

EMERGENCY RESPONSE PLAN PENOBSCOT ESTUARY REMEDIATION

Prepared for
Greenfield Penobscot Estuary Trust LLC



Prepared by



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I certify that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I have no personal knowledge that the information submitted is other than true, accurate, and complete.

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ABBREVIATIONS/ACRONYMS

□□□	□cti□it□□a□ard □nal□ses
□□□	□erti□ied □ndustrial □□gienist
□□□	contaminant o□□concern
□F□	□ode o□Federal □egulations
□P□	cardiopulmonar□resuscitation
□□□	□ontamination □eduction □one
□SP	□erti□ied Sa□et□Pro□essional
□□	□r□ger tu□e
□□P	□mergenc□□esponse Plan
F□L	Field □perations Lead
FSP	Field Sampling Plan
□F□□	ground-□ault circuit interrupters
□□SP	□ealth and Sa□et□Plan
□□□□□	□arm □limination and □ecognition □rac□ing
□S□	□ealth□Sa□et□□ □n□ironment
□□L□	□mmediatel□□angerous to Li□e and □ealth
□□□	in□estigation-deri□ed □aste
L□L	lo□er e□plosi□e limit
□□S	□ational □eather Ser□ice
□S□□	□ccupational Sa□et□and □ealth □dministration
P□□	Pol□chlorinated □iphen□ls
P□L	Permissi□le e□posure limits
P□□	Photoioni□ation detector
PM	Pro□ect Manager
PP□	Personal protecti□e e□uipment
□□□	□is□□ssessment □ode
S□□□	sel□contained □reathing apparatus
S□S	Sa□et□□ata Sheet
S□S□	Site □ealth and Sa□et□□□icer
SM	Site Manager
□□□□	Wet-□ul□ glo□e temperature
□SP	□SP □S□ □n□ironment □ □n□rastructure□nc□

1.0 INTRODUCTION AND OBJECTIVES

This Emergency Response Plan (ERP) has been prepared by WSP USA Environment & Infrastructure, Inc. (WSP) on behalf of the Greenfield Penobscot Estuary Remediation Trust LLC (Greenfield), Trustee of the Penobscot Estuary Mercury Remediation Trust (the Remediation Trust) for Work on the Penobscot River Estuary located in Hancock, Penobscot, and Waldo counties, Maine (the Site) as shown in **Figure 1-1**. This ERP has been prepared in accordance with the Consent Decree¹ and appendices, including Paragraphs 31(b) and 13 of the Statement of Work (Appendix A to the Consent Decree). It is written for the Site-specific Work activities in accordance with 29 CFR 1910.120(l), in compliance with all applicable local, state, and federal regulations.

The primary objective of this Site-specific ERP is to direct the preparation, management, response to, and recovery from any given emergency while conducting the Work activities on the Penobscot River Estuary. This ERP is applicable to work to be performed as proposed in Investigation Work Plans as described in the SOW Paragraph 6(a) titled Investigation Work Plan. This ERP is a living document and may be reviewed and updated as needed at minimum each year from the approval date. The ERP complies with the Statement of Work and the objectives of the ERP are presented in **Table 1-1** and **Table 1-2**, respectively.

The ERP was developed based on the hazards known or suspected to be present at the Site in accordance with the Health and Safety Plan (HASP) (WSP, 2023a.), specifically as they relate to the Work to be conducted by the Greenfield Penobscot Estuary Remediation Trust and their contractors and subcontractors. Contractors and subcontractors may adopt this ERP as a companion document to the HASP. Notwithstanding, each contractor and subcontractor is responsible for ensuring their personnel health, safety and wellbeing while conducting Work activities and are responsible for reviewing the ERP and the HASP to ensure that any hazards unique to their operations are addressed and the emergency protocols included herein are followed. Prior to commencement of Work activities, contractors and subcontractors are responsible for understanding the emergency response information included herein.

The investigation and monitoring work covered by this ERP will occur only on the waters of the Estuary, intertidal flats, marshes, and State-owned property, and is not expected to affect the general community. As part of securing required access to intertidal sampling locations, the Greenfield Penobscot Estuary Remediation Trust will notify landowners of planned activities.

This document must be consulted prior to conducting any of the specific field Work activities presented in Investigation Work Plans as described in the SOW Paragraph 6(a) titled Investigation Work Plan. This document must be kept on-Site, communicated, and distributed to any and all who will be performing Work activities.

1.1 WORK DESCRIPTION

The Penobscot River Estuary Work activities include, but are not limited to, the collection of biota, surface water, and sediment samples in the tidal, inter-tidal, riverine, and estuarine environments of the Penobscot River Estuary to evaluate the concentration of mercury in the environment to develop a database and the remedial response action pertaining to mercury contamination at the Site. Additionally, a wetlands

¹ The Consent Decree was approved and entered by the U.S. District Court for the District of Maine (in the case *Maine People's Alliance and NRDC v. Holtrachem Manufacturing Company LLC, et al.*, No. 1:00-cv-00069-JAW (D. Me.) (ECF No.1187, October 11, 2022).

evaluation survey, a bathymetric survey, and a LiDAR survey are anticipated to inform pre-design remedial investigations and support permitting efforts for the Site.

Collection of samples will require boats typically less than 25 feet in length to access sample locations. The captained vessels to be used to support sampling efforts will be subcontracted. In addition, small boats may be rented by contractors to access sampling locations in marsh and tidal flats habitats. Boating is a critical task relative to safety and requires implementation of specific planning, hazard identification, and training in the avoidance of safety incidents.

1.2 SITE DESCRIPTION

The Site is the Penobscot River Estuary, which generally includes the tidal portions of the Penobscot River from the former Veazie Dam location to upper Penobscot Bay (**Figure 1-1**). The Site varies significantly in width, depth, tidal, and current conditions. The Site width ranges from 0.1 to 2.3 miles with depth ranges between 0.0 to 75 feet at mean low water and tidal fluctuations between 10 and 14 feet. Currents typically run 3 to 5 knots and may be influenced by factors including tides, manmade structures, weather, and shoaling. Bottom conditions range from soft sediments and grass, to mud, gravel, boulders, and rock or ledge. There are numerous bridges, submarine cables and pipeline crossings, restricted areas, commercial vessel travel channels and routes, and navigational aids.

It is anticipated that the Work environment will be constantly changing and evolving and will seldom be static. Wind can change direction and velocity in seconds, tides ebb for only brief periods and reverse flow direction, and storm fronts appear without warning. It is imperative for personnel to constantly be aware of their surroundings and to changing conditions to avoid potentially serious safety conditions.

1.3 ERP ORGANIZATION

This ERP is developed to meet the requirements of Paragraph 31(b) of the Statement of Work and to address actions required to respond to a release, accident, or emergency that may occur during Work activities on the Penobscot River Estuary. This plan identifies the persons and entities responsible for responding in an emergency and the procedures for potential emergency scenarios including communication and notifications. Additional topics addressed in this plan include Emergency Responder Notification, Work Area Security, Spill Prevention and Counter Measures, and Emergency Release and Response Reporting.

In the event of an emergency, the Site Health and Safety Officer (SHSO) and the Field Operations Lead (FOL) are the primary “On-Site” contacts and should be the first persons notified.

2.0 EMERGENCY RESPONSE CONTACTS

2.1 EMERGENCY RESPONSE CONTACTS

A list of contacts and telephone numbers for the applicable local off-site emergency responders, project emergency contacts, and regulatory agency contacts is provided in **Table 2-1**. The nature of the Site Work activities and contaminants of concern (COCs) should be reviewed and the ability of off-site responders to respond to reasonably anticipated emergencies should be confirmed by direct contact with the emergency responders listed in **Table 2-1** prior to starting work (see Section 2.2). Contact the off-site emergency responders directly if there are any questions about their responsibilities.

Emergency Treatment Hospital:

Eastern Maine Medical Center
 489 State Street
 Bangor, Maine 04401
 (207) 973-7000

Table 2-1: Emergency Response Contacts			
Name	Telephone Numbers		Date of Pre-Emergency Notification (if applicable)
Emergency Responder Contacts			
Fire Department	000		
Hospital Eastern Maine Medical Center	207-000-0000		
Police Department	000		
Amulance	000		
Seacoast Guard Station Rockland Mt	207-000-0000		
Seacoast Guard			
Bangor Harbor Master	207-002-0000 00F Channel 0		
Bucksport Harbor Master	207-000-0002 00F Channel 0		
Crigoon SP earlinjury case management	000000-0000		
Poison Control	000-222-0222		
Penobscot County Sheriff	207-000-0000		
Project Contacts			
	Office	Cell/Home	
Greenfield Program Manager Lauri Horton	00	000-002-0000	
Site Health and Safety Officer (SOS) Lindse Fales	00	207-220-0000	
Project Manager (PM) Rod Pendleton	00	207-220-0000	
Site Manager (SM) Brad Cole	00	207-020-0002	
Field Operations Lead (FLO) Charles Loman	00	207-000-0000	
Health and Safety Manager (HSE) Eeddale	00	000-000-0000	
Regulatory Agency Contacts			
National Response Center (Spills/Security) Seacoast Guard	000-020-0002 or 202-200-2000		
Clean Harbors 24-hour Spill Response	207-000-0000		

Name	Telephone Numbers	Date of Pre-Emergency Notification (if applicable)
Maine Fire Marshal Service Central Division – Bangor	207-554-2200	
Maine Marine Patrol Division	207-554-2200	
US Coast Guard Station Rockland ME	207-554-2200	
Maine DEP Emergency Response Bangor Big Lake	207-554-2200	

2.2 EMERGENCY RESPONDER NOTIFICATION

Communication with emergency responders (i.e., fire, police, U.S. Coast Guard) in advance of starting work is critical. The emergency responders identified in **Table 2-1** will be notified of proposed sampling plans and activities so they are fully aware of the work and able to respond if necessary. Emergency responders should be aware of when and where work will occur, as well as the size of the sampling teams and any equipment that may be involved with the work. Coordination with emergency responders will be the responsibility of the SHSO and FOL. At a minimum communication with emergency responders should occur prior to work starting and on a weekly basis or when significant changes in plans occur during the sampling event. Emergency responders will be notified when sampling work has been completed successfully.

2.3 PROJECT TEAM ROLES AND RESPONSIBILITIES

The responsibilities of specific project individuals and coordination with emergency responders (i.e., police, fire, Coast Guard) are defined as follows:

2.3.1 Site Health and Safety Officer

The Site Health and Safety Officer (SHSO) and Field Operations Lead (FOL) are responsible for implementation of the ERP, which includes the following responsibilities:

- The SHSO will assume control of emergency responses, with support provided by the FOL and Site Manager (SM)
- The SHSO will contact off-site emergency responders (e.g., fire department, hospital, police department)
- The SHSO will notify the appropriate agencies regarding emergencies, spills, or releases of hazardous materials
- The SHSO will notify the Project Manager and the Greenfield Program Manager of an emergency as soon as emergency care and immediate hazards have been addressed
- The SHSO will document the emergency response, and provide written documentation to the Project Manager and Greenfield Program Manager within 48 hours of the emergency incident occurrence

2.3.2 Project Manager

The Project Manager (PM) is responsible for directing the Work and getting it done safely. This includes the following responsibilities:

- Ensuring the ERP meets all requirements of the Consent Decree and SOW, WSP corporate Health and Safety policies, and OSHA rules and regulations.
- Ensuring communication with the Greenfield Program Manager and appropriate regulatory agencies regarding emergency situations.

- Reviewing emergency incident response documentation and ensuring that the documentation complies with the Consent Decree and SOW.
- Ensuring that emergency response incident documentation is submitted to the Greenfield Program Manager, and appropriate regulatory agencies within the timeframes presented in the Consent Decree and SOW.

