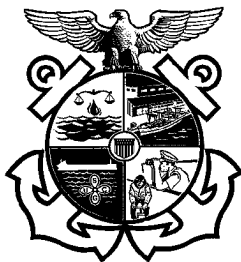


United States Coast Guard



FIXED PLATFORM INSPECTOR Job Aid

Name of Facility	
Facility ID Number	Activity Number
Date Completed	Priority
Location	
Inspection Team Members:	
1. _____	3. _____
2. _____	4. _____

Job Aid FPI
Rev. Oct2018

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Use of Fixed Platform Inspection Book:

This examination book is intended to be used as a job aid by Coast Guard Marine Inspectors during inspections of fixed platforms. Each book contains an extensive list of possible inspection items. The depth and scope of the inspection must be determined by the Marine Inspectors based on their observations.

This document does not establish or change Federal laws or regulations. References given are only general guides. Refer to CFRs, NVICs and any locally produced cite guides for specific regulatory references.

NOTE: *Guidance on how to examine fixed platforms can be found in MSM Volume II, Section G: Procedures Applicable to Fixed OCS Facilities or Platforms.*

Guide to Inspections:

Pre-inspection Items

- Schedule inspection in MISLE
- Review MISLE records
- Coordinate inspection with installation's representative
- Conduct meeting with installation's representative
- Issue Letter(s) of Determination

Post-inspection Items

- Issue deficiencies
- Verify deficiency corrections
- Complete MISLE entries within 48 hours

Table of Contents:

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Section 1: Administrative Items

Involved Parties & General Information:

Facility's Representative
Phone Number
E-mail

Owner – Name & Address
<input type="checkbox"/> No Change

Operator – Name & Address
<input type="checkbox"/> No Change

Section 2: Inspection Items

Pre-Inspection

- 1. Research Bureau of Safety and Environmental Enforcement (BSEE)/Coast Guard (CG) Memorandum of Agreement OCS-09
 - Determine authority, jurisdiction and applicable regulations 43 USC 1331
33 CFR 140.101
 - Determine responsibilities of CG and BSEE BSEE/USCG MOA OCS-09

- 2. Schedule inspection in Maritime Information for Safety and Law Enforcement (MISLE)
 - Locate facility MISLE User Guide
 - Review history (narratives, deficiencies & special notes) MSM I/12.G.2.a
MISLE User Guide
 - Generate new activity MISLE User Guide

- 3. Coordinate inspection with facility's representative
 - Identify fixed platform/facility representative MPS-PR-SEC-01
MPS-PR-SEC-04
 - Confirm inspection time and destination MPS-PR-SEC-01
 - Articulate inspection expectations 33 CFR 140.3
33 CFR 140.101
 - Verify owner/operator information MPS-PR-SEC-04

- 4. Conduct meeting with Person in Charge (PIC)
 - Review outstanding third party servicing report discrepancies MPS-PR-SEC-04
 - Discuss inspection procedure and expectations 33 CFR 140.3
33 CFR 140.101
 - Review any ongoing operations that could affect inspection or equipment MPS-PR-SEC-04
 - Coordinate testing procedures and inspection MPS-PR-SEC-04

- 5. Mitigate potential hazards encountered during an inspection
 - Recognize potential hazards NFPA 306
 - Prepare necessary personal protective equipment MSM I/10 App. A
Quattro Operator's Manual

- Review CG policy for leaving spaces due to hazardous condition MSM I/10 App. A
6. Issue Letter of Determination (LOD)
- Review request 43 USC 1356(c)
33 CFR 141.5 & 141.15
 - Prepare LOD 33 CFR 141.15
NVIC 07-84
 - Retain a copy and log issued LODs 5 USC 552 & 552a
COMDTINST M5260.3
 - Secure documentation received from employers/applicants COMDTINST M5212.12A

