Health Assessment for

PARRAMORE SURPLUS COMPANY

MT. PLEASANT, FLORIDA

04FLDO41140344

Agency for Toxic Substances and Disease Registry
U.S. Public Health Service

BACKGROUND

A. SITE DESCRIPTION

The Parramore NPL Site is located in Mt. Pleasant, Gadsden County, Florida. Parramore is a storage and resale company for Navy and Air Force surplus equipment. Beginning in 1972 Parramore began storing drums on the property. The Florida Department of Environmental Regulations (FDER) inspected the site and noted 400 to 600 drums, some of which were leaking. FDER also noted vegetational stress in areas at the site.

Samples were taken of the soil and the wastes present on the ground surface. These samples indicated elevated concentrations of polychlorinated biphenyls, organic compounds, and some metals. The Environmental Protection Agency (EPA), FDER, and the owner of Parramore agreed that Parramore would remove the surface contamination. After the removal was complete samples were taken of the soil. Three new areas of contamination were located. Parramore remediated these areas as well. Sampling after the second removal indicated that the contamination had been removed.

A modified Remedial Investigation (RI) was conducted to determine whether all source materials had been removed and to determine whether there was any groundwater contamination directly related to the site. The RI determined that all source materials had been successfully removed with the exception of the three small areas that had been the target of the second remediation. It was determined that the concentration of the contamination present in these areas would not damage the environment or be of human health concern.

The ROD signed September 1987 mandated a no action alternative for source control and monitoring well installation to determine whether contamination was present in the groundwater. Four wells were constructed. Two samples were taken from the wells in June and July 1988. Results from the samples indicated that there was no contamination present at concentrations of concern. Therefore, no further remedial action will be taken.

B. SITE VISIT

ATSDR has not made a site visit to date.

ENVIRONMENTAL CONTAMINATION AND PHYSICAL HAZARDS

A. ON-SITE CONTAMINATION

Since the second removal was completed by Parramore in late 1983, it has been established through soil samples that the source of contamination at Parramore has been removed. The small areas of surface soil contamination which are present on-site contain low level contamination with the exception of one area which indicated lead at a concentration of 640 parts per million (ppm).

B. OFF-SITE CONTAMINATION

There does not appear to be any off-site contamination.

C. PHYSICAL HAZARDS

Scattered throughout Parramore are organized piles of miscellaneous items. These piles may pose a physical hazard to employees or trespassers if the piles should fall on them.

DEMOGRAPHICS OF POPULATION NEAR SITE

The site is located in a low density residential area with approximately 20 homes in the immediate vicinity of the site. There is a population of less than 100 persons within a 1-mile radius of the site. The area surrounding the site is primarily agricultural (row crop fields are located along the eastern and northern boundaries), the area is also forested. There are several buildings located on-site which are used as office space and for storage. The site is currently in operation, but the owner has said that he would like to retire soon. ATSDR is not aware of any plans for future use of the site.

EVALUATION

A. SITE CHARACTERIZATION (DATA NEEDS AND EVALUATION)

1. Environmental Media

There was no sampling of the biota namely, fish, game, crops, garden vegetables, etc. at the site. This does not appear to be of concern, however, since the source material has been adequately removed. The sampling of the other environmental media appears to be adequate.

2. Land Use and Demographics

The land use and demographic information provided to ATSDR was adequate.

3. Quality Assurance/Quality Control

Conclusions contained in this Health Assessment are based on the information received by ATSDR. The accuracy of these conclusions is determined by the availability and reliability of the data.

B. ENVIRONMENTAL PATHWAYS

The bulk of the contamination that was present on-site in the early 1980's was located in the surface soil. This source contamination was removed by Parramore in two separate removals authorized by EPA and FDER. There are still three small areas which contain low concentrations of a few contaminants. These areas are not of public health concern under the present site conditions.

The only surface water present at the site is surface runoff. This was sampled and did not indicate any contamination above background

concentrations. The nearest surface water body is Mosquito Creek, which is located one-half mile west of Parramore.

