Site Review And Update

PIONEER SAND COMPANY

PENSACOLA, ESCAMBIA COUNTY, FLORIDA

CERCLIS NO. FLD056116965

SEPTEMBER 9, 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 Pioneer Sand Company National Priorities List (NPL) site is approximately 5 miles west of Pensacola, Escambia County, Florida (Figs. 1 and 2). The 11-acre site was used to mine sand for roads and construction fill from the mid 1950s until 1973. This resulted in a pit 30-50 feet deep encompassing most of the 11 acres. Pioneer Sand Company was purchased by Mr. Walter Dugger in 1970 and permitted by the Florida Department of Environmental Regulation (FDER) in 1974 to receive various nonhazardous industrial wastes. In addition to construction debris and shredded auto parts, phenols, resin compounds, domestic wastes, and metal plating sludges were deposited at the site. In 1981, following several citations for violations of the permit requirements, FDER decided not to renew the disposal permit and ordered all dumping at the site to cease. By this time, approximately 25% of the pit had been backfilled (Fig. 3).

Samples analyzed by FDER, the U.S. Environmental Protection Agency (EPA), and EPA contractors indicate contamination of on-site sediments, soil, surface water, and groundwater. Among the on-site contaminants of concern are the following:

Contaminant	Ground-water (µg/L)	Surface Water (µg/L)	Soil (mg/kg)	Sediment (mg/kg)
Lead	2,240.0	101.0	4,380.0	217.0
Beryllium	BLC	129.0	1.17	0.86
Cadmium	65.0	10.0	94.1	13.2
Chromium	380.0	246.0	334.0	BLC
Antimony	100.0	129.0	24.3	BLC
Poly-chlorinated biphenyls	BLC	BLC	410.0	7.2
Pentachloro phenol	136.0	BLC	BLC	BLC
Di(2-ethylhexyl) phthalate	61.3	BLC	72.9	BLC

µg/L - micrograms per liter
mg/kg - milligrams per kilogram
BLC - below level of concern

In addition, di(2-ethylhexyl)phthalate was found in one off-site private well at a concentration of 23.7 µg/L. Air monitoring for many of these same contaminants did not detect any concentrations above levels of concern.

In its 1985 health assessment, the Agency for Toxic Substances and Disease Registry (ATSDR) concluded that there was no danger to persons outside of the site because contaminants did not appear to be migrating off-site. The Agency recommended the installation and monitoring of additional wells to detect off-site migration of contaminants, chemical screening of abandoned off-site private wells, and isolation of the site by improved fencing and posting of warning signs. This site has been remediated by stabilization of contaminated soil and the installation of a cover system to prevent off-site migration of contaminants. All residences immediately adjacent to the site are currently supplied with municipal water. No community health concerns were identified in the health assessment, and currently there is no community interest in the site.

CURRENT SITE CONDITIONS

On July 16, 1992, Bruce Tuovila of the Florida Department of Health and Rehabilitative Services (HRS) and Tom Hunt of the Escambia County Public Health Unit visited the site. The site is in a rural residential area bordered on the north, east, and west by woods and on the south by several residences. Approximately 19,000 people live within 1 mile of the site. Warning signs are posted at the site, and it is completely surrounded by a chain-link fence. The entrance gate to the property is locked and posted with warning signs. A large pond is in the southeast corner of the site, and the ground slopes up from there to the surrounding ground level at the northwest corner. The south and east borders of the site are heavily wooded. The rest of the property is open field planted with grass, except for a few bare areas around the pond. We saw no physical hazards and no obvious signs of trespassing. However, we observed several places along the fence where a sufficient amount of soil had washed away so that a person could readily crawl under the fence.

Conclusions in the 1985 health assessment appear to be supported by these observations and the remedial activity that has occurred. Although contaminants at levels of concern are still present in the soil, sediments, and groundwater on-site, the remediation process should prevent them from migrating off-site. The likelihood of future exposure is very low.

CURRENT ISSUES

The remedial activities appear to have reduced or eliminated the risk of exposure to contaminants migrating from the site. The Escambia County Public Health Unit periodically tests private

wells in the area to ensure that any contamination that may occur in the future is detected in a timely manner.

Local residents have not expressed any concerns about the site.

CONCLUSIONS

The conclusions of the 1985 health assessment appear to be supported. Based on the available information, the potential for exposure from this site is very low. On-site and off-site groundwater, soil, and sediment contamination appears to have been adequately characterized. On-site contaminants have been sequestered by the soil stabilization and capping process, and off-site contamination is unlikely in the future. There are no physical hazards, and the site has been adequately secured to prevent public access. Should the use of this site change in the future, a reevaluation may be necessary.

