

Follow Up Actions (FU)

FTVE-FU01 - Verify International Safety Management (ISM) compliance

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|-----|--|--|
| .01 | Verify clear grounds exist to initiate expanded exam | IMO Res A.1052(27) 2.4
MSM II/D.1.G.2 |
| .02 | Verify crew familiarity with vessel's Safety Management System (SMS) | ISM Code 6.1 |
| .03 | Verify company responsibilities and authority are clearly defined | ISM Code 3 |
| .04 | Verify record keeping compliance | ISM Code 11 |
| .05 | Verify maintenance requirements | ISM Code 10 |
| .06 | Verify SMS training requirement | ISM Code 6.3
ISM Code 6.4 |
| .07 | Review audit documentation and follow-up actions | ISM Code 1.4.6
ISM Code 9.2 |

FTVE-FU02 - Issue or endorse vessel's Certificate of Compliance

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| .01 | Issue and/or endorse Certificate of Compliance | 46 USC 3711
46 CFR 2.01-6(a)(4)
CG-3585 |
| .02 | Verify COC endorsements are accurate | CG-3585 |
| .03 | Obtain copy of endorsed certificates | MSM I/12.E.7
MSM II/D.6.G.1.h |

United States Coast Guard



FOREIGN TANK VESSEL EXAMINER COMPETENCY CODE (FTVE)

Training Aid

Use of Foreign Tank Vessel Training Aid:

This is a condensed version of the FTV Examiner Performance and Qualification Standard (PQS) workbook. This Training Aid is intended to be used by Coast Guard Port State Control Officer trainees during examinations of foreign flagged tank vessels subject to Port State Control. This Training Aid provides a quick reference for all the steps necessary to complete specific examination tasks listed in the FTVE Job Aid.

This PQS workbook cites SOLAS regulations from the 2014 Consolidated Edition (74 SOLAS (14)). In some cases, the regulations in 74 SOLAS (14) may not apply due to the keel laid date of the vessel. PSC personnel must pay close attention to the applicability dates of the SOLAS chapters and regulations when conducting PSC exams.

FTVE-CS09 - Witness tests of Inert Gas System (IGS) audible and visual alarms and shutdowns

.01	Witness test for low water pressure or low water flow to the cooling & scrubbing arrangement	FSS Code 15.2.3.2.2.3 FSS Code 15.2.2.2.2
.02	Witness test of high water level in flue gas scrubber alarm	FSS Code 15.2.3.2.2.4 FSS Code 15.2.2.2.2
.03	Witness high temperature alarm shutdown*	FSS Code 15.2.3.2.2.5 FSS Code 15.2.2.2.2 & .2.3.2.1 MSM II/C.5.F.3(4)
.04	Witness IGS blower failure alarm and automatic shutdown of main or regulating valve*	FSS Code 15.2.3.2.2.6 FSS Code 15.2.2.2.2 MSM II/C.5.F.3(6)
.05	Witness test of high oxygen content alarm in IGS main	FSS Code 15.2.2.4.5.1.1 FSS Code 15.2.2.4.5.2 MSM II/C.5.F.3(1)
.06	Witness test for failure of power to auto controlled system for gas regulating valve and indicating devices alarms	FSS Code 15.2.2.4.5.1.2 FSS Code 15.2.2.4.5.1.5 MSM II/C.5.F.3(7)
.07	Witness test for low water alarm for water seal	46 CFR 32.53-10(b)(1) FSS Code 15.2.3.2.2.7 MSM II/C.5.F.3(3)
.08	Witness test for low gas pressure in IG main forward of all non-return devices alarm	FSS Code 15.2.2.4.5.1.3 FSS Code 15.2.2.4.5.2 MSM II/C.5.F.3(2)
.09	Witness test for high gas pressure in IG main forward of all non-return devices alarm(s)	FSS Code 15.2.2.4.5.1.4 FSS Code 15.2.2.4.2 MSM II/C.5.F.3(5)
.10	Verify fuel oil supply alarm	FSS Code 15.2.3.2.2.1 FSS Code 15.2.2.2.2
.11	Verify Nitrogen Generator alarms	FSS Code 15.2.4.2.2

FTVE-CS10 - Examine oil discharge monitoring and control system (ODME)

