

APPENDIX H – Hazardous, Toxic, and Radioactive Waste (HTRW)

Galveston Intercoastal Waterways Coastal Resilience Study, Texas

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



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List of Acronyms

AE	Architectural and Engineering
AFB	Alternative Formulation Briefing
ATR	Agency Technical Review
ATRT	Agency Technical Review Team
CAR	Corrective Action Request
CCIR	Commander's Critical Information Requirement
CE/ICA	Cost Effectiveness/Incremental Cost Analysis
Corps	U.S. Army Corps of Engineers
CMI	Corporate Management Information
CMP	Cost Management Plan
DQC	District Quality Control
DX	Directorate of Expertise
EC	Engineer Circular
EIS	Environmental Impact Statement
EM	Engineer Manual
ER	Engineer Regulation
ERDC	Engineer Research and Development Center
EVM	Earned Value Management
FCSA	Feasibility Cost Share Agreement
FGDC	Federal Geographic Data Committee
FRA	Flood Risk Assessment
FRM	Flood Risk Management
FWOP	Future without Project
FWS	Fish and Wildlife Service
FY	Fiscal Year
GDM	General Design Memorandum
GIS	Geographic Information Systems
HEC	Hydrologic Engineering Center
HEC-FDA	Hydrologic Engineering Center Flood Damage Assessment Model
HEC-FRM	Hydrologic Engineering Center Flood Risk Management Model
HEMP	Hydrologic Engineering Management Plan
H&H	Hydrology and Hydraulics
HQUSACE	Headquarters, U.S. Army Corps of Engineers
HTRW	Hazardous, Toxic and Radioactive Waste Program
IRC	Issue Resolution Conference
IEPR	Independent External Peer Review
IPR	In-Progress Review
IWR	Institute of Water Resources
LAERF	Lewisville Aquatic Ecosystem Research Facility
LERRD	Lands, Easement, Right-of-Way, Relocations, and borrow and dredged or Excavated materials Disposal areas
MIPR	Military Interdepartmental Purchase Request
MSC	Major Subordinate Command

MFR	Memorandum for Record
NED	National Economic Development
NEPA	Nation Environmental Protection Act
NER	National Ecosystem Restoration
NOA	Notice of Availability
NWP	Nationwide Permit
O&M	Operations and Maintenance
OMB	Office of Management and Budget
P2	Scheduling software database
PCX	Planning Center of Expertise
PDT	Project Delivery Team
PED	Pre Engineering and Design
PES	Project Executive Summary
PL	Lead Planner
PM	Project Manager
PMBP	Project Management Business Process
PMP	Project Management Plan
PROC	Process
QMS	Quality Management System
RIT	Regional Integration Team
RMO	Resource Management Office
SAWS	San Antonio Water System
SDSFIE	Set of data standards that define the content of the database
SMART	Specific, Measurable, Attainable, Risk Informed and Timely
SMT	Study Management Team
SWD	Southwest Division
SWF	Fort Worth District
TCEQ	Texas Commission on Environmental Quality
TPWD	Texas Parks and Wildlife Department
TSP	Tentative Selected Plan
TX SHPO	Texas State Historical Preservation Officer
USFWS	US Fish and Wildlife Services
VT	Vertical Team
WBS	Work Breakdown Structure
WIK	Work-In-Kind
WRDA	Water Resources Development Act

1 Background

1.1 Introduction

In order to complete a feasibility level HTRW evaluation for the Gulf Intercoastal Waterway Coastal Resiliency Study, a report was completed following the rules and guidance of ER 1165-2-132: *HTRW Guidance for Civil Works Projects*, and ASTM E1527-13: *Standard Practice for Environmental Site Assessment: Phase 1 Environmental Site Assessment Process*. These two documents outline a process which has three main components (excluding the report itself): the records review, site reconnaissance, and interviews.