Security

7. Review Facility Security Plan/Alternate Security Plan (FSP/ASP)
- Verify presence of FSP/ASP 33 CFR 106.105
NVIC 05-03/Encl(1)
 - Verify presence of valid approval letter 33 CFR 106.115
 - Verify contents 33 CFR 106.405
33 CFR 106.235
 - Verify amendments approved 33 CFR 106.415
NVIC 05-03/Encl(1)
 - Verify security plan protected 33 CFR 106.400(c)
49 CFR 1520
 - Verify security incident procedures 33 CFR 106.280
 - Verify presence of Facility Security Assessment Report 33 CFR 106.305(d)
8. Review security records/documents
- Determine applicability 33 CFR 106.105
NVIC 05-03/Encl (1)
 - Verify TWIC program implementation 33 CFR 106.200(b)(6)
 - Verify record of security training for facility security officer (FSO) 33 CFR 106.210
 - Verify record(s) of security training for OCS facility personnel with security duties 33 CFR 106.215
 - Verify record(s) of security training for all other facility personnel 33 CFR 106.220

- Verify presence of Declarations of Security (DoS) 33 CFR 106.230(b)(7)
33 CFR 106.250
- Verify record(s) of security drills conducted 33 CFR 106.230(b)(2)
33 CFR 106.225(b)
- Verify record(s) of annual exercise conducted 33 CFR 106.230(b)(2)
33 CFR 106.225(c)
- Verify record(s) of annual audit conducted 33 CFR 106.415(b)
33 CFR 106.230(b)(8)
- Verify required record(s) 33 CFR 106.230
- Verify CSO and FSO are designated in writing 33 CFR 106.200(b)(2)

9. Inspect security equipment and access control

- Determine applicability 33 CFR 106.105
NVIC 05-03/Encl (1)
- Verify condition 33 CFR 106.255
- Inspect access control measures 33 CFR 106.260(a)(3)
33 CFR 106.260(b)(1)
- Inspect signs 33 CFR 106.260(f)(3)
- Verify restricted area markings 33 CFR 106.265(b)
- Verify communications are maintained in accordance with Facility Security Plan 33 CFR 106.240

10. Review crew knowledge of Facility Security Plan

- Determine applicability 33 CFR 106.105
NVIC 05-03/Encl (1)
- Evaluate facility security officer's (FSO) knowledge 33 CFR 106.210(b)
- Evaluate crew's knowledge 33 CFR 106.215
33 CFR 106.270

Certificates & Documents

11. Examine Annual Inspection Report(s) (CG-5432) - BSEE PINC Z-100

- Verify annual self-inspection(s) 33 CFR 140.103(a)
33 CFR 140.103(c)
- Verify results recorded on CG-5432 33 CFR 140.103(c)
- If manned, verify CG-5432 is available 33 CFR 140.103(c)

- If unmanned, verify CG-5432 is available and maintained at adjacent manned facility or nearest field office 33 CFR 140.103(c)
 - Verify annual self-inspections with outstanding deficiencies have been forwarded to appropriate BSEE District Office 33 CFR 140.103(c)
12. Verify Person in Charge designation
- Verify person in charge (PIC) is formally designated 33 CFR 146.5(a)
 - Verify PIC successors are formally designated 33 CFR 146.5(a)
13. Examine station bill - BSEE PINC Z-210
- Verify posted 33 CFR 146.130(a)
 - Verify prepared and signed by PIC 33 CFR 146.130(a)
 - Verify special duties and duty stations designated 33 CFR 146.130(b)
33 CFR 146.120
 - Verify proper handling of emergencies addressed 33 CFR 146.130(b)
 - Verify various signals for emergency stations and abandonment listed 33 CFR 146.130(c)

Logs & Manuals

14. Review Emergency Evacuation Plan (EEP)
- Verify presence of plan 33 CFR 146.140(a)
33 CFR 146.140(b)
 - Verify presence of approval letter 33 CFR 146.140(b)
 - Verify contents 33 CFR 146.140(d)(1)
 - Verify revisions pages for changes 33 CFR 146.140(d)(3)
 - Verify EEP is applicable to on-site conditions 33 CFR 146.140(a)
 - Verify EEP annual drill was conducted 33 CFR 146.125(c)(1)
15. Verify emergency drill records - BSEE PINC Z-205
- Verify monthly emergency drills conducted 33 CFR 146.125(a)

