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GENERAL DYNAMICS
Electric Boat

CONTRACTOR
SAFETY, HEALTH, & REGULATIONS MANUAL

REVISION 5
11/06/2025

/S/
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1. INTRODUCTION

Electric Boat (EB) is dedicated to the protection of all personnel, contractors, vendors, and visitors. It is the policy of EB that all persons on site will be provided with a work environment that is safe and free of recognized hazards. The Contractor Safety, Health, and Regulations Manual (CSHRM) is provided to outline some of the more important safety, health issues, and regulations that are required at EB, but is not to be used as a substitute for reviewing or complying with Occupational Safety and Health Administration (OSHA), Federal, State, and local regulations. This manual sets forth the minimum safety and health requirements and is not intended to discourage or prevent the implementation of additional precautionary measures necessary to reduce or eliminate hazards. Any concerns must be addressed to the applicable Owner's Representative.

Before visiting and prior to performing work under the direction of Electric Boat (EB), all personnel must read and fully understand the requirements pertaining to safety, industrial hygiene, fire prevention, environmental resource management, security, facilities (e.g., interruption of services and excavations), radiological and/or radiation safety, and lifting/hoisting of materials. In addition, any situation or issue that would impede or adversely impact the production of EB operation, the building and maintaining of submarines, has to be reviewed and planned.

Applicability:

The contents of this manual apply to all work under the direction of EB, including non-shipboard and shipboard work, including offsite and leased locations. All work being performed at government and private installations shall conform to this manual as well as local rules and regulations.

Please be aware that regulations may differ when performing shipboard work, ensure the applicable Owner's Representative is consulted with for specific shipboard regulations prior to starting work.

Expectations of Contractors (Supervision and Workers):

- Comply with all Federal and State health and safety laws, regulations and applicable EB internal policies and procedures.
- Be proactive to recognize and prevent workplace hazards before they happen.
- Meet daily before work begins, with the Owner's Representative to discuss work scope and hazards.
- Establish and maintain good communication with EB to discuss all changes and unplanned events.
- Any change in work scope or work method will be discussed with and agreed upon with the Owner's Representative prior to proceeding.
- Ensure that all personnel working or visiting EB sites read and fully understand the CSHRM.

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Prior to doing business at EB, it is required that all contractors obtain copies of the latest United States (U.S.) Department of Labor's OSHA Construction and General Industry Standards (29 Code of Federal Regulations [CFR] 1926, 1910, and 1915) and the Occupational Safety and Health Act of 1970 (Public Law 91-596). Copies of each can be obtained through the Superintendent of Documents, U.S. Government printing office, Washington, DC 20402, telephone no. (202) 783-3238, or the local area OSHA office. This information is also available electronically at www.osha.gov. Contractors and their subcontractors, regardless of tier, are considered subject to the enforcement provisions of OSHA. Any violation of these OSHA standards or EB policies and procedures could result in the restriction of the contractor's activities for EB and possible termination.

2. CONTRACT ADMINISTRATION

2.1 OWNER'S REPRESENTATIVE

All contracts will be assigned an Owner's Representative prior to arrival on site. If the contractor is not aware of their representative, the purchasing agent should be contacted.

Owner's Representative - The owner, EB, has designated Project Managers and Points of Contact as representatives, as follows:

The Project Manager and Point of Contact will be available as required at the site of the work and will have the authority to act for the Owner, as follows:

- Act as the liaison between the Owner and the contractor on site.
- Make field decisions on behalf of the Owner and/or make the decisions of the Owner known.
- Suspend the Contractor's operations for any conduct in violation of the requirements of the contract or EB policies.
- Inspect and approve specified details and inspect for adherence to design and completeness of details shown on the Owner's drawings/specifications.

2.2 SUBMITTAL PROCESS

All submittals will be provided to the Owner's Representative and required to be approved by the appropriate EB department(s) before work commences.

All submittals stating qualifications shall be on Company stationery and signed by an authorized individual.

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3. SECURITY

3.1 PERSONNEL ENTERING EB (INCLUDING PARKING LOTS AND GARAGES INSIDE THE SECURITY PERIMETER)

- Must be U.S. Citizens.
- Must be properly badged.
- Must be escorted by an Owner's Representative if the requirements for unescorted access are not met.
- Cannot permit another person to wear their badge or use it to access the facilities.
- Cannot carry firearms, ammunition, or a weapon of any kind.
- Alcohol, drugs, tobacco, and vaping materials, or being under the influence is prohibited.
- Use of cameras or audio devices is forbidden without a permit obtained via the submittal process in Section 2.2.
- Cameras and camera-enabled devices are prohibited in the Controlled Industrial Areas (CIA)s of Groton, and within sensitive restricted areas at Quonset Point.
- Access to the EB network and computers is forbidden, but approval can be obtained from Security through the Owner's Representative.
- A Visitor Computer Pass Form must be completed by the visitor and EB sponsor, then submitted to EB Security prior to entry into the facility with a laptop or electronic device.

  Electric Boat Policy (EBP)-00704 and Industrial Security Bulletin #153 should be referenced and obtained through the applicable Owner's Representative for clarification relative to personally owned Portable Electronic Devices (PED)s.

  NOTE: Security violations may result in the termination of a contract.

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3.2 TRAFFIC CONTROLS

Traffic control and parking are essential to safe operations and the number of vehicles should be kept to a minimum. The driving of vehicles in the shipyard is a privilege and only permitted if absolutely necessary for the direct performance of the job.

- Vehicles are to follow posted speed limit signs and under no condition not to exceed the speed of ***5 or*** 10 mph, ***as posted*** in the Groton Shipyard and Quonset Point Facility.
- Vehicle operators must grant the right-of-way to all emergency vehicles.
- Vehicles shall not be left unattended at shipyard access gates, fire lanes, or pedestrian walkways (see 3.2.1.1***)***.
- Upon exiting a vehicle, ensure that it is not blocking or impeding egress to buildings or to other vehicles' passage.
- Always chock vehicles that are parked on an incline.
- Delivery vehicles must chock wheels at all times during loading and unloading, including during fuel delivery.
- Commercial vehicles (i.e., all vehicles used to perform work or provide a service on behalf of a company) in the shipyard shall have a functional back-up alarm or utilize a spotter when backing up.
- All vehicles shall have required safety features and equipment that conforms to OSHA 1915.93 (Motor vehicle safety equipment, operation and maintenance).
- Department of Transportation (DOT) placards are required to be displayed per DOT regulations.
- Signalmen, flagmen, and vehicle spotters shall be used by the contractor when the conditions warrant, and such personnel shall wear high-visibility attire.
- All vehicles on site are required to display on the dash the vehicle pass with the driver's contact phone number. All drivers are required to have an EB-approved cell phone on them at all times away from their vehicle.
- Posted signs at the entrance may indicate "No Driving Times"; these are specific times during shift changes when vehicular traffic is stopped.
- All vehicles driving on site are subject to search.

3.2.1 IN PLANT/SITE PARKING/ROADWAY BLOCKAGES

3.2.1.1 Pedestrian Walkways

Pedestrian walkways are marked on the ground and parking ***on pedestrian walkways*** should be avoided. If there is a need to block the pedestrian walkway, contact the applicable Owner's Representative and establish a walking lane for pedestrians when feasible. The area that work is being performed shall be cordoned off with a physical barrier or danger tape accompanied by a sign with the Owners Rep name and number.

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3.2.1.2 Fire Lanes

Vehicles shall not be parked in designated fire lanes/roadways or obstruct access to fire equipment/hydrants unless absolutely unavoidable. If a routine delivery is being made, the vehicle should be parked outside of the fire lane. If the fire lane is blocked or obstructed, it is the contractor's responsibility to contact the Fire Department Dispatcher (Groton Shipyard phone number [860] 433-3617) or Security (Quonset Point Facility phone number [401] 222-2410) and Owner's Representative notifying of the blockages related to material/equipment removal, and re-notified once the fire lane is cleared.

3.2.1.3 Crane Rails

Do not park on, or within, 3ft of crane rails. If there is a need to park within those limits, contact the Owner's Representative.

3.2.2 Progressive Disciplinary Policy

The following disciplinary actions will be invoked for unsafe driving within the shipyard.

NOTE: Subcontractor violations will count against the primary contractor.

Two Minor Violations - Two minor incidents per individual in a calendar year will result in the individual losing driving privileges for one month.

Three Minor Violations - Three minor incidents per contractor per calendar year will result in the contractor's president/owner providing an action plan for approval to the EB Safety Department prior to the contractor driving in the shipyard.

One Major Violation - One major incident per individual, per calendar year will result in the individual losing driving privileges for one month in addition to the contractor's president/owner providing an action plan to the EB Safety Department for approval prior to the contractor's driving in the shipyard.

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A Minor Violation includes:

- Driving during *Stop Driving Times*
- No back up alarm/spotter when required
- Not wearing seat belts
- Parking within a fire lane
- Parking within a pedestrian walkway

A Major Violation includes:

- Striking a pedestrian
- Reckless driving
- Driving while impaired
- Traveling too fast for conditions or speeding
- Following too closely
- Leaving the scene of an accident
- Use of hand-held device/texting while driving
- Not yielding to pedestrians
- Not stopping at stop signs

EB Security and Safety personnel will enforce proper action as required by directives. Occurrences beyond what has been stated above will be subject to additional discipline, as necessary. If negative trends continue, a contractor's driving privileges within the shipyard will be suspended.

4. SAFETY

4.1 JOB HAZARD ANALYSIS

All contractors performing construction or troubleshooting work on site are required on a daily basis to complete their company's Job Hazard Analysis (JHA). The JHA will be available for EB review upon request and does not exclude them from completing the EB JHA. Additionally, on a daily basis, contractors performing work are required to complete an Electric Boat Hazard Assessment Form, EB Form 84-03-4761, with their Owner's Representative. Deviations in work scope may require a Stop, Secure, and Notify condition (see 4.2), where a new Hazard Assessment may be required to be completed with the Owner's Representative.

4.2 STOP, SECURE, NOTIFY

An unusual occurrence is defined as an unfamiliar event that requires immediate action and communication with the Owner's Representative.

Actions to Take: It is the responsibility of all personnel who witness the unusual occurrence to take the immediate following actions:

STOP
Immediately stop all people affiliated with the unusual occurrence.

NOTE: Take immediate action to ensure personnel safety and preserved life.