1.2 Records Review

Perhaps the most critical part of the feasibility level HTRW evaluation is the records review. In this, records, maps and other documents that provide environmental information about the project area are obtained and reviewed. To complete the records review, USACE used publicly available environmental databases. This records review was completed using the proposed footprint of the project, and the standard ASTM environmental record sources, along with an approximate 1 Mile search distance for each of the sources shown in the below Table 1. Once the database searches were complete, USACE analyzed the results for recognized environmental conditions (RECs) that could affect the proposed project or need further investigation, given the proposed project measures. Due to the conservative search distances and specifics of the proposed project, many of the record search results can be dismissed from further consideration in this study. The results of that analysis, specifics of the REC (where applicable), and justification for dismissal from further evaluation (where applicable) are discussed below.

Table 1: Standard ASTM Search Distances and Records Review Results

ASTM Source	ASTM Distance (miles)	Searched Distance (miles)	Number of Results
Federal National Priorities List (NPL) site list	1.0	1.0	0
Federal Delisted NPL site list	0.5	1.0	0
Federal CERCLIS (SEMS) list	0.5	1.0	0
Federal NFRAP (SEMS archive) site list	0.5	1.0	0
Federal RCRA Corrective Action facilities list	1.0	1.0	0
Federal RCRA TSD facilities list	0.5	1.0	0
Federal RCRA generators list	Property and adjacent properties only	1.0	0
Federal ICs/Engineering Control registry	Property only	1.0	0
Federal ERNS list	Property only	1.0	0
State and tribal equivalent NPL list	1.0	1.0	0
State and tribal equivalent CERCLIS	0.5	1.0	0
State and tribal landfill and/or solid waste disposal sites	0.5	1.0	1
State and tribal leaking AST/UST sites	0.5	1.0	0
State and tribal registered storage tank list	Property and adjacent properties only	1.0	1
State and tribal ICs/Engineering Control registry	Property only	1.0	0
State and tribal voluntary cleanup sites	0.5	1.0	0
Federal, State and tribal Brownfields site list	0.5	1.0	0

(See Figure 1 for map of Records Review Results)

Federal Institutional Controls (IC)/Engineering Controls Registry – Engineering controls and ICs are both methods of preventing exposure to contaminants on a particular site. This database is a listing of sites where one or both of those controls are in place. There weren't any sites with these measures in place that were identified within a one-mile radius of GIWW project footprint. However, the ASTM standard only requires that the proposed project property be searched for ICs or engineering controls.

State and Tribal Solid Waste Facilities/Landfill Sites – This search is designed to check any state or tribal databases for solid waste handling facilities or landfills in the project vicinity. The search found 1 closed site within 0.5 miles that handled primarily only solid waste and thus, will not be carried forward as a REC.

State and Tribal Registered Storage Tanks – This list is a combination of the State of Texas registered UST and AST databases, representing sites with storage tanks registered with the State of Texas. Within a mile radius there was 1 tank identified. However, the existence of a registered storage tank (UST or AST) is not sufficient to believe that contamination is likely to be generated, and therefore it will not be carried forward as a REC.

1.3 Site Visit

The site visit in environmental investigations is designed to identify environmental conditions that would otherwise not be identified in the records search. The site visit also is used to look at indoor areas and area usages on the subject property. Due to the proposed action occurring mostly in-and directly adjacent to a water body, a site visit will not be conducted for this phase of the investigation.

1.4 Interviews

The objective of the interviews is to discover environmental conditions that could not be obtained in the records search, as well as to determine past uses of the subject property. Due to the nature of the proposed project and its ownership, it is expected that the subjects and scope of the interviews for this project will be limited. The subjects of the interviews will be determined at a later time, once the records search is completed and allows for the narrowing of potential interviewees.