- Verify monthly Emergency Evacuation Plan (EEP) drills conducted 33 CFR 146.125(c)(2)
 - Verify annual EEP exercise completed 33 CFR 146.125(c)(1)
 - Verify drill record/report maintained 33 CFR 146.125(d)
 - Verify notifications to OCMI for drills that are unable to be conducted 33 CFR 146.125(d)
16. Verify fire extinguisher inspection and maintenance records
- Verify inspection records 33 CFR 145.01(b)
NFPA 10/7.2.4
 - Verify extinguishers inspected at required intervals 33 CFR 145.01(b)
NFPA 10/7.2.1.2 and 7.2.2
 - Verify annual and periodic maintenance conducted by certified personnel for rechargeable/refillable fire extinguishers 33 CFR 145.01(b)
 - Verify maintenance records 33 CFR 145.01(b)
NFPA 10/A.7.3.3

General Health & Safety

17. Inspect eye and face protection - BSEE PINC Z-102
- Verify protection meets ANSI Z87.1 for associated hazard(s) 33 CFR 142.27(a)
ANSI Z87.1
 - Verify condition/serviceability 33 CFR 142.27(b)
 - Verify marked 33 CFR 142.27(c)
ANSI Z87.1
18. Inspect head protection - BSEE PINC Z-102
- Verify meets specifications for hazard involved 33 CFR 142.30(a)
33 CFR 142.24(b)
 - Verify marked 33 CFR 142.30(b)
ANSI Z89.1
 - Verify condition 33 CFR 142.30(a)
19. Inspect foot protection - BSEE PINC Z-102
- Verify meets specifications for hazard involved 33 CFR 142.33(a)
33 CFR 142.24(b)

- Verify marked 33 CFR 142.33(b)
ANSI Z41
 - Verify condition 33 CFR 142.33(a)
20. Inspect protective clothing - BSEE PINC Z-102
- Verify appropriate clothing worn for the hazard involved 33 CFR 142.36
33 CFR 142.24(b)
 - Verify condition (no cuts, tears, excessive deterioration, mismatches, etc.) 33 CFR 142.36
21. Inspect respiratory protection - BSEE PINC Z-104
- Verify equipment meets specifications for atmosphere/conditions involved 33 CFR 142.39(a)
ANSI Z88.2
 - Verify personnel fit tested 33 CFR 142.39(b)(1)
ANSI Z88.2
 - Verify training 33 CFR 142.39(b)(2)
ANSI Z88.2
 - Verify equipment maintained 33 CFR 142.39(c)
ANSI Z88.2
22. Inspect fall protection - BSEE PINC Z-106
- Verify protection utilized when required 33 CFR 142.42(a)
ANSI A10.14
 - Verify equipment meets specifications 33 CFR 142.42(b)
ANSI A10.14
 - Verify PFDs or alternatives worn 33 CFR 142.45
33 CFR 146.20(b)
23. Inspect eyewash stations - BSEE PINC Z-110
- Verify location and quantity 33 CFR 142.48
 - If non-self contained, verify stations operational 33 CFR 142.48
 - If self contained, verify solution expiration and container condition 33 CFR 142.48
24. Examine general housekeeping - BSEE PINC Z-112
- Verify stairways, ramps and working surfaces kept clear of tools, materials and equipment not in use 33 CFR 142.84

