



EMPLOYEE SAFETY GUIDELINE

Published by: VSRA Safety Committee

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Purpose:

VSRA provides this Employee Safety Guideline to be used as an instructional tool to assist our member companies and their subcontractors. The VSRA Employee Safety Guideline is not intended to supplant any applicable government regulations or company policy.

Mission:

VSRA strives to help its members be as efficient and profitable as possible. The mission of this guide is to improve safety awareness and prevention for our member companies.

Thank You!!!

VSRA gratefully acknowledges the assistance of the VSRA Safety Committee Members who helped revise these safety guidelines.

NOTICE:

REPORT ALL ACCIDENTS, INJURIES, AND NEAR MISSES TO YOUR SUPERVISOR IMMEDIATELY. EVEN MINOR CUTS OR SCRATCHES CAN BECOME INFECTED UNLESS PROPERLY TREATED. SO TAKE THE TIME TO REPORT.

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Safety Guidelines

The safety guidelines presented in this booklet are standard “Ship Repair Industry” safety practices and should be followed by all workers.

The company you are working for may also have some specific safety rules, policies and procedures which are not listed in this booklet, but you should be aware of your company’s safety rules and follow them.

Workers who disregard or violate established safety rules or cause accidents through their own carelessness may be subject to disciplinary action, up to and including termination of employment.

Remember, it is every worker’s responsibility to use common sense when they see what appears to be an unsafe condition. Tell your supervisor.

If you do not know or do not understand how to safely perform the assigned tasks ASK YOUR SUPERVISOR or SAFETY DEPARTMENT REPRESENTATIVE.

Environmental Guidelines

Your company is required to comply with environmental regulations. You should help your employer comply with the environmental regulations by following the company’s rules.

Your safety on the job is very important, but we must also protect our natural resources and the

environment. You can help by following these simple rules:

- Place all trash in properly coded garbage cans.
- Do not put any chemicals down drains, storm water inlets or onto the ground.
- Do not allow any oil to be spilled or poured on the ground, sewer or waterway.
- Properly contain—close off—your work area while abrasive blasting or painting.
- Properly dispose of hazardous waste in appropriate containers.
- Use only products that have been approved by your company.

These rules are only a few of the environmental guidelines for the Ship Repair work environment.

They are needed for a better cleaner work environment. We must follow these rules to be compliant with the environmental requirements.

Direct any questions to your environmental officer or manager. Violations can be serious for your company and may result in severe disciplinary action.

Hazard Communications

You have the “Right to Know” what hazardous chemicals and other materials are in your work space.

Employees should know:

- The potential safety and health hazards of substances to which they may be exposed in their work space.
- How to reduce the risk of work-related illness and injury.
- How to identify what health effects are presented by the hazardous chemicals in your work space.
- Your right to be trained on the nature of these hazards and the precautions you should take to protect yourself from these hazards.
- Your right to read your employer's written Hazardous Communication Plan.

Your employer will explain how to use Material Safety Data Sheets, commonly referred to as MSDS, and where to obtain a copy of a MSDS.

Goals of Right to Know:

- To help you reduce the risks involved in working with hazardous materials,
- To transmit vital information to employees about real and potential hazards of substances in the work place,
- To reduce the incidence and cost of illness and injury resulting from hazardous substances,

Confined and Enclosed Spaces

Confined spaces:

Spaces that are large enough and so configured that a person can bodily enter and perform assigned work; has limited or restricted means for entry or exit (e.g., tanks, double bottom tanks, cofferdams, silos, storage bins, hoppers, vaults, and pits); are not designed for continuous employee occupancy; and have unfavorable natural ventilation that could contain dangerous air contaminants or are oxygen deficient.

Enclosed spaces:

Any spaces, other than confined spaces, that are enclosed by bulkheads and overhead. These may include cargo holds, tanks, quarters, and machinery and boiler spaces. Enclosed spaces have the potential of containing a hazardous atmosphere or becoming oxygen deficient. Enclosed spaces may require the same tests as confined spaces for oxygen, explosion hazards, and toxic atmospheres.

Adjacent spaces:

Any spaces bordering a space in all directions, including all points of contact, corners, diagonals, decks, tank tops, and bulkheads.

Marine Chemist/Shipyard Competent Person:

- Trained to check out potentially dangerous confined spaces before workers are allowed to enter them
- Annotate Log of Tests and Inspections and/or whether the space is safe for entry
- Update inspections at least every 24 hours

Employees:

- You must personally read the log inspection or certificate each time before entering a confined space.
- Breaking the plane of the opening, with any part of your body, of the confined space is considered entering the space. (Some gases are extremely dangerous and/or suffocating at the opening, e.g., Methane, H₂S associated with CHT tanks, argon from welding, and nitrogen from suppressed tanks.)
- If you are unsure or uncomfortable in entering a confined space, report to your supervisor.
- Employees working alone must be checked on, or should check-in to supervisors regularly.

CAUTION:

If someone falls or passes out in a confined space, DO NOT attempt to rescue unless you are a TRAINED and CERTIFIED RESCUE SPECIALIST! Notify any supervisor immediately. Only trained and fully equipped specialists are to attempt rescue. If you have any questions, contact a Safety Department Representative.

Fire Protection

- Check the condition of torches prior to each use.
- Follow the proper procedure when using oxygen and fuel gas (see Hot Work).
- Oily waste and rags must be placed in proper waste containers.

- Notify supervisor immediately following the discharge of a fire extinguisher in order for it to be replaced.
- Familiarize yourself with all locations of fire extinguishers.
- No open fires are permitted.
- Only approved heaters may be used.
- No heat lamps are allowed.