3.0 EMERGENCY RESPONSE PROCEDURES

The types of emergencies and emergency response procedures can be found in the table provided as **Appendix A**. The table presents the type of emergency, a description of the emergency, immediate action to be taken, the contacts to be made, and the follow-up procedures. The following types of emergencies are presented in the table:

- Weather Emergency
- Medical Emergency
- Fire
- Explosion
- Unanticipated Personnel Absence
- Property Damage / Theft / Vandalism
- Unauthorized Person
- Hazardous Material and/or Chemical Spills and Leaks

3.1 EMERGENCY RESPONSE EQUIPMENT

The following emergency response equipment is required for this project and will be readily available:

- Field first aid kit (including blood-borne pathogen kit/supplies)
- Fire extinguisher - Type ABC for Field Staging Area
- Fire extinguisher - Type 5-B or 20-B UL-rated USCG approved extinguishers for Marine Vessels
- Spill containment kits

3.2 ON-SITE COMMUNICATIONS IN THE EVENT OF AN EMERGENCY

On-Site communications will be conducted as follows:

- Verbal
- Two-way radio
- Cellular telephone
- Smartphone communication app (e.g., WhatsApp)
- Hand signals
 - Hand gripping throat: - Out of air, can't breathe
 - Grip partner's wrist or both hands around waist: - Leave area immediately
 - Hands on top of head: - Need assistance
 - Thumbs up: - OK, I am all right, I understand
 - Thumbs down: - No, negative
- Horn/siren

Off-site communications will be conducted as follows:

- Cellular telephone
- Smartphone communication app (e.g., WhatsApp)
- Landline

If Site evacuation is required, workers will be notified using the on-Site communication method identified above. The SHSO will verify that the communication method can be heard/received by all workers in all portions of the site and can be detected above ambient equipment noise. The assembly area will be

established and communicated to workers. If the assembly area changes due to Site conditions, wind direction, work schedule, etc., the new assembly area location will be communicated to workers during the daily Safety Tailgate meetings (WSP, 2023a). For personnel working in remote areas of the Site (e.g., Mendall Marsh or Orland River), the SHSO will communicate alternate evacuation areas, which may be boat launches identified on **Figure 3-1**.

3.3 GENERAL EMERGENCY RESPONSE PROCEDURES

In the event of an on-Site emergency, the general emergency procedures are presented in **Table 3-1**. In the event that an evacuation is necessary, river egress routes and the emergency assembly area are shown on **Figure 3-1**, attached.

Table 3-1: General Emergency Procedures
<ul style="list-style-type: none">• The SSS should be immediately notified via the on-site communication system. The SSS will assume control of the emergency response.• The applicable SSS will contact on-site emergency responders (e.g., fire department, hospital, police department) and will inform the response team as to the nature and location of the emergency on site.• The applicable SSS will evacuate the Site. Site workers should move to the predetermined evacuation point (see Site Map).• For small fires, flames should be extinguished using the fire extinguisher. A safe to do so and workers are trained within the past year. Large fires should be only handled by the local fire department.• If chemicals are accidentally spilled or splashed into eyes or on skin, use eye wash and/or shower if available.• If a worker is injured, first aid should be administered by a certified first aid provider.• An injured worker must be decontaminated appropriately.• The SSS will notify the Project Manager and the Greenfield Program Manager of the emergency as soon as emergency care and immediate hazards have been addressed.• After the response, the SSS will document the emergency response using the Incident Analysis Forms provided in Appendix. The completed Incident Analysis Forms will be provided to the Greenfield Program Manager within 24 hours of the emergency incident occurrence.

Figure 3-2 presents WSP-specific incident response flow chart for personnel injuries in the event of an emergency incident. Non-WSP contractors and subcontractors will follow their company workplace injury case management program.

Figure 3-2: Incident Response Flow Chart for WSP Personnel Injuries



3.4 MEDICAL CARE

In the event of any medical incident, immediately notify the SHSO via cellular phone. If an incident requires more than first aid, the SHSO, or designee will determine whether emergency services are needed or whether the employee can be safely transported to a medical service provider. If emergency services are needed, such as a life-threatening emergency, the SHSO, or designee shall contact Emergency Services by calling 911. Support from first aid/CPR/AED-trained site personnel may be provided at this time. Subsequent notifications to the PM and the Greenfield Program Manager will be made, as described in Table 15-1 of the HASP.

Based upon the type of medical incident, the employee may be transported by on-site first aid trained personnel to a facility listed in Section 15.6 of the HASP (for a non-life-threatening emergency) or as directed by the dispatcher/emergency response personnel (for a life-threatening emergency). Minor medical issues may be treated on site. Upon arrival of the appropriate emergency response personnel, field personnel shall defer authority and provide assistance as needed.

The following subsections discuss the types of medical incidents, what to do in case of a life-threatening medical emergency, how to provide non-life-threatening medical care.

3.4.1 Non-Life-Threatening Medical Care

Examples of non-life-threatening medical care that may be performed on site include minor cuts, minor bruises, minor abrasion, splinters, and insect bites. In case of a non-life-threatening medical emergency, medical care may be self-administered or administered on site by a qualified person. Section 15 of the Site-Specific HASP (WSP, 2023a) provides procedures for non-life threatening medical care.

If an injury is not a life-threatening medical emergency, but the injured person(s) needs to seek medical attention, the initial care may be administered on site by a qualified person, upon consent. Examples of this include twisted ankles, possible broken bones, and muscle strains. After initial care has been administered, for WSP employees the SHSO or designee will contact TriageNow for instructions on where to transport the injured person.

TriageNow: (877) 311-0038

For non-WSP contractors and subcontractors, follow the injured person's company workplace injury case management program. If instructed, the SHSO or designee can either transport the injured person to one of the identified clinic or hospitals in the area. If the SHSO is unable to transport the injured person themselves, they will call 911.

3.4.2 Life-Threatening Medical Emergency

Examples of life-threatening medical emergencies include unconsciousness; difficulty breathing or abnormal breathing; persistent chest pain; severe bleeding that does not stop; chemical or thermal burns; vomiting or passing blood; seizures; possible head, neck, back injuries; poisoning; and compound fractures (i.e., bone sticking through the skin). In case of a life-threatening medical emergency that occurs on site, personnel shall immediately contact Emergency Services by dialing 911.

An emergency response transport vehicle or medical evacuation helicopter will be dispatched to the site. Personnel trained in first aid and cardiopulmonary resuscitation (CPR) should assist the injured person until medical professionals arrive on site.

The injured person will be transported to the hospital for further examination or treatment via a professional emergency transport service (i.e., ambulance). If these services are unavailable or would result in excessive delay, other means of transportation may be warranted. Under no circumstance should the injured person transport themselves to the hospital.

Incidences and injuries that require more than first aid will be reported to the PM and Greenfield Program Manager, Lauri Gorton, by telephone (414-732-4514) following admittance to the hospital. A written report of the incident will be issued to the Greenfield Program Manager within 14 days. Incidences and injuries that are OSHA recordable will be documented and recorded by the SHSO on the appropriate OSHA 300 form. If applicable the OSHA 300 form will be posted in a conspicuous location as required by 29 Code of Federal Regulations (CFR) 1904.

3.4.3 Hospitals

A nearby hospital (for emergency injuries needing immediate treatment) has been identified. The hospital to be used for emergency treatment is (see **Figure 3-4** for the Hospital Route Map):

Eastern Maine Medical Center
 489 State Street
 Bangor, Maine 04401
 (207) 973-7000

3.4.4 WSP Early Injury Case Management Program

If the emergency involves an injury to a WSP employee, the HSE Coordinator or Site Manager will implement the WSP Early Injury Case Management Program. See procedures below.

Emergency Incident
<p>Provide emergency first aid. Supervisor on duty must immediately call 911 or local emergency number. No employee may respond to outside inquiries without prior authorization. Outside media calls concerning this incident must be referred immediately to Lauren Gallagher at 207-222-2222.</p> <p>Once medical attention is sought and provided, the supervisor must see table below.</p>
Call TriageNow 24/7 Hotline* (877) 311-0038
<p>Triage will be responsible for performing the following:</p> <ul style="list-style-type: none"> • Contact the treating physician • Request copies of all medical records from clinic • Send an email update to the corporate EHS department
<p>MMI. After contacting triage, send a triage email notification and inform all direct contact is required. One of the EHS corporate representatives.</p> <p>Make all other local notifications and client notifications.</p> <p>Local Supervisor, EHS Coordinator, EHS and an applicable safety committees must complete the preliminary investigation along with the initial incident report within 2 hours.</p> <p>Corporate Loss Prevention Manager to complete Worker's Compensation Insurance notifications as needed.</p> <p>Corporate EHS to conduct further incident notifications, investigation, include in statistics, classification and develop lessons-learned materials.</p> <p>* NOTE: Step 2 is applicable only to incidents involving WSP personnel. High potential near misses, subcontractors' incidents, regulatory inspections, spills, and property damages above \$1,000 should be reported immediately, following the directions in Step 3.</p>

3.4.5 Bloodborne Pathogens

All employees who work on a site where bloodborne pathogens are known to be present or who have been designated, as a part of their work duties at the Site, to respond to all first aid injuries, will have received bloodborne pathogen training at the time of initial assignment, and annually thereafter. Before the project begins, provisions will be made to summon prompt medical attention in case of serious injury.

In the absence of an infirmary, clinic, hospital, or physician that is reasonably accessible in terms of time and distance to the Work Site, a person who has a valid certificate in both first aid and CPR training must be available at the Work Site to render first aid or CPR.

3.4.5.1 *Universal Precautions*

Universal precautions are a method of infection control that operates on the assumption that all human blood and bodily fluids are to be treated as if they are known to be infectious for human immunodeficiency virus, Hepatitis B virus, Hepatitis C virus, or other bloodborne pathogens. Universal precautions will be observed to prevent contact with blood or other potentially infectious materials. All bodily fluids will be considered potentially infectious.

Universal precautions consist of the following practices:

- All workers will protect their skin and mucous membranes from contact with blood or other bodily fluids. At a minimum, gloves and safety glasses will be donned before administering first aid or otherwise touching blood and bodily fluids, mucous membranes, or non-intact skin, and for handling items or surfaces contaminated with blood or bodily fluids. Note: the gloves selected for use at this site to protect against chemical exposure will also protect against bloodborne pathogens.
- All first aid procedures involving blood or other potentially infectious materials must be performed in such a manner as to minimize splashing, spraying, spattering, and generation of droplets and aerosols of these substances.
- When there is a risk of exposure to the eyes, nose, and mucous membranes from the generation of droplets of blood or other bodily fluids, masks and face shields must be worn.
- Uncoated or poly coated Tyveks (or the suits provided in some bloodborne pathogen kits, must be worn during procedures that are likely to generate splashes of blood or other bodily fluids.
- Hands and other skin surfaces will be washed immediately and thoroughly if contaminated with blood or other bodily fluids. Flush mucous membranes with water immediately or as soon as feasible following contact of such body areas with blood or other potentially infectious materials.
- Hands must be washed with soap and water immediately or as soon as feasible after removal of gloves or other PPE used to perform first aid. When provision of hand washing facilities is not feasible, use appropriate antiseptic hand cleanser in conjunction with clean cloth/paper towels or antiseptic towelettes. When antiseptic hand cleansers or towelettes are used, hands must be washed with soap and running water as soon as feasible.
- CPR masks or other ventilation devices will be available for use in areas in which the need for resuscitation is foreseeable.

All site first aid kits must include bloodborne pathogen kits or supplies. These kits typically include, at a minimum, the CPR mask, gloves, safety glasses, and a red bag.

3.4.5.2 *Decontamination/Laundry*

If a garment(s) is penetrated by blood or other potentially infectious materials, the garment(s) must be removed immediately or as soon as feasible. All PPE must be removed prior to leaving the work area. When PPE is removed it must be placed in an appropriately designated area or container for storage, washing, decontamination, or disposal. In many states where waste is incinerated, if the blood does not drip from a material when compressed, or if there is no risk of it flaking off during handling, the materials can be disposed of in the regular trash and do not need to be handled as biohazardous materials.