.01	Verify approval	33 CFR 157.12(a) & 157.12(b) MARPOL I/31.1 MSM II/E.1.D.5
.02	Verify operation of recording device	33 CFR 157.12d(a)(4)(viii)(C) MARPOL I/31.2
.03	Verify approved operation manual	33 CFR 157.12g(c) MARPOL I/31.4
.04	Verify recording device records	33 CFR 157.12d(h)

FTVE-CS11 - Examine crude oil washing (COW) system

.01	Verify presence	MARPOL I/33.1 MARPOL I/33.3
.02	Verify approved	MARPOL I/33.2
.03	Verify presence of Operations and Equipment Manual	MARPOL I/35.1

FTVE-CS07 - Examine fixed/portable vapor detection instruments

- .01** Verify operation of flammable vapor device SOLAS 14 II-2/4.5.7.1
SOLAS 14 II-2/4.5.7.2.1
- .02** Verify operation of oxygen content device SOLAS 14 II-2/4.5.7.1
SOLAS 14 II-2/4.5.7.2.1
FSS Code 16.2.2.3.2
- .03** Verify means to calibrate fixed and portable instruments SOLAS 14 II-2/4.5.7.1
FSS Code 16.2.2.3.4
- .04** Verify operation of fixed gas sampling line system SOLAS 14 II-2/4.5.7.2.2
SOLAS 14 II-2/4.5.7.2.3
FSS Code 16.2.2.3.4

FTVE-CS08 - Examine Inert Gas System (IGS)

- .01** Verify presence SOLAS 14 II-2/4.5.5.1.1
SOLAS 14 II-2/4.5.5.1.2
SOLAS 14 II-2/4.5.5.2
- .02** Determine type installed SOLAS 14 II-2/4.5.5.3.2
FSS Code 15.2.2.1.4
46 CFR 32.53-10
- .03** Verify volume of inert gas being delivered SOLAS 14 II-2/4.5.5.3.2
FSS Code 15.2.2.1.2.4
- .04** Verify oxygen content of inert gas in IGS supply main SOLAS 14 II-2/4.5.5.3.2
FSS Code 15.2.2.1.2.5
FSS Code 15.2.2.4.2.2
- .05** Verify oxygen content of inert gas forward of non-return devices FSS Code 15.2.2.1.2.1
- .06** Verify arrangements within gas-safe zone (i.e. scrubbers, blowers) FSS Code 15.2.3.1.3
FSS Code 15.2.3.1.4
- .07** Verify arrangement of pressure/vacuum breaking device SOLAS 14 II-2/11.6.3.4
- .08** Verify arrangement of water seal on deck FSS Code 15.2.2.3.1.2
FSS Code 15.2.2.3.1.7
FSS Code 15.2.2.3.1.9
- .09** Verify arrangement of non-return valve on deck FSS Code 15.2.2.3.1.3
- .10** Verify ability to connect inert gas main to an external supply of inert gas FSS Code 15.2.2.3.2.6
- .11** Verify double block and bleed arrangement MSM II/C.5.C.6.b(4)

Table of Contents:

Foreign Tank Vessel Examination

Pre-exam	1
Certificates and Documents	1
Logs and Manuals	2
Bridge/Navigation	3
Lifesaving Equipment	3
Firefighting Systems	4
Electrical Systems	4
Pollution Prevention.....	4
Topside Equipment	5
Cargo Systems	6
Follow Up Action.....	9

Pre-Exam (PE)

FTVE-PE01 - Schedule examination in Maritime Information for Safety and Law Enforcement (MISLE)

.01 Review vessel particulars	MSM I/12.G.5
.02 Verify documents are current in MISLE and there are no overdue examinations	MSM I/12.G.5
.03 Review special notes pertaining to alternative design arrangements	MSM I/12.G.5
.04 Verify status of user fees	46 CFR 2.10-1 46 CFR 2.10-125
.05 Verify applicable examination regulations	MPS-PR-SEC-02 MPS-PR-SEC-04
.06 Determine if cargo operations are permitted prior to COC exam	MSM II/D.6.C.1.e(2) 46 USC 3711
.07 Prepare Certificate of Compliance	MPS-PR-SEC-04

FTVE-PE02 - Conduct meeting with vessel's representative to discuss scope of the examination

.01 Review outstanding Conditions of Class	MPS-PR-SEC-04
.02 Discuss examination procedures and expectations	MSM II/B.8
.03 Review any ongoing operations that could affect examination and equipment availability with Master	MPS-PR-SEC-04
.04 Coordinate actual testing procedures	MSM II/D.6.C.4 MSM II/D.6.C.6.f(1)(e) MPS-PR-SEC-04