RECOMMENDATIONS

Because this site does not appear to present a public health hazard, we do not recommend a full public health assessment. However, we recommend that the washed-out areas under the perimeter fence be repaired to reduce accessibility to the site.

The data and information developed in the site review and update have been evaluated to determine if follow-up actions may be indicated. No further public health actions are indicated at this time.

DOCUMENTS REVIEWED

Documents reviewed by the Florida HRS for this summary are as follows:

1. NUS Corporation, Remedial Action Master Plan, Pioneer Sand Site, November 1983.

2. Memorandum, Ron Leins, Data From Monitoring Private Wells Near Pioneer Sand Site, Dept. of Environmental Regulation, May 13, 1985.

3. Memorandum, Health Scientist ATSDR, Pioneer Sand Superfund Site, Pensacola, Florida, August 29, 1985.

4. Woodward-Clyde Consultants, Site Investigation, Pioneer Sand, Pensacola, Florida, December 1985.

5. EPA, Record of Decision, Remedial Alternative Selection, Pioneer Sand Company, September 26, 1986.

6. Clean Sites, Inc., Acceptance Report for Completion of Sludge Stabilization, Pioneer Sand Company, Pensacola, Florida, May 1991.

7. Clean Sites, Inc., Acceptance Report for Completion of the Synthetic Cover System, Pioneer Sand Company, Pensacola, Florida, August 1991.

Preparer of the report: Bruce J. Tuovila, M.S.