If personal clothing should become contaminated with blood or other bodily fluids, it should be collected, bagged, or containerized and appropriately labeled. Contaminated laundry must be handled as little as possible, with a minimum of agitation.

All equipment and environmental/working surfaces must be cleaned and decontaminated with an appropriate disinfectant immediately after contact with blood or other potentially infectious materials, or as soon as feasibly possible. A solution of one-part bleach to nine parts water can be mixed and used as a disinfectant to clean/wipe down equipment and other surfaces.

Broken glassware or other sharps that may be contaminated must not be picked up directly with the hands. It must be cleaned up using mechanical means, such as a brush and dustpan, tongs, or forceps, and disposed of in a sturdy container.

3.4.5.3 Vaccines, Evaluation, and Follow-Up

Hepatitis B vaccines will be available to all WSP employees who may have an occupational exposure. Post-exposure evaluation and follow-up will be conducted on all employees who have had an exposure incident.

3.5 POST-INCIDENT DRUG AND ALCOHOL TESTING

This section of the ERP is a requirement for WSP personnel only. Drug and alcohol testing may be required for any:

- Injuries requiring immediate medical treatment (beyond first aid) administered at the Work Site,
- Incident involving a work-related fatality.
- Work-related injury or illness that results in loss of consciousness,
- Environmental impact beyond a small immediate area to soil/groundwater, marine life, or impact to nearby habitat, wildlife, livestock, crops, or fisheries,
- Safety rules and regulations may have been violated as determined by the responsible Company or customer Supervisor.
- Damage to property, equipment, or vehicles of more than \$1000 estimated in good faith at the time of the incident as determined by the responsible Company or customer personnel.
- Motor vehicle accident where there is evidence to support that the operator of the vehicle or other individuals involved may have contributed to the accident.

It is the responsibility of the Supervisor/Project Manager to ensure that the WSP employee who has had an on-the-job incident (as defined in WSP HR Drugs, Alcohol, Tobacco, and Smoking policy), submits to this testing, if required. Contact Robin Datz at 1-470-751-4146 / robin.datz@wsp.com, if you have any questions about incident-related drug testing.

3.6 SPILL PREVENTION, CONTROL, AND COUNTERMEASURES (SPCC)

The purpose of the Spill Prevention, Control, and Countermeasure (SPCC) federal regulation is to help prevent a discharge of oil into navigable waters and adjoining shorelines for owners and operators managing an aggregate aboveground oil storage capacity greater than 1,320 U.S. gallons or a completely buried storage capacity greater than 42,000 U.S. gallons with reasonable expectation of an oil discharge into or upon navigable waters of the U.S. This rule is part of the U.S. Environmental Protection Agency's (EPA) oil spill prevention program and was published under the authority of Section 311(j)(1)(C) of the Federal Water Pollution Control Act (Clean Water Act) in 1974 [Title 40, Code of Federal Regulations, Part 112].

In accordance with the Work activities anticipated on Site, an SPCC Plan compliant with Title 40, Code of Federal Regulations, Part 112 will not be required. However, this SPCC section of the ERP has been prepared to describe measures that will be implemented to manage, control, and prevent any potential spills

or releases of hazardous or waste materials that may occur during the regular Work activities. **Table 3-2** presents potential release sources and preventative measures for spills.

3.6.1 Fuels and Oils – Spill Prevention

Chemicals, other than commercially available cleaning solutions for equipment decontamination and gas, diesel fuel, and oil for equipment, are not anticipated to be used at the Site during investigation activities.

The best way to deal with a fuel, oil, or chemical spill is to avoid having one in the first place. The key is to follow proper procedures for storing, transferring, handling, using, and disposing of chemicals (see safety data sheets [SDSs]). All workers on the Site should be trained to recognize the hazards and proper procedures associated with every chemical they may encounter, including the actions they need to take when a spill occurs. SDSs for gasoline and diesel fuel are available in the Site-Specific HASP (WSP, 2023a).

For marine vessels used for Site Work, the following is a list of items to prevent fuel spills while maintaining or operating the engine, and while fueling:

- Know how much the fuel tank of the vessel holds.
- Before filling up marine fuel tanks, determine how much fuel will be necessary to fill the tank.
- Do not “top off” the tank.
- Make sure anyone fueling a vessel knows which deck fill is for fuel, and that the appropriate fuel is used.
- Replace the deck fill cap with a color cap so it's easy to distinguish from the water or sewage deck fills.

3.6.2 Fuels and Oils Storage and Spill Prevention

Hazardous materials anticipated to be used during investigation and monitoring activities at the Site include gasoline and diesel fuel. Gasoline, diesel fuel, and oils should be stored and transported properly, as noted in the SDS. Gasoline and diesel fuel should not be exposed to excessive heat and will be stored in Type-II safety cans which meet OSHA and National Fire Protection Association Code 30 requirements. Gasoline and diesel fuel will be stored in designated areas at the field staging office, protected from direct sun and potential vehicular impact. The designated storage area will have secondary containment in the form of a 6-inch berm and impermeable liner. The storage area will be placarded for flammable liquids content. Spill equipment will be readily available to contain and/or mitigate accidental spills of these fuels. Workers using gasoline and diesel fuel must wear the proper personal protective equipment (PPE) as specified in the Site-Specific HASP (WSP, 2023a) to minimize the chance of injury.

3.6.3 Potential Spill Area Inspection

Potential spill areas, including fuel storage areas, and the decks, bilges, and fuel tanks of any marine vessels, will be monitored periodically for leaks or spills. Early identification and cleanup of spills will help to prevent further contamination of the environment (e.g., gasoline and diesel fueling areas). Spill cleanup materials will be kept near the area where fuels and oils are utilized or stored. Proper protective clothing and equipment outlined in the SDS will be provided in the spill kit, which will be checked monthly and inspected after every use.

If a leak or spill is detected, site personnel must notify the SHSO or SM. If leaks are from equipment on the Site, tag out of service and promptly repair or replace.

Inspections will be documented in the project logbook and materials used as part of the cleanup will be immediately replaced.

3.6.4 Spill Prevention Training

Workers who work with chemicals and hazardous materials shall be trained both in preventing and responding to an incident in order to create risk awareness. The SHSO will provide site personnel with Site-specific instruction on sounding the alarm, and the specific emergency procedures they are to take such as: use of fire extinguishers, first aid/CPR, PPE use, including the use of respiratory protection, the reduction of environmental damages and on the proper method of handling a minor spill using the emergency spill kit, etc.

Workers involved in the handling, use and storage of flammable liquids are required to know the hazards associated with these chemicals. Refer to the SDSs.

The SM and the SHSO serve as the Spill Response Coordinators for this operation, should the need arise. Review chemical safety data sheet (SDS) for additional guidance on safe chemical transport/storage and spill response protocols. The SM is responsible for maintaining the supplies and equipment.

3.6.5 Spill Kits

The following represents the types of equipment that will be maintained at the field staging area for the purpose of supporting this Spill Prevention/Containment Program.

- Sand, clean fill, vermiculite, or other non-combustible absorbent (oil-dry);
- Absorbent socks, pads, and pillows designed for fuel spills;
- Empty/Clean 55-gallon Drum (U.S. DOT 1A1 or 1A2);
- Shovels, rakes, and brooms; and
- Container labels.

When marine vessels are re-fueled, a spill containment kit will be present and will include hydrophobic, absorbent socks, pads, and pillows to absorb spilled fuels in the event of a release to a surface water body. All marine vessels with a bilge will be equipped with absorbent socks to capture fuel and oil leaks from engines and fuel tanks.

General cleanup procedures for fuels and oils are provided in the text below. Refer to the SDS for cleanup recommendations specific to the spilled material.

3.6.6 Evaluate and Notify

You should NOT clean up a spill if:

- You don't know what the spilled material is.
- You lack the necessary protection or equipment to do the job safely.
- You lack the skills and knowledge to clean up the material safely.
- The spill is too large to contain.
- The spilled material is highly toxic.
- You feel any symptoms of exposure.

Evaluate the spill:

- Assess the toxicity, flammability, or other properties of material (see label & SDS).
- For flammables, remove or turn off ignition sources such as motors, pumps, fridges.
- Determine if there is an immediate health threat to you or nearby personnel. If so, alert nearby personnel, isolate the area and call for help.
- Determine the type of spill; is it a minor or a major spill?

Minor Spill: A minor spill is small enough that it can be safely cleaned up after donning appropriate PPE and using the emergency spill kit.

Major Spill: A major spill is one that cannot be contained safely with the materials on the site and threatens to enter the ground or waters of the Penobscot River Estuary potentially endangering the environment.

Notify:

- Notify the SHSO or SM immediately upon detection of a leak or spill. Activate emergency alerting procedures for that area to remove non-essential personnel.
- If the material is flammable and if warranted, call 9-1-1 for aid from the fire department.
- Any release of fuels or oils to the Penobscot River Estuary which causes a visible sheen on the water surface must be reported immediately to the U.S. Coast Guard National Response Center by calling 800-424-8802.
- Any release of gasoline, diesel, hydraulic oils, or lubricating oils must be reported immediately to the Maine Department of Environmental Protection by calling 800-482-0777. If the report is made within 2 hours, the responsible party is exempt from any fines for the discharge. .
- Notify the PM and Greenfield Program Manager immediately following successful control of the spill or if emergency responders have assumed control of the spill response. Provide an additional written follow-up report within 48 hours of the occurrence.

3.6.7 Minor Spill Cleanup Procedures

Cordon off the area.

If the spill cannot be controlled or contained, initiate emergency alerting procedures for that area to remove non-essential personnel.

It is not anticipated that a spill will occur that the field crew cannot handle. Should this occur, notification of the appropriate Emergency Response agencies will be carried out by the FOL or SHSO in compliance with all local, state, and federal regulations and Paragraph 13 of the Statement of Work.

Minor spill cleanup procedures to be implemented include:

- Don appropriate gloves, eye protection, chemical protective clothing, etc. Ensure that the glove type is appropriate, and the glove is heavy enough to protect against the spilled material. Do not attempt to clean up a spill if you feel unqualified to do so. If the nature of the spill is such that respiratory protection is needed, evacuate unless all cleanup personnel are trained, have been medically cleared to wear a respirator, have been fit tested and the appropriate respirators and chemical protective clothing is available at the site.
- Refer to the SDS to determine the appropriate absorbents (e.g., “spill pillows” for solvents), or neutralizers (e.g., sodium bicarbonate) to use from the spill kit.
- Take immediate actions to stop the leak or spill by plugging or patching the container or raising the leak to the highest point in the vessel. Spread the absorbent material in the area of the spill, covering it completely. Transfer the contents from a leaking container into a new container, using a pump.
- Protect any floor drains or catch basins, if present, with absorbents or barriers around them.
- For spills or releases to the Penobscot River Estuary, use absorbent socks, pads, and/or pillows to minimize impact to the environment. A fuel spill response kit will be available at each vessel refueling event, and absorbent materials will be made available on every vessel.

- For spills or releases to a water body, it is against the law to use detergents, soaps, emulsifying agents, or other chemicals to disperse a spill. Anyone who deliberately applies soap to disperse or hide a sheen is subject to criminal penalties and high fines.
- Control any ignition sources. The spill should be isolated from any possible ignition sources such as smoking, welding, electrical equipment and grinding.
- If indoors, initiate ventilation measures. Ventilate the area to prevent vapors from settling on the floor, in pits, stairwells and trenches or other areas below the floor level.
- In case of fire see **Section 3.8**.
- Work from the outside in when laying down absorbents or neutralizer, to avoid spreading the contaminant. Lay absorbent material/ neutralizing chemical around the outer edge of the spill and work inwards, towards the center, in a circular pattern. Avoid going back and forth in a grid pattern as that could spread the spill.
- Package and label waste. Include contaminated clothes, rags, equipment, etc. Arrange for the disposal of waste material in accordance with the regulatory requirements.
- Double containment will be provided when transporting chemical containers to help prevent spills and leaks.
- Spill kits will be available at the field office and with all sample teams.