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SECURE

- Do not alter the scene. It is extremely important that the scene is protected from unnecessary movement, demolition, or contamination.
- Do not move equipment, material, or other items that have been involved in the unusual occurrence.

NOTIFY

For emergencies (Security, Fire Department, Medical, Safety, Environmental, etc.), immediately call Groton 860-433-3333, Quonset Point 401-268-2222, New London 860-867-1300, or 911.

Report the occurrence to the direct supervisor and to the Owner's Representative.

4.3 UNUSUAL OCCURRENCES

The following are examples of unusual occurrences that warrant the Stop/Secure/Notify policy:

- Fires
- Electrical shocks
- Crane and rigging accidents
- Discovery of asbestos containing material
- Pollution of air or water
- Boundary or line violations including, but not limited to, radiography, tank or confined space entry, safety, and security boundaries
- Undocumented deviations from approved procedures, instructions, or test documents

NOTE: This is not a complete list of all unusual occurrences.

4.4 INJURIES AND MEDICAL TREATMENT

If any injury occurs while at EB, the incident must be promptly reported to the supervisor and Owner's Representative. If the incident is an emergency, call the ambulance (Groton Shipyard [860] 433-3333; Quonset Point Facility [401] 268-2222; New London [911]).

Groton Shipyard has a medical facility available on first and second shift. Quonset Point Facility has a physician on first shift and a registered nurse on first and second shift. Only emergency treatment is provided to non-EB employees. Contractors are required to complete an investigation of each injury/illness and provide a copy to the Owner's Representative and the applicable/appropriate off-site local fire departments (i.e., New London Fire Department, Groton City Fire Department or Poquonnock Bridge Fire Department).

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4.5 PERSONAL PROTECTIVE EQUIPMENT

Wearing Personal Protective Equipment (PPE) is a requirement of OSHA and EB and should be followed on all projects. There are areas of the shipyard, and areas within specific buildings, that have signage and placards indicating the minimum PPE that must be worn. These requirements apply to all personnel including EB, contractors, Navy, vendors, and visitors.

4.5.1 Protective Clothing

Contractors and visitors reporting to work are expected to wear proper clothing. The minimum requirements for body protection are a tee shirt with short sleeves and full-length pants. Contractors and visitors are required to follow the PPE requirements of posted areas throughout the shipyard.

- Long sleeves are recommended.
- Sleeveless shirts, tank tops, and shorts are prohibited.
- Delivery vendors wearing their corporate-approved uniforms are excluded from this requirement.
- Closed-toed shoes are required.

Welders, burners, and other personnel working with these trades should take extra precautions to protect themselves against hot slag, molten metal, sparks, etc. Kevlar, green sleeves, leathers, gauntlet, or other equally-protective measures to the task being performed must be used.

4.5.2. Personal Flotation Devices

Personal flotation devices, which are U.S. Coast Guard approved (46 CFR 169 and 33 CFR 175.23, Buoyant Work Vests) are to be worn when working from floats, docks without railings, near deck edges, or on scaffolds not protected by guardrails when over water or on small boats.

4.5.3 High-Visibility (Hi-Vis) Vests

All personnel performing work or travelling within a warehouse area must wear a Hi-Vis safety vest to maximize pedestrian visibility to forklift activity. Thru traffic is to stay within designated walking spaces when applicable or possible. If accessing a construction or excavation area, workers will wear a Hi-Vis vest.

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4.6 BARRIER TAPES

EB utilizes six different color barrier tapes for specific situations. Contractors shall utilize the same color barrier tapes. All danger tape shall have attached signs provided by the applicable Owner's Representative identifying the hazard, the responsible person, and organization installing the tape. Barrier tapes are not to be used for non-safety situations, such as reserving laydown space for material. Plain rope or other simple materials, such as plastic chain, should be used for these purposes. Personnel may cross yellow barrier tape without permission of the owner as long as they understand the hazard. Personnel may not cross any other barrier tape without permission from the owner or cognizant employee. The contractor is responsible to install the barrier tape and signs in a manner such that only the immediate affected area is cordoned off. Following the particular situation's concern, the contactor shall restore the area by removing all barriers and signs.

Red (Danger)
Authorized Personnel Only - Do Not Enter, intended to keep unauthorized personnel out of the areas that present immediate or potential hazards that, if not avoided, will result in death or serious injury to untrained or unprotected individuals. Situations include lead work, blood spills, sewage spills, electrical equipment, gas leaks, asbestos, hazardous materials (hazmat), fire scenes, open manholes, falling object hazard zones with no additional protection or those left unattended, ***falling ice or falling object hazard***, etc. See the applicable Owner's Representative to obtain the signs to be attached to the danger tape that will display contact information and hazards and state "ONLY AUTHORIZED PERSONS BEYOND THIS POINT". All barrier tape must be removed and properly disposed of when they are no longer required.

Yellow (Caution)
To alert anyone in the area ***that additional*** safety precautions are utilized (i.e., slippery conditions, pot holes, painting, etc.). Personnel may cross yellow barrier tape without permission of the owner as long as they understand the hazard.

Green (Caution Suspended Loads)
Establishes an exclusion area where loads are suspended above. Only authorized individuals are allowed within the tape area as determined in MDD-03224.

Blue (Security Do Not Enter)
Security Department use only, to control vehicular traffic, crime scenes, accident scenes, etc.

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White with Red Lettering (Fire Dept.) No Entry Without Permission
Fire Department emergency use during fire, hazmat or medical emergencies. Keeps unauthorized personnel out of the area. Prior to breaching any perimeter closed off with "Fire Line No Entry Without Permission" barricade tape, all personnel must seek authorization from the on-scene EB Fire Department incident commander.

Yellow and Magenta (Radiological Control)

Industrial Radiography and Radiological Control areas are clearly identified by the use of warning signs and, in most cases, isolated by the use of yellow and magenta barrier ropes or ribbons. All radiological postings will have, as a minimum, the magenta international three-bladed symbol (trefoil) on a yellow background. The signs will give such information as type of area and radiological conditions of the area. Never enter radiological areas unless trained and authorized by EB. Radiological barriers or signs must never be relocated or repositioned. Contact Radiological Control personnel when questions or concerns arise about radiography postings or barriers. Contact Quality Inspection Radiography personnel when questions or concerns arise about industrial radiography postings and barriers.

Roof access at the Quonset Point Facility requires permission from the Quonset Point Radiographic Test (RT) department at (401) 268-2248.

4.7 LOCKOUT/TAGOUT (LOTO)

Contractors shall have a documented program of procedures for the control of isolating energized devices and documented employee training for these procedures. See OSHA 29 CFR 1910.147.

Contractors and their employees must also be familiar with EB's LOTO policy (Safety Manual Section C-13, Control of [Shipboard] Hazardous Energy [Lockout/Tags-plus] and Safety Manual C-14, Control of Non-Shipboard Hazardous Energy [Lockout – Tag-out]. Complete copies of the EB Safety Manuals can be obtained from the Owner's Representative or the Safety Department.

A LOTO plan that conforms to the provisions of 29 CFR 1910.147, shall be developed by the contractor and submitted to the Owner's Representative as per Section 2.2 for review prior to implementation. ***Contractors are responsible for creating their own LOTO procedures, and ensuring that qualified personnel are performing to their LOTO procedures. These LOTO procedures must include a "live – dead – live" process to verify the test tool is working correctly, ensuring zero energy and re-verifying the tool is properly functioning.*** Contractors must supply their own locks and tags. All equipment and circuit shutdowns shall be properly locked out and tagged out of service until ready to be restored to service.

LOTO shall be followed, when required to:

- Remove or bypass a guard or other safety device
- Place any part of the body into an area of a machine or piece of equipment where work is actually performed upon the material being processed (point of operation) or where an associated danger zone such as moving parts exists during the operating cycle
- Electrical distribution systems - work on, near, or with electrical wiring in distribution systems; e.g., distribution panels, switchboards, transformers, substations, and similar electric equipment

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- Piping systems such as pneumatic, hydraulic, steam, and chemical
- Boilers and elevators for repairs, maintenance, and inspection

NOTE: Never remove a DANGER, Red, Lockout, or Tagout tag.
Exception: If the authorized person(s) are not on the premises, their cognizant management may remove the tag in accordance with detailed procedures outlined in the EB Safety Manual C-14.

4.8 ELECTRICAL SAFETY

- Compliance with The National Electrical Code, OSHA Regulations, and the Connecticut Building Code is required.
- Only qualified personnel will perform troubleshooting, repairs, and installations of permanent electrical services and equipment.
- A Qualified Person is trained and familiar with the construction and operation of the equipment and hazards involved as referenced by NEC Article 100.
- Unqualified personnel may be allowed to work in the locked up transformer areas (GA62 Key) under the following conditions:
  - No high-voltage bus work/connections will be exposed and
  - Work is to be performed under constant direction of an EB-approved Qualified Person after being briefed on the type of equipment and hazards in the area.
- Additional electrical guidelines are available and can be obtained from the Owner's Representative or Safety Department.

4.9 WELDING SAFETY

The contractor shall ensure that all electrical connections from an EB power source to the contractor's welding equipment shall be of a proper size and configuration to support that equipment. Each connection made to an EB power source shall be identified with a contractor's name tag at the EB power source and shall indicate the equipment serviced.

Grounding:

- All work return and safety ground connections shall make clean metal to metal contact at both ends of the connections.
- Scrap metal, static straps, ship's ladders, and other incidental ground paths are not acceptable and shall not be used.
- Prior to welding, all welders shall survey the system on which welding will be performed to ensure that there is a direct and solid metal path between the metal on which the arc will be struck and the work return. A qualified welder shall verify that the work return and safety grounds are sufficient in size, placement, and installation for the machines to be used.

Hot work permit(s) should be secured in compliance with Section 7.4 of this manual prior to work being performed.

The contractor shall, at the end of each shift:

- Turn off the welding machine power switch.
- Disconnect all welding leads from the welding machine.
- De-energize the welding machine power lead from the original power source.
- Collect **ALL** unused weld wire/stick.

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4.10 FALL PROTECTION / HIGH WORK

4.10.1 General Requirement for Fall Protection

A full-body safety harness with an approved lanyard is required when working **5ft** or more above ground where there is no protection by guardrails and also when working from manlifts. The lanyard must be kept clear of all Hot Work operations or those involving the use of acid, solvents, or caustics to avoid it from being burnt, melted, or weakened. The strict adherence to requirements for the safe design, construction, and use of staging, ladders, and walking/working surfaces is essential for the protection of personnel.