1.5 Conclusion of Background Records Review

In order to complete a feasibility level HTRW evaluation for GIWW Coastal Resiliency Study project footprint, this report was completed following the rules and guidance of ER 1165-2-132: *HTRW Guidance for Civil Works Projects*, and ASTM E1527-13: *Standard Practice for Environmental Site Assessment: Phase 1 Environmental Site Assessment Process*. No sites were found that had recognized environmental conditions.

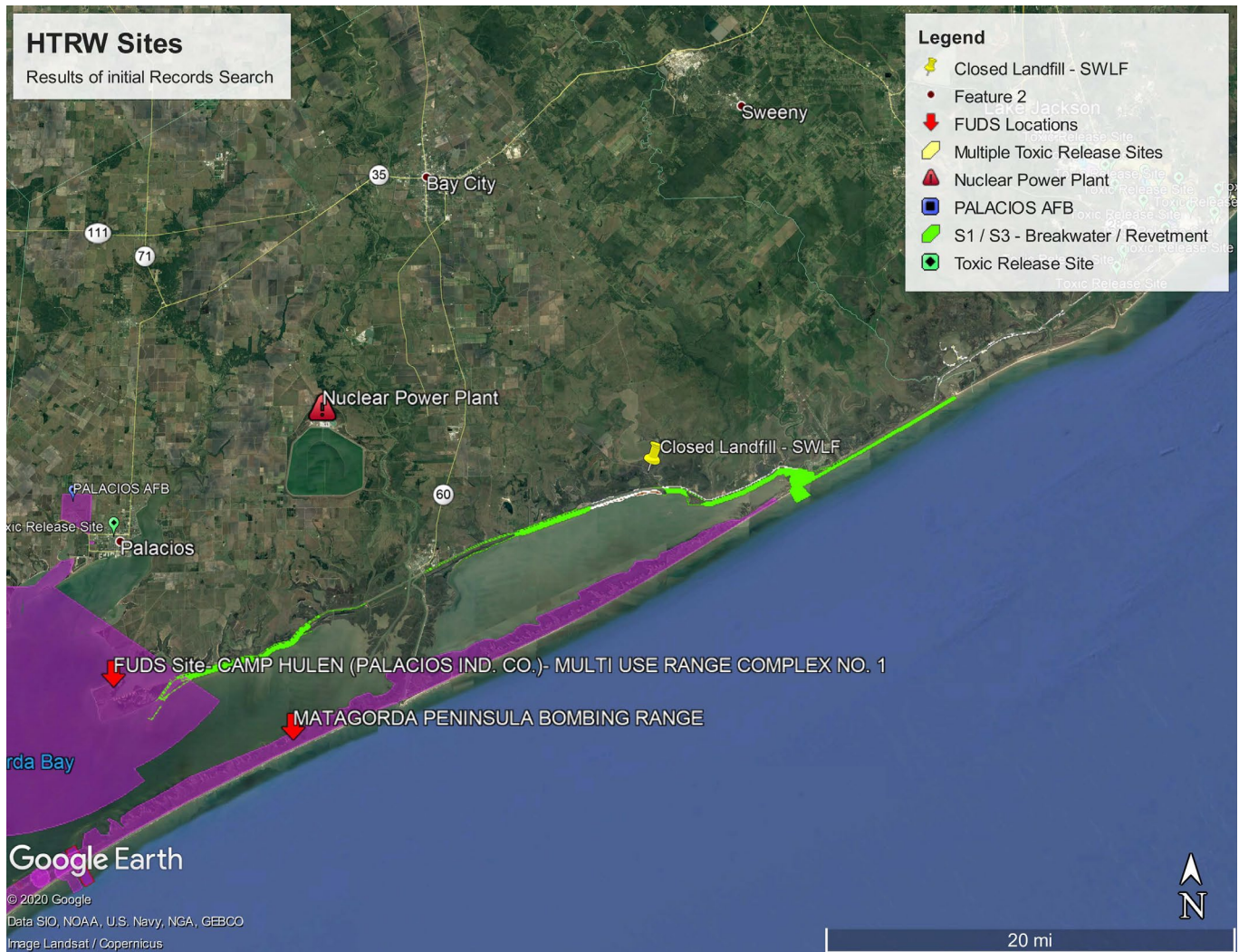


Figure 1: Map of HTRW Sites

2. Existing Conditions

In order to complete a feasibility level HTRW evaluation for the Gulf Intercoastal Waterway Coastal Resiliency Study (GIWW), a records search was conducted following the rules and guidance of ER 1165-2-132: *HTRW Guidance for Civil Works Projects*, and ASTM E1527-13: *Standard Practice for Environmental Site Assessment: Phase 1 Environmental Site Assessment Process*. In the records review, files, maps and other documents that provide environmental information about the project area are obtained and reviewed. To complete the records review, USACE reviewed publicly available databases and sources, using the proposed footprint of the project, along with an approximate 1-mile search distance for each of the sources. The records search revealed several HTRW sites in the vicinity of the project area, although none of these sites have the potential to affect the proposed project. See the future without project, alternative analyses, and the HTRW appendix for more information about risks from these sites.

Gulf Intercoastal Waterway has several potential HTRW sites in relative proximity (one mile) to the proposed project footprint, including 1 registered petroleum storage tank, 6 National pollutant discharge elimination system (NPDES) permitted dischargers, 8 oil and gas pipelines, as well as 2 historical FUDS sites and 1 nuclear power plant located adjacent to the target area. Considering the large project footprint this is a relatively low number of HTRW sites and this is attributed to the wildlife refuges/preserves within the region which maintain lower population centers and less developed lands. With populations increasing worldwide, more development and thus an increase in HTRW instances, is expected in future decades that could potentially have negative impacts on the GIWW. However, the current identified sites within one mile of the proposed project have an extremely low potential to impact the project as they are not located directly in the GIWW.