- Verify stairways, ramps and working surfaces promptly cleared of substances that create a slipping or tripping hazard 33 CFR 142.84
 - Evaluate suitability of alternative methods to reduce slip hazards in areas subject to fluid spillage during operations (drill floor and PIG receivers/ launchers) 33 CFR 142.84
25. Inspect deck opening protection - BSEE PINC Z-114
- Verify deck openings made inaccessible 33 CFR 142.87
 - Verify manner of blockage is able to prevent a person's foot or body from inadvertently passing through the opening 33 CFR 142.87
26. Examine lockout-tagout procedures
- Verify lockout-tagout procedures utilized 33 CFR 142.90
 - Verify lockout devices utilized and maintained 33 CFR 142.90(a)
33 CFR 142.90(b)
 - Verify appropriate tags utilized and maintained 33 CFR 142.90(c)
33 CFR 142.90(d)
27. Inspect general alarm system - BSEE PINC Z-195
- If manned, verify general alarm system operable 33 CFR 146.105
 - Verify audible in all parts of the facility 33 CFR 146.105
 - Verify markings 33 CFR 146.135(b)
33 CFR 146.135(c)
28. Inspect emergency signals
- Verify established emergency signals 33 CFR 146.110(a)
 - Verify separate/distinct signals for manning emergency stations and to abandon facility 33 CFR 146.110(b)
 - Verify signals match description on Station Bill 33 CFR 146.130(c)

Lifesaving Equipment

- 29. Inspect means of escape - BSEE PINC Z-125
 - Verify required number of primary and secondary means of escape for manned facility 33 CFR 143.101(a) & (b)
33 CFR 143.101(c)
 - Verify required number of primary and secondary means of escape for unmanned facility 33 CFR 143.101(d)
 - Verify suitably arranged 33 CFR 143.101(f)
MSM II/G.5.D.8
 - Verify readily accessible for rapid evacuation 33 CFR 143.101(e)
 - Verify all extend to water's surface 33 CFR 143.101(b)& (c)
33 CFR 143.101(d)
 - If bridged facility or complex, verify catwalk/bridge arrangement(s) (if utilized as a primary means of escape) MSM II/G.5.D.7

- 30. Inspect lifefloats - BSEE PINC Z-145
 - Verify quantity and capacity provided 33 CFR 144.01-1
 - Verify approval 33 CFR 144.01-1
46 CFR 160.027
 - Verify location and launching arrangements 33 CFR 144.01-5
33 CFR 144.01-10(b)
 - Verify condition 33 CFR 146.15(a)
 - Verify painter size, length and attachment 33 CFR 144.01-10(a)
33 CFR 144.01-10(b)
 - Verify water light approval, operation and attachment 33 CFR 144.01-10(b)
46 CFR 161.010
 - Verify paddle condition and attachment 33 CFR 144.01-1(c)
 - Verify markings 33 CFR 146.135(d)
 - Verify minimum lifesaving arrangements If lifefloat alternatives installed 33 CFR 144.01-15(a)
 - Verify variances and/or temporary arrangements MSM II/G.5.6

- 31. Inspect lifeboat(s) - BSEE PINC Z-145
 - Verify USCG type approval 33 CFR 144.01-15(a)
46 CFR 160.135
 - Verify marked weights are IAW rated capacity 33 CFR 144.01-15(a)
46 CFR 160.135-17
 - Verify equipment 33 CFR 144.01-15(b)
 - Verify markings 33 CFR 146.135(d)
 - Verify condition 33 CFR 146.15(a)
 - Verify remote and local steering 46 CFR 160.135-7(b)(13)
46 CFR 160.035-3(k)
 - Witness operational tests of engine and reduction gear 33CFR 146.15(a)
 - Verify release gear mechanism(s) approval 33 CFR 144.01-15(a)
46 CFR 160.133

- 32. Inspect boat davits/winches
 - Verify davit approval 33 CFR 144.01-15(a)
46 CFR 160.132
 - Verify winch approval 33 CFR 144.01-15(a)
46 CFR 160.115
 - Inspect condition of davit(s)/winch(s) and associated components 33 CFR 146.15(a)
 - Verify markings and labeling 46 CFR 160.115-17
46 CFR 160.132-17
 - Witness operational test of limit switches 46 CFR 160.115-7(b)(6)(vi)
46 CFR 160.015.3(k)(2)