The groundwater in the vicinity of the site is in three separate aquifers. The first of these aquifers is a surficial aquifer located in an unconsolidated sand, silt, and clay layered formation. This aquifer is recharged by annual rainfall. The water table is located 3 to 4 feet below the ground surface and its total thickness in the area near Parramore is 15 to 30 feet. The flow is to the northwest. Discharge from the aquifer is in the form of seeps, springs, evapotranspiration, and well pumpage. There is some rural domestic well use of this aquifer.

The second aquifer is the water bearing zone of the upper confining layer of the Hawthorne Formation. It is an artesian aquifer located in sandy clays and sandy limestone. It is separated from the lower aquifer by a layer of clay which is from a few feet to 50 feet thick. There are also a few rural domestic wells located in this aquifer as well.

The final aquifer is the Floridian. It is located in a limestone formation and flows to the southeast. This aquifer is the primary source of drinking water in the area.

The groundwater samples taken during the RI indicated metal contamination near one of the areas of soil contamination. These groundwater samples were turbid and therefore the results were not reliable. The ROD mandated further groundwater monitoring in the area. The results of the monitoring indicated no contamination was present, and therefore, no further action was required.

Although there has been no air or biota sampling at this site, this does not appear to be problem since the source material is no longer present.

C. HUMAN EXPOSURE PATHWAYS

There is a potential for ingestion and inhalation exposure to the lead present on-site. The concentration of lead detected, 640 ppm, falls within the Centers for Disease Control and ATSDR Advisory Level (500 to 1,000 ppm) for lead in residential soil which is indicative of a potential increase in the blood lead level of children by ingestion and inhalation of contaminated soils and soil dusts (U.S. Department of Health and Human Services, 1988). Since this site is an industrial site and not residential property, it is felt that this concentration is not of public health concern. However, should the land use change in the future to a residential or recreational use, the possibility of children being exposed to the lead increases and this concentration would then be of public health concern.

PUBLIC HEALTH IMPLICATIONS

There are no known human exposures present at this site, therefore there are no public health implications to be discussed.

CONCLUSIONS AND RECOMMENDATIONS

A. CONCLUSIONS

This site is not of public health concern under current conditions because of the absence of human exposure to significant levels of hazardous substances. As noted in the Environmental Pathways and Human Exposure Pathways Sections above, the analytical results of the groundwater monitoring conducted during the summer of 1988 did not indicatate any concentrations of health concern. The removals done by Parramore have adequately minimized the potential for human exposure to the contamination present in the soil in the affected areas of the site.

B. RECOMMENDATION

In accordance with the Comprehensive Environmental Response, Compensation, and Liability Act as amended, the Parramore Surplus Company, has been evaluated for appropriate follow-up with respect to health effects studies. Although there are indications that human exposure to on-site/off-site contaminants may have occurred in the past, this site is not being considered for follow-up health studies at this time because no current pathway of exposure can be defined.

PREPARERS OF REPORT

Environmental Reviewer: Susan L. Mueller, Environmental Health Specialist, Health Sciences Branch.

Regional Representative: Chuck Pietrosewicz, ATSDR Regional Representative, Region IV.

REFERENCES

1. Record of Decision, Parramore Surplus Company, Mt. Pleasant, Gadsden County, Florida, 1987.

2. Modified Remedial Investigation, Parramore Surplus Company, Mt. Pleasant, Gadsden County, Florida, NUS Corporation Superfund Division, 1986.

3. Public Health Evaluation, Parramore Surplus Company, Mt. Pleasant, Gadsden County, Florida, U.S. Environmental Protection Agency, 1987.

4. U.S. Department of Health and Human Services. The Nature and Extent of Lead Poisoning in Children in the United States: A Report to Congress. Agency for Toxic Substances and Disease Registry, Atlanta, GA, 1988.

5. ATSDR File.

SUMMARY

The Parramore Surplus Company (Parramore) National Priorities List (NPL) Site is located in Mt. Pleasant, Gadsden County, Florida. The 25-acre site is located 32 miles northwest of Tallahassee. There are a few small areas of surface soil contamination on-site, one contains an elevated level of lead. The Record of Decision (ROD) signed September 1987 mandated a no action alternative for source control and monitoring well installation to determine if contamination is present in the groundwater. The sampling of the groundwater indicated that there was no groundwater contamination present. The site has been proposed for deletion from the NPL.