FTVE-PE03 - Mitigate potential hazards encountered during an exam

.01 Recognize potential hazards encountered during an exam	NFPA 306
.02 Determine confined spaces	MSM I/10 App.A
.03 Determine if exam scope will require a Marine Chemist certification for space entry	29 CFR 1915, Part B MSM II/D.6.C.1.f
.04 Verify Marine Chemist has been scheduled for the exam	MSM I/10 App. A
.05 Prepare necessary personal protective equipment for exam	MSM I/10 App. A MSM I/8.A.3 Quattro Operator's Manual
.06 Review CG policy for when to leave a space due to hazardous condition	MSM I/10 App. A

Certificates and Documents (CD)

FTVE-CD01 - Examine International Oil Prevention Certificate Form B (IOPP)

.01 Verify presence	33 CFR 151.19(b) MARPOL I/7 MARPOL I/8
.02 Verify validity	MARPOL I/10 MARPOL I/6.1
.03 Verify form/content	MARPOL I/9 MARPOL I/Appendix II

FTVE-CS03 - Examine designated observation area

.01 Verify location	33 CFR 157.13 33 CFR 157.13(a)
.02 Verify means to stop discharge of effluent	33 CFR 157.13(b)(1)
.03 Verify communications	33 CFR 157.13(b)(2)

FTVE-CS04 - Examine liquid cargo transfer systems

.01 Examine condition of piping and hose(s)	33 CFR 155.800
.02 Verify operation of cargo pump remote shutdown devices	33 CFR 155.780 33 CFR 156.170(c)(5)
.03 Verify hoses are marked	33 CFR 155.800 33 CFR 154.500(e) 33 CFR 154.500(f)
.04 Verify hose and hose assembly	33 CFR 155.800 33 CFR 154.500 (a)-(d)
.05 Verify transfer equipment tests and inspections	33 CFR 156.170(c)(1)
.06 Verify warning signals and signs	46 CFR 35.30-1

FTVE-CS05 - Examine Vapor Control System (VCS)

.01 Examine drain lines	46 CFR 39.2001(d)
.02 Verify electrically bonded	46 CFR 39.2001(c)
.03 Verify system can be isolated from Inert Gas System	46 CFR 39.2001(e)
.04 Verify presence of isolation valve and indicator	46 CFR 39.2001(g)
.05 Verify markings on vapor piping	46 CFR 39.2001(h)
.06 Verify presence of flange stud	46 CFR 39.2001(j)
.07 Verify closed gauging system	46 CFR 39.2003(a)
.08 Verify pressure indicator for main vapor collection line	46 CFR 39.2013(a)
.09 Verify operation of pressure alarms	46 CFR 39.2013(b)
.10 Examine approval letter	46 CFR 39.1015 MSM II/D.6.B.2

FTVE-CS06 - Examine tank liquid high level and overflow protection

.01 Verify overflow alarms	46 CFR 39.2007(a) SOLAS 14 II-2/11.6.3.1
.02 Verify high level alarm settings	46 CFR 39.2007(c)(1)
.03 Witness operational test of audible and visual alarm indicators	46 CFR 39.2007(c)(3) 46 CFR 39.2007(d)(3)
.04 Verify high level alarm markings	46 CFR 39.2007(c)(2)
.05 Verify tank overflow alarm markings	46 CFR 39.2007(d)(2)

Topside Equipment Examination (TE)

FTVE-TE01 - Examine access to bow and emergency towing arrangements

.01	Verify safe access	SOLAS 14 II-1/3-3.2 ICLL 25(4) & 26(2) IMO Res MSC.62(67)
.02	Verify towing arrangements	SOLAS 14 II-1/3-4.1 33 CFR 155.235 NVIC 08-89
.03	Verify emergency towing arrangements	SOLAS 14 II-1/3-4.2 33 CFR 155.235
.04	Verify design is approved by the Administration	SOLAS 14 II-1/3-4.2.2 SOLAS 14 II-1/3-4.3 33 CFR 155.235

Cargo Systems Examination (CS)

