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Technical Memorandum

To:	Rob Holmlund (HBHRCD)
From:	Erik Nielsen (SHN)
Date:	April 23, 2024
Subject:	**Assessment of Environmental Conditions**
Project:	Redwood Marine Multipurpose Terminal Replacement Project
Location:	Eureka, CA
M&N Job No:	212991-03
cc:	Shane Phillips (M&N)

Disclaimer: This draft technical memorandum is a work-in-progress and is intended to be an internal document for use by the Humboldt Bay Offshore Wind Heavy Lift Marine Terminal Project team as a part of the conceptual design process and the ongoing permitting process. This memorandum is meant to be read as a part of a comprehensive packet of technical analyses. It is not written to be a standalone document and it is assumed that the reader has substantial project knowledge and context to understand the memorandum's content. All aspects of this memorandum are subject to change and may become less accurate over time. To better understand the project, please review the more comprehensive and up-to-date documents posted to the Humboldt Bay Harbor District's website at https://humboldtbay.org/humboldt-bay-offshore-wind-heavy-lift-marine-terminal-project-3.

Introduction

This memorandum provides an initial assessment of environmental conditions associated with historical activities at the Redwood Marine Multipurpose Terminal (RMMT) site. This assessment additionally includes recommendations to address potential data gaps and regulatory oversight that can be expected for site development.

Site Setting

The former 300-acre industrial site has been occupied by sawmills, planing mills, a cutting mill, warehouses, kilns, drying sheds, a cogeneration power plant, lumber storage, refuse burners, a dock and shipping operations. Much of the large-scale industrial activity occurred between the period of 1920 to 2005, with current site operations limited to log storage and fishing related activities. Many of the former structures associated with industrial use have been demolished, and only a few buildings remain, including a kiln, boiler, electrical, and office. A site figure showing the location of former operations and structures is provided in Attachment 1.

Areas of Potential Concern

Known releases of hazardous substances have occurred at the site that have undergone investigation and cleanup under the oversight of the North Coast Regional Water Quality Control Board (RWQCB). Areas previously investigated for release and cleanup include fuel storage facilities and wood treatment with fungicide application (spray booth). The primary constituents of concern in these areas would be petroleum hydrocarbon and their associated constituents (diesel, motor oil, gasoline, benzene, and so on) and pentachlorophenol, which is a polycyclic aromatic hydrocarbon (PAH). There are currently no active cases under regulatory oversight requiring investigation and cleanup at RMMT.

Additional areas of the site with the potential for contaminants present would include the former refuse burners in the northern portion of the site (dioxin/furans and PAHs), former structures with industrial use (fuels and lubricants), and existing structures for the presence of asbestos and lead-based paint. General areas of lesser concern would include the use of dredge material as fill on the site, utility/conveyance lines that may act as a preferential pathway for released materials, and the potential of elevated metals in soils where storage of materials of salvage operations may have occurred.
For this initial assessment of environmental conditions at RMMT, an evaluation of the following nearby sites was not undertaken:

- Evergreen Pulp Mill (RMT-II site immediately south)
- Roundhouse site (site immediately north)
- Samoa Lagoons—Dredge material storage facility north of RMMT
- Lorenzo Shell—UST cleanup site in Samoa (west of RMMT)

Site Assessment Activities

Following the completion of a Phase I environmental site assessment (ESA), a Phase II ESA should be undertaken to address recognized environmental concerns (RECs). The work would involve site investigation activities for the collection and analysis of soil and groundwater samples at RECs warranting further evaluation. The objective of the Phase II ESA would be to address potential data gaps prior to site development that may affect the schedule of operations. This effort would additionally allow for implementation of corrective action that may be required to address environmental impacts from historical operations to ensure protection of human health and the environment.

Specific locations of concerns based on this initial assessment would include the areas of fuel storage and use, refuse burning, and fungicide application. Mechanized equipment such as a direct push drill rig to install soil borings or a backhoe for completing test pits is anticipated for Phase II ESA investigation activities. The approach for investigation of RECS at the site would involve development of a work plan specific to each area outlining the methods, number of data points to be collected, and testing of chemical constituents.

Regulatory Agency Oversight

Site investigation work conducted under Brownfields grant funding to address areas of potential concern would be completed under the oversight of the U.S. Environmental Protection Agency (EPA),

Region 9 office in San Francisco. Approval of workplans and reports would need to adhere to EPA standards of conduct and quality control. The RWQCB in Santa Rosa has been the lead agency in the past and would likely take oversight during any future ground disturbance at RMMT for site development.

Environmental Documents

The general order for site redevelopment will be demolition of structures and infrastructure, site preparation, and construction. Each of these work phases will contain a specific set of requirements from an environmental standpoint that will require the submittal of accompanying documents for approval from the RWQCB as well as other agencies. It is anticipated that the RWQCB would require development of a document similar to an interim measures work plan (IMW) that would outline plans and documents to be submitted to address environmental components identified for this project.

Plans expected to be required during the course of the project will include:

Construction Stormwater Pollution Prevention Plan (SWPPP): To determine the potential sources of runoff pollution at the site during construction and describe the measures to prevent pollution from the project. The plan will demonstrate the procedures that comply with the construction general permit.

Demolition and Disposal Plan: Prior to demolition of site structures, permits will be required with a description of how the material will be segregated and stockpiled. Non-hazardous debris will be transported offsite for disposal as municipal solid waste (MSW), hazardous material will need special handling and disposal, and metals will be recycled. Much of the concrete is considered usable material, and machines will sort and downsize the material for preparation as onsite reuse or recycling.