3.6.8 Major Spill Cleanup Procedures

In the event of a fuel or oil spill beyond what would be considered minor/incidental, or where it is determined that the employees do not have adequate training, the area shall be evacuated, and a hazardous materials contractor shall be called to respond to the emergency.

- Immediately clear the area if gasoline, diesel fuel, or oils are spilled.
- Ensure that all persons are moved upwind of the spill.
- For major fuel or oil spills on land, if possible, contain the spilled material with the use of diking material such as cat litter, sand, or other suitable, approved containment material (only if the material is not toxic and it is safe to do so).
- For major releases of fuel or oil to the Penobscot River Estuary, all absorbent materials available from the field office staging spill kits and available marine vessel spill kits will be deployed to mitigate the release
- DO NOT wash gasoline, diesel fuel, or oils into storm or sewer lines, or by any means that promotes drainage to the Penobscot River Estuary.

Major spills require special training and equipment possessed by commercial cleanup companies. In the event that a major spill occurs, regular meetings will be scheduled with local agencies involved in the cleanup. These meetings will track cleanup progress and maintain contact with local and state officials.

3.6.9 Follow-Up

Used material from spill kits will be containerized in 55-gallon USDOT-approved, 55-gallon drums, labeled, and staged to await further analyses. Include topsoil or ground cover that may have been impacted by the spill. Analytical samples of the material will be collected and submitted to a laboratory for characterization. The results of these analyses will determine the method of disposal. General steps to be taken for follow-up include:

- Dispose of spilled chemical and clean up materials according to local/state regulations.
- Reorder and restock cleanup materials used.
- Inform SHSO if there were any personnel exposures, or release to the environment.

3.6.10 Waste Management Plan

Compliance with IDW regulations for handling, transportation, and disposal is also a requirement of the project. Waste management activities will fully comply with Greenfield Penobscot Estuary Remediation Trust LLC requirements, Maine DEP, and other local, state, and federal regulations, including Resource Conservation Recovery Act, Toxic Substances Control Act, and OSHA regulation 1910.120 regarding hazardous waste operations and emergency response waste management procedures. Waste associated with a release or spill, including absorbent materials, will be containerized and managed consistent with IDW management procedures presented in the FSP (WSP, 2023b).

3.6.11 Fuels and Oils Release Reporting

Responses to incidental releases or spills of gasoline, diesel fuel, or oils that can be absorbed, neutralized, or otherwise controlled at the time of release by personnel in the immediate release area are not considered to be emergency responses under 29 CFR 1910.120(l) and do not require additional specialized training. However, any release of gasoline, diesel fuel, or oils in a marine environment in any volume must be reported to authorities having jurisdiction, per Regulatory Notification and Reporting [CFR 40, 112.4 & 112.7(a)(4)] and per the Consent Decree. Accidental or not, under Federal law (the Oil Pollution Act and the Clean Water Act), it is illegal to discharge any amount of fuel, oil, or other petroleum product into the waters of the United States. By law, any oil or fuel spill that leaves a sheen on the water must be reported to the U.S. Coast Guard National Response Center by calling 1-800-424-8802. It is also against the law to use detergents, soaps, emulsifying agents, or other chemicals to disperse a spill. These products cause the petroleum to sink, creating even greater environmental damage. While it may only seem like a small amount, it can permanently contaminate bottom sediments. Anyone who deliberately applies soap to disperse or hide a sheen is subject to criminal penalties and high fines.

To increase awareness of the issue, boats 26 feet and longer are required to post an oil placard (available at marine supply stores) near the engine.

In addition, oral reports followed by written reports will be made to the appropriate state and federal regulatory agencies for any event occurring pursuant to Section 103 of CERCLA, 42 U.S.C. § 9603, or Section 304 of the Emergency Planning and Community Right-to-know Act (EPCRA), 42 U.S.C. § 11004.

If a spill occurs the PM, SM and Greenfield Program Manager will be notified after all appropriate agencies and emergency responders are notified and the situation is under control. In addition, the Maine Department of Environmental Protection (and National Response Center) will be orally notified when the event occurs, and the U.S. Coast Guard National Response Center (800-424-8802) in the event of a release to the waters or sediments of the Penobscot River Estuary, and a written report will be distributed to the Greenfield Program Manager within 48 hours of the event. The written report will include documentation of the time, date, nature, and content of the oral notification which was provided. Within 14 days of the occurrence, a report will be submitted by the PM, SM, and SHSO to the Greenfield Program Manager describing the actions or events that occurred and the measures taken and to be taken in response to the occurrence. Within 30 days after the conclusion of an event, a report will be submitted by the PM to the Greenfield Program Manager describing all actions taken in response to the spill. Any other required reporting under CERCLA § 103 or EPCRA § 304 will also be completed.

Discharges of oil from a properly functioning vessel engine is not deemed to be harmful, therefore they do not need to be reported under the Discharge of Oil Regulation. However, oil accumulated in a vessel's bilge is not exempt. Minor spills, drips, or leaks into bulkheads, wells, or bilge areas can be contained and addressed either immediately or thoroughly cleaned upon return to dock and the materials transferred to an appropriate container.

3.7 CIVIL DISTURBANCE

Although unlikely, civil disturbances could occur on or near the project Site. This may be in the form of labor strikes, riots, demonstrations, or other activist activities. If a civil disturbance occurs on or near the project Site:

- Ensure that all site personnel are inside the field staging building or their vehicles and that the police department has been notified of the situation. If the situation is violent, call 911.
- Lock all field staging building doors (or car doors) as quickly as possible.
- Ensure that personnel move as far away as possible from doors and windows.
- Return to normal activities only when advised by police personnel that it is safe to do so.

After resolution of the immediate emergency or as soon as practicable, the SHSO will notify the SM, FOL, and PM orally. The PM will communicate the situation orally to the Greenfield Program Manager and follow up with a written report within 14 calendar days.

3.8 FIRE

3.8.1 Fire Extinguishers

Fire extinguishers will be made available at the field staging office and on each marine vessel used for Work at the Site. Fire extinguishers shall be inspected annually by a certified inspector. Extinguishers shall be checked monthly by the SHSO, and the inspected month and day noted on the affixed tag. This check shall ensure the following:

- Extinguishers are properly mounted/placed (mounted so that the bottom is no lower than 4 inches (10 cm) from the floor and the top no higher than 5 feet (1.5 m) and within 50 feet (15 m) from fuel storage and refueling areas – 75 feet (23 m) for Class A hazards).
- Sign posted indicating fire extinguisher location.
- Unobstructed access is provided.
- Extinguishers are of the proper type to extinguish the potential fire hazards near them:
 - Type A - paper products only
 - Type B - flammable liquids
 - Type C - electrical fires
 - Type ABC - all purpose
- Every marine vessel will carry at least one extinguisher capable of putting out a class A, B or C fire (ABC extinguisher). The U.S. Coast Guard requires that all extinguishers used on boats must be U.S. Coast Guard-approved and rated for marine use.
- Check the device is properly charged, and the pressure indicator does not indicate over or under pressure. If the pressure indicated is not correct, remove from service and replace with new fire extinguisher.
- Check that the safety pin or other safety device is in place.
- Check that the inspection tag is affixed, and the device is not overdue for its annual inspection by a certified inspector.

3.8.2 Fire Emergency Procedures

- Sound the alarm (voice and or airhorn).
- Ensure that the fire department is notified by dialing 911. Give the fire department the address of the project site, the type of fire, if known (chemical, electrical, paper), and state whether there are any known injuries. Also tell the fire department the location of the Safe Assembly Area.

- Evacuate all occupants to the Safe Assembly Area. Inspect all work areas to ensure that all occupants have been evacuated.
- Any attempts to extinguish small fires shall be done exercising good judgment and only by a trained employee (fire extinguisher training within the past year)
- Ensure that all doors are closed, but not locked, before leaving. This will slow the spread of the fire and may limit smoke damage.
- Interior lights should be left on unless otherwise directed by fire personnel.

3.8.3 Using Fire Extinguishers

Only use a fire extinguisher if trained and if safe to do so. Fire extinguisher use procedures are as follows:

- Only use to extinguish small fires (less than half the size of the observer). Large fires should be abandoned and left to the expertise of professional firefighters.
- If the decision is made to use a fire extinguisher, the user shall follow these steps:
 - Call the fire department, regardless of the fire size or anticipated successful suppression.
 - Ensure that the proper extinguisher is being used based on the type of fire (paper, chemical, electrical)
 - Place yourself between the fire and the exit (so you won't become blocked if fire cannot be extinguished).
 - Use the **PASS** method:
 - **P**ull the locking pin or other safety device from the extinguisher.
 - **A**im the extinguisher hose or nozzle at the base of the fire.
 - **S**queeze the lever, releasing the extinguishing agent.
 - Use a **S**weeping the extinguishing agent at the base of the fire.
 - Replace a used extinguisher with a fully charged extinguisher.

3.9 HURRICANE

Hurricane season typically begins in June and can extend through October. A hurricane watch or warning is issued by National Weather Service indicates that a hurricane is probable in the defined vicinity within the next 36 or 48 hours.

Hurricane warnings indicate that hurricane conditions (sustained winds of 74 mph or higher) are expected somewhere within the specified area. Because hurricane preparedness activities become difficult once winds reach tropical storm force (sustained winds of 39 to 73 mph), the hurricane warning is issued 36 hours in advance of the anticipated onset of tropical-storm-force winds to allow for important preparation.

A hurricane watch means that hurricane conditions (sustained winds of 74 mph or higher) are possible within the specified area. A hurricane watch is issued 48 hours in advance of the anticipated onset of tropical-storm-force winds in an area.

The SHSO and PM will assemble in advance of a hurricane and develop a Site-specific response plan. Steps to be followed include:

- The SHSO and PM will consider options such as project closures/operation, establishing emergency communication methods and sending out periodic reports and updates, return to business, re-start of operations, and exposure control to flooded and damaged areas.
- The SHSO and PM will begin monitoring the hurricane's/typhoon's progress from the NOAA Hurricane Center website as well as the Maine Emergency Management Agency website for instructions.

- Communication methods will be established including updating employee telephone lists and installing group chat software (WhatsApp) on their smart phones. To allow for emergency contact with employees during the storm to check on status, notify employees of office closures and openings, etc.
- The PM will notify project personnel on the course of action to take in preparation of the storm. In most cases, action will entail securing and shutting down the project Site. Personnel will be informed of hurricane preparations and evacuation recommendations for the area.

3.10 SEVERE WEATHER

Upon notification of a severe storm watch, the SHSO will turn on a radio or visit the National Weather Service (NWS) website and await instruction from the NWS.

- If outdoors, go indoors. A sturdy building is the safest place to be during a severe weather event.
- Pay attention to weather reports and warnings of severe weather. Be ready to change plans, if necessary, to be near shelter.
- When you receive a severe weather warning or hear thunder, go inside immediately.
- If indoors, avoid running water or using landline phones. Electricity can travel through plumbing and phone lines.
- Protect your property. Unplug computers, appliances, and other electric devices. Secure outside equipment and materials.
- If boating, get to land and find a sturdy, grounded shelter, or vehicle immediately.
- If necessary, take shelter in a car with a metal top and sides. Do not touch anything metal.
- Follow the 30:30 rule. Be in a shelter if the time between seeing lightning and hearing thunder is less than 30 seconds. Stay indoors for 30 minutes after hearing the last clap of thunder.
- Avoid flooded roadways. Just six inches of fast-moving water can knock you down, and one foot of moving water can sweep your vehicle away.
- Listen to authorities and weather forecasts for information on whether it is safe to go outside and instructions regarding potential flash flooding.
- Watch for fallen power lines and trees. Report them immediately.