APPENDIX B

STANDARD HAND SIGNALS FOR CONTROLLING CRAWLER, LOCOMOTIVE, AND TRUCK CRANE OPERATIONS

<p>HOIST. With forearm vertical, forefinger pointing up, move hand in small horizontal circles.</p>	<p>LOWER. With arm extended downward, forefinger pointing down, move hand in small horizontal circles.</p>	<p>USE MAIN HOIST. Tap fist on head; then use regular signals.</p>
<p>USE WHIPLINE. (Auxiliary Hoist). Tap elbow with one hand; then use regular signals.</p>	<p>RAISE BOOM. Arm extended, fingers closed, thumb pointing upward.</p>	<p>LOWER BOOM. Arm extended, fingers closed, thumb pointing downward.</p>
<p>MOVE SLOWLY. Use one hand to give any motion signal and place other hand motionless in front of hand giving the motion signal. (Hoist slowly shown as example).</p>	<p>RAISE THE BOOM AND LOWER THE LOAD. Arm extended, fingers closed, thumb pointing upward, other arm bent slightly with forefinger pointing down and rotate hand in horizontal circles.</p>	<p>LOWER THE BOOM AND RAISE THE LOAD. Arm extended, fingers closed, thumb pointing downward, other arm with forearm vertical, forefinger pointing upward and rotate hand in horizontal circles.</p>

<p>SWING. Arm extended, point with finger in direction of swing of boom.</p>	<p>STOP. Both arms outstretched at the sides horizontally, fingers outstretched.</p>	
<p>TRAVEL. Arm extended forward hand open and slightly raised, make pushing motion in direction of travel.</p>	<p>DOG EVERYTHING. Clasp hands in front of body.</p>	<p>TRAVEL (Both Tracks). Use both fists in front of body, making a circular motion about each other, indicating direction of travel; forward or backward. (For crawler cranes only.)</p>
<p>TRAVEL (One Track). Lock the track on side indicated by raised fist. Travel opposite track in direction indicated by circular motion of other fist rotated vertically in front of body. (For crawler cranes only.)</p>	<p>EXTEND BOOM. (Telescoping Booms). Both fists in front of body with thumbs pointing outward. One hand signal may be used.</p>	<p>RETRACT BOOM. (Telescoping Booms). Both fists in front of body with thumbs pointing toward each other. One hand signal may be used.</p>

Glossary of Terms

Adjacent Spaces means those spaces bordering a subject space in all directions, including all points of contact, corners, diagonals, decks, tank tops, and bulkheads.

Air Purifying Respirators (APR) are half & full-faced non-pressure respirator using NISOH approved cartridges. An APR removes contaminants from the air as it is inhaled through the filter into the mask. IT DOES NOT SUPPLY OXYGEN!

Air Supplied Respirator (ASR) are respirators that provide a supply of breathable air.

Alarm means a signal or message from a person or device that indicates that there is a fire, medical emergency, or other situation that requires emergency response or evacuation. At some shipyards, this may be called an "incident" or a "call for service."

Alarm System means a system that warns employees at the worksite of danger.

Body Harness means a system of straps that may be secured about the employee in a manner that will distribute the fall arrest forces over at least the thighs, shoulders, chest, and pelvis, with means for attaching it to other components of a personal fall arrest system.

Biohazard is a combination of the words “biological” and “hazard”. Organisms or products of organisms that present a health risk to humans.

Certified Industrial Hygienist (CIH) means an industrial hygienist who is certified by the American Board of Industrial Hygiene.

CHT (Collection and Holding Tanks) – Are usually associated with the sewage disposal system and disposal of sanitary waste. The danger is H₂S (Hydrogen Sulfide) which can cause instantaneous death if not treated and cleaned properly by certified and qualified personnel.

Coffer Dam is a watertight structure that allows repairs below the waterline of a vessel.

Cold Work means any work that does not involve riveting, welding, burning, or other fire or spark producing operations.

Competent Person for purposes of this part means a person who is capable of recognizing and evaluating employee exposure to hazardous substances or to other unsafe conditions and is capable of specifying the necessary protection and precautions to be taken to ensure the safety of employees as required by the particular regulation under the condition to which it applies. For the purposes of Subparts B, C, and D of this part, except for 1915.35(b)(8) and 1915.36(a)(5), to which the above definition applies, the competent person must also meet the additional requirements of 1915.7.

Confined Space means a compartment of small size and limited access such as a double bottom tank, cofferdam, or other space which by its small size and confined nature can readily create or aggravate a hazardous exposure.

Contract Employer means an employer, such as a painter, joiner, carpenter, or scaffolding sub-contractor, who performs work under contract to the host employer or to another employer under contract to the host employer at the host employer's worksite. This excludes employers who provide incidental services that do not influence shipyard employment (such as mail delivery or office supply services).

Dangerous Atmosphere means an atmosphere that may expose employees to the risk of death, incapacitation, impairment of ability to self-rescue (i.e., escape unaided from a confined or enclosed space), injury, or acute illness.

Designated Area means an area established for a specific reason, such as, hot work, storage, or accumulation area.

Dilution Ventilation means a form of exposure control that involves providing enough air in the workplace to dilute the concentration of airborne contaminants to acceptable levels.

Drop Test means a method utilizing gauges to ensure the integrity of an oxygen fuel gas burning system. The method requires that the burning torch is installed to one end of the oxygen and fuel gas lines and then the gauges are attached to the

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