FTVE-CS01 - Examine cargo tank venting arrangements

.01	Verify material condition	SOLAS 14 II-2/4.5.3
.02	Verify condition of flame screens and arresters	SOLAS 14 II-2/4.5.3.3 MSM II/D.6.B.4 MSM II/F.3.F.17
.03	Verify operation of permanently attached closures (when applicable)	ICLL I/20
.04	Verify height of tank venting system	SOLAS 14 II-2/4.5.3.4 SOLAS 14 II-2/11.6.2.1
.05	Verify horizontal distance from air intakes and openings	SOLAS 14 II-2/4.5.3.4.1 SOLAS 14 II-2/11.6.2.2
.06	Verify operation of visual indicators (when applicable)	SOLAS 14 II-2/4.5.3.2.2 SOLAS 14 II-2/11.6.3.3
.07	Verify presence of blank flanges (when applicable)	SOLAS 14 II-2/4.5.3.5
.08	Verify operation of pressure/vacuum valves	SOLAS 14 II-2/11.6.1 SOLAS 14 II-2/11.6.3.2
.09	Verify operation of vapor line pressure sensors and alarms	SOLAS 14 II-2/11.6.3.2

FTVE-CS02 - Examine cargo pump room

.01	Verify Marine Chemist Certificate prior to entry	MSM I/10 App. A
.02	Verify operation of ventilation	SOLAS 14 II-2/4.5.4.1
.03	Verify lighting/ventilation interlock	SOLAS 14 II-2/4.5.10.1.2
.04	Verify operation of hydrocarbon gas monitoring system	SOLAS 14 II-2/4.5.10.1.3 SOLAS 14 II-2/1.6.7 IMO MSC.1/Circ.1370
.05	Verify operation of bilge monitoring devices	SOLAS 14 II-2/4.5.10.1.4
.06	Verify electrical equipment	SOLAS 14 II-1/45.11
.07	Verify fixed fire extinguishing system	SOLAS 14 II-2/10.9.1 SOLAS 14 II-2/10.9.2 MARPOL I/1.18 UI 3.1
.08	Examine spool piece	
.09	Verify bulkhead between pump room and engine room is gas tight	SOLAS 14 II-2/9.2.4 Table 9.7

FTVE-CD02 - Examine Tank Vessel Response Plan (TVRP)

.01	Verify presence	33 CFR 155.1015 33 CFR 155.1025
.02	Verify validity	33 CFR 155.1065(c)
.03	Verify content	33 CFR 155.1030 33 CFR 155.1035 33 CFR 155.1045

FTVE-CD03 - Examine International Pollution Prevention Certificate for the Carriage of Noxious Liquid Substances (IPPC-NLS)

.01	Verify presence	46 CFR 153.9(a) MARPOL II/9.1
.02	Verify validity	MARPOL II/10
.03	Verify content	MARPOL II/9.4 MARPOL II/Appendix III

FTVE-CD04 - Examine crew Certificates of Competency & Proficiency for service on oil tankers

.01	Verify basic training for oil tanker cargo operations	STCW A-V/1-1.1
.02	Verify advanced training for oil tanker cargo operations	STCW A-V/1-1.2

FTVE-CD05 - Verify participation in Enhanced Survey program

.01	Verify written language(s)	SOLAS 14 XI-1/2 ESP Code 6.1.1
.02	Verify presence of supporting documents	ESP Code 6.1.1 ESP Code 6.1.2
.03	Verify survey schedule	ESP Code 2 ESP Code 3 ESP Code 4

Logs and Manuals Examination (LM)

FTVE-LM01 - Examine Oil Record Book (Part II)

.01	Verify presence	33 CFR 151.25 MARPOL I/36.1
.02	Verify validity and content	MARPOL I/36.2-36.6
.03	Verify presence of completed books	MARPOL I/36.7
.04	Verify form	MARPOL I/36.1 MARPOL I/Appendix III

FTVE-LM02 - Examine cargo and ballast system instructional manual

.01	Verify presence of instruction manual	33 CFR 157.23(a)
.02	Verify format and content of instruction manual	33 CFR 157.23(b)

FTVE-LM03 - Examine inert gas manual(s)

.01	Verify presence & approval	SOLAS 14 II-2/4.5.5.1.1 FSS Code 15.2.2.5
.02	Verify content	SOLAS 14 II-2/4.5.5.1.1 FSS Code 15.2.2.5 MSM II/C.5.C.11