3.11 BOATING EMERGENCIES

The proposed Work includes use of small trailer launched boats, as well as fully supported charter boats operated by an appropriately licensed captain. While utilizing trailer launched boats the SHSO or FOL will designate qualified boat operators. See Section 7.1 of the Site-Specific HASP (WSP, 2023a) for boating training requirements; designated operators will have to demonstrate proficiency in transporting, launching, operating, and retrieving the vessels being used on site. Boating in the tidal estuary and Penobscot River is inherently dangerous and will be approached with caution.

The sampling team, SHSO and FOL will develop a daily float plan, when utilizing a boat to sample from or access sample locations. The float plan will include where the boat will be launched and retrieved, emergency meeting locations (docks, boat yards, boat launches) within the areas where work is occurring on that day, should an incident arise.

3.11.1 Man Overboard (MOB)

Should someone go overboard, the immediate response is to throw them a line and flotation device and retrieve them. All boats will be supplied with a throw line and throwable flotation devices. The boat

operator will designate someone on board to watch the MOB, while the boat is maneuvered to repatriate the associate. Once back on board the MOB victim will be transported to shore and assessed for injuries. The SHSO or FOL will contact the PM and notify them of the situation.

If the MOB is not immediately retrieved, emergency responders will be called for additional support. Emergency responders include local emergency responders (Police and Fire), local Harbor Master, and the USCG.

3.11.2 Unintentional Grounding

Accessing sampling locations will require the use of small, trailered boats, if an unintentional grounding occurs the following procedures will be followed.

The initial step is to assess crew and boat for injuries and or damage. Follow emergency care procedures in Section 3.9 if personnel sustain injuries. Evaluate the situation to determine if the boat is stuck or able to be moved into navigable waters. Evaluate the tide to determine if incoming or outgoing, to facilitate self-rescue. Determine if the boat motor has been affected by the grounding. If self-rescue is not possible, then a call to the local harbor master for non-emergency situations is warranted or emergency responders if there is an emergency.

An incident report will be filed for any unintentional groundings. The SHSO and or FOL will notify the PM regarding any unintentional groundings or boating mishaps.

3.12 WORKING IN AND AROUND TIDAL MARSH/MUD FLATS

The proposed work will require traversing and sampling in tidal marsh and mud flats. Work within these areas is potentially hazardous due to substrate, tides, weather, and biological factors (e.g., biting insects). Prior to accessing a mud flat to collect samples the sample team will have a good understanding of the daily tide cycle in the area being sampled. Sample teams should include a team of at least three people. While working in marsh habitat, sample crews will need to identify ditching and salt pans within the marsh to avoid them when working on the marsh. A daily activity plan will be discussed prior to accessing a sample location.

Sampling in mud flats is inherently dangerous due to ebbing and flowing tides and a soft substrate, with the potential to entrap. Sample crews will be provided with throw ropes and throwable flotation devices prior to embarking on the mud flat. Additional equipment including snowshoes (or other such device to strap on to feet to provide support in mud) or plywood will be used when sampling mud flats. If self-rescue is not feasible the SHSO and/or FOL will call emergency responders for help in extricating stuck individuals. The PM will be notified if emergency responders are called to help extricate stuck individuals.

In addition, there is a potential exposure pathway from exposure to contaminated sediment. Extra care in the form of protective clothing (e.g., chest waders, Tyvek, heavy nitrile gloves with thin nitrile liners) is warranted to limit exposure to sediment. All sediment stuck to clothing should be rinsed prior to leaving a sample location, and an approved wash is required after sampling at a location is complete, prior to disembarking for the day back to the field office. Decontamination water is considered IDW and must be managed in accordance with Section 5.3 of the FSP (WSP, 2023b).

3.13 PERSONAL PROTECTIVE EQUIPMENT

The individual PPE required for each task is listed in the AHA's please refer to the HASP. At a minimum work will be done in level D; to include steel toe boots, hi-vis vest, and safety glasses. A PFD will always be worn when working from a boat or on or adjacent to water. When working in tidal marsh or mud flats additional PPE including chest waders, heavy nitrile gloves with liners, and Tyvek may be warranted to limit exposure to the elements and sediment. It is the responsibility of the SHSO and FOL to ensure that all the PPE requirements are met and being implemented by the sampling teams.

4.0 WORK AREA SECURITY

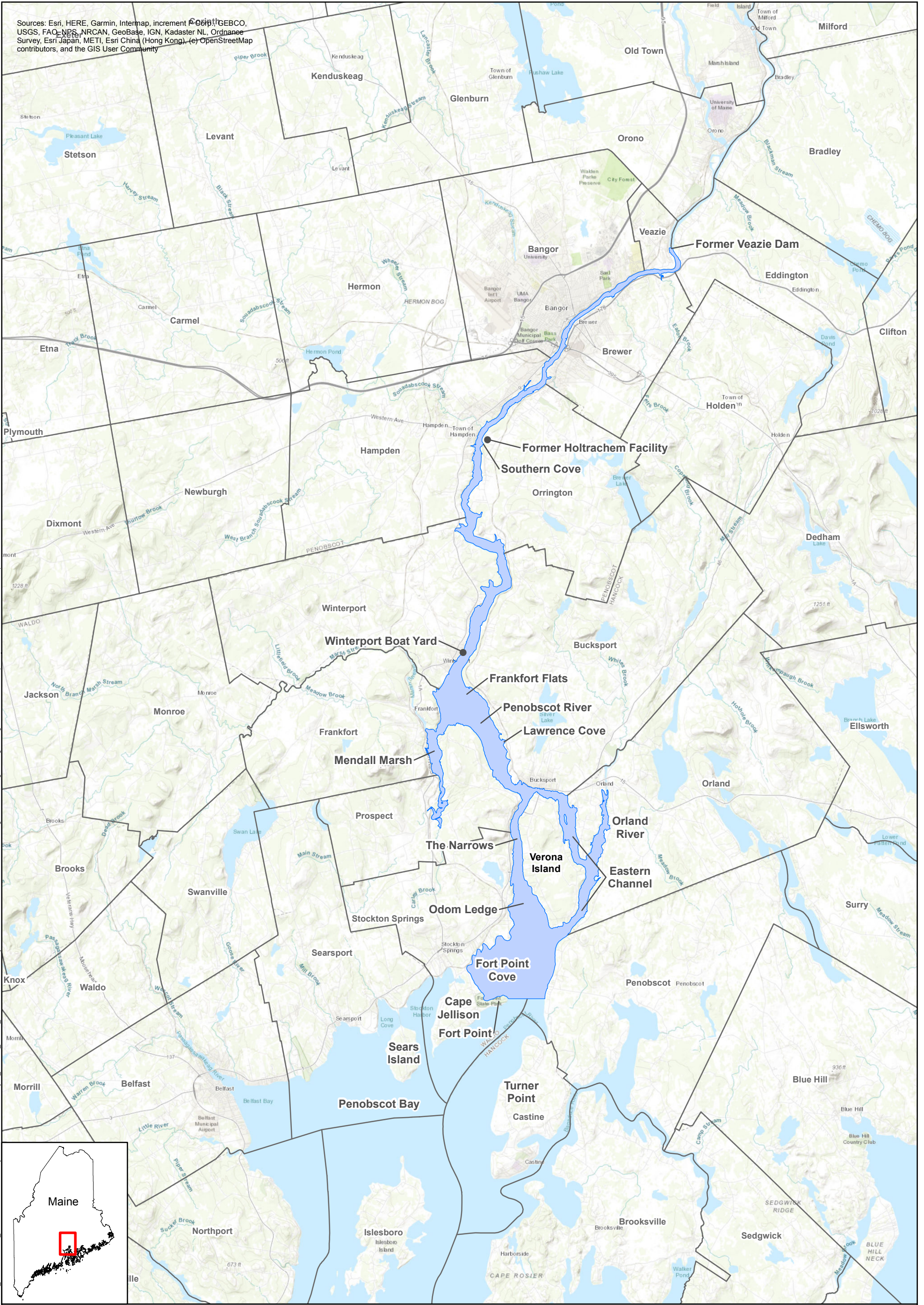
Surface water, sediment and biota samples will be collected from multiple locations throughout the Site, as identified in activity-specific work plans. Samples will be collected from boats and all sampling locations will be accessed by boat, including marsh and intertidal mud flats. Sampling locations are all within tidally influenced areas and the presence of other people is unlikely during the limited time samples are being collected. Should a situation arise where the public is encroaching on the sampling area or questioning our field team, they are instructed to contact the FOL and SHSO, who will follow up with the public. Should other people that are present or the sample teams feel or be threatened or confronted while executing Work, the sampling team will demobilize from the location and call the FOL. Sample crews are authorized to summon the local police, sheriff or State Police should they feel threatened (see **Table 2-1**).

5.0 REFERENCES


- CDM Smith, 2016. Corrective Measures Implementation Plan, Southern Cove, Orrington Remediation Site, Orrington, Maine. CDM Smith, Inc. June 8, 2016.
- WSP, 2023a. Health and Safety Plan (HASP), Penobscot Estuary Remediation, Maine. WSP USA Environment & Infrastructure, Inc. March 2023.
- WSP, 2023b. Field Sampling Plan (FSP), Penobscot Estuary Remediation, Maine. WSP USA Environment & Infrastructure, Inc. March 2023.


FIGURES

Sources: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NBS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), Swisstopo, Mapbox Contributors, and the GIS User Community



Document: P:\Projects\USDC - Penobscot River\4.0_Deliverables\GIS\Preliminary Work\MXD\11-10-2023\Monitoring\2023 Monitoring\FSP\Figures\Figure 1 - Site Location Map.pdf 11-10-2023 10:07 AM brian.peters

Prepared for:  Greenfield Penobscot Estuary Remediation Trust LCC
Trustee of the Penobscot Estuary Mercury Remediation Trust

Prepared by:  WSP USA Environment & Infrastructure, Inc.

Legend



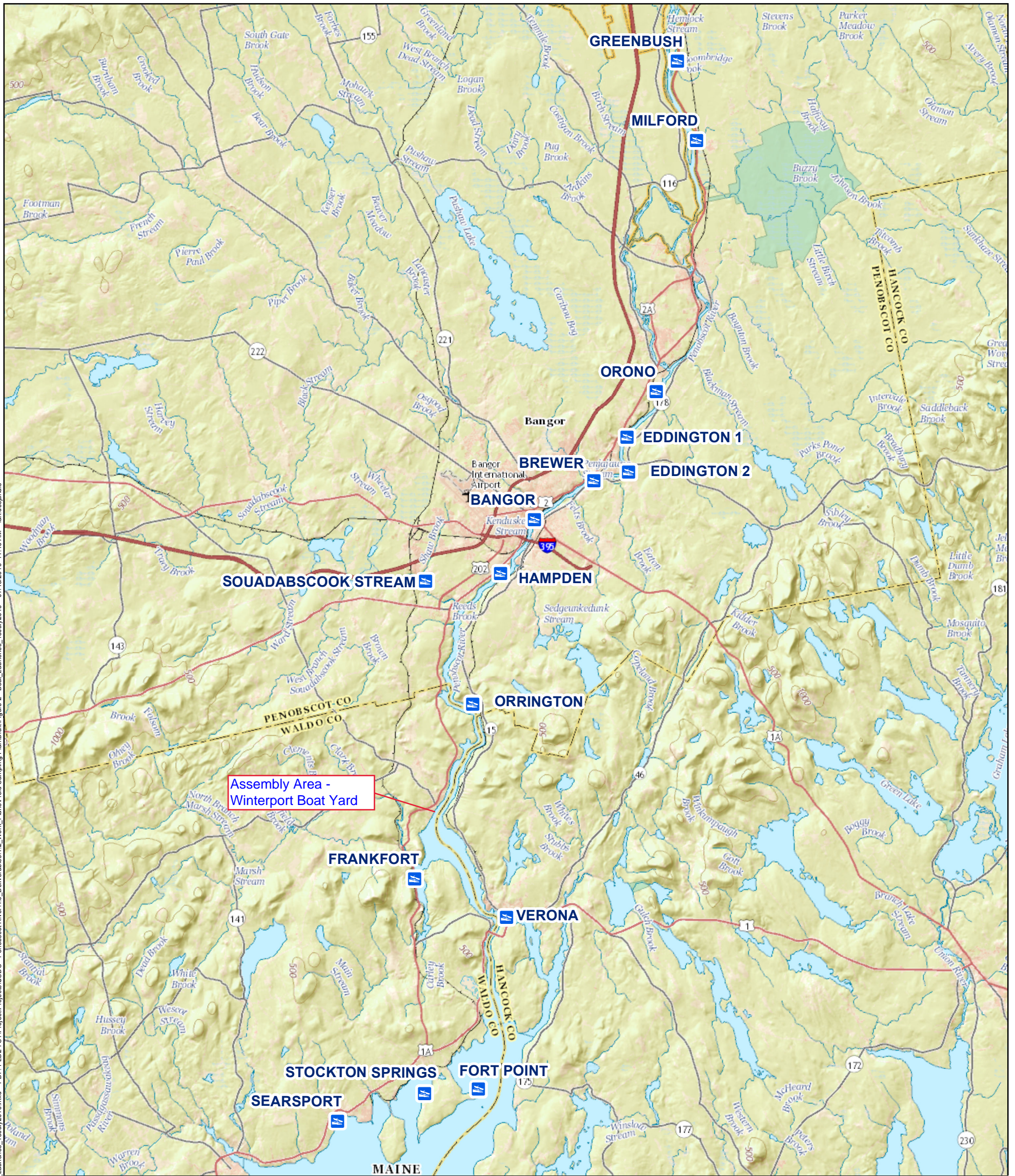
-  Approximate Limit of Study Area
-  Town Boundary