- When roofing work is to be performed, the contractor shall follow provisions of 29 CFR 1926.501(b)(10) and 1926.501(b)(11).
- Roof access at the Quonset Point Facility requires permission from the Quonset Point RT department at (401) 268-2248.
- Any fall hazard created by a contractor in the course of performing work must be eliminated by either providing a guardrail around the fall hazard or by installing danger tape with the appropriate signage at a minimum of 6ft away from the fall hazard.
- ***When visually restricted by blasting hoods, welding helmets, burning goggles/shields, etc., individuals shall work from scaffolds, not from ladders, except for the initial and final welding or burning operation to start or complete a job, such as the erection and dismantling of hung scaffolding, or other similar, non-repetitive jobs of brief duration.***

4.10.2 Fall Protection Plan

Prior to the start of work, the contractor shall provide the Owner's Representative with a complete fall protection/high work plan for any high work as defined by OSHA regulations CFR 1910, 1915, and/or 1926 in accordance with submittal Section 2.2. This plan must be approved by EB Safety Department prior to beginning work. This plan shall be complete in all aspects including, but not limited to, the following:

- Where and when fall protection is required during the performance of the project
- Grade level control measures for those areas located below the high work locations
- Identification of selected fall protection systems to be utilized
- Certificates of training for all employees involved in high work, indicating proficiency in use and maintenance of selected fall protection systems
- Rescue provisions and contingencies

4.10.3 Roofing Inspections

Roof inspections require a safety monitoring system for steep sloped roofs. Low sloped, flat roofs and those with a guardrail or parapet wall in place would not require use of the safety monitoring system unless the inspector is required to go in the danger zone (i.e., 6ft from leading edge or unguarded hole). Additionally, if tie-offs are available on a steep roof or while working in the danger zone, employees performing inspections shall utilize them.

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4.10.4 Stop the Drop

In accordance with OSHA regulations in 29 CFR 1926.501(c), any work that includes exposing an employee to falling objects will require adequate safety precautions to the worksite in order to prevent injury. ***All personnel including vendors, customers, and all visitors on EB Property and Sites, shall take the following Stop the Drop actions:***

- ***Remove all personnel from below by utilizing appropriate Danger Tape and signs;***
- ***Secure the object to prevent falling, tripping, or dropping; and***
- ***Place a barrier of suitable construction to stop the dropped object hazard, between the hazard and personnel below.***

4.11 TOOLS

All tools, personal or company provided, are to be kept in good repair and used only for the purpose for which designed.

- Defective tools should be immediately removed from service.
- Ensure that guards, shields, and protective devices are in place on any tool or machinery in use.
- All contractors must use Ground Fault Circuit Interrupter (GFCI) protection for portable electrical tools or an assured equipment grounding program (29 CFR 1926 404 b 1), at all locations.

4.12 LASERS

Class 1, 2, and 3R lasers are allowed to be used without prior approval by Industrial Hygiene. Typical devices that fall into these classes are laser pointers and laser levels for construction and surveying. All other classes of lasers (Class 3B and Class 4) must be approved for use by Industrial Hygiene.

Laser users should comply with the recommendations in American National Standard Institute's (ANSI) Z136.1, The Safe Use of Lasers.

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4.13 COMPRESSED GAS CYLINDER

Extreme caution must be exercised when working with industrial gases.

4.13.1 Labeling

- Labels shall be adhered, legibly marked, located on the shoulder of the cylinder, and will be made of material that will withstand environmental exposure. The labels will identify the gas content, delivery date, owner, and contact phone number.
- If this label has been removed, is not legible, or no label is present, the gas cylinders must be removed from EB property.
- If the label becomes illegible, or is inadvertently destroyed or removed while within the facility, the vendor will replace the label.
- Labels will not replace, cover, or conceal any existing labels that are required by Connecticut State Law or Federal law.
- Only cylinders bearing Interstate Commerce Commission (ICC) DOT (Department of Transportation) identification and inspection markings are to be used.

4.13.2 Handling and Storage of Gas Cylinders

- Compressed gas cylinders are ONLY allowed on freight elevators. They are not allowed in any passenger elevators.
- Cylinders are to be properly secured, by means of chains, wire rope, or other suitable methods (such as in cylinder storage racks provided throughout the shipyard, or special portable carts).
- The vendor must remove all cylinders from EB property at the end of the job.
- All cylinders (in storage or use) are to be kept far enough away from welding, cutting and other forms of Hot Work, or are so located such that sparks, hot slag or flames will not reach them. When this is not possible, fire resistant shields (i.e., sheet metal, refrasil) will be used to protect the cylinders. Oxygen in storage must be kept separated from fuel gasses and combustible materials by a minimum of 20ft or by a non-combustible barrier at least 5ft high, having a fire rating of at least one-half hour.

4.14 DIVERS

For all contractor dive operations at EB, a written dive plan must be submitted, one week in advance of the scheduled work, to the Owner's Representative for approval by the EB Dive Supervisor. The contractor dive team shall be briefed by the EB Dive Supervisor prior to the commencement of diving operations.

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5. CONFINED SPACES

EB has many confined spaces throughout its facilities, both shipboard and landside. Confined spaces present potentially life-threatening environments and accordingly, strict compliance with the policy below is mandatory.

All contractors entering confined spaces are responsible for their own confined space safety. Prior to entering any confined space, the contractor shall submit a copy of their confined space entry program to the Owner's Representative along with the qualified individuals for approval by the Marine Chemist. Entry into a confined space is prohibited without approval.

Upon revision to an approved confined space plan, training must recur for those requiring access to the confined space.

Prior to any confined space entry, the nearest confined space rescue team shall be notified.

Groton Shipyard:	*EB Fire Department Groton (860) 433-3333*
Quonset Point Facility:	*EB Fire Marshall (401) 268-2685*
New London Campus:	*EB Security (860) 867-1300*

Plans and a qualified list of individuals shall be submitted annually on company letterhead at least a week prior to the scheduled start of work and must meet all applicable OSHA regulations. Subcontractors entering confined spaces are required to submit their own plan or be added to the Prime contractor's plan. All records are maintained by the Marine Chemist, and personnel entering a confined space shall be verified in compliance by the Owner's Representative prior to entering any confined space. When in doubt, EB will determine if the area is a confined space. Any deviations of the requirements above must be approved in writing by the Marine Chemist.

Definitions of confined spaces or tanks can be found in OSHA 29CFR 1915 Subpart B, 1910.146(b) or 1926.1202.

NOTE: Qualified confined space vendor personnel are never to enter an uncertified tank or uncertified confined space.

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6. INDUSTRIAL HYGIENE

6.1 HAZARDOUS MATERIAL

Hazardous Material (hazmat) is any material that could be a physical or health hazard during normal conditions of use or in a foreseeable emergency. Physical and health hazards include, but are not limited to, products that are flammable, combustible, corrosive, compressed gasses, oxidizers, irritants, or poisonous.

Prior to all hazmat being brought into the facility, Safety Data Sheets (SDS) shall be submitted as per Section 2.2. If a review identifies the presence of a restricted or prohibited substance, the contractor may not be authorized to bring the product into the facility. These materials include, but are not limited to: adhesives, cleaners, coatings, caustics, corrosives, paints, primers, resins, sealants, and solvents. The contractor must be able to provide documented confirmation of training, as required by 29CFR 1910.1200. The contractor shall maintain a copy of SDS on the job site.

Do not store more than 25 gallons (collectively) of any combination of flammable or combustible liquids within shops or buildings. Address all concerns on this subject to the Fire Department.

As it may be required for Resource Conservation and Recovery Act (RCRA) 40 CFR 260 to 279 sampling and analysis to be done to properly characterize the waste stream per Environmental Protection Agency (EPA) regulations, Environmental Resource Management needs to be contacted for any characterization sampling being done to prevent rework.

Any questions pertaining to hazmats can be addressed to Industrial Hygiene (Groton at (860) 433-2811 or Quonset Point at (401) 222-2243).

6.2 USE OF FLAMMABLE OR COMBUSTIBLE MATERIALS

The storage and transport of all flammable or combustible liquids shall be accomplished in containers clearly intended and identified for such use. Approved red safety containers shall be used whenever practical. Containers shall identify the contents and hazards associated in compliance with OSHA. Portable containers shall be removed from the site at the end of each shift. Plastic containers for flammable/combustible storage are unacceptable. Storage on site is not permitted unless it is in a National Fire Protection Agency (NFPA) 30 compliant flammable liquids storage cabinet that has been approved by the Fire Department and Safety. While using, care should be taken to maintain safe distances between incompatible materials such as hydrocarbons and oxidizers or acids and bases.
Painting or the use of flammable material or noxious ***vapors*** (i.e., adhesives) should be managed to minimize unnecessary exposure. Prior to the commencement of work on all jobs involving the use of flammable or combustible liquids, a submittal shall be submitted as per Section 2.2. The plan shall include an exclusion area and is required to be established before any operation begins. Provide proof that all personnel assigned to the job are instructed in the location of fire extinguishers and properly trained in their use. Provide adequate ventilation at all times when conducting indoor operations involving the use of flammable or combustible liquids. During the shift, manage paint, oil rags, or waste in a closed metal container to reduce the danger of spontaneous combustion. Manage all waste in accordance with Waste Management Section 8.2 of this manual.

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6.3 ASBESTOS-CONTAINING MATERIAL

OSHA asbestos regulations require that all persons be informed of the presence of Asbestos Containing Material (ACM) in the area that they work or occupy. Disturbed and damaged ACM poses a significant hazard.

Be advised that floor tiles, thermal system insulation, surfacing materials, underground steam lines and other materials used in construction of buildings may contain asbestos. If any of these materials are damaged or disturbed, or if work involves the disturbance of suspect ACM, immediately Stop, Secure, and Notify the Owner's Representative. Do not disturb any suspect material without prior approval.

If a contractor will work on commissioned ships, please be advised that ships may also contain ACM. Examples of suspect shipboard ACM include, but are not limited to, pipe lagging, electrical cabling, mastic, floor tile, valve packing and gaskets, and electrical stuffing tube packing. Contact EB Ship Management and Industrial Hygiene prior to working any known or suspected ACM.

