPA collected and analyzed three sediment samples and three surface water samples in Red Road Canal. The sediment samples did not contain metals related to the site. The surface water samples contained no detectable chromium, copper, cadmium, nickel, lead, arsenic, or cyanide.

Conclusions

Currently, no identifiable public health hazard exists at this site. EPA has implemented the recommendations of the 1990 Preliminary Public Health Assessment report. Therefore, no further public health assessment is necessary at this time.

The conclusions of this report are based on analysis of the information listed in the Documents Reviewed section. New information will be evaluated as it becomes available to decide if further assessment is necessary.

Recommendations

1. No further public health assessment is necessary at this time.

2. The Florida Department of Health should evaluate new information as it becomes available to decide if an additional public health assessment is necessary.

Documents Reviewed

ATSDR 1990. Agency for Toxic Substances and Disease Registry, Preliminary Health Assessment for Standard Auto Bumper Corporation, Dade County, Florida. Prepared by the Florida Department of Health and Rehabilitative Services. May 1990.

EPA 1991a. The Environmental Protection Agency. Superfund Fact Sheet. January 1991.

EPA 1992. The Environmental Protection Agency. Proposed Plan Fact Sheet for soil. August 1992.

EPA 1993a. The Environmental Protection Agency. Remedial Investigation report on groundwater conditions at Standard Auto Bumper Corporation Site. May 1993.

EPA 1993b. The Environmental Protection Agency. Record of Decision for Operable Unit-1. June 1993.

EPA 1993c. The Environmental Protection Agency. Draft Record of Decision for Operable Unit-2. July 1993.

EPA 1993d. The Environmental Protection Agency. Proposed Plan Fact Sheet for groundwater. August 1993.

Miller 1997. Gary Miller, Environmental Health Specialist, Dade County Health Department. Personal Communication. July 23, 1997.

Preparer of Report

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Florida Department of Health

CERTIFICATION

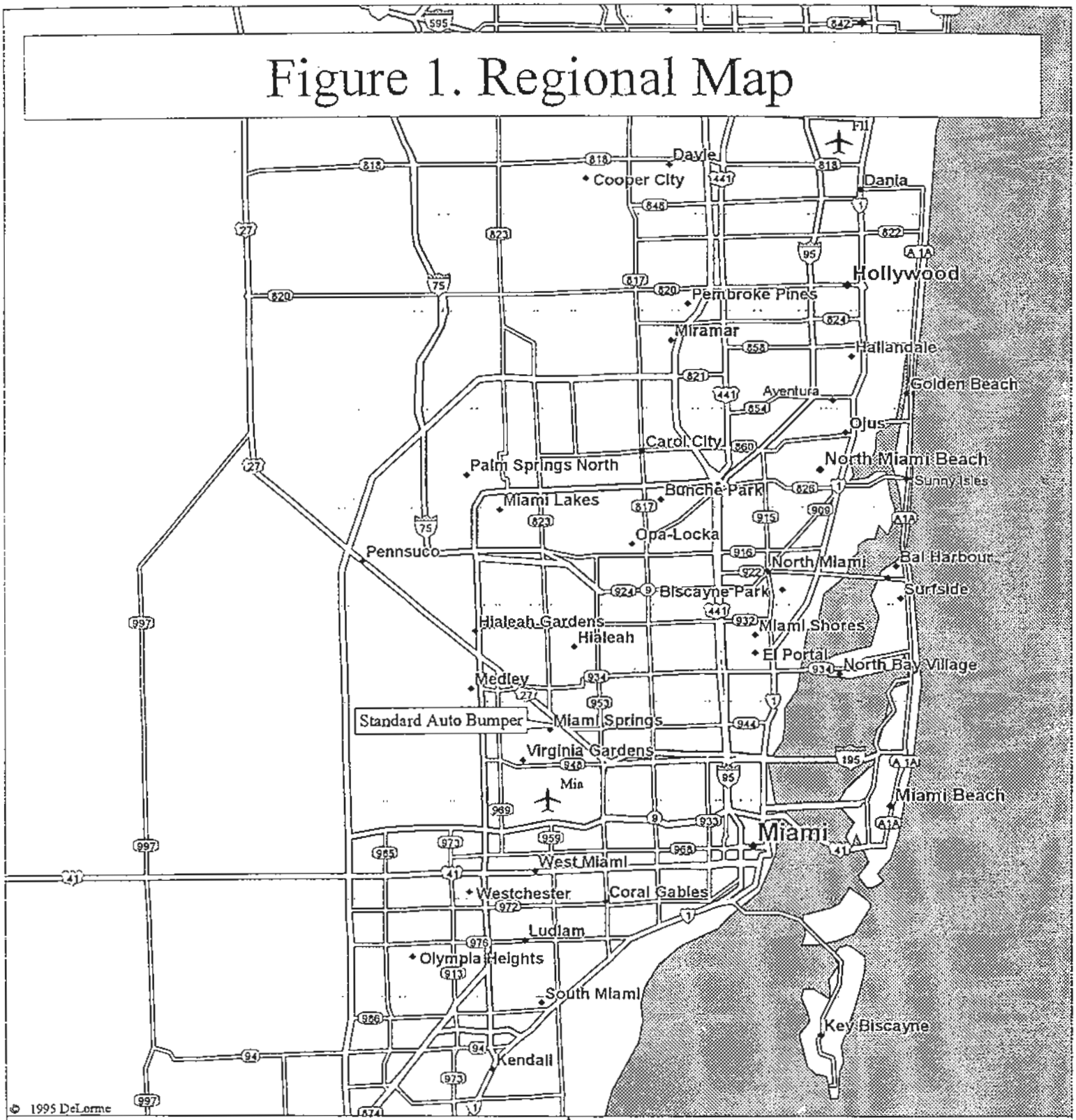
This Site Review and Update was prepared by the Department of Health under a cooperative agreement with the Agency for Toxic Substances and Disease Registry (ATSDR). It is in accordance with approved methodology and procedures existing at the time the site review and update was begun.