Figure 1-1
Site Location Map

Emergency Response Plan
Penobscot Estuary Remediation

Prepared/Date: BRP 11-10-22 | Checked/Date: BPW 11-10-22



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NAME	TOWN	COUNTY	OWNERSHIP	STATE OR LOCAL	TYPE	WATER TYPE/TIDE	TYPE OF RAMP	LENGTH OF RAMP	WIDTH OF RAMP	GRADE	FLOATS	TOILETS	Latitude	Longitude
GREENBUSH	GREENBUSH	PENOBSCOT	GREENBUSH	Local	Trailer Accessible	Freshwater	Hard	130'	16'	12%	No	No	45.057960	-68.656110
MILFORD	MILFORD	PENOBSCOT	MILFORD	Local	Trailer Accessible	Freshwater	Hard	110'	10'	14%	No	No	45.012710	-68.640660
ORONO	ORONO	PENOBSCOT	PPL-MAINE	Local	Trailer Accessible	Freshwater	Hard		10'	13.5%	No	No	44.869600	-68.672800
EDDINGTON 1	EDDINGTON	PENOBSCOT	PPL-MAINE	Local	Trailer Accessible	Freshwater	Hard		10'	13.5%	No	No	44.843300	-68.696000
EDDINGTON 2	EDDINGTON	PENOBSCOT	EDDINGTON SAL. CL.	Local	Carry-in	Freshwater					No	Yes	44.823400	-68.694700
BREWER	BREWER	PENOBSCOT	BREWER	Local	Trailer Accessible	Freshwater	Hard	120'	20'	14%	No	No	44.818420	-68.722690
BANGOR	BANGOR	PENOBSCOT	BANGOR	Local	Landing Facility	All-Tide					Yes	Yes	44.796170	-68.770120
HAMPDEN	HAMPDEN	PENOBSCOT	HAMPDEN	Local	Trailer Accessible	All-Tide Ramp	Hard	200'	50'	15%	Yes	Yes	44.765400	-68.796900
SOUADABSCOOK STREAM	HAMPDEN	PENOBSCOT	DIFW	State	Carry-in	Freshwater	Gravel				No	No	44.760700	-68.857000
ORRINGTON	ORRINGTON	PENOBSCOT	DOC	State	Trailer Accessible	Part-Tide Ramp	Hard	102'	20'	11%	No	No	44.690940	-68.818780
FRANKFORT	FRANKFORT	WALDO	FRANKFORT	Local	Trailer Accessible	All-Tide Ramp	Hard	160'	20'	13%	No	No	44.590980	-68.864790
VERONA	VERONA	HANCOCK	DOC	State	Trailer Accessible	All-Tide Ramp	Hard	100'	20'	13%	No	No	44.569170	-68.791220
FORT POINT	STOCKTON SPRINGS	WALDO	DOC	State	Landing Facility	All-Tide					Yes	No	44.471000	-68.813100
STOCKTON SPRINGS	STOCKTON SPRINGS	WALDO	STOCKTON SPRINGS	Local	Trailer Accessible	All-Tide Ramp	Hard	160'	20'	8%	Yes	No	44.468600	-68.856100
SEARSPORT	SEARSPORT	WALDO	SEARSPORT	Local	Trailer Accessible	All-Tide Ramp	Hard	110'	24'	14%	Yes	No	44.452550	-68.925130

Prepared for: Greenfield Penobscot Estuary Remediation Trust LCC
Trustee of the Penobscot Estuary Mercury Remediation Trust

Prepared by: WSP USA Environment & Infrastructure, Inc.

Legend

Boat Launches
River egress will be achieved at boat launches and assembly area.

Figure 3-1
Emergency Assembly Area

Emergency Response Plan
Penobscot Estuary Remediation

Project: 3617237573

Prepared/Date: BRP 3/02/23

Checked/Date: BW 03/02/2023

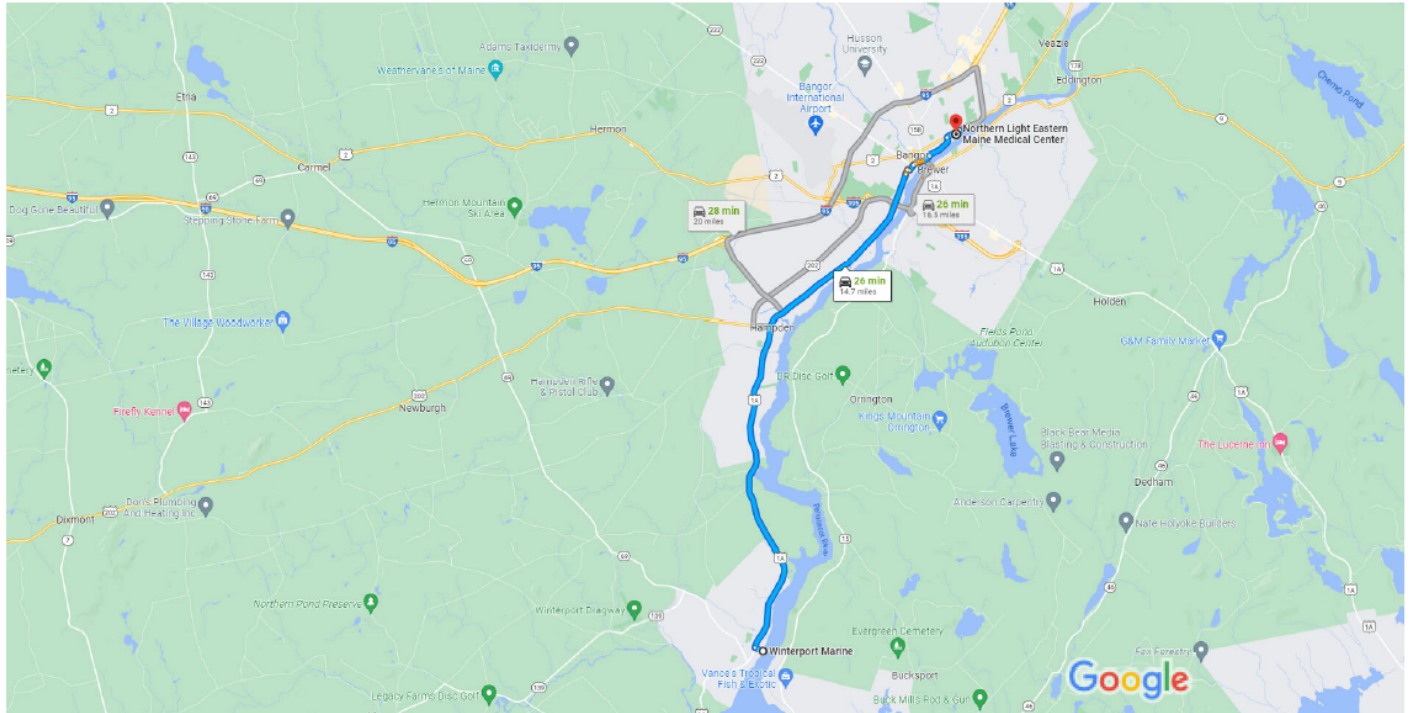
NAD83 State Plane Maine East, US Survey Feet

Figure 3-3: Hospital Route Map



Winterport Marine, 49 Water St, Winterport, ME 04496 to Northern Light Eastern Maine Medical Ctr, 489 State St, Bangor, ME 04401

Drive 14.7 miles, 26 min



Winterport Marine

49 Water St, Winterport, ME 04496

Map data ©2023 1 mi

Follow Commercial St to US-1A E/Main St

- 1 min (0.2 mi)
- ↑ 1. Head north on Water St toward Commercial St
- 43 ft
- ← 2. Turn left onto Commercial St
- 0.2 mi

Follow US-1A E to Cedar St in Bangor

- 21 min (12.8 mi)
- ↘ 3. Turn right onto US-1A E/Main St
- [Continue to follow US-1A E](#)
- 12.7 mi
- ↑ 4. Continue onto Main St
- 0.1 mi

Take Washington St and Hancock St to State St

- 3 min (1.3 mi)
- ↘ 5. Turn right onto Cedar St
- 249 ft

- 6. Continue onto Summer St
- 0.1 mi
- ↑ 7. Continue onto Independent St
- 348 ft
- ↑ 8. Continue onto Washington St
- 0.4 mi
- ↘ 9. Washington St turns right and becomes Hancock St
- 0.6 mi
- ↘ 10. Turn right onto State St
- 47 sec (0.3 mi)
- ↘ 11. Turn right
- 1 min (0.1 mi)

Northern Light Eastern Maine Medical Ctr
489 State St, Bangor, ME 04401

Prepared for:



Greenfield Penobscot Estuary Remediation Trust LCC
Trustee of the Penobscot Estuary Mercury Remediation Trust

Prepared by:



WSP USA Environment & Infrastructure, Inc.