The identified HTRW sites are not in the GIWW itself which eliminates potential impacts. Specifically, the PST is in Matagorda, TX city limits, which is 0.4 miles from the GIWW. The 6 NPDES sites are spaced out along Beach Rd. between Matagorda and the Matagorda peninsula with only 2 locations within 0.5 miles of the GIWW. Adjacent to the GIWW are two FUDS sites, both 3 to 5 miles from the GIWW, that are historical bomb and range areas where munitions were discharged. These sites have been in the adjacent area without any notable impact on the GIWW and this is not expected to change with the current proposed project measures. Additionally, the South Texas Nuclear Power Plant cooling lake is located within 5.5 miles of the GIWW but no impacts are anticipated.

3. Expected Future Without-Project Conditions

No-Action Alternative

Based on the findings of the HTRW survey, the probability of encountering contaminated sites or toxic substances without project construction is considered low. Information compiled by this assessment indicates additional investigations are not warranted at this time

Future With-Project Conditions

In order to complete a feasibility level HTRW evaluation for the Gulf Intercoastal Waterway Coastal Resiliency Study, a records search was conducted following the rules and guidance of ER 1165-2-132: HTRW Guidance for Civil Works Projects, and ASTM E1527-13: Standard Practice for Environmental Site Assessment: Phase 1 Environmental Site Assessment Process.

Although not classified as HTRW, pipelines and oil wells play an important role in the HTRW existing condition in and around the GIWW. The 8 oil and natural gas pipelines that cross the GIWW within the area our proposed measures will take place, will need to be avoided. Three natural gas pipelines cross zone 16, 1 natural gas pipeline crosses between zones 15 and 16, and just past Mod Island Lake 3 more natural gas pipelines and 1 crude oil pipeline cross the project area in zone 18. Refer to the HTRW Appendix for locations of known pipelines in and around the GIWW. The project alternatives involving disruption of the sediment may need to consider the locations of these oil and gas pipelines.

4. *References

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*Sections that fulfill NEPA requirements for an EA