Figure 1. Map Showing Location of Escambia County

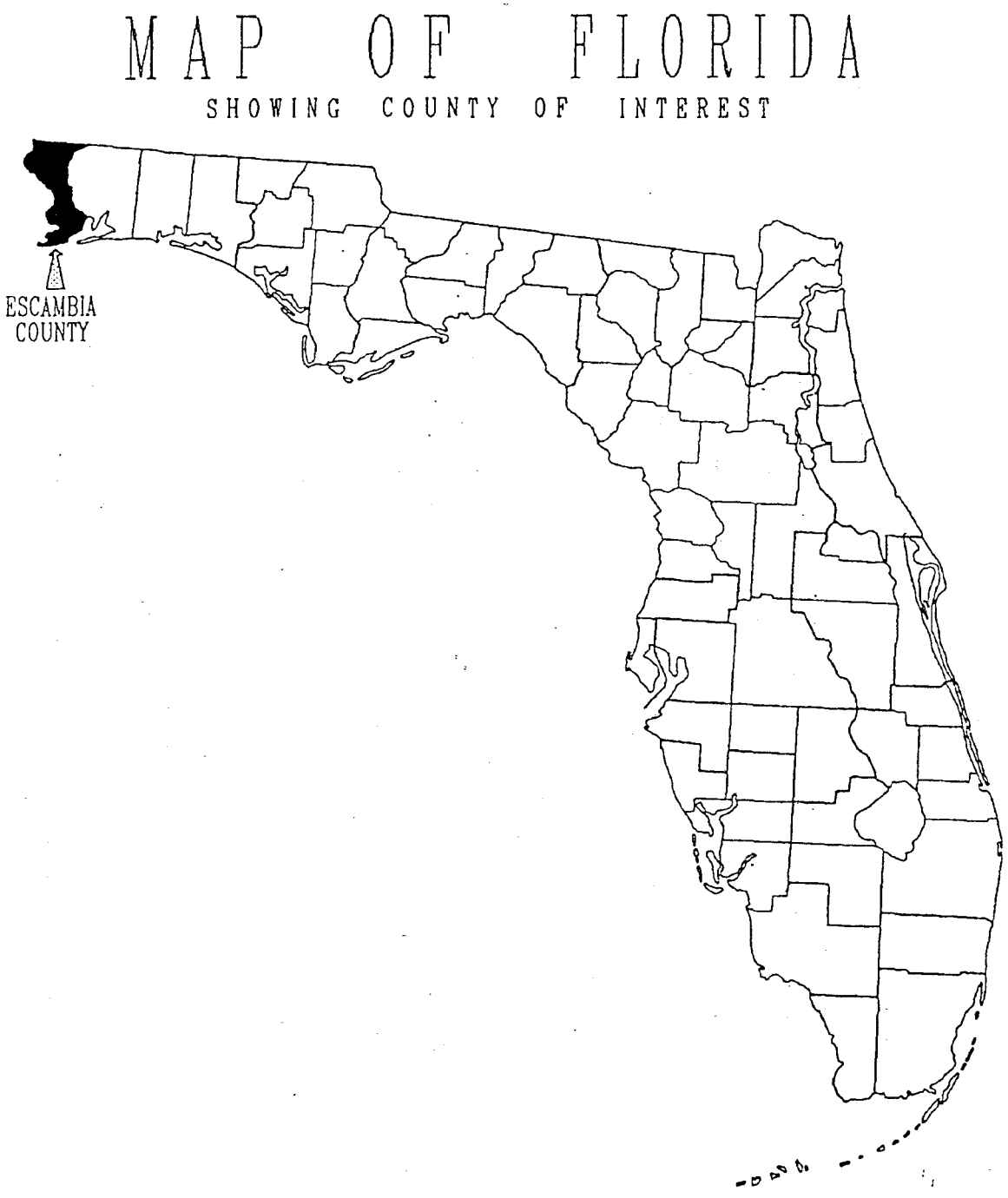

Figure 2. Map Showing Approximate Location of Pioneer Sand Company

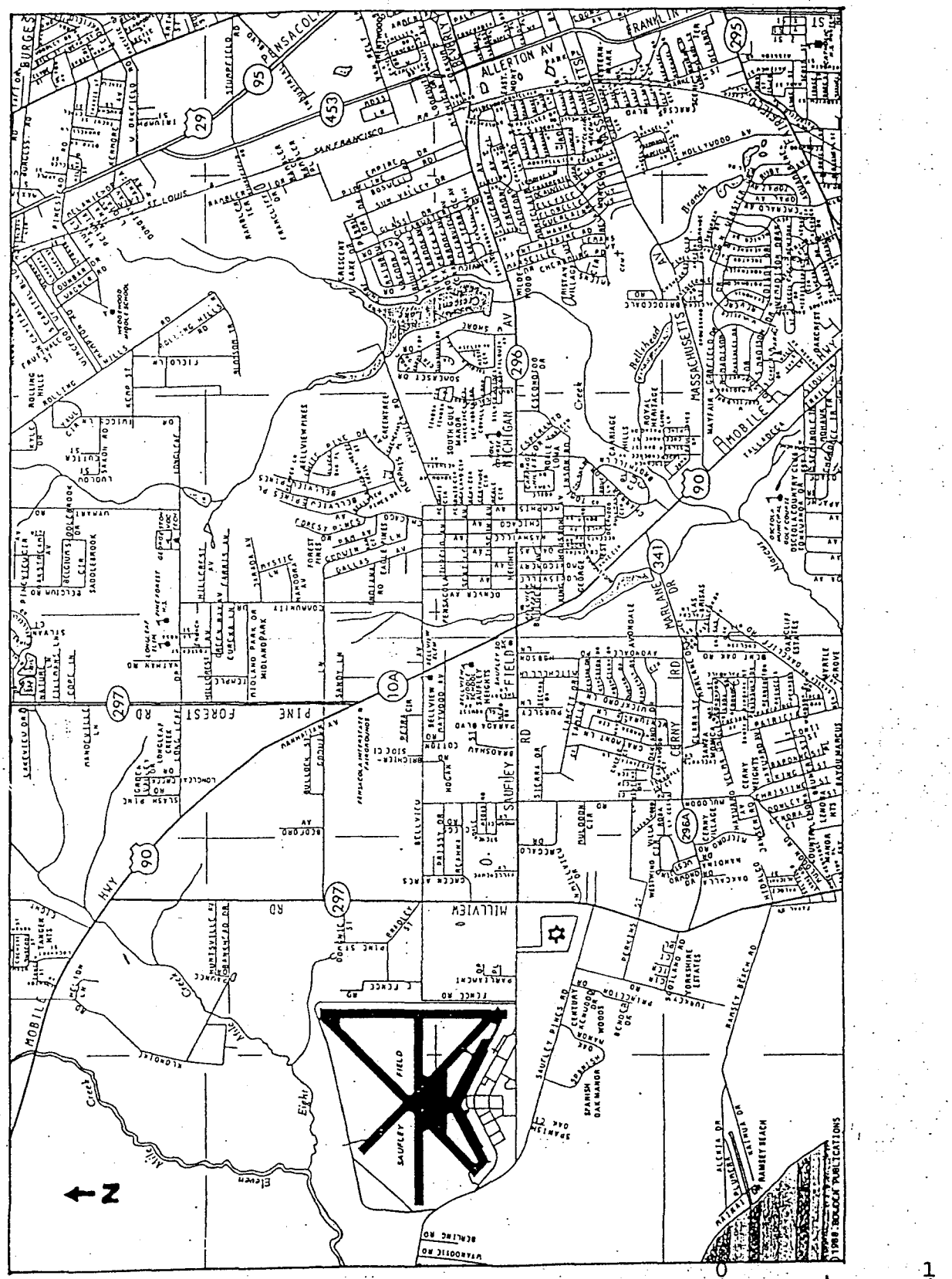

Figure 3. Pioneer Sand Company Site