**Figure 3-3
Hospital Route Map**

TABLES

Table 1-1: Statement of Work Compliance

Statement of Work (SOW) Requirement	ERP Section
¶ 31(b) The Emergency Response Plan (“ERP”) shall be developed to meet all applicable laws and regulations and describe procedures to be used in the event of an accident or emergency at the Site (for example, power outages, on-water vessel failure, treatment plant failure, slope failure, etc.)	✓ Entire Document
¶ 31(b)(i) Name of the person or entity responsible for responding in the event of an emergency incident	✓ Section 2
¶ 31(b)(ii) Plan and date(s) for meeting(s) with the local community, including local, State, and federal agencies involved in the cleanup, as well as local emergency squads and hospitals	✓ Section 2.2
¶ 31(b)(iii) Spill Prevention, Control, and Countermeasures (“SPCC”) Plan (if applicable) describing measures to prevent, and contingency plans for, spills and discharges	✓ Section 3.6
¶ 31(b)(iv) Notification activities in accordance with Paragraphs 13(a) (Emergency Response and Reporting) and 13(b) (Release Reporting) in the event of a release of hazardous substances requiring reporting under federal or State law	✓ Section 3.6.6 Section 3.6.11
¶ 31(b)(v) A description of all necessary actions to ensure compliance with Paragraph 13 (Emergency Response and Reporting) in the event of an occurrence during the performance of the Work that causes or threatens a release of Waste Material from the Site that constitutes an emergency or may present an immediate threat to public health or welfare or the environment	✓ Section 3.6
¶ 13(a) The Emergency Response Plan addresses any event occurring during performance of the Work that causes or threatens to cause a release of Waste Material on, at, or from the Site and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment...	✓ Section 3.6
¶ 13(a)(1) ...immediately take or direct all appropriate action to prevent, abate, or minimize such release or threat of release	✓ Section 3.6.6 through Section 3.6.8
¶ 13(a)(2) ...immediately notify the appropriate state and federal regulatory agencies orally and notify the Trustees, who will notify the Beneficiaries orally or by electronic mail	✓ Section 3.5.6
¶ 13(a)(3) ...take such actions in accordance with all applicable provisions of the Health and Safety Plan, the Emergency Response Plan, and any other relevant Deliverables. All oral notifications made to state and federal regulatory agencies pursuant to the Emergency Response and Reporting provisions herein must be followed up in writing within 48 hours of issuance to document the time, date, nature, and content of the oral notification that was provided.	✓ Section 3.6.6 Section 3.6.11

Table 1-2: Emergency Response Plan Objectives

Objective	Information/Data Needed	ERP Document Section
The Emergency Response Plan (ERP) shall be developed to meet all applicable laws and regulations and describe procedures to be followed in the event of an accident or emergency at the Site (e.g., power outages, on-water vessel failure, treatment plant failure, slope failure, etc.).	The Emergency Response Plan, including Assembly Areas, Hospital and Clinic Route Maps, Emergency Response Strategies, and Incident Analysis Forms	Section 3.0 Figure 2 Figure 4 Figure 5 Appendix A Appendix B
The ERP shall provide contact information including the name of the person or entity responsible for responding in the event of an emergency incident.	Emergency Response Contacts, Roles and Responsibilities, Medical Information, and Emergency Response Strategies	Section 2.0 Section 3.6 Appendix A
The ERP shall identify potential emergency situations related to the Work, and provide response actions to prevent or mitigate these situations.	Emergency Procedures, Emergency Response Contacts	Section 2.0 Section 3.0
The ERP shall provide procedures and requirements for reporting regarding any event occurring during the work that releases or threatens to release hazardous substances or Waste Material on, at, or from the Site and that either constitutes an emergency situation or that may present an immediate threat to public health or welfare or the environment.	Spill Prevention, Control, and Countermeasures (SPCC) Measures	Section 3.5
The ERP shall provide procedures for appropriate action to prevent, abate, or minimize a release or threat of release of hazardous substances or Waste Material.	SPCC Measures	Section 3.6

Table 3-2: Potential Release Sources and Preventative Measures				
	Description	Potential Chemicals	Potential Source of Release	Discharge Prevention Measures
Vehicle Refueling & Basic Maintenance	Site vehicles and boats may require refueling throughout the day	Diesel fuel, gasoline	<ul style="list-style-type: none"> - Tank overflow - Incidental gas drips during nozzle transfer 	<ul style="list-style-type: none"> - Awareness - Utilizing the appropriate dispenser nozzle without the use of the refueling latch on the nozzle - Complete fueling prior to removing nozzle - No topping off and no siphoning - Staging in areas of suitable ground cover (i.e., asphalt and not soil)
Portable Fueling Containers	Small containers may be required for transporting fuel to hand tools/machinery	Diesel fuel, gasoline, oil	<ul style="list-style-type: none"> - Tank overflow - Incidental drips during nozzle transfer 	<ul style="list-style-type: none"> - Awareness - Using an approved portable container & place on ground (rather than holding) - Fill <95% full to allow for expansion
Hydraulic Leaks	Normal wear of fittings/component surfaces, incorrect lubrication, and seal maintenance can cause leakage	Hydraulic Oil	<ul style="list-style-type: none"> - Equipment seals, hose connections, and fittings 	<ul style="list-style-type: none"> - Daily inspections of equipment - Address minor leaks prior to a catastrophic failure - Tighten fittings/components when appropriate, otherwise replace - Properly maintain and lubricate seals and other equipment components

Appendix A

Emergency Response Procedures

**Appendix A
 Emergency Response Procedures**

Type of Emergency	Description	Immediate Action	Emergency Contact Procedure	Follow Up Procedures
Weather Emergency	Lightning	<ul style="list-style-type: none"> - If lightning is observed, work shall be halted, and employees must follow the 30/30 rule. - Begin counting as soon as you see lightning. If you hear thunder before you reach 30, stop work and go indoors. 	<p><u>SHSO</u>: Lindsey Fales (207-228-3909) <u>FOL</u>: Charles Lyman (207-461-0001)</p>	<p>Outdoor activities must be suspended for at least 30 minutes after the last sound of thunder and/or sight of lightning, whichever is longer. The FOL will be responsible for monitoring weather conditions.</p>
	High Winds	<ul style="list-style-type: none"> - Take appropriate shelter. 	<p><u>SHSO</u>: Lindsey Fales (207-228-3909) <u>FOL</u>: Charles Lyman (207-461-0001)</p>	<p>The FOL will be responsible for monitoring weather forecasts and communicating conditions to on-site personnel.</p>
	Adverse Weather (e.g., snow, hail)	<ul style="list-style-type: none"> - Send personnel home early in advance of an approaching storm. Alternatively, shelter workers if conditions are too hazardous to risk travel. 	<p><u>SHSO</u>: Lindsey Fales (207-228-3909) <u>FOL</u>: Charles Lyman (207-461-0001)</p>	<p>The FOL will be responsible for monitoring weather forecasts and communicating conditions to on-site personnel.</p>
Medical Emergency	An emergency requiring medical attention beyond first aid (e.g., major injury)	<ul style="list-style-type: none"> - Call 911 and follow first responder instructions. - Make area safe for first responders and perform lifesaving procedures if possible (e.g., CPR/FA) 	<p>911 <u>PM</u>: Rod Pendleton (207-229-0891) <u>FOM</u>: Brad Wolfe (925-323-4082) <u>H&SM</u>: Jeff Tweeddale (860-805-5883) <u>SHSO</u>: Lindsey Fales (207-228-3909) <u>FOL</u>: Charles Lyman (207-461-0001)</p>	<p>PM will work with SHSO, FOL, and other on-site personnel to prepare an incident report.</p>
Fire	Fire	<ul style="list-style-type: none"> - If a fire is observed, an employee trained in fire extinguisher use may attempt to extinguish the fire. - Do NOT attempt to extinguish a flammable gas fire until the source of gas has been shut off/eliminated. - If fire not extinguished, contact employees, and evacuate to assembly area. - Contact 911 	<p>911 <u>PM</u>: Rod Pendleton (207-229-0891) <u>FOM</u>: Brad Wolfe (925-323-4082) <u>H&SM</u>: Jeff Tweeddale (860-805-5883) <u>SHSO</u>: Lindsey Fales (207-228-3909) <u>FOL</u>: Charles Lyman (207-461-0001)</p>	<p>PM will work with SHSO, FOL, and other on-site personnel to prepare an incident report.</p>
Explosion	Explosion	<ul style="list-style-type: none"> - Contact 911 - Contact employees and evacuate to assembly area. 	<p>911 <u>PM</u>: Rod Pendleton (207-229-0891) <u>FOM</u>: Brad Wolfe (925-323-4082) <u>H&SM</u>: Jeff Tweeddale (860-805-5883) <u>SHSO</u>: Lindsey Fales (207-228-3909) <u>FOL</u>: Charles Lyman (207-461-0001)</p>	<p>PM will work with SHSO, FOL, and other on-site personnel to prepare an incident report.</p>

Type of Emergency	Description	Immediate Action	Emergency Contact Procedure	Follow Up Procedures
Personnel Absence	Unanticipated personnel absence or failure to report to Site at expected time	<ul style="list-style-type: none"> - Attempt to contact employee via cell phone, office phone, or other means. Reach out to employee's manager to evaluate if other circumstances exist. - If not, contact company's HR department to determine next steps. 	<p><u>PM</u>: Rod Pendleton (207-229-0891) <u>FOM</u>: Brad Wolfe (925-323-4082)</p> <p>911 (if necessary)</p>	PM will perform situation-specific follow-up with assistance of on-site personnel.
Property Damage / Theft / Vandalism	Damage to property, equipment, or vehicles on-site	<ul style="list-style-type: none"> - Assess extent of damage. - If warranted, contact local police to file a report. - Initiate steps to repair or replace property, damaged equipment, or vehicles. 	<p>Penobscot County Sheriff: 207-947-4585</p> <p><u>SHSO</u>: Lindsey Fales (207-228-3909) <u>FOL</u>: Charles Lyman (207-461-0001)</p>	SHSO will perform situation specific follow-up with assistance of on-site personnel.
Unauthorized Person	Entry of unauthorized person onto Site	<ul style="list-style-type: none"> - Initiate contact to understand access need and politely request departure. - If unauthorized person is hostile or aggressive, contact Penobscot Sheriff's Office or call 911. 	<p>Penobscot County Sheriff: 207-947-4585</p> <p>911</p> <p><u>SHSO</u>: Lindsey Fales (207-228-3909) <u>FOL</u>: Charles Lyman (207-461-0001)</p>	SHSO will perform situation specific follow-up with assistance of on-site personnel.
Hazardous Material and/or Chemical Spills and Leaks	Small Spill (<10 gallons)	<ul style="list-style-type: none"> - While wearing appropriate PPE, place absorbent material over area to contain spill. - Once contained, place absorbent material into appropriate DOT approved 55-gallon container and label for identification/disposal. - Spills of OHM shall be cleaned up immediately and not left unattended. 	<p><u>PM</u>: Rod Pendleton (207-229-0891) <u>FOM</u>: Brad Wolfe (925-323-4082) <u>SHSO</u>: Lindsey Fales (207-228-3909) <u>FOL</u>: Charles Lyman (207-461-0001)</p>	PM will perform situation specific follow-up with assistance of on-site personnel.
	Large Spill (>10 gallons)	<ul style="list-style-type: none"> - Cone/barricade off area and evacuate personnel to upwind area. - Contact appropriate governmental agencies, as identified in the SPCC. - Contact hazardous materials spill response contractor. 	<p>NRC: 1-800-424-8802 ME DEP ER: 207-941-4570 Clean Harbors Spill Response: 207-799-8111</p> <p><u>PM</u>: Rod Pendleton (207-229-0891) <u>FOM</u>: Brad Wolfe (925-323-4082) <u>WSP H&SM</u>: Jeff Tweeddale (860-805-5883) <u>SHSO</u>: Lindsey Fales (207-228-3909) <u>FOL</u>: Charles Lyman (207-461-0001)</p>	PM will perform situation specific follow-up with assistance of on-site personnel. Written reports will be completed per the SPCC (Section 3.6).

Abbreviations are as follows:

PM = Project Manager
FOM = Field Operations Manager
H&SM = Health and Safety Manager
SHSO = Site Health and Safety Officer

FOL = Field Operations Lead
CPR = Cardiopulmonary Resuscitation
FA = First Aid

OHM = Oil and/or Hazardous Material
NRC = National Response Center
ME DEP ER = Maine Department of Environmental Protection Emergency Response

Appendix B
Incident Analysis Forms

Check one
 Initial Report:
 Update:
 Final Report:

INCIDENT ANALYSIS REPORT (IAR)

WSP E&I

Confidential – Privileged

Early Case Management Contacts:
 Canada – **WorkCare** (888) 449-7787
 USA – **TriageNow** (877) 311-0038

Severity Classification: Select One
 (See chart page 3)

Within 24 hours enter information into iSMS or mobile app iSMS.

Install mobile app using QR code. App Info: WSP USA Inc.
 Launch mobile app using iSMS URL: zeroharm.onepb.net

Use the IAR to document findings from the investigation, causal factors, root causes and corrective actions.

