

United States Coast Guard



**INSPECTED TOW VESSEL INSPECTOR
COMPETENCY CODE (ITVI)**

Training Aid

Use of Inspected Tow Vessel Inspector Training Aid:

This is a condensed version of the ITV Inspector Performance and Qualification Standard (PQS) workbook. This Training Aid is intended to be used by Coast Guard Inspected Tow Vessel Inspector trainees during inspections of inspected tow vessels. This Training Aid provides a quick reference for all the steps necessary to complete specific inspection tasks listed in the ITVI Job Aid.

Marine Inspectors must pay close attention to the applicability dates of the regulations when conducting inspections to determine which regulations and/or American Bureau of Shipping (ABS) standards apply.

ITV-FU03 - Issue/Endorse vessel certificates

.01	Issue/Endorse certificates, as applicable	46 CFR 136.200 46 CFR 136.212(c) 46 CFR 137.200 MSM I/12.E.7
.02	Obtain a copy of all endorsed certificates for the unit's vessel file	
.03	Issue amended COI	46 CFR 136.235 MSM II/A.3.J MSM II/A.6.B 46 CFR 136.240 MSM II/A.6.B 46 CFR 136.245 MSM II/B.4.B
.04	Issue Permit to Proceed	
.05	Issue Excursion Permit	

ITV-FU04 - Complete MISLE Activity

.01	Open existing activity in MISLE	MSM I/12.G.2.a
.02	Update inspection results	MSM I/12.H.1 MSM II/A.2.C.2.d
.03	Update activity narrative	MSM I/12.H.1
.04	Update vessel details	MSM I/12.H.1
.05	Amend Certificate of Inspection (as needed)	MSM I/12.H.1
.06	Print new or amended Certificate of Inspection	MSM II/A.2.C.6
.07	Change activity status to "Open - Submitted for Review"	MSM I/12.H.1

ITV-FU05 - Verify deficiency corrections

.01	Determine an appropriate verification method for identified deficiency(s)	MSM II/A.2.C.4
.02	Verify corrective action(s) meet appropriate regulations	MSM II/A.2.C.4.a
.03	Clear deficiency(s) in MISLE activity	MSM II/A.2.C.2.d

ITV-NT04 - Verify nondestructive testing (NDT) using the ultrasonic method

- .01 Verify technician's qualification and certification ABS NDT Guide 1/5.0
ABS NDT Guide 3/3.1
- .02 Witness technician calibrate equipment ABS NDT Guide 3/3.5.1
ABS NDT Guide 3/3.5.2
- .03 Witness technician examine/interpret readings ABS NDT Guide 3/9.1
- .04 Evaluate test results or review technician's report ABS NDT Guide 3/13

ITV-NT05 - Verify nondestructive testing (NDT) using the hydro-static method

- .01 Verify test pressure ABS 3-7-1/5.1
- .02 Verify air has been purged ABS 3-7-1/5.1
- .03 Verify test pressure is attained and maintained ABS 3-7-1/5.1
- .04 Examine all joints, connections and high stress regions ABS 3-7-1/5.1

ITV-NT06 - Verify nondestructive testing (NDT) using the pneumatic (air test) method

- .01 Verify test pressure ABS 3-7-1/5.3
- .02 Verify test pressure is attained and maintained ABS 3-7-1/5.3
- .03 Examine joints and connections with leak indicating solution ABS 3-7-1/5.3

Follow Up Actions (FU)

ITV-FU01 - Issue deficiencies & non-conformities