- 33. Inspect inflatable liferaft installation(s) - BSEE PINC Z-145
 - Verify liferaft approval 33 CFR 144.01-15(a)
33 CFR 144.01-15(d)
 - Verify capacity and arrangement (if used in lieu of lifefloats) 33 CFR 144.01-15(a)
 - Verify stowage and launching arrangement 33 CFR 144.01-15(a)
 - Verify markings 33 CFR 146.135(d)
46 CFR 160.151-33
 - Verify annual servicing 46 CFR 160.151-57(m)
46 CFR 160.151-57(n)
 - Verify davit arrangement and approval 33 CFR 144.01-15(a)
46 CFR 160.132

- Verify condition 33 CFR 146.15(a)
 - Verify variances and/or temporary arrangements MSM II/G.5.D.6
34. Inspect life preservers - BSEE PINC Z-108 & 150
- Verify approval 33 CFR 144.01-20(a)
46 CFR 160.001, .002 & .005,
 - Verify quantity 33 CFR 144.01-20(a)
 - Verify stowage and accessibility 33 CFR 144.01-20(a)
 - Verify personal marker light approval, attachment and expiration 33 CFR 144.01-20(c)
33 CFR 146.15(b) & (c)
 - Verify retro-reflective material 33 CFR 144.01-20(d)
46 CFR 164.018
 - Verify condition 33 CFR 146.15(a)
 - Verify markings 33 CFR 146.135(e)
35. Inspect ring life buoys - BSEE PINC Z-155
- Verify approval 33 CFR 144.01-25(a)
46 CFR 160.050
 - Verify quantity 33 CFR 144.01-25(a)
 - Verify location, stowage and accessibility 33 CFR 144.01-25(a)
 - Verify water light approval, operation and attachment 33 CFR 144.01-25(b)
46 CFR 161.010
 - Verify condition 33 CFR 146.15(a)
 - Verify markings 33 CFR 146.135(e)
36. Inspect first-aid kit - BSEE PINC Z-160
- Verify approval 33 CFR 144.01-30
 - Verify custody retained by PIC 33 CFR 144.01-30
 - Verify contents and expiration dates 33 CFR 146.15(a)
37. Inspect stokes/safety litter - BSEE PINC Z-165
- Verify onboard 33 CFR 144.01-35
 - Verify accessibility 33 CFR 144.01-35
 - Verify condition 33 CFR 146.15(a)
 - Verify hoistable 33 CFR 144.01-35

- 38. Inspect emergency communications - BSEE PINC Z-170
 - Verify means of communications provided 33 CFR 144.01-40
 - Verify condition 33 CFR 146.15(a)
 - Witness test 33 CFR 146.15(a)

- 39. Inspect work vests - BSEE PINC Z-190
 - Verify approval 33 CFR 146.20(a)
46 CFR 160.053
 - Verify use 33 CFR 146.20(b)
 - Verify stowage 33 CFR 146.20(c)
 - Verify condition 33 CFR 146.20(d)
 - Verify use, stowage and maintenance of hybrid work vests 33 CFR 146.20(e)

- 40. Inspect lifesaving equipment on unmanned platforms - BSEE PINC Z-175 & 180
 - Verify life preservers 33 CFR 144.10-1(a)(1)
46 CFR 160.001, .002 & .005
 - Verify ring life buoys 33 CFR 144.10-1(a)(2)
46 CFR 160.050
 - Verify water light approval, operation and attachment 33 CFR 144.10-1(a)(3)
46 CFR 161.010
 - Verify alternative ring life buoy arrangements 33 CFR 144.10-1(b)
 - Verify condition of installed equipment 33 CFR 146.15

- 41. Inspect man ropes/swing ropes - BSEE PINC Z-125
 - Verify material MSM II/G.5.D.9
D8 INST 16711.1 Item 8(a)
 - Verify shackle, eyebolt and thimble D8 INST 16711.1 Item 8(b)
 - Verify knot spacing D8 INST 16711.1 Item 8(c)
 - Verify distance to the water D8 INST 16711.1 Item 8(d)
 - Verify condition D8 INST 16711.1 Item 8

Firefighting Systems

- 42. Inspect portable and semi-portable fire extinguishers - BSEE PINC Z-185
 - Verify approval 33 CFR 145.01