Technical Project Officer
Superfund Site Assessment Branch (SSAB)
Division of Health Assessment and Consultation (DHAC)
ATSDR

The Division of Health Assessment and Consultation, ATSDR, has reviewed this Site Review and Update and concurs with its findings.

Chief, SPS, SSAB, DHAC, ATSDR

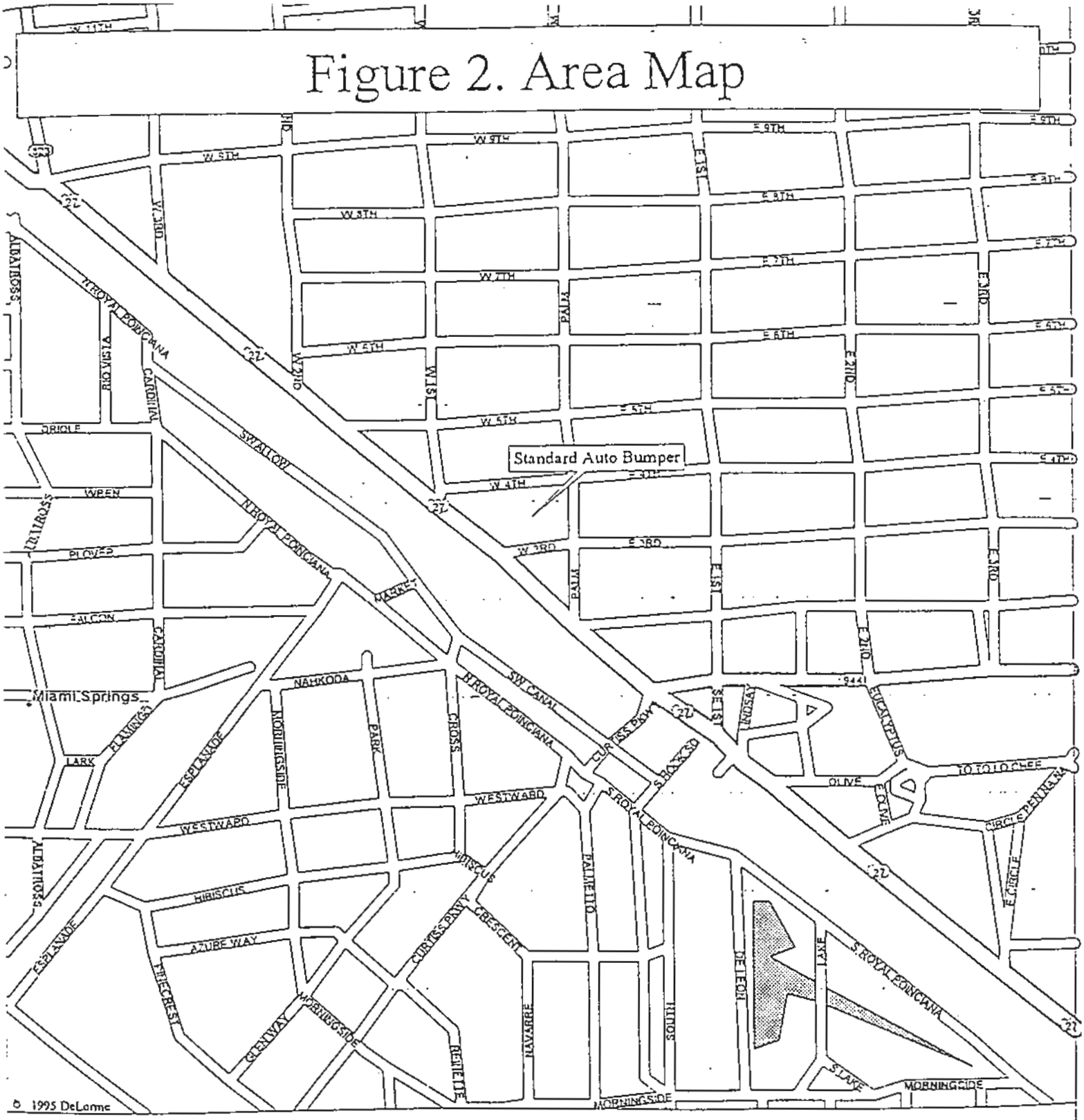
Figure 1. Regional Map

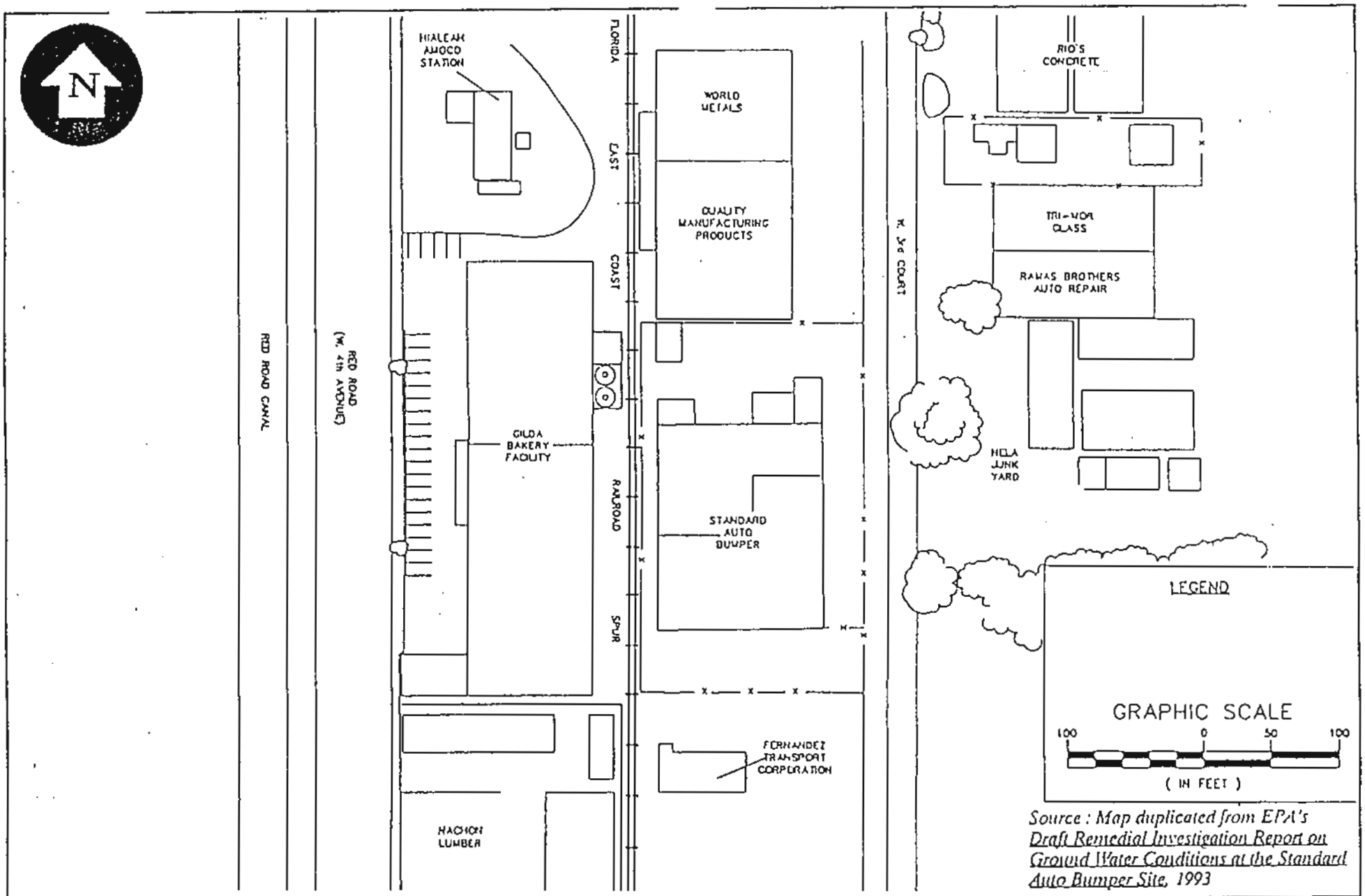


Mag 11.00
Mon Jul 28 10:05 1997
Scale 1:250,000 (at center)
5 Miles
5 KM

- Major Connector
- State Route
- Primary State Route
- US Highway
- Interstate/Limited Access
- Toll Highway
- Town, Small City
- Large City
- Sched Service Airport
- Mega City
- Locale
- City
- Land
- Lake, Ocean, Large River

Figure 2. Area Map





Source : Map duplicated from EPA's Draft Remedial Investigation Report on Ground Water Conditions at the Standard Auto Bumper Site, 1993

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Figure 3 : SITE BASE MAP
Standard Auto Bumper
Hialeah, Florida