EB has surveyed a significant portion of the Groton Shipyard Facilities and Quonset Point Facilities for the presence of ACM. Contractors need to ensure that their work will not disturb ACM. Both the contractor and the Owner's Representative must contact EB Industrial Hygiene to assure that the work area has been surveyed and all known asbestos materials identified and, if necessary, removed prior to contractor work in the area.

If work involves the disturbance or removal of ACM, it must be compliant with all applicable asbestos standards and regulations, including OSHA Asbestos standard 29 CFR 1926.1101, State of Connecticut Asbestos Regulations 19a-332a-1 through 19a-332a-16 and 19a-332-17 through 19a-332-23(as applicable), State of Rhode Island Rules and Regulations for Asbestos Control (as applicable), and EPA 40 CFR Part 61 NESHAPS Asbestos Standard.

Prior to performing asbestos abatement, a written work plan developed and signed by a State-licensed asbestos project designer, describing how the work will be done in compliance with all applicable asbestos regulations, shall be submitted for approval as per Section 2.2.

If the contractor should, at any time, encounter suspect asbestos-containing material, immediately stop work that would disturb the suspect asbestos material and bring to the attention of the Owner's Representative. Work in the immediate area shall not resume until EB Industrial Hygiene has evaluated the condition and authorizes the contractor to resume work in the area.

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6.4 LEAD

Some of EB buildings possess the presence of lead in paint. Prior to any disturbance (any act of cutting, grinding, drilling, scraping, sand-blasting, etc.) of painted surfaces, the surfaces must first be sampled for the presence of lead and other metals. If lead is present, 29 CFR 1926.62 is to be followed.

If the project involves the use or disturbance of lead-containing materials such as paints, OSHA's construction lead standard, 29CFR1926.62, must be followed. A work plan shall be submitted and approved as per Section 2.2 prior to the start of work. The plan will describe how the lead-containing material will be worked and the controls that will be in place to protect both contractor and non-contractor personnel. Certification of all OSHA-required training and medical physicals must be submitted as part of the plan.

6.5 CADMIUM

If the project involves the use or disturbance of cadmium-containing materials such as paints, OSHA's construction cadmium standard, 29 CFR 1910.1027, must be followed. Prior to the disturbance of painted surfaces, the surfaces must be sampled for the presence of cadmium and other metals. A work plan shall be submitted and approved as per Section 2.2 prior to starting work. The plan shall describe how the cadmium-containing material will be worked and the controls that will be in place to protect both contractor and non-contractor personnel. Allow adequate lead time to preclude the work from being delayed. Certification of all OSHA required training and/or medical physicals must be submitted to the Owner's Representative as part of the work.

6.6 PCBs

If the project involves the use, disturbance, or handling of polychlorinated biphenyl (PCB)-containing materials, special precautions must be taken. Two such materials in which PCBs may be found are paint and caulk. Prior to the disturbance of painted surfaces, the surfaces must be sampled for the presence of PCB. A work plan must be submitted and approved per Section 2.2. The plan shall describe how the PCB-containing material will be worked and the controls that will be in place to protect both contractor and non-contractor personnel. Certification of all OSHA required training and/or medical physicals must be included in the plan.

6.7 MERCURY

Mercury and its compounds are prohibited from use anywhere in the Shipyard, except as approved by authorized EB waiver. Mercury-bearing instruments and/or equipment shall not be used in manufacture, fabrication, assembly, or testing of any material. In the event of any accident involving mercury contamination of material being furnished on this contract, or the reasonable suspicion of such contamination, the Owner's Representative shall be notified immediately. All subcontractors must be notified of, and must comply with, the requirements of this notice.

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6.8 CRYSTALLINE SILICA

Crystalline Silica is a common mineral found in many naturally occurring and man-made materials. It is in construction materials such as sand, stone, concrete, brick, and mortar. Work that cuts, grinds, drills, or crushes materials that contain crystalline silica (such as stone, rock, concrete, brick, block, and mortar, or when abrasive blasting with sand), creates respirable-size dust particles. Inhalation of crystalline silica dust may lead to a number of long-term diseases.

EB requires contractors to follow OSHA's Construction Silica Standard (29 CFR 1926.1153) when contractors' projects involve the use or disturbance of materials containing crystalline silica. EB requires contractors to take steps to protect workers from exposure to respirable crystalline silica.

Table 1 of OSHA's Respirable Crystalline Silica Standard matches 18 common construction tasks with effective dust control methods, such as using water or using filtered vacuum dust collection systems. In some operations, workers may need to utilize respirators. All EB contractors shall use the control methods in Table 1 of OSHA's Construction Silica Standard as their primary controls measures for eliminating or minimizing airborne crystalline silica dust.

Depending on the size and scope of the project, a written safety plan may be required and will be determined by the Owner's Representative and Safety Department. All safety plans must be submitted through the submittal process in Section 2.2.

6.9 SPILL RESPONSE FOR ABATEMENT

All vendors scheduled to perform abatement work at EB shall submit a spill response plan to Owner's Representative through the submittal process in Section 2.2 no later than five days prior to start of the abatement work. At a minimum, this plan will include steps to:

- Notify the EB Fire Department
- Stop the spill
- Control and identify the area
- Utilize the proper PPE
- Clean up the spill
- Prior to starting abatement work, the vendor shall ensure that a spill response kit is on site and the kit contains necessary supplies to meet the requirements of the Spill Response Plan.

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7. FIRE PREVENTION AND PROTECTION

7.1 REQUIREMENTS

OSHA standards 29 CFR SubPart P 1915.501-509, Fire Protection in Shipyard Employment, apply to all employers, including contractors, engaged in work involving shipyard employment. When working at EB either on vessels, vessel sections, or land-side, contractors must follow the requirements in these standards.

EB maintains a Fire Manual containing EB's Fire Safety Plan and Fire Evacuation Plans, and must be reviewed before beginning work at EB. To access, click on the link below or paste it into the browser and contact the EB Purchasing Department Agent/Buyer or Owner's Representative for the username and password required to access the Fire Manual. https://wwws.gdeb.com/fire_manual/

EB has a Fire Department that is responsible for the fire safety of all evolutions conducted in the shipyard and attendant facilities. It has control over all fire suppression and detection systems and must give approval before any work can be accomplished on these systems.

- Contractors working at EB are required to adopt the EB Fire Safety Manual.
- The Fire Safety Manual must be reviewed with employees and any subcontractor employees before they begin work at EB.
- Contractors shall submit, as applicable, to the Owner's Representative as per submittal Section 2.2, a signed statement on contractor's letterhead stating that they will adopt and adhere to the EB Fire Safety Plan and Fire Evacuation Plans (Fire Manual Section E and Section F) while performing work at EB.
- A separate letter stating that the contractor will provide trained fire watch employee(s) in accordance with OSHA standards 29 CFR SubPart P 1915.501-509 shall be provided, as applicable, to the Owner's Representative as per Section 2.2. The letter must be on vendor's letterhead and list the trained fire watch employee(s).
- All EB facilities and properties are non-smoking and tobacco-free.

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7.2 REPORTING EMERGENCIES

Fire, Medical, Hazmats, Rescue, and Flooding Emergencies

All emergencies, which include fire, medicals, hazmats, rescue, and flooding, shall immediately be reported, including fires that have been extinguished via one of the following methods. It is the responsibility of the contractor to determine the best method for reporting an emergency prior to the start of work.

GROTON

Upon discovery of an emergency onboard a submarine with a Casualty Control (CASCON) System in place, the Game-Well switch should be activated immediately (for every reason except a flooding emergency). The CASCON hand set shall be used to relay information to the operator (this requires pressing the button on the handset when speaking to the operator). This is for all emergencies, including flooding emergencies. If the handset is not functioning correctly, proceed to the next closest CASCON station to communicate with the CASCON operator. If this fails, use one of the following phone methods to communicate the location, type of incident, and any additional pertinent information that is requested by the operator:

- To report an emergency via a company network desk phone, dial extension 3-3333 and communicate the location, type of incident, and any additional pertinent information that is requested by the operator.
- To report an emergency via a cell phone or phone not on the company network, dial 860-433-3333 and communicate the location, type of incident, and any additional pertinent information that is requested by the operator.
- To report an emergency in a building with a fire alarm system:
  - If within a building, proceed to an exit door and pull a fire alarm pull station;
  - Proceed to the exterior to meet the arriving fire department personnel and communicate the following:
    - Location;
    - Type of incident; and
    - Any additional pertinent information that is requested by Fire Department personnel.
- To report an emergency while walking in the shipyard adjacent to buildings with fire alarm systems:
  - Locate the red Game-Well master-box located on the exterior of the building and pull the lever.
  - Remain at the location to meet the arriving fire department personnel and communicate the following:
    - Location;
    - Type of incident; and
    - Any additional pertinent information that is requested by fire department personnel.
- To report an emergency in a building with an EB-issued radio:
  - Switch to the Gates channel to report to Security Dispatch.
  - Communicate the following:
    - Location;
    - Type of incident; and
    - Any addition pertinent information that is requested by the operator.

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- To report an elevator entrapment or an emergency within an elevator:
  - Pick up the emergency phone within the elevator car and wait for the operator to answer the call.
  - Communicate the following:
    - Location;
    - Type of incident; and
    - Any additional pertinent information that is requested by the operator.

QUONSET POINT

- To report an emergency via a company network desk phone:
  - Dial extension 2-2222.
  - Communicate the following:
    - Location;
    - Type of incident; and
    - Any additional pertinent information that is requested by the operator.
- To report an emergency via a cell phone or phone not on the company network:
  - Dial 401-268-2222
  - Communicate the following:
    - Location;
    - Type of incident; and
    - Any additional pertinent information that is requested by the operator.
- To report an emergency in a building with a fire alarm system:
  - If inside a building, proceed to an exit door and pull a fire alarm pull station.
  - Proceed to the exterior to meet the arriving fire department personnel and communicate the following:
    - Location;
    - Type of incident; and
    - Any additional pertinent information that is requested by fire department personnel.
- To report an emergency in a building with an EB-issued radio:
  - Switch to the Security channel to report to Security Dispatch.
  - Communicate the following:
    - Location;
    - Type of incident; and
    - Any additional pertinent information that is requested by the operator.
- To report an elevator entrapment or an emergency within an elevator:
  - Pick up the emergency phone within the elevator car and wait for the operator to answer the call.
  - Communicate the following:
    - Location;
    - Type of incident; and
    - Any additional pertinent information that is requested by the operator

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NEW LONDON

- For all types of emergencies:
  - Dial 911.
  - Communicate the following:
    - Location; and
    - Type of incident.
    - Any additional pertinent information that is requested by the operator.