Sampling and Analysis Plan (SAP): Demolition and construction activities will result in the excavation of soil that must be properly managed. Soil may need to be screened in the field or tested through the collection and analysis of samples. The SAP will act as a guide to appropriately evaluate whether excess soil can be reused onsite or may require offsite disposal. Excavated soils identified to have impacts from previous mill operations that require offsite disposal will be moved for temporary stockpiling and profiled for transport to a licensed disposal facility.

Groundwater Management Plan: Impacted groundwater encountered during demolition and construction may require removal and storage into appropriate containers for characterization and proper disposal. Groundwater at the RMMT site is shallow (< 10 feet) and development of a plan to manage, treat and handle water generated during dewatering activities is likely to be required by the RWQCB.

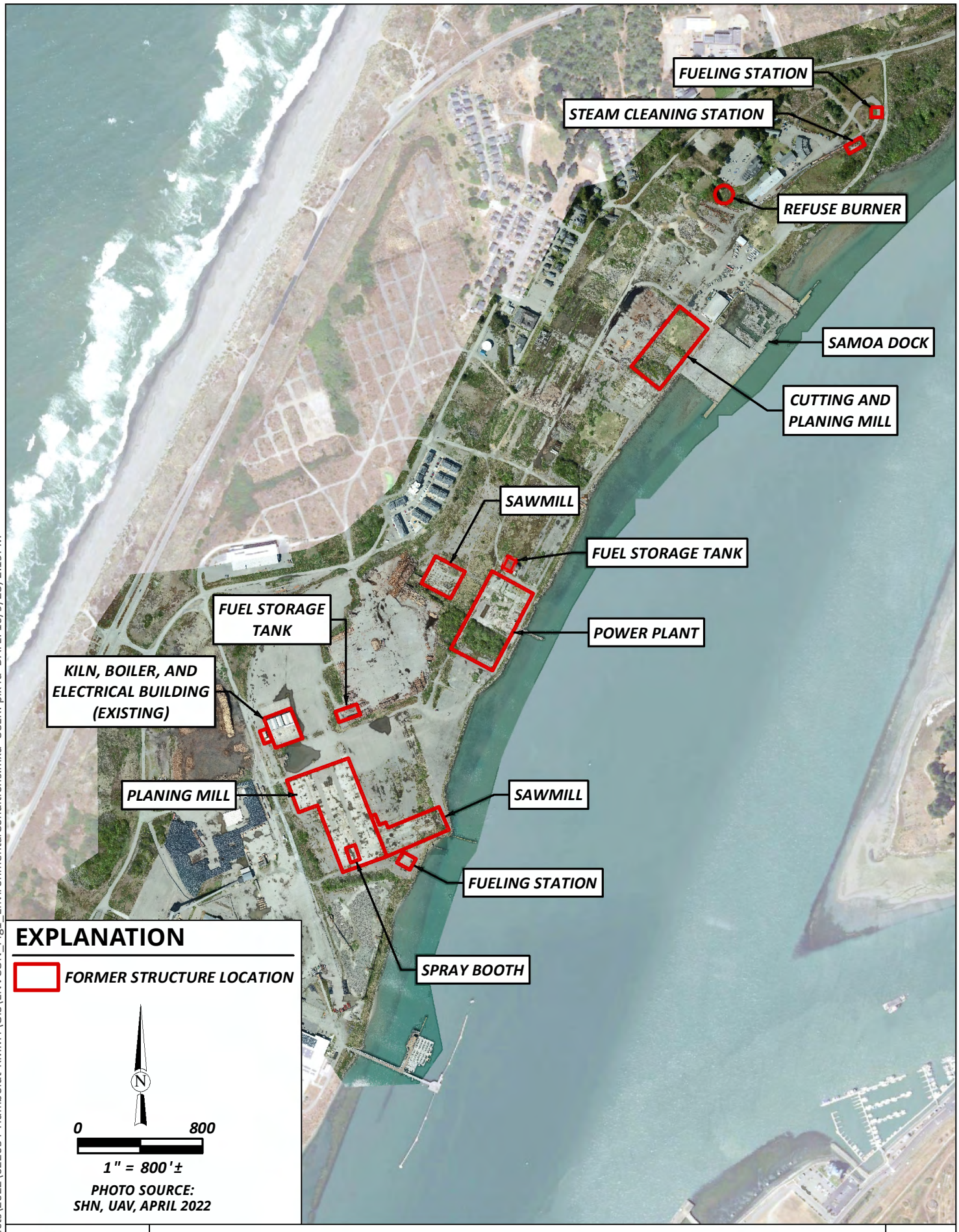
Summary

The information obtained from this desktop review and from redevelopment at similar industrial sites can be used to address known and unknown environmental conditions at RMMT. Conducting a Phase II ESA for the site and preparing applicable environmental documents is recommended to address data

gaps and reduce the risk of project setbacks. Although conditions on the RMMT site do not appear to warrant widescale measures requiring remediation to address areas of previous impact, there may be localized areas of contaminants encountered during site development. Completing upfront site investigation and having a clear path to address situations of impacted soil and groundwater is the best approach to minimize disruption during development.

Attachment 1. Figure

FIGURES 1



EXPLANATION

FORMER STRUCTURE LOCATION

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0 800

1" = 800'±

PHOTO SOURCE:
SHN, UAV, APRIL 2022

Humboldt Bay Harbor, Rec., & Cons. District
Redwood Marine Multipurpose Terminal
Eureka, California

Environmental Conditions

October 2023 - 022054.400

Figure 1

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