

# Evaluation of Shipyard Competent Person (SCP) Programs

## *An Employer's Self-Assessment Tool*

Confined and enclosed spaces exist aboard all maritime vessels, many of which often carry various hazardous cargoes. This presents unique challenges to workers who enter and work in these spaces. To ensure that workers are appropriately protected, employers should employ a combination of certified Marine Chemists and shipyard competent persons (SCPs) to assess these spaces to determine if they are safe for workers to enter, work in, as well as prescribe appropriate protective measures to be implemented. Employers must have a program in place that ensures that workers designated as shipyard competent persons have the necessary training and qualifications ([29 CFR 1915.7\(c\)](#) and [1915.12](#)). This document is intended for use by employers in the shipyard industry to evaluate SCP programs. The information contained in this document may also be useful to other members of the shipyard community, such as subcontractors and inspectors for evaluating a shipyard's program.

A Marine Chemist is one who possesses a current Marine Chemist Certification issued by the National Fire Protection Association (NFPA 306: Standard for the Control of Gas Hazards on Vessels). NFPA training requires a college degree, along with extensive shipyard and laboratory experience; this process generally takes several years.

Tasks performed by the Marine Chemist include:

- Testing for flammable, combustible, and toxic atmospheres before beginning hot work operations in spaces, adjacent spaces, and pipelines, which contain or last contained flammable or combustible liquids or gases ([29 CFR 1915.14\(a\)](#)).
- Testing to confirm that inerting of spaces containing flammable and combustible materials has been effective (NFPA 306, Chapter 5.2.1).
- Approving the use of inerting medium (such as nitrogen, carbon dioxide, etc.) and personally supervising the introduction of the inerting medium into the space (NFPA 306, Chapter 5.2.1)
- Testing of spaces that are IDLH or cannot be ventilated to comply with OSHA PELs until the space can be certified "[Enter with Restrictions](#)" or "[Safe for Workers](#)" ([29 CFR 1915.12\(c\)\(3\)](#)).

A shipyard competent person is designated by the employer and typically attends a three-day course, which covers the required topics found in [29 CFR 1915.7](#). However, there is no designated minimum time for training as long as the training topics are covered adequately. The designated shipyard competent person must be capable of recognizing and evaluating employee exposure to hazardous substances or to other unsafe conditions and is capable of specifying the necessary protection precautions to be taken to ensure the safety of fellow employees.

Tasks performed by the shipyard competent person include:

- Inspect and test spaces to determine the atmosphere's oxygen content before employees enter the space ([29 CFR 1915.12\(a\)\(1\)](#)).
- Inspect spaces containing, or that have previously contained, combustible or flammable liquids or gases before employees enter the spaces to determine the presence of combustible or flammable liquids within

these spaces, and test to determine the concentration of flammable vapors and gases within these spaces ([29 CFR 1915.12\(b\)\(1\)](#)).

- Inspect spaces containing, or that have previously contained liquids, gases or solids that are toxic, corrosive, or irritating, to include the testing of atmospheric conditions, before employees enter the space ([29 CFR 1915.12\(c\)\(1\)](#)).
- Test spaces and adjacent spaces before hot work and ensure that no concentrations of flammable vapors equal to or greater than 10 percent of the LEL exist ([29 CFR 1915.14\(b\)](#)).
- Determine the flammability of preservative coatings on any surface before welding, cutting, or heating is performed ([29 CFR 1915.53\(b\)](#)).
- Test the atmosphere for explosive vapors in spaces in which the metals are coated with soft and greasy preservatives before and immediately after beginning welding, cutting, or heating ([29 CFR 1915.53\(e\)\(1\)](#) and [29 CFR 1915.53\(f\)](#)).
- Inspect structural voids such as skegs, bilge keels, fair waters, masts, booms, support stanchions, pipe stanchions, and railings, and test them for the presence of flammable liquids or vapors before welding, cutting, heating or brazing ([29 CFR 1915.54\(c\)](#)).
- Calibrate and maintain test equipment ([29 CFR 1915.7\(c\)](#)).
- Determine if and when a Marine Chemist is required to certify work ([29 CFR 1915.7\(c\)\(6\)](#)).

The following evaluation tool contains both requirements and best practices for the assessment of competent person programs in determining their effectiveness, as well as to identify any areas for improvement.