7.3 HAZARDOUS MATERIALS RELEASES

While it is the responsibility of the contractor to recover any released material created, the Fire Department is the Emergency Responder for all landside occurrences. Should a release occur, the Fire Department and then the Owner's Representative shall be notified immediately of the location, type, and amount of release (Groton Shipyard at 860-433-3333, Quonset (401) 268-2222, or New London Fire Department 911). The contractor shall make every effort to safely mitigate the spread of the release, paying particular attention to storm drains, waterways, etc. The contractor must remain on scene until the arrival of the Fire Department. Upon arrival of the Fire Department, the contractor shall supply any documentation requested to better identify control techniques.

7.4 HOT WORK

ALL landside and facility Hot Work requires the issuance of a Hot Work Permit by the Electric Boat Fire Department.

Shipboard Hot Work performed by vendors is governed by EB procedure MDD-02857, Hot Work Permitting. Subcontractors or vendors hired by EB who are conducting Hot Work on submarines after Initial Criticality or on EB-rented vessels (such as barges, pontoons, caissons, or other floating assets), are responsible for their own Hot Work safety programs and shall comply with all applicable OSHA standards at a minimum. The applicable Owner's Representative must be contacted for the applicable regulations if preforming shipboard Hot Work.

On commissioned or post critical vessels vendors shall receive approval from cognizant Ship's Management and the Ship's Duty Officer prior to beginning Hot Work. Ship's Management has the responsibility of assessing risk, providing comments, ensuring subcontractor employee trainings are satisfactory, and establishing the precautions for the Hot Work. The Hot Work permit is not a record, but is an authorization of the employer certifying that certain safety precautions have been implemented prior to the beginning of work operations.

Hot Work is defined as any activity that could produce flames, sparks, slag, or other hot fragments that might act as an ignition source for any flammable or combustible material in the area. It includes, but is not limited to, welding, flame cutting, torch soldering, heat treating, pipe thawing, the use of powder-actuated tools, torch-applied roofing, and grinding. Hot Work also includes any activity that could generate sufficient smoke or heat to activate a fire alarm detection system.

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The contractor shall contact their Owner's Representative to ensure that the appropriate issuing authority is notified in accordance with the Fire Manual. Upon completion of a precautions checklist, the Permit will be issued on a daily basis to the personnel conducting the specific task. If several employees are working in the same area for the same contractor, the Permit may be issued to their on-site supervisor. Welding, torch cutting and other high-heat operations are not allowed on painted surfaces. Painted surfaces must be stripped back a minimum of four inches on either side of the point of operation, both on the front and back sides of the work piece. All additional combustible material within 35ft of the Hot Work (either horizontally or vertically) must be removed, shielded with metal, or protected with flame-proof covers, fire-resistant guards, or curtains. All fire watches must be trained and in compliance with OSHA ***1915.504***, and must not perform any other duties while Hot Work is in process.

7.5 AREA CONTAINMENT

The contractor is required to provide documentation that the material is compliant with NFPA 701 Test Method 2. The Fire Department will review submitted information and will make the final determination as to the material's acceptability. The contractor is also responsible for supplying fire-resistant cover-up material, such as Refrasil for the job site. Treated canvas blankets are unacceptable. Building portable fire protection shall not be relocated or tampered with. The contractor as required to supply their own fire extinguisher for use with fire watch that is in compliance with NFPA 10.

7.6 FIRE PROTECTION/DETECTION/SUPPRESSION SYSTEMS

All shutdowns, additions, alterations, or modifications to Fire Protection/Detection/Suppression Systems (i.e., fire alarm, sprinkler, chemical agent discharge systems, etc.) must be reviewed and approved by the Fire Department prior to its implementation. Sprinkler system and fire main control valves are under the exclusive control of the Fire Department Groton Shipyard, Fire Department New London or Security/Fire Marshal at Quonset Point Facility. Once it has been determined that a system must be shut down, contact must be made with the Fire Department Dispatcher Groton Shipyard at (860) 433-3617 or Quonset Facility Fire Marshal's Office at (401) 268-2685, New London (860) 625-3038. A Fire Department representative will manage all condition changes, and deviations from this procedure may result in the contractor's removal from the Facility.

Once a system is ready for restoration, contact the Fire Department Dispatcher Groton at (860) 433-3617, Quonset Security (401) 268-2685, or New London (860) 625-3038, at which time a Fire Department representative will be assigned to operate the appropriate control valve(s).

Fire alarm, detection, and chemical agent discharge systems may require both Fire Department and the Fire Alarm Repair Section of Maintenance (Groton - D501; Quonset Point – Fire Marshal's Office D967) interface. Work will not begin on these systems until both groups have ensured the safe status of the system.

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7.7 ELEVATORS

In accordance with the American Society of Mechanical Engineers (ASME) A17.1/CSA B44-2019, only licensed elevator personnel and trained firefighters will operate equipment and its associated parts, rooms, spaces, and hoistways, where located in or adjacent to a building or structure with the following:

(a) Hoisting and lowering mechanisms, equipped with a car, that move between two or more landings;
(b) Elevators power-driven stairways and walkways for carrying persons between landings. This equipment includes, but is not limited to, escalators and moving walks; and
(c) Hoisting and lowering mechanisms equipped with a car that serves two or more landings and is restricted to the carrying of material by its limited size or limited access to the car. This equipment includes, but is not limited to, dumbwaiters and material lifts.

8. ENVIRONMENTAL RESOURCE MANAGEMENT (ERM)

EB's environmental permits and procedures require all personnel to adhere to specific environmental requirements and regulations. This manual and the required orientation video contain the requirements and training specified in those permits. The Owner's Representative will hold the contractor, all contractor employees, and all subcontractors responsible for being familiar with and following the requirements applicable to the job:

8.1 POLICY

EB recognizes environmental protection as among the highest of its priorities. To uphold that pledge, ERM has generated the following statements under their policy to act as the focal point for all EB employees, contractors, and subcontractors:

- Protect the environment and minimize or prevent pollution;
- Fulfill environmental compliance obligations; and
- Continually improve to enhance environmental performance.

8.2 PRE-WORK COMMUNICATING AND TRAINING

- Prior to contractor work, the contractor must complete a Project Environmental Impact Survey and submit the survey to the Owner's Representative.
- Project Environmental Impact Surveys should be provided to ERM for review and comment prior to the project kickoff meeting or start date to ensure that project plans are compliant with applicable policies, procedures and regulations.
- The contractor must submit SDSs to the Owner's Representative who will have them sent for approval prior to the product(s) being brought on site. No substitutes are allowed without prior written approval. The contractor will keep records of material usage as directed by the Owner's Representative and ERM. Please see sections 2.2 and 6.1 for more information.

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8.3 AIR EMISSIONS

- Abrasive Grit Blasting: All abrasive grit blasting will be conducted in an enclosure served by a dust collection system (baghouse). The contractor will provide manufacturer's specifications for dust collection systems to the Owner's Representative for approval per Section 2.2 no later than 30 days prior to planned abrasive blasting.
- Paint/Adhesives: All paints, solvents, and adhesive SDSs will be submitted to ERM prior to the project start date. Many of these products are considered air toxics and must be managed appropriately, including keeping all products covered when not actively being used.
- Fuel Burning Equipment: The contractor shall include on the Project Environmental Impact Survey any fuel-burning equipment, other than transportation vehicles, intended for use. Connecticut law (R.C.S.A. 22a-174-18) prohibits vehicles of all kind from unnecessary idling for more than three minutes. Rhode Island law (Air Pollution Control Act No.45) restricts diesel engine idling for more than five minutes. Refer to the applicable act for details regarding provisions for weather extremes, certain service vehicles, and health-related conditions.
- Dust-Control Practices: Dust is not allowed to be generated without an approved method of control in place. A plan must be submitted as per Section 2.2.
- Other: Any emission source not specified above shall also be listed on the Survey.

8.4 WATER DISCHARGES

- All wastewater generated directly from, or as a result of contractor work, including potentially contaminated stormwater runoff from work areas, must be captured and collected unless approval from ERM has been granted to discharge wastewater under EB's existing water permits.
- New discharges may take up to six months following application submittal, so be sure to notify ERM as far in advance as possible to mitigate delays.
- Work areas shall be kept free of dust, debris, etc., using frequent housekeeping practices, such as sweeping or vacuuming work areas after tasks and prior to the end of work shift.
- Drop cloths, catches, drip pans, absorbent pads, booms, etc., shall be utilized wherever possible.
- Cleaning of vehicles, equipment, or work areas with chemicals, water, or pressurized air is prohibited without a control plan approved by ERM.
- Concrete mixing and testing must be completely contained to prevent runoff to storm drains or waterways. Concrete truck and equipment washing is prohibited without a control plan approved by ERM.
- All equipment must be kept in proper working order to prevent leaks of oils, coolants, etc.

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8.5 SPILL RESPONSE, CONTROL, AND COUNTERMEASURES

Release Reporting: Immediately notify appropriate emergency responders of any spill, leak, or release of any chemical, oil, or waste water, including sewage:

Groton Shipyard:	*EB Fire Department Groton (860) 433-3333*
Quonset Point Facility:	*EB Security (401) 268-2222*
New London Campus:	*EB Security (860) 867-1300 or*
Other facilities:	*As directed by Owner's Representative, or 911 for local emergency response.*

Examples of spills include, but are not limited to, burst hydraulic lines, bonding material, solvents, paint, lubricants/grease, other oils, chemicals, coolants, and other hazardous materials. Releases into secondary containments are spills and must be reported.

- Maintain appropriate immediate spill response materials (spill absorbent, pads, etc.) near work areas for spills of materials used during the work process.
- Filters, berms, and the like shall be utilized to prevent entrance of spilled liquid or solid materials into storm drain systems and adjacent waterways.
- All oil, chemical, and wastewater containers, including tanks, must be double-walled or stored under cover from storm water and provided with secondary containment sufficient to contain 110% capacity of the largest stored container, regardless of actual container content volume, as soon as it arrives on site.
- Some type of containment must be used when handling or transferring petroleum based products, chemicals, or hazardous liquids. Handling containment may vary based on project, and examples include, but are not limited to, spill pads, trays, buckets, structured containment, etc. Handling should only be performed indoors whenever possible and never outdoors during inclement weather.
- Containments must be inspected frequently for any wear, cracks, or leaks. In the event of any damage, the containment must be immediately swapped with an approved one.