- Verify location, type and quantity 33 CFR Table 145.10(a)
- Verify semi-portable extinguishers are located in the open/plain sight 33 CFR 145.10(b)
- Verify condition 33 CFR 146.15(a)
NFPA 10/7.2.2.2
- Verify markings 33 CFR 145.05(d)
- Verify mounting brackets 46 CFR 162.028-3(g)

43. Inspect fixed firefighting system(s)

- Verify installation 33 CFR Table 145.10(a), Note 1
- Verify condition 33 CFR 146.15(a)
- Verify maintenance records 33 CFR 146.15(a)

44. Inspect galley fire suppression system

- Verify condition 33 CFR 146.15(a)
- Verify maintenance records 33 CFR 146.15(a)

Heli-Deck

45. Inspect heli-deck perimeter - BSEE PINC Z-140

- Verify unprotected perimeter fall protection 33 CFR 143.110(b)
- Verify opening(s) for stairwells sized and arranged to reduce fall hazards to lower decks 33 CFR 143.110(b)
33 CFR 143.110(c)

Aids to Navigation

46. Inspect obstruction light(s) - BSEE PINC Z-120

- Verify presence 33 CFR 143.15(a)
33 CFR 67.01-1
- Verify properly arranged according to structure's classification 33 CFR 67.05-1
33 CFR 67.20-5 & .25-5
- Verify lenses are clean and light(s) are level 33 CFR 67.05-1
33 CFR 67.20-5 & .25-5
- Witness operation 33 CFR 67.05-5
33 CFR 67.05-10
- Verify configured for automatic operation 33 CFR 67.05-15

- 47. Inspect sound signal(s) - BSEE PINC Z-120
 - Verify presence 33 CFR 143.15(a)
33 CFR 67.01-1
 - Verify location and audible range for structure's classification 33 CFR 67.10-5(b)
33 CFR 67.20-10 & .25-10
 - Verify approval 33 CFR 67.10-15
33 CFR 67.10-35
 - Witness a test of sound signal(s) and fog detection device 33 CFR 67.10-10
 - Verify audible in a 360-degree arc (minimal obstructions blocking the sound path) 33 CFR 67.10-5(a)
 - Verify automatic operation or procedures to activate while crew is sleeping or facility is unmanned 33 CFR 67.10-10(a)
33 CFR 67.20-10(b) & .25-10(a)(2)

Topside Equipment

- 48. Inspect guards and rails - BSEE PINC Z-135
 - Verify installation 33 CFR 143.110(a)
 - Verify configuration 33 CFR 143.110(a)
 - Verify rails provided 33 CFR 143.110(c)

- 49. Inspect personnel landings - BSEE PINC Z-130
 - Verify sufficient landings provided 33 CFR 143.105(a)
 - Verify adequately maintained to ensure safe access and egress 33 CFR 143.105(a)
 - Verify illumination 33 CFR 143.105(b)

Emergency Drill

- 50. Evaluate abandon platform drill - BSEE PINC Z-200
 - Evaluate abandon platform drill procedures and crew's ability to perform assigned duties 33 CFR 146.130
33 CFR 146.140(e)(2)
 - Verify assigned personnel are prepared for launching of life floats, lifeboats or life rafts 33 CFR 146.115(b)(4)
 - Verify crew is proficient at donning lifejackets (no work vests) 33 CFR 146.115(b)(3)

- Verify presence of person responsible to launch the life float, lifeboat or liferafts 33 CFR 146.120

Follow-Up

- 51. Issue Deficiencies
 - Identify deficiencies 46 CFR 2.01-10(a)
 - Determine deficiency reference cite 46 USC 3313(b)
MSM II/A.2.C.4.b
 - Discuss deficiencies and corrective measures/timeframe with facility PIC or representative 46 CFR 2.01-10
MSM II/A.2.C.2
 - Issue signed CG-835 to facility PIC or representative MSM II/A.2.C.2.b(2)
46 CFR 2.01-10(a)