**ASSESSMENT TOOL  
SHIPYARD COMPETENT PERSON (SCP) PROGRAM**

<b>TRAINING</b>	✓
Have the SCP's received formal training? ( <a href="#">29CFR 1915.7(c)</a> )	✓
Who provided the training?  Company Name: _____ Address: _____ Telephone: _____ Date of Training: _____	✓
Is a copy of the training certificates available?	✓
Has the SCPs received refresher training since the initial training? (Not required unless company policy or local authorities requires refresher training)	✓
Is there an adequate level of experience at the facility to provide guidance and support?	✓
Is there a roster available that identifies the employer, SCPs name and date of training? ( <a href="#">29 CFR 1915.7(b)(2)</a> )	✓

**EQUIPMENT**

✓

Is the quantity of testing meters available adequate to support work within the facility? \_\_\_\_\_

What do the meters test for? [\(29 CFR 1915.12\)](#)Oxygen\_\_\_\_\_ LEL\_\_\_\_\_ CO\_\_\_\_\_ H<sub>2</sub>S \_\_\_\_\_ VOCs \_\_\_\_\_ Other \_\_\_\_\_Are calibration records on file, available, and kept for a minimum of three months? [\(29 CFR 1915.7\(d\)\(2\) and \(3\)\)](#)

Do the SCPs conduct calibration checks before each day's use?

Is the fresh air check conducted in an area free of contaminants which would affect the reading?

Do the SCPs have the ability to correctly calibrate and operate the equipment? [\(29 CFR 1915.7\(c\)\(4\)\)](#)

If there is a contaminant within the facility which the meter does not test for, if so, is there equipment available to test for it?

Are colorimetric detector tubes used in the facility for the monitoring of toxins not detected by the meter?

Is a leak check done on the detector tube pump prior to use?

Do the SCPs understand how to conduct this leak check and what to do if it fails?

**GENERAL KNOWLEDGE**

✓

Do the SCPs have knowledge of OSHA Subparts B, C, D and H? [\(29 CFR 1915.7\(c\)\)](#)Do the SCPs know when to call in a Marine Chemist? [\(29 CFR 1915.12\(c\)\(3\) and 1915.14\)](#)

Do the SCPs know the local Marine Chemist?

Are the SCPs able to understand and carry out the instructions of the Marine Chemist? [\(29 CFR 1915.7\(c\)\(1\)\)](#)Do the SCPs post and file the Marine Chemist Certificate as required? [\(29 CFR 1915.14\(a\)\(2\)\)](#)Does SCPs conduct follow up testing as required on a Marine Chemist Certificate? [\(29 CFR 1915.15\(c\)\)](#)  
Do the SCPs understand what constitutes a change in conditions that require a Marine Chemist to be recalled? [\(29 CFR 1915.15\(d\)\)](#)Do the SCPs test spaces as often as necessary to ensure conditions have not changed? [\(29 CFR 1915.15\(e\)\)](#)Do the SCPs place signs or labels of the spaces tested along with entry requirements at the spaces or at locations to access the spaces? [\(29 CFR 1915.16\(b\)\)](#)Are the signs written in a manner that can be understood by all employees? [\(29 CFR 1915.16\(a\)\)](#)

During spray paint operations do the SCPs check for flammable and toxic concentrations of paint vapors? <a href="#">(29 CFR 1915.35(b)(1) through (4))</a>	
Does the SCPs drop test spaces prior to entry? (Insert meter or hose into the space prior to entering)	
Do the SCPs know what levels of oxygen, explosives and toxics are safe for entry? <a href="#">(29 CFR 1915.12))</a>	
Do the SCP's physically enter the space to do a visual inspection and check for physical hazards? <a href="#">(29 CFR 1915.12))</a>	

<b>RECORDKEEPING</b>	✓
Are inspection records readily available for review? <a href="#">(29 CFR 1915.7(d) (3))</a>	
Are inspection records maintained for 3 months? <a href="#">(29 CFR 1915.7(d) (2))</a>	
<p>Do inspection records contain the time, date, location of spaces tested along with testing results, operations and entry requirements such as? <a href="#">(29CFR 1915.7(d)(1))</a></p> <ul style="list-style-type: none"> <li>• Vessel name</li> <li>• Vessel berth</li> <li>• Date</li> <li>• Time</li> <li>• Spaces Checked</li> <li>• Reason for Inspection (Operation: entry, hot work, or both)</li> <li>• Meter Readings</li> <li>• How are spaces described? Safe or Unsafe?</li> <li>• Instructions: If safe, how to keep it safe? Not safe, how to make safe?</li> </ul>	

**Note:** Where assessment results indicate inadequacies in the program, it is recommended that a Certified Marine Chemist or qualified health and safety professional examine the program and provide suggested methods for improvement based on their extensive training and shipyard experience.