8.6 WASTE MANAGEMENT

- Waste is a material that can no longer be used for its intended purpose or is otherwise intended for disposal.
- EB will be the generator and will direct/arrange management of all hazardous and regulated waste. The contractor will support characterization, labeling, handling, and storage of hazardous waste as directed by the Owner's Representative and ERM.
- EB will direct/arrange the management of industrial wastes, wastewater, and excavated soils (see Section 8.7) unless otherwise approved by the Owner's Representative and ERM. If the contractor is authorized to arrange disposal of waste, ERM must review and approve disposal arrangements prior to the start of work.
- All waste accumulation containers (drums, dumpsters, roll-offs, etc.) shall be in good condition, leak-proof, and have watertight covers to prevent storm water accumulation and contaminated runoff. Covers will remain in place except for adding and removing waste.
- Label all containers immediately before the first waste is added and ensure that only compatible waste is placed in the container.

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- Frequently inspect the containers for damage, i.e., cracks, holes, or wear. Immediately report any leaks as spills (see section 8.5).
- Any container that will not close properly, or is damaged, should be removed from service and immediately reported to ERM.
- Dispose of all empty containers in appropriately labeled dumpsters/bins. Empty is defined as material having been removed by all available practical methods (e.g., draining, pouring, wiping, or scraping). Please contact ERM if unsure.
- Remove unused materials from the Shipyard upon the completion of work.

8.7 SOIL MANAGEMENT

- All plans for soil management must be approved by ERM and the Owner's Representative prior to disturbing the soil.
- All excavated soils must be returned to the original excavation or managed for offsite disposal as potentially contaminated, unless otherwise authorized by ERM.
- Soil to be removed from the site whether for relocation or disposal must first be tested (coordinated by ERM) for proper waste management characterization.
- Stockpiles of soil or other material shall be placed on impervious material, such as a tarp, and completely covered with a waterproof cover to prevent storm water runoff, or incorporate another means of sediment and erosion control approved by ERM.

8.8 PROJECT PERFORMANCE AND COMMUNICATION

- The contractor must notify and obtain concurrence from the Owner's Representative and ERM for any new or changing information, equipment, processes, etc., relevant to potential environmental impact. This includes, but is not limited to, areas of concern outlined in the Project Environmental Impact Survey.
- Contractors are invited and encouraged to communicate with ERM regarding any relevant issue pertaining to the environment or EB's environmental management system, of which this manual and associated information and requirements are a part.
    - Communication relative to a specific project or that may include sensitive information should be made through the Owner's Representative or ERM representative that reviewed the Project Environmental Impact Survey.
    - General questions, comments or suggestions pertaining to the environment or EB's environmental management system may be communicated directly to ERM by calling 860-433-1144 or emailing Environmental D503@gdeb.com (Groton); or calling 401-268-1144 or emailing Environmental_D974@gdeb.com (Quonset).
- Continuous improvement is one of EB's and ERM's top priorities and requires commitment and accountability from everyone. As contractors for EB, we strongly encourage contracted personnel to endorse our environmental policy and be proactive by incorporating good environmental practices into daily activities here at work and at home. If there are any questions, do not hesitate to reach out to the Owner and ERM representatives and remember that protecting the environment is everyone's responsibility.

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Project Environmental Impact Survey (Rev. 04/23/18)

Location: ☐ Groton ☐ New London ☐ Quonset Point ☐ Other_____

Project Description: **EB Project Manager:**	**Estimated start date:** **Estimated completion date:**

AIR EMISSIONS

☐ Additional documentation attached

Will **fuel-burning equipment** be brought on site? (except transportation)	☐ YES ☐ NO	If yes, list type:(e.g.,: 75 KW Generator, gas air compressor)
Will **abrasive grit blasting** be performed?	☐ YES ☐ NO	If yes, list type and estimate amount of grit to be used:
Will there be **use of paints, coatings, solvents, or adhesives?**	☐ YES ☐ NO	Estimated amount to be used:
Will **demolition** be performed?	☐ YES ☐ NO	

WATER POLLUTION PREVENTION

☐ Additional documentation attached

Any water **discharges** anticipated?	☐ YES ☐ NO	If yes, request meeting with ERM.
Will there be equipment or containers containing ⟨ **55 gallons of <u>any type</u> of oil**? (excluding transportation vehicle fuel supply tanks)	☐ YES ☐ NO	If yes, provide the following information:

Oil type	Equipment/ Container	Max capacity	Intended storage location	Secondary containment method
				☐ Containment provided ☐ Double-walled tank
				☐ Containment provided ☐ Double-walled tank

Will any **soil excavation** be conducted?	☐ YES ☐ NO	If yes, provide the location of soil and anticipated volume:
Is any waterfront work required beyond the Mean High Water Mark? (e.g., dredge, dock maintenance, rip rap repair)	☐ YES ☐ NO	If yes, request meeting with ERM.

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GENERAL DYNAMICS
Electric Boat

Project Environmental Impact Survey (Rev. 04/2018)

WASTE MANAGEMENT

☐ Additional documentation attached

List anticipated generation of waste (other than trash):

Waste Material	Waste Container Size/s	Accumulation Frequency *"X" per day/week/month*	Total Volume Anticipated	Storage location/s

PROJECT POINT OF CONTACT INFORMATION: *(provide point of contact for all vendors and subcontractors)*

Vendor	Name	Office	Mobile	Email
EB Project Manager				

Environmental Resources Management:

The environmental impact information provided has been reviewed by Environmental Resources Management. Comments or concerns existing at time of review are noted below:

Reviewed by (Sign):	**EB Badge**	**Date:**
(Print):	**Phone:**	**Email:**

Contractor/Project Manager/Work Administrator:

Notify Environmental Resources Management of any deviation from by the provided survey data, either before or after commencement of work.

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9. FACILITIES

9.1 INTERRUPTION OF EXISTING PLANT SERVICES

Prior to performing work requiring interruption of existing services (i.e., shutdowns) the contractor must obtain Owner's Representative approval.

- The contractor shall supply all supervision, personnel, tools, tags, locks, chains, grounds, and other equipment and supplies required.
- All lockout/tagout and all procedures shall be as required by OSHA and other sections of this manual.

9.2 PIPE

Pipe, tubing, fittings, and nipples are not permitted on site without prior approval from EB Quality Assurance (Groton Shipyard Department 322 or Quonset Point Facility Department 935). The contractor must coordinate with the Owner's Representative to obtain the approval (refer to MDD-00306). The contractor shall not disconnect or remove infrastructure without approval from the Owner's Representative.

9.3 EXCAVATION

Approval by the Owner's Representative is required prior to performing any excavation. A competent person shall demonstrate an understanding of OSHA requirement for: overhead utilities, underground utilities, soil classification, ground water, surface water, traffic, shoring protection systems, fall protection needs, ladders and equipment needs.

For all projects that involve excavation, a detailed underground utility sketch or drawing will be developed by EB Facilities prior to starting work. The excavators performing the work must contact either Connecticut's Call Before You Dig (CBYD) or Rhode Island's Dig-Safe to mark off and locate public utilities. The excavation area must be surveyed to locate underground utilities with ground penetrating radar (GPR). Field verify the underground utility drawings to the utilities located by GPR.

Numerous underground utilities exist at the facilities, for which exact information does not exist. Extensive hand digging or other soft excavation techniques may be required. Excavation with power equipment always requires extreme caution.

If any utilities are damaged or the excavator encounters unknown utilities, abnormal or hazardous conditions, discolored soils, soils with discernable odor, or heavily stained concrete, STOP, SECURE, AND NOTIFY the Owner's Representative.

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When road plates are required to cover an excavation or roadway area, the road plate perimeters are to be painted to identify the ***trip*** hazard.

For excavations greater than 4ft, or where oxygen deficient or hazardous atmospheres may exist, the contractor shall perform atmospheric testing before personnel can enter the excavation. Shoring, ***sloping, or shielding*** is required for excavations greater than 5ft.

Location	Requirements
Groton, CT	MDD-00804, *Excavation Procedure*
New London, CT	ENV-NLON-04, *New London – Soil Management Plan*
Quonset Point, RI	MDD-01233, *Procedure for Excavation / Demolition*

For the latest copy of the document, contact the Owner's Representative

10. RADIOLOGICAL/RADIATION SAFETY

10.1 RADIOLOGICAL AND RADIATION SAFETY

- All contractors and their employees will be required to complete a Radiological Controls Awareness (RADCON) briefing prior to commencing work at both Groton and Quonset Point.
- Work may not be started until concurrence by Radiological Services, D438, for the particular project and/or area is given to the contractor by the Owner's Representative.
- During a radiological event, the shipyard whistle will blow and an intercom will announce instructions. Personnel are expected to shelter in place. If outside, personnel are required to seek shelter inside a building.
- Roof access at the Quonset Point Facility requires permission from the Quonset Point Industrial Radiography Inspection Group, D937 at (401) 268-2248.