Check here if incident was entered into iSMS. iSMS Incident #

Note: All incidents must be entered into iSMS. If unable to enter (e.g., lack of internet access or cell service), complete [iSMS Entry Information Form](#) and provide copy to supervisor / HSE Coordinator to enter incident in [iSMS](#).



Section 1 – General Information

Incident Date: _____ Incident Assigned to: WSP employee Subcontractor: Other (Explain): _____

Injured / Involved Person (IP) Name: _____ Employee Info: Region: Select One / Home office: _____ State / Province: _____

Age Profile: Select One Occupation: Select One Length of time in role (or date of hire): _____ Days Since Last Day Off: _____

Business Line: Select One Dept. Number: _____

Employee Line Supervisor: _____ Project Manager: _____ Field Supervisor: _____

Project Name: _____ Project Number: _____ Client: _____

Location: Select One Is this a Company controlled work site: Yes No Location description: _____

Short Description (who (without names), what, where, and clarify compliance with basic controls, if known. Indicate if no injuries. 150 characters.): _____

First Alert? (HiPo, Recordable (medical/restricted/lost time) injuries): Yes No Email [template](#) (link) HiPo Alert [template](#)

Section 2 – Event Type - Process (mark at least ONE BOLD TYPE and all that apply)

- Near Miss - If near miss, select type.** If an observation of unsafe act / condition, complete [iSMS Observation](#)
- Injury / Illness Incident** If Injury / illness Select One Hospitalization Serious / Critical Injury?
- Asset Damage** If Damage: Select One 3rd Party? If underground utility, complete [GDR](#)
- Vehicle** If Vehicle: Select One 3rd Party? If vehicle, complete [VIR](#)
- Environmental** **Agency Inspection** **Security**

If **injury / illness**: If sprain /strain, complete [MSD Injury Form](#).

If incident involves exposure to blood or other bodily fluids:

Bleeding? Yes – If yes Select One If 'First Aider', provide name:

Did 'First Aider' have contact with blood / infectious material? Select One

If Yes, indicate Exposure Control Precautions taken by First Aider (Check all that apply):

- None (If none, contact WorkCare) Gloves Previous HBV Immunization
- Immediate Personal Hygiene One-way CPR valve Recommended for HBV Immunization
- Eye protection Face mask Other (describe): _____

Blood contaminated work area / surface? Yes – If yes, describe cleanup/disposal:

- A. If **environmental**: Environmental incident category: Pollution Event Non-conformance
 Was Regulatory Action Taken: Yes No Describe:
- B. If **security**: Security Incident Type: Physical Criminal Intellectual
 If Physical: Select One If Criminal: Select One If Intellectual: Select One
- C. If an **inspection by a regulatory agency**, what agency, who were the inspectors, inspector contact information?

Section 3 - Incident Analysis

- A. Explain in **detail** what happened (Expand on Short Description without names, use Injured Person (IP)):
- B. Explain in **detail** what object or substance directly harmed the employee:
- C. Was a tool or equipment involved? Yes No What was it: Last Inspection Date: Defects:
- D. List the names of all persons involved in the incident, and employer information:
- E. List the names of any witnesses, their employer, and a local/company telephone number or address:
- F. Was a Health and Safety Plan (HASP) or Activity Hazard Analysis (AHA) completed for the work being performed? Yes No
 If "yes", Who prepared the document?
- G. Who and when was the last manager (Project, Operations, HSSE, etc.) at the site of the incident?
- H. When and what safety training **directly related** to the incident has the person(s) involved had?
- I. List attached documentation (**Witness statements**, HASP acknowledgement forms, kickoff/daily/weekly meetings, inspections, photographs) Complete a **Physical Evidence Log**, as required:

Section 4 - Incident Investigation Results and Corrective Actions (Why Analysis, HFACS)

- A. Causal Factors: Supervisor/PM identify the Immediate Cause/s and describe the Critical Factor/s that preceded the event.
- B. Root Causes: Supervisor/PM identify the Root Cause/s and describe the factors that if fixed should prevent reoccurrence.

Causal Factors (Acts or Omissions / Conditions)		
	Immediate cause	description of critical factors
1		
2		
3		
Root Cause(s) Analysis - The below items represent major root cause categories which have been determined to be Less Than Adequate (LTA). A more detailed determination of the root cause will be facilitated, if needed, by the applicable HSSE Manager / Incident Review Panel.		
	root cause	description
1		
2		
3		
Life Saving Actions - Select all that apply or <input type="checkbox"/> None		
<input type="checkbox"/> Plant / People Interaction (Work around HME) <input type="checkbox"/> Driving <input type="checkbox"/> Suspended Loads	<input type="checkbox"/> Hazardous Substances / Atmospheres <input type="checkbox"/> Working at Heights <input type="checkbox"/> Energy Sources	<input type="checkbox"/> Working on or near Water <input type="checkbox"/> Ground Stability <input type="checkbox"/> Lone or Remote Work

Corrective Actions – Identify corrective and preventative actions and recommendations to prevent a re-occurrence. Communicate lessons learned using [template](#), modify for event type as required.

Root Cause # / Type	Corrective Actions Taken (Attach additional pages as needed to completely address this section)	Responsible Person	Proposed Completion Date	Closed on Date	Verified by and Date Verified

Section 5 - Notifications, Certification & Approvals

Check the appropriate boxes indicating the applicable reports have been made to the following applicable organizations:

Auto Insurance Carrier was called HSE Manager Notified

WorkCare / TriageNow was called Post-incident Drug/Alcohol Testing Performed

Incident Report prepared by:

Employee (s):	Date:	HSE Coordinator / Advisor:	Date:
Supervisor:	Date:	HSE Manager:	Date:
Operations Manager:	Date:	HSE Director (if applicable):	Date:

Note: Addition of name/date by the individual represents digital signature when accompanied by an email.

Severity Classification

HiPo = Realistic Potential to be a serious incident or fatality (Level 4 or 5 consequence).

Standard 103 - Reporting Requirements

Scale	Catastrophic -5-	Major -4-	Moderate -3-	Minor -2-	Insignificant -1-	
Health, Safety & Environment	Impact on Health	<ul style="list-style-type: none"> Death of member of the public Multiple worker deaths 	<ul style="list-style-type: none"> Single worker death Life-shortening health effect Health effect causing significant irreversible disability/illness 	<ul style="list-style-type: none"> Irreversible health effect Serious illness from which there is full recovery Illness resulting in three days away from work 	<ul style="list-style-type: none"> Reversible health effect Illness resulting in one day away from work Restricted work Medical treatment beyond first aid 	<ul style="list-style-type: none"> Mild health effect for short period, with no lost time
	Impact on Safety	<ul style="list-style-type: none"> Death of member of the public Multiple worker deaths 	<ul style="list-style-type: none"> Single worker death Multiple serious injuries Significant irreversible disability 	<ul style="list-style-type: none"> Single serious injury Worker injury resulting in three days away from work 	<ul style="list-style-type: none"> Minor injury Injuries resulting in one day away from work Restricted work Medical treatment beyond first aid 	<ul style="list-style-type: none"> First aid case, with no lost time Negligible safety impact
	Impact on Environment	<ul style="list-style-type: none"> Extreme environmental incident, resulting in irreversible or long term or widespread harm 	<ul style="list-style-type: none"> Major environmental incident resulting in significant impact requiring management by external authorities and/or high level of resources for response and remedy Environmental incident managed by external authorities 	<ul style="list-style-type: none"> Moderate environmental impact requiring management response to aid recovery Reportable to authorities 	<ul style="list-style-type: none"> Local impact requiring management response, but from which there is natural recovery 	<ul style="list-style-type: none"> Minimal environmental impact

iSMS ENTRY INFORMATION – INCIDENT / NEAR MISS



INSTRUCTIONS: Only complete this form if you are unable to enter incident data directly into iSMS (e.g., due to lack of internet or some other reason). The purpose of this form is to gather required information to allow others to enter information into iSMS for the involved person. **Information needs to be entered into iSMS within 24-hours.**

INCIDENT OCCURRENCE

Incident Date		Incident Time		Home Phone No.	
Incident Type	<input type="checkbox"/> Near Miss <input type="checkbox"/> Injury/Illness <input type="checkbox"/> Loss or Damage <input type="checkbox"/> Road/Vehicle				
	Event Type#1: Select One Event Type#2: Select One Event Type#3: Select One				

VEHICLE INCIDENT DETAILS

Driver Name		License Plate		Fleet Vehicle #	
Vehicle Year		Vehicle Make		Vehicle Model	
Vehicle Power Source		On/Off Road		Vehicle Ownership	

LOCATION (Where Incident Occurred)

Country		WSP Region (Country)		State / Province	
Office / Project		Description of Location			

ORGANIZATION (Employee Reporting Information)

Division	WSP
Level 1 (E&E, etc.)	
Level 2 (WSP Region)	
Level 3 (Legal Entity)	
Agreement (Employee, Subs, etc.)	
Client Name	
Project #	

CONTACTS

Incident Contact information represents who should be contacted in relation to this incident.

Injured Person/s / Involved Person/s

First Name		Last Name	
Job Description		Trade	
Address (optional)			
Brief description of injury / body parts			



Reported By

Full Name		Title	
Phone		Email	

Contract Safety and Security Manager (If applicable)

Full Name		Title	
Phone		Email	

Witnesses By (If applicable)

Full Name		Title	
Phone		Email	

Additional Contact Description (If applicable)

Full Name		Title	
Phone		Email	

INCIDENT DESCRIPTION

Limit to conditions observable on site. Do not include names or personal medical information.

Short Event Description (2 or 3 sentences, 150 words)	
Long Event Description	
Immediate Actions Taken	

ATTACHMENTS

Append attachments to email or link to shared drive to allow attachments to be uploaded to iSMS.

List / Describe	
List / Describe	
List / Describe	

CHECK ALL THAT APPLY

Only include information that is applicable to the incident response and/or investigation.

Drug / Alcohol Test Conducted	<input type="checkbox"/> Yes				
If Yes	<input type="checkbox"/> Pre-Shift Alcohol Test <input type="checkbox"/> Post Incident Alcohol Test <input type="checkbox"/> Post Incident Drug Test <input type="checkbox"/> Random Drug / Alcohol Test conducted prior to incident on the day				
Activities in Progress					
Emergency Services Called	<input type="checkbox"/> Yes	Description of Emergency Services			
Equipment / Tool Involved	<input type="checkbox"/> Yes	Description Equipment / Tool			
Property Damage	<input type="checkbox"/> Yes	Description of Property Damage		Estimated Value	
Project Impact / Delays	<input type="checkbox"/> Yes	Number of People		Days Impacted / Delayed	
Weather Condition	<input type="checkbox"/> Yes	Weather Condition		Weather Description	

SERVICE STRIKE INFORMATION (If Service Strike identified in Incident Occurrence)

Service Strike	<input type="checkbox"/> Yes	Incident Time		Home Phone No.	
Service Type	<input type="checkbox"/> Electrical (low voltage) <input type="checkbox"/> Electrical (high voltage) <input type="checkbox"/> Gas (high pressure) <input type="checkbox"/> Gas (high pressure) <input type="checkbox"/> Other pipeline <input type="checkbox"/> Sewer / Drain <input type="checkbox"/> Telecommunications <input type="checkbox"/> Water				
Service Position	<input type="checkbox"/> Overhead <input type="checkbox"/> Surface <input type="checkbox"/> Underground				

ENVIRONMENTAL (If Environmental identified in Incident Occurrence)

Env. Sensitive Area?	<input type="checkbox"/> Yes	Reportable Quantity Exceeded?	<input type="checkbox"/> Yes
Clean Up Actions			
Environment Affected	<input type="checkbox"/> Air <input type="checkbox"/> Ground <input type="checkbox"/> Water		
Material Released			
Material Released	<input type="checkbox"/> Discharge <input type="checkbox"/> Emission <input type="checkbox"/> Spill <input type="checkbox"/> Waste Incident		
Community Off-Site Impact			
Environmental Impact			