



**US Army Corps
of Engineers®
Memphis District**

SECTION X

Northwest Tennessee Regional Harbor

HAZARDOUS, TOXIC, RADIOACTIVE WASTE SURVEY

April 2004

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Introduction

Hazardous, toxic, and radioactive waste (HTRW) includes any material listed as “hazardous substances” under the Comprehensive Environmental Response, Compensation and Liability Act, 42 U.S.C. 9601 et seq. (CERCLA); “hazardous wastes” under Sec. 3001 of the Resource Conservation and Recovery Act (RCRA), 42 U.S.C. 6921 et seq.; “hazardous substances” identified under Section 311 of the Clean Air Act, 33 U.S.C. 1321; “toxic pollutants” designated under Section 307 of the Clean Water Act, 33 U.S.C. 1317; “hazardous air pollutants” designated under Section 112 of the Clean Air Act, 42 U.S.C. 7412; and “imminently hazardous chemical substances or mixtures” on which EPA has taken action under Section 7 of the Toxic Substance Control Act, 15 U.S.C. 2606.

The HTRW survey included reviewing historical files of the area, making inquiries to federal databases, making inquiries to regulatory agencies, viewing aerial photography, and conducting site visits to the study area. The study area was defined as the area of Old Slough Landing, silted in areas of Slab Fill Chute, the former casting field at Cates Landing, the bature area between Cates Landing and Jolly Landing, and potential disposal areas.

Historical File Review

Cates Casting Field was acquired in fee by the federal government on 30 January 1947 under authority of the Flood Control Act of 1928 (PL 391). When the maintenance of the river channel facilitating the loading of the mattress squares from the field became uneconomical, a second area (Jolly Landing) was acquired 2.5 miles down river. The second site was acquired on 22 July 1961.

Articulated concrete mats were cast at the site and loaded on to barges that were used for bank stabilization along the river. Channel stabilization work along the reaches of river served by Cates Casting Field was completed and presently only requires periodic maintenance. The properties were declared excess in 1991.

An HTRW site assessment was completed in September 1991 (HESS Environmental Services, In., 1991) prior to declaring the property excess. A copy of the site assessment is on file at the Memphis District office and can be viewed upon request. The site assessment found no evidence of significant adverse environmental impact to the subject properties. The site assessment concluded the following:

- According to records available to HESS, no registered landfills, open dumps, hazardous waste generators, or Superfund sites are located on or adjacent to the subject properties.
- Stained oil was observed on the Cates Casting Field site. The staining was observed near the northeast corner of tract 2 and staining appeared to cover an area of about 150 square feet.

- There was also an area containing several small mounds of soil and small associated depressions located approximately 900 feet north of the road which comprises the southern boundary of the Cates Casting Field property. These areas do not present an environmental concern since the mounds and depressions are the result of demolishing the operational headquarters of the former casting operations.
- A visual inspection of the properties revealed no signs of stressed vegetation. There were no indications of hazardous or toxic waste disposal of any kind observed on the properties with the exception if the stained soil noted above.
- Household trash, discarded appliances, and discarded automobiles were observed on the Cates Casting Field site. Significant open dumping of scrap and household trash was also noted on tracts 101 and 102; however, no hazardous or toxic waste or evidence of adverse environmental impact (except the stained soil noted above) was observed in any of these areas.
- There are also several remnants of the old casting operations that were conducted on the Cates Casting Field property in the past. These remnants consisted of concrete foundations, old building shells, and discarded concrete castings. These areas do not constitute a threat to the environment.
- The Fowlkes Concrete and Construction Company operates a concrete mixing operation near the boundary between tracts 2 and 3. This operation includes an above ground gasoline storage tank and several drums that were labeled as hydraulic oil. The operations did generate dust that emanated from the site. There did not appear to be any adverse environmental impact resulting from these operations.
- HESS also observed visible signs of underground storage tanks (USTs) on the Cates Casting Field property, although State of Tennessee UST records revealed no registered USTs on the subject properties or any immediately adjacent properties. The USTs were most likely used during the casting operations and were never registered with the State of Tennessee. The number, size, or condition of the USTs (assuming they have not been removed) could not be determined. A subsurface investigation would be required to determine if a release occurred sometime in the past.
- Visual observations of adjacent properties conducted from the perimeters of the subject properties did not reveal any evidence of adverse environmental impact of cause for concern.