FTVE-LM04 - Examine Procedures & Arrangements (P&A) Manual

- .01 Verify presence 46 CFR 153.490(a)(2)
MARPOL II/14.1
MSM II/E.1.E.3.b
- .02 Verify validity MARPOL II/14.1
MSM II/E.1.E.2.e.2
- .03 Verify contents 46 CFR 153.490(b)
MARPOL II/14.2
MARPOL II/Appendix IV

FTVE-LM05 - Examine Shipboard Marine Pollution Emergency Plan (SMPEP)

- .01 Verify presence MARPOL II/17.1
MARPOL II/17.3
- .02 Verify validity MARPOL II/17.1
- .03 Verify contents MARPOL II/17.2

FTVE-LM06 - Examine Cargo Record Book

- .01 Verify presence 46 CFR 153.490(a)(1)
MARPOL II/15.1
MARPOL II/15.5
- .02 Verify validity and contents 46 CFR 153.909
MARPOL II/15.2 & 15.3
MARPOL II/15.4
- .03 Verify presence of completed books 46 CFR 153.909(e)
MARPOL II/15.5
- .04 Verify form 46 CFR 153.490(a)(1)
MARPOL II/Appendix II

Bridge/Navigation Examination (BN)**FTVE-BN01 - Examine additional equipment for tank vessels**

- .01 Verify additional radar capabilities 33 CFR 164.37(b)
- .02 Verify Automatic Radar Plotting Aid (ARPA) 33 CFR 164.38(b)(2)
- .03 Verify steering gear 33 CFR 164.39
SOLAS 14 II-1/29
SOLAS 14 II-1/30

Lifesaving Equipment Examination (LS)**FTVE-LS01 - Examine lifeboats**

- .01 Verify equipped with a fire protection system SOLAS 14 III/31.1.7
LSA Code 4.9
- .02 Examine material condition of fire protection system piping* LSA Code Part 1/6.16.8
- .03 Verify self-contained air support system LSA Code 4.9
LSA Code 4.8

Firefighting Systems Examination (FF)**FTVE-FF01 - Examine fixed fire-extinguishing system(s) for cargo pump rooms**

- .01 Verify type of agent and coverage SOLAS 14 II-2/10.9.1
- .02 Verify CO2 system compliance SOLAS 14 II-2/10.9.1.1
FSS Code 5.2.2
- .03 Verify foam system compliance SOLAS 14 II-2/10.9.1.2
FSS Code 6
- .04 Verify water spraying system compliance SOLAS 14 II-2/10.9.1.3
FSS Code 7

FTVE-FF02 - Examine fixed deck foam system

- .01 Verify presence SOLAS 14 II-2/10.8
FSS Code 14.2.1.1
- .02 Verify operation of fire main isolation valves FSS Code 14.2.3.4
- .03 Witness operational test of applicators and monitors FSS Code 14.2.2.2
FSS Code 14.2.3.2.2
- .04 Verify location of main operation station FFS Code 14.2.3.1.1
- .05 Verify foam type (polar/non-polar) is compatible with cargoes MSM II/D.6.B.3
- .06 Verify foam analysis report FSS Code 14.2.2.1.4
IMO MSC.1/Circ. 1312

FTVE-FF03 - Examine additional personal fire fighting equipment

- .01 Verify additional fire fighting outfits SOLAS 14 II-2/10.10.2.3
FSS Code 3.2.1
- .02 Verify additional spare charges for breathing apparatus SOLAS 14 II-2/10.10.2.5

Electrical Systems Examination (ES)**FTVE-ES01 - Examine components installed in designated hazardous locations**

- .01 Identify hazardous location(s) SOLAS 14 II-1/45.11
IEC 60092-502
- .02 Verify design and conditions of fixtures are appropriate SOLAS 14 II-1/45.5.4
SOLAS 14 II-1/45.11

Pollution Prevention Examination (PP)**FTVE-PP01 - Examine containment on deck**

- .01 Verify adequate containment 33 CFR 155.310(a)
33 CFR 156.120(n)
- .02 Verify adequate peripheral cargo deck coamings 33 CFR 155.310(c)(4)
33 CFR 156.120(n)
- .03 Verify means of drainage 33 CFR 155.310(a)(2)
33 CFR 156.120(o)
- .04 Verify mechanical means of closing drain(s) or scupper(s) 33 CFR 155.310(a)(3)
33 CFR 156.120(o)