10.2 RADIOLOGICAL BOUNDARIES

- Never enter posted radiological areas at EB unless trained and authorized by Radiological Services, D438, or the Radiation Protection Office, D320, at EB.
- Violations of posted radiation boundaries could result of unmonitored radiation exposure and the spread of radioactive contamination.
- Radiation area boundary ropes at EB are yellow and magenta in color (Figure 10.1).
- Radiation area signs (Figure 10.2) will display a magenta three-bladed propeller (trefoil) on a yellow background and will identify the area and hazards.
- Entry into posted industrial radiography areas (Figures 10.3 and 10.4) is prohibited, unless specific authorization has been granted by the radiographer-in-charge and is controlled through a badge exchange and entry log.
- ***Certain building walls in Groton are considered radiological boundaries and are posted with signs. No work is to occur on these walls without prior authorization from the Owner's Representative.***

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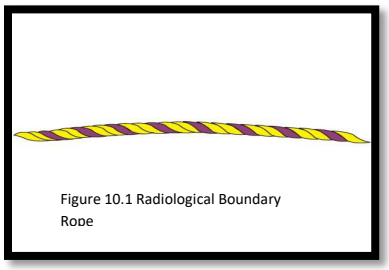
Figure 10.1. Radiological Boundary Rope



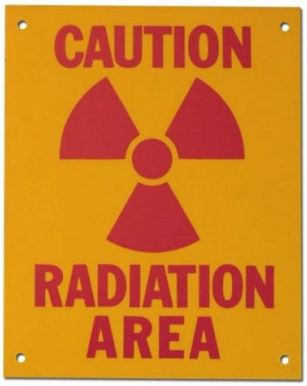


Figure 10.2. Radiation Area Sign

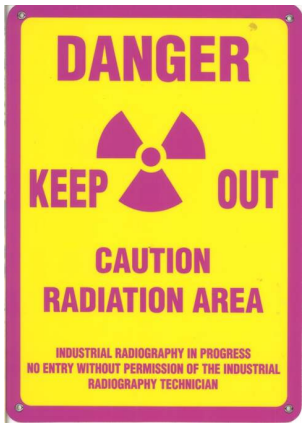


Figure 10.3. Radiography Radiation Area

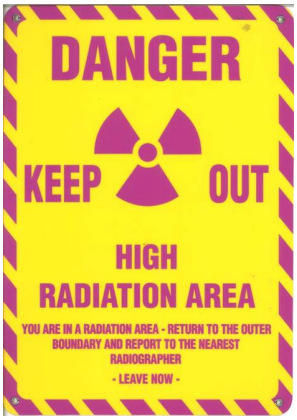


Figure 10.4. Radiography High Radiation Area

10.3 RADIOACTIVE MATERIALS

- Yellow-colored plastic film (wrapping) materials and yellow plastic bags are prohibited for use in the shipyard for contractor work unless specifically authorized by Radiological Services, D438.
- Radioactive material at EB is typically wrapped or contained in yellow herculite or plastic.
- Yellow protective clothing is worn in posted areas, where required.
- Radioactive material is accounted for and controlled in accordance with formal procedures.

10.4 CONTRACTOR RADIOACTIVE SOURCES AND X-RAY PRODUCING DEVICES

- A contractor who plans on using a radioactive source on site must submit a plan and receive approval as per Section 2.2 (a minimum of 48 hours before arriving on site).
- The plan shall include the type of radiation produced, the type of device/radioactive source, locations, duration, and provide training information.
- The contractor must be licensed or maintain a current registration, and is ultimately responsible for the source of radiation.

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- The contractor may post radiation boundaries based on their Nuclear Regulatory Commission (NRC) license requirements unless they are conducting industrial radiography, then boundary ropes and signs will be provided by EB D321. When using any non-industrial radiography source, the contractor must attend a briefing held by the EB Radiological Services, D438, prior to using a radioactive source on site per MDD-01674.
- A radiological control technician will perform a routine survey of any non-industrial radiography source and may perform periodic oversight surveillance during the work. For industrial radiography work being conducted on EB property, the contractor must attend a briefing held by the EB Radiation Protection Office D320, prior to using a radioactive source or X-Ray-producing device.
- A radiation safety officer or radiography technician will perform a routine survey of the industrial radiography source of radiation and may perform periodic oversight surveillance during the work.
- The radioactive source or X-Ray device shall not be left unattended at any time, and personnel must be kept away from the source of radiation as much as possible. The contractor shall remove the device from the site immediately at the conclusion of the work and inform EB Radiological Services, D438, or EB Radiation Protection Office, D320, that the job is finished.
- If the project is to run for multiple days, inform the EB Radiological Services, D438, or Radiation Protection Office, D320 upon arrival to the facility.

11. HOISTING, LIFTING, AND CRANES

11.1 HOISTING/CRANE OPERATIONS

Non-Crane Maintenance/contractor personnel may not operate any EB crane or hoisting equipment without written approval. Contractor personnel shall be hoisted or lifted only by approved equipment designed for such application, as defined by ASME standards.

The crane check sheet (Contractor Crane Review Sheet, section 11.7) shall be filled out prior to allowing the contractor to use the equipment on EB property. Concerns noted by EB shall be adjudicated prior to the start of work. Any deviation from the below guidelines can only be authorized by EB Lifting and Handling Management/Engineering personnel via the Owner's Representative. Contractor cranes operating on EB property shall follow the Contractor Crane Program Guidelines in Section 11.2.

11.2 CONTRACTOR CRANE PROGRAM GUIDELINES

Cranes that are not the property of EB are subject to the following quality assurance requirements, as applicable:

- A lift plan shall be submitted per Section 2.2.
  - Chafing gear must be used where synthetic ***slings*** or wire rope slings meet sharp edges.
  - Synthetic sling/grommet D:d ratios and minimum hardware widths must be preserved.
  - Approximate center of gravity (CG) and weight of lifted objects must be known along with the level of risk of the CG shifting during lifting (contents sliding in a container).
  - Taglines ***shall be used to control suspended loads as necessary***.
  - If custom ***rigging*** gear is being used (i.e., column rig), the gear must be certified and load tested as required: ASME B30.9 (Slings)/B30.26 (Rigging Hardware) / B30.20 (Below-the-Hook Lifting Devices.

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  - Consider whether rigging gear is to be attached and detached safely before and after the lift (i.e., is a scissor lift required or is ladder access feasible and safe?).
  - Bolted-on lifting attachment points must be evaluated for structural adequacy, and fastener torque values must be provided for bolted lifting attachments in direct tension.
- The equipment must meet the applicable sections of the current OSHA standards that govern the type of work to be performed (i.e., CFR 1910.179, CFR 1910.180, CFR 1926.1400, 29 CFR 1917, 29 CFR 1918, ASME B 30.23, CFR 1910.184, etc.).
- A written statement that the equipment meets the applicable OSHA standards is required. (Third party certification may be used to meet this requirement.)
- Third-party crane certification is required.
- The operator shall have a current State Crane Operator License.
- A Connecticut/Rhode Island (for Groton/Quonset Point, respectively) crane operator license is preferred. However, other valid crane operator State licenses will be considered.
- For contractors working at Quonset Point, a valid Rhode Island hoisting license is required to operate any lifting and handling machinery.
- The crane is subject to inspection by EB (Lifting and Handling) personnel at any time, and any number of times while the equipment is on site.
- The crane inspection can include, but is not limited to, items such as: general housekeeping, ropes, operator manuals, brakes, clutches, outriggers, boom condition, swing system, blocks, jibs, tires, safety equipment, lights, etc. Rigging gear can be subject to a similar inspection.
- All rigging gear shall be in good condition in accordance with ANSI and OSHA requirements.
- Lifting evolutions may be observed by EB personnel for proper execution and safety concerns.
- Notify Radiological Services, D438, at (860) 433-5019 of any lifts over radiological boundaries or marked containers.
- A designated Rigger-in-Charge (RIC) shall be identified and the person shall understand that he/she has the overall responsibility for the safe initial crane setup, the lifting evolution, and crane breakdown/stowing.
- In the event of a crane or rigging accident, the operator shall secure the load, stop all work and notify their Owner's Representative, as well as Groton, D507, at (860) 433-2266 and Quonset Point, D962, at (401) 268-2210.

11.3 DEFINITIONS

Operating Envelope – It is assumed that there is an operating envelope around any lifting and handling operation and inside the envelope are the following elements:

- The crane or rigging gear;
- The crane operator or rigging gear user;
- The riggers, signal person, and crane walker;
- Other personnel involved in the operation (e.g., supervisor, mechanic, tag line handler, engineer, etc.);
- The rigging gear between the hook and the load;
- The load;
- The crane's or load's supporting structure (e.g., ground, rail, pad-eyes, building structure, etc.);
- The lifting or rigging procedure; and
- The load's rigging path.

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Accident – A crane accident occurs when any of the elements in the operating envelope fails to perform correctly, including operation during maintenance or testing, resulting in the following:

a) Personnel injury or death. Minor injuries that are inherent to any industrial operation, including strains and repetitive motion-related injuries, shall be reported to the normal personnel injury-reporting process of the activity in lieu of these requirements;
b) Material or equipment damage that requires the damaged item to be repaired because it can no longer perform its intended function. This does not include superficial damage such as scratched paint, damaged lagging, or normal wear on rigging gear;
c) Dropped load (incudes any part of the load or rigging gear and any item lifted with the load or rigging gear);
d) Derailment;
e) Two-blocking;
f) Overload. (This includes load tests when the test load tolerance is exceeded.); and
g) Collision (avoidable contact between the load, crane and/or other objects). Avoidable contact is defined as contact that would have been prevented with proper lift planning and execution. Simply briefing that contact will occur is not sufficient.

Component Failure - (i.e., motor burnout, gear tooth failure, bearing failure) is not considered an accident solely due to material or equipment damage unless the component failure results in damage to other components (i.e., dropped boom, dropped load, rollover, etc.). Items 11.3.c, d, e, f, and g are considered accidents even though no material damage or injury occurs.

Once EB Lifting and Handling Management/Engineering is satisfied that the lifting evolution can proceed, a sheet of paper will be given to the crane operator indicating a SAT review has been conducted. The sheet of paper will contain the following information: line one, “EB”; line two, “allowed to operate”; line three, “Expires On”; line four, date of expiration “xx-xx-xx”; line five, a statement such as; “Contact department 507 at (860) 433-2266 (Mark Bailey or Doug Petrillo) if an extension is needed. Please do so prior to expiration. Thank you”.

11.4 MANLIFTS, SCISSOR LIFTS, AND FORK LIFTS

Contractor personnel may supply their own forklifts for use on EB Facilities. An agreement with the Owner’s Representative shall take place concerning the use of the forklift prior to bringing it on site. Forklifts must be inspected by the operator before each use. Contractors shall utilize their own inspection forms for their forklifts. Contractor operators must be qualified to operate each type of forklift their company brings on site prior to first use. All contractor forklift operations shall follow OSHA 1910.178 or OSHA 1926.602, as applicable, and the ANSI/ITSDF B56 Forklift Safety Standards. ***For Quonset Point only, contractors operating Mobile Elevated Work Platforms (MEWP)s shall also adhere to spotter requirements per EB Safety Manual D-05, Section 5.G.13 and 15.***

Contractor personnel may use EB MEWPs, provided that the contractor has been trained and qualified on each type and group of lift IAW ANSI/SAIA A92.22, has provided indemnification Purchase Order (PO) supplement and has EB permission.