Subsurface exploration by the Corps revealed that there was not an underground storage tank located in the former casting field. The pipe was used to protect a fire hydrant from vehicles. Testing was conducted on the oil stained area. The area was cleaned up according to environmental laws and regulations. The Secretary of the Army declared the casting field excess property on 10 January 1992.

Federal Databases

The Toxic Release Inventory database was queried to determine all reported toxic releases in the vicinity of Cates Landing. No toxic releases have been reported in the project area.

The EPA RCRIS and CERCLIS databases were queried to determine if there are any regulated RCRA or CRCLA facilities within the proposed area. There are no reported regulated facilities in the project area.

The National Response Center database was queried. No incidents were reported in the immediate vicinity.

Inquiry to the Tennessee Department of Environment and Conservation

Inquiries were made to TDEC requesting a search of their records for any potential HTRW within the study area. The response is found in Attachment 1. Federal and state records did not find any regulated RCRA or promulgated Superfund sites in the vicinity of the proposed project.

Aerial Photography

Available aerial photographs of the area were viewed to determine if there were any unreported/illegal activities that could have resulted in HTRW. Photographs were viewed going back to 1953. With the exception of the casting field, agriculture was the dominant land use in the area. No potential HTRW was identified by viewing aerial photographs.

Site Visits

Several site visits were conducted to the area over the course of the feasibility study. Site visits included walking the potential harbor and disposal areas and recording any potential HTRW. Site visits revealed the presence of two illegal landfills (Figure 1)

The first illegal landfill is located at the former Cates Casting Field site. The area contained household waste, used appliances, tires, shingles, and an empty 55-gallon drum (Figure 2).

The second illegal landfill is located directly to the north of the intersection of Highway 22 and New Markham Road. The area was on fire during a site visit. The illegal landfill contained household waste, household hazardous waste (water sealant, paint cans), shingles, appliances, automobiles, used tires, and empty 55-gallon drums (Figures 3-7).