- 52. Verify deficiency corrections
 - Determine verification method for identified deficiencies MSM II/A.2.C.4
 - Determine deficiency's reference cite MSM II/A.2.C.4.a
 - Clear deficiencies in MISLE activity MSM II/A.2.C.2.d
MISLE USER Guide 7.g.ii.3.i

- 53. Complete Maritime Information for Safety and Law Enforcement (MISLE) Activity
 - Open existing activity in MISLE MSM I/12.G.2.a
MISLE User Guide
 - Update inspection results MSM I/12.H.1
MISLE User Guide
 - Update activity narrative MSM I 12.H.1
MISLE User Guide
 - Change activity status to "Open-Submitted for Review" MSM 1/12.H.1
MISLE User Guide
 - Forward required documentation to appropriate Bureau of Safety and Environmental Enforcement (BSEE) District Office MSM II/G.5.D.2.f(6)

Section 4: Appendices

Confined Space Entry Checklist

Sources for Policy

- COMDTINST M5100.47, Chapter 6, change 11
- MSM Vol. 1, Chapter 10 & Appendix A, C, D to chap. 10
- MSM Vol. 2 Ch. 1, Section D, Chapter 6
- 29 CFR 1915, Part B

A Confined Space for the purpose of this checklist is:

A space that possess all of the following three distinct characteristics –

1. Is large enough and so configured that an employee can bodily enter & perform assigned work;
2. Has limited or restricted means for entry or exit; and
3. Is not designed for continuous employee occupancy

Hazards associated with confined space entry

- Oxygen deficient or enriched atmosphere
- Flammable atmosphere
- Toxic atmosphere
- Extreme temperature (hot or cold)
- Engulfment hazard (such as grain, coal, sand, gypsum or similar material)
- Extreme noise
- Slick / wet surfaces & tripping hazards
- Falling objects
- Potential for rapidly changing atmosphere

USCG Confined Space Entry Requirement

A certified Marine Chemist **shall** conduct the initial inspection & certify all confined spaces on merchant vessels “Safe for Workers” before entry by USCG personnel.

In rare circumstances, if a Marine Chemist is not available, the OCMI may designate a USCG Competent Person to certify a confined space “Safe for Workers”

Examples (not limited to) of confined spaces:

Confined Spaces	Hazard⁽²⁾
Voids/Cofferdams ⁽¹⁾	P- O; S- F,T
Sealed Compartments ⁽¹⁾	P- O; S- F,T
Double Bottoms/Sides/Duct Keels ⁽¹⁾	P- O; S- F,T
Spaces Coated with a Preservative ⁽¹⁾	P- O; S- F,T
Engine Crankcases/Scavenging Spaces ⁽¹⁾	P- O; S- F,T
Large Heat Exchangers ⁽¹⁾	P- O; S- F,T
Fuel/Lube Oil/Sludge Tanks ⁽¹⁾	P- F,T; S- O
Water tanks ⁽¹⁾	P- O; S- F,T
Cargo/Slop Tanks ⁽¹⁾	P- O; S- F,T
Pump Rooms (if provided)	P- O; S- F,T

⁽¹⁾**Port State Control Officers should not attempt to enter any of the above spaces during a standard PSC examination, other than pump rooms. There may be reason to enter one or more of these spaces during the exam if there are clear grounds to do so, but only enter these spaces after ensuring they are safe for entry. Review the safe work practices contained in MSM Vol. 1, chapter 10, Appendix A for entry into confined spaces other than pump rooms.**

⁽²⁾**Hazards – P (Primary);
S (Secondary);
O (Oxygen Deprivation);
F (Flammability);
T (Toxicity)**

Examples (not limited to) of non-confined spaces that may pose a hazard:

<u>Non-confined spaces that may pose a risk (All vessel types)</u>	<u>Possible Hazard(s)</u>	<u>Safe Work Practice</u>
CO ₂ Storage Room	O ₂ deprivation due to leaking CO ₂	Ensure proper ventilation, wear O ₂ meter
Machinery Spaces	Noise, Flammability, Toxicity; MSDs – H ₂ S	Hearing protection
Flammable Storage Lockers/Paint Rooms	Flammability, Toxicity	Ensure proper ventilation
Battery Room	Toxicity -	Ensure proper ventilation
Bos'n Shop	O ₂ deprivation	Ensure proper ventilation
Workshops	Toxicity from welding fumes, Flammability, Noise	Ensure proper ventilation
Compressor Rooms ⁽¹⁾	O ₂ deprivation, Flammability	See Note 1
Provisions/Non-Flammable Storage	O ₂ deprivation	Ensure proper ventilation
Open Cargo Deck	Flammability	Ensure use of intrinsically safe radios, flashlight, phone, etc.

1) Space is monitored every thirty minutes by gas detection system. Enter these spaces after ensuring these are safe for entry and after ensuring the gas detection system is calibrated and functioning properly and gas levels detected are safe for entry. A marine chemist certificate is not required prior to entry.

IMMEDIATELY LEAVE ANY CONFINED SPACE IF:

- A personal monitor alarms;
- You feel dizzy or lightheaded;
- The forced air ventilation stops or is apparently ineffective; or
- If you sense any unexpected chemical through smell or dermal sensation that concerns you. This is a judgment call; however, you should depart any time there is a burning sensation in your lungs or you experience a shortness of breath. Any of these sensations may indicate a life threatening situation and you must react promptly to avoid injury.

Note: Climbing (other than on ladders) shall be limited to 5ft.

Steps to Take After Entry for All Confined Spaces

- Immediately contact your chain of command if you left a confined space for any of the reasons noted above. Do not reenter any confined space until notification of appropriate senior personnel and direction from your supervisor is obtained.
- Report any inconsistencies in the marine chemist certificate or competent person log to your supervisor and follow-up with a letter to Commandant CG-1134 via your District (industrial hygienist).
- In the event of overexposure, personnel should be evacuated to appropriate medical facilities by the most expeditious means. Medical personnel should be provided with all known information on the suspected exposure, including concentration and duration of exposure. This should include the most probable route of exposure. Also provide the medical authority with the phone number to American Toxic Substance and Disease Registry (ATSDR).

Conversions:

Distance and Energy							
Kilowatts (kW)	X	1.341	=	Horsepower (hp)			
Feet (ft)	X	3.281	=	Meters (m)			
Long Ton (LT)	X	.98421	=	Metric Ton (t)			
Liquid (NOTE: Values are approximate.)							
Liquid	bbl/LT	m ³ /t	bbl/m ³	bbl/t			
Freshwater	6.40	1.00	6.29	6.29			
Saltwater	6.24	.975	6.13	5.98			
Heavy Oil	6.77	1.06	6.66	7.06			
DFM	6.60	1.19	7.48	8.91			
Lube Oil	7.66	1.20	7.54	9.05			
Weight							
1 Long Ton	=	2240 lbs	1 Metric Ton	= 2204 lbs			
1 Short Ton	=	2000 lbs	1 Cubic Foot	= 7.48 gal			
1 Barrel (oil)	=	5.61 ft = 42 gal = 6.29 m ³	1 psi	= .06895 Bar = 2.3106 ft of water			
Temperature: Fahrenheit = Celsius (°F = 9/5 °C + 32 and °C = 5/9 (°F – 32))							
0	=	-17.8	80	= 26.7	200	=	93.3
32	=	0	90	= 32.2	250	=	121.1
40	=	4.4	100	= 37.8	300	=	148.9
50	=	10.0	110	= 43.3	400	=	204.4
60	=	15.6	120	= 48.9	500	=	260
70	=	21.1	150	= 65.6	1000	=	537.8
Pressure: Bars = Pounds per square inch							
1 Bar	=	14.5 psi	5 Bars	= 72.5 psi	9 Bars	=	130.5 psi
2 bars	=	29.0 psi	6 Bars	= 87.0 psi	10 Bars	=	145.0 psi
3 Bars	=	43.5 psi	7 Bars	= 101.5 psi			
4 Bars	=	58.0 psi	8 Bars	= 116.0 psi			