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MEWPs shall be used in accordance with the ANSI/SAIA A92 Series including:

- Ensure that the area is properly barricaded and adequate caution signs are in place. ***(Mark out an exclusion zone below the basket on type 3B MEWPs [Aerial lifts] and consider lanyards to properly secure tools and radios to, "STOP THE DROP").***
- ***Spotters shall be used to assist qualified operators with travel path clearances.***
- Do not use auxiliary scaffolding, ladders or similar items on the work platform to extend the normal reach of the work platform. Employees shall always be standing firmly on the floor of the work platform.
- Do not use MEWPs as a personal elevator. A plan must be submitted to and approved by EB Safety Department per Section 2.2 and be approved prior to exiting an MEWP work platform to work on an elevated work surface.
- Do not operate the machine in high winds or during electrical storms.
- Do not operate a machine rated as "indoor" in an area where it could be exposed to wind forces.
- Do not operate the machine near electrical wires.
- Do not block the foot pedal to the on position as the cutoff switch control is within the foot pedal; also, unit throttle control is lost.
- Make sure platform guardrails are properly installed and gates or openings are closed.
- Ensure that all occupants' safety harnesses are on and properly attached. Lanyard(s) shall **not** be secured to any adjacent pole, structure, or equipment. Secure only at the Original Equipment Manufacturer (OEM)-designated anchor points.
- Do not continue to operate the machine if any defect or abnormality in its operation is noticed. Correct any malfunctions before further operation.
- The operator shall immediately report to his or her supervisor any defects or malfunctions, which become evident during operating. Any defects or malfunctions that affect the safety of operations shall be repaired prior to continued use of the work platform.
- Altering, modifying or disabling safety devices or interlocks is prohibited.
- Do not violate radiation zones (i.e., operate the boom so that it will not break radiological boundary planes). If assigned to work near a roped-off area, personnel will be required to check with Radiological Services, D438, for a monitor to survey the area.

Requirements for EB to Lift Contractor's MEWPs:

- If the contractor's MEWP needs to be lifted by EB riggers, the contractor must supply the Project Manager the manufacturer's rigging diagram showing boom orientation, CG, pick points, and lifting weight.
- If the MEWP manufacturer doesn't supply the rigging diagram, the contractor shall provide a Professional Engineer (PE)-engineered rigging arrangement containing the above listed information.
- All MEWPs brought onto MEWP property shall have all inspections required by the applicable ANSI/SAIA A92 series document performed by the party specified by the same document.

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11.5 WORK IN, NEAR, OR ADJACENT TO CRANES

All work in, near, or adjacent to cranes requires extra safety precautions. This includes overhead bridge cranes, portal cranes, and jibs.

The Owner's Representative shall brief contractor supervision of possible crane-related safety hazards in areas of the project. Contractor supervision shall brief all personnel prior to arrival at the actual job site, with a general overview of the job to be performed and possible crane-related safety hazards in the area. A second briefing shall be conducted at the job site, prior to the start of work. The purpose of this briefing will be to reiterate the hazards identified in the initial briefing and to demonstrate the precautions to be employed while working near the hazards and potential hazards of the work area. This briefing will be attended by all contractor personnel assigned to perform tasks, contractor supervision, Owner's Representative, and EB Rigging Department Supervisor. When the briefing reveals that the performance of the job will interfere with the operation of the crane, the EB Rigging department will determine the action required.

Notify the project manager and EB Rigging department upon completion of the job. The EB Rigging department will coordinate the removal of the temporary crane stops and caution tags from the affected cranes.

11.6 INSTALLATION IN, NEAR, OR AROUND CRANES

All installations (e.g., conduit, pipe, steel, etc.) permanent or temporary, in, near, or adjacent to crane ways must be checked for clearances from the cranes. All OSHA-mandated clearances must be maintained, typically three inches above and two inches on the sides. All installations within twelve inches of a crane system or of questionable clearance **must be approved** by Crane Engineering prior to installation and after.

11.7 CONTRACTOR CRANE REVIEW SHEET (SEE PAGE 42)

11.8 VENDOR LIFT PLAN REQUIREMENTS

All deliverables to EB shall comply with all EB standards and/or the applicable portions of 29CFR1910, 29CFR1915 and 29 CFR1926 standards. Unless approved in advance by EB, all portable equipment that is designed to be crane-liftable shall:

- Be provided with lifting padeye for overhead lifting;
- Each padeye and attachment shall be sized to handle one half the maximum full weight of the component;
- Padeye and weld design shall provide a design safety factor of three based upon material yield strength;
- Padeye shall be located above the center of gravity of the unit; and
- Pads shall be designed to accept a Crosby Group Inc., G-209, screw pin shackle of appropriate size.

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Contractor Crane Review Sheet

(Rev E, 10/6/11)

Date:_____ EB Primary Contact:_____

Prime Contractor:_____

Crane Contractor (if different from Prime Contractor):_____

Crane Operator:_____ Operator Cell #:_____-_____-_____

Operator State License #:_____ License Type:_____ License Exp. Date:_____

Crane Mfg.:_____ Type:_____ Year:_____ Model #:_____ Serial #:_____

- □ Contractor familiar with the Contractor Safety, Health and Regulations Manual (if checked – ok, if not checked – tell vendor to check with their management and advise EB Project Manager)
- □ Verbal verification we tell the crane operator to stop, safely secure, and notify EB Primary Contact in the event of a crane accident.
- □ The EB Contractors' Orientation Video has been seen.
- □ The operator has prior operating experience on this type of equipment.
- □ Operator verification there are ***NO*** crane safety devices bypassed.

3rd Party/OSHA Certification Date:_____ 3rd Party/OSHA Certification #:_____ To What:_____

□ Written current monthly OSHA (hook and cable) inspection

- □ Written Pre Use Inspection
- □ Fire extinguisher in cab(s)
- □ Electrocution Plaque Posted
- □ Warning Horn
- □ Equipment free of leaks
- □ Operator's manuals, load charts, and range diagrams available
- □ Load moment system
- □ Anti-two-block (Boom / Main / Aux.)
- □ Level bubble(s)
- □ Block(s) ID plaques (cap. & wt.), safety latches
- □ Boom angle or radius gauge provided
- □ Notify Radiological Services of any lift over radiological boundaries or marked containers.

General Housekeeping (Poor / Fair / Good / Excellent)

Name of Rigger-In-Charge: _____ Rigging gear: _____

- □ Rigger in charge verification of hand signal knowledge for the crane being used.
- □ Illustration of hand signals posted, job site or crane.

Rigger Communication:

- □ Hand
- □ Radio
- □ Phone

Lift:_____ Location:_____ Are power lines near? (Y / N)

Lift plan/pre job briefing? (Y / N)

Weather conditions (860) 449-8921, Groton/ airport weather:_____Crane wind limitation:_____

Comments / Observations:

Post Script:_____

OK to operate until:_____ Review by:_____

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12. CODE OF CONDUCT

All vendors are required to comply with Equal Employment Opportunities (EEO) policies while conducting business on this facility. Specifically, contractors must ensure that employees under their direction realize that:

- Harassment on the basis of sex is prohibited by Title VII of the Civil Rights Act of 1964, as amended, and by the Connecticut Fair Employment Practices Act, including any unwanted or unsolicited conduct, communication of a sexual nature, or conduct based on gender with or without sexual conduct or sexual harassment that adversely affects a person's conditions of employment or working environment. Contractors are reminded that sexual harassment in any form will not be tolerated at EB.

- Prohibited harassment is verbal or physical conduct that denigrates or shows hostility or aversion toward an individual because of his/her race, color, religion, national origin, age, veteran status, physical or mental disability, or gender, with or without sexual conduct, including same-sex harassment, and that has the purpose or effect of creating an intimidating, hostile, or offensive work environment, unreasonably interfering with an individual's work performance, or otherwise adversely affecting an individual's employment opportunities. Harassment, for any reason, is prohibited by EB.

- Offensive material is not tolerated at EB. All contractors are instructed to maintain a continuous review of their work areas to ensure that no material, graffiti, or other displays exist that could be considered offensive and make employees feel uncomfortable. Examples of offensive material include objects, pictures, videos, images, jokes, or text that contains material that is derogatory to individual or groups of individuals. Offensive material includes, but is not limited to, sexually oriented graphic displays/text or anything that denigrates or shows hostility towards others based on any reason that includes, but is not limited to, race, color, gender, sexual orientation, age, national origin, religion, disability, or status as a Vietnam-Era veteran or other eligible veteran status. Simply stated, the accessing, retrieval, creation, viewing, storage, or transmittal of offensive material will not be tolerated at any time, even during non-working hours.

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13. EMERGENCY NUMBERS & IMPORTANT POINTS OF CONTACT

	Groton Shipyard	Quonset Point	New London
EMERGENCY	(860) 433-3333	(401) 268-2222	911
FIRE DEPARTMENT	(860) 433-3333	(401) 268-2222	860-867-1300
RAD CON	(860) 433-3322	(401) 268-2248	
SECURITY	(860) 433-5530	(401) 268-2410	860-867-1300
SAFETY	(860) 433-2811	(401) 268-2221/(401) 268-2412	
INDUSTRIAL HYGIENE	(860) 433-2811	(401) 268-2243/(401) 268-2453	
ENVIRONMENTAL	(860) 433-2791	(401) 268-2717	860-433-2791
AMBULANCE	(860) 433-3344	(401) 268-2222	860-867-1300
Fire Dept. Hot Wk. Permit	(860) 433-3617	(401) 268-2685	

14. EB PROCEDURE REFERENCES

The following documents are available upon request:

- EB Fire Manual
- EBP-00704, Portable Electronic Devices and Personal Technology
- ENV-NLON-04, New London-Soil Management Plan
- Industrial Safety Bulletin #153, Portable Electronic Devices (PEDs)
- MDD-00306, Control of Piping/Tubing/Fittings (Exception Requests)
- MDD-00804, Excavation Procedure
- MDD-01233, Excavation Planning and Execution
- MDD-01674, Radiological Oversight of Vendors Who Use Radioactive Sources
- MDD-02857, Hot Work Permitting
- MDD-03224, Work Near, On, or Under Suspended Loads
- Safety Manual C-13, Control of (Shipboard) Hazardous Energy (Lockout/Tags-plus)
- Safety Manual C-14, Control of Non-Shipboard Hazardous Energy (Lockout – Tag-out)
- Safety Manual D-05, Mobile Elevated Work Platform

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