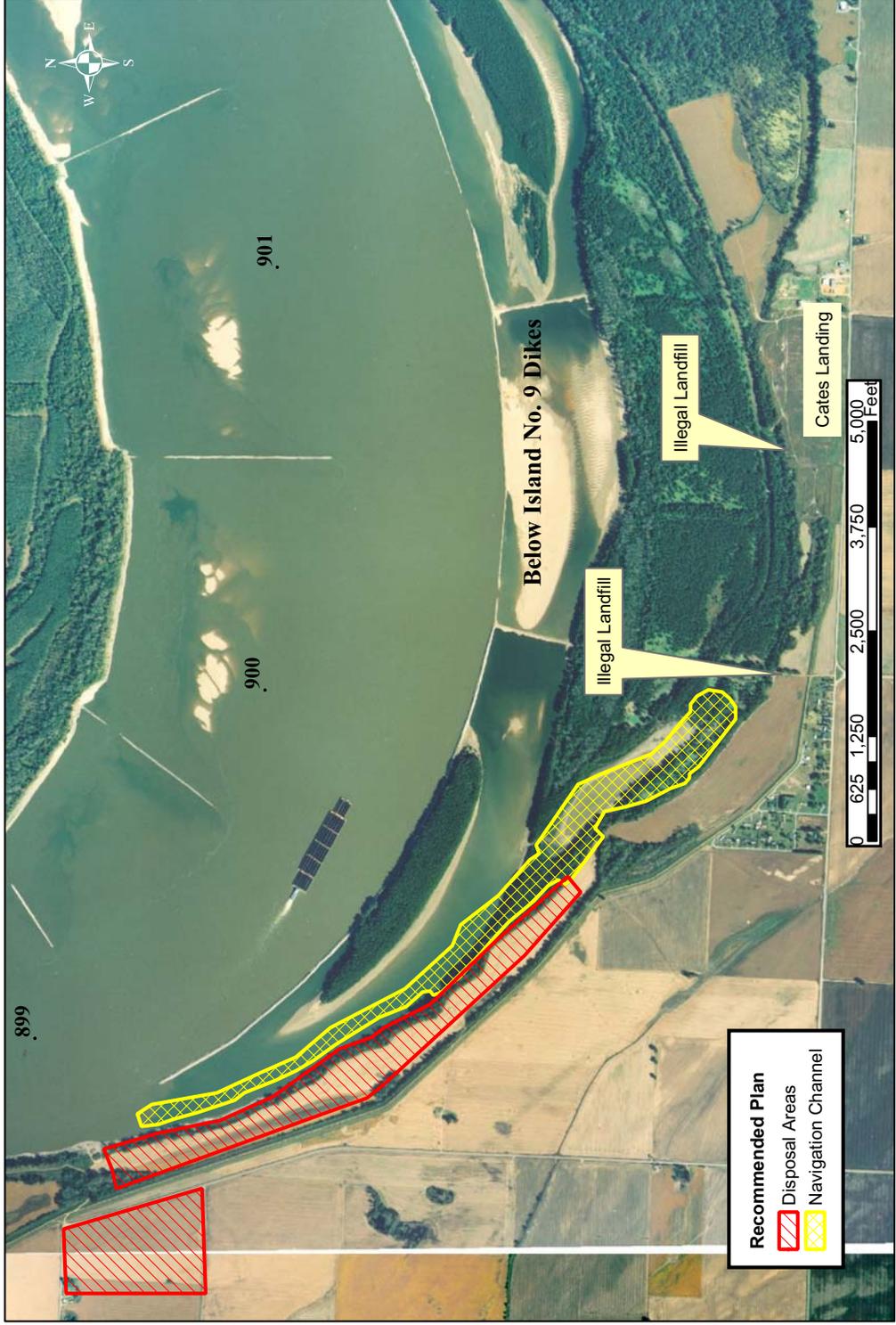


Figure 1. Illegal landfill locations, Northwest Tennessee Regional Harbor.



Figure 2. Illegal landfill located at former casting field.



Figure 3. Illegal landfill located north of Hwy 22 and New Markham Roads



Figure 4. Illegal landfill located north of Hwy 22 and New Markham Roads



Figure 5. Illegal landfill located north of Hwy 22 and New Markham Roads.



Figure 6. Illegal landfill located north of Hwy 22 and New Markham Roads

Conclusions

HTRW investigations revealed two illegal landfills in the project vicinity. However, these illegal landfills are outside of the proposed construction work limits. They have been reported to the Tennessee Department of Environment and Conservation, Division of Solid/Hazardous Waste Management – Jackson Environmental Assistance Center. No potential HTRW was encountered in the proposed harbor and disposal areas.

ATTACHMENT 1



DEPARTMENT OF ENVIRONMENT & CONSERVATION

**ENVIRONMENTAL ASSISTANCE CENTER
362 CARRIAGE HOUSE DRIVE
JACKSON, TN. 38305-2222
PHONE (901) 661-6200 STATEWIDE 1-888-891-8332 FAX (901) 661-6283**

September 5, 2000

**CERTIFIED MAIL RECEIPT Z 316 342 779
Return Receipt requested**

Environmental and Economic Analysis Branch
U. S. Army Corps of Engineers
167 North Main St., Room B-202
Memphis, Tn. 38103-1894
ATTN: Danny Ward

RE: Hazardous, toxic and radioactive waste evaluation, Northwest Tn. Regional Harbor

Mr. Ward

Tennessee Department of Environment and Conservation (TDEC) personnel have completed the hazardous, toxic and radioactive waste evaluation requested for the site of the new slackwater harbor at Mississippi River mile 900.

Mr. James Ron Sells, manager of the Division of Superfund (DSF) here at the Jackson Environmental Assistance Center (EAC) determined that DSF records reveal that no inactive hazardous substance site is known to be within 4 miles of the project area located in the Cates community on the Mississippi River at mile 900. If you have further questions about this determination please call Mr. Sells at 901-661-6204.

Thank you for your diligent inquiry and your efforts to be in compliance with environmental regulations. If you have any questions about environmental issues contact me at 1-901-661-6252 or 1-888-891-TDEC.

Sincerely,



Vaughn Cassidy
Environmental Coordinator
Tennessee Department of Environment and Conservation
Jackson EAC

Enclosures: e-mail correspondence from Mr. Sells, cover letter of Corps. request.

cc EAC Permit Coordination File
Rudy Collins, EAC manager
James Ron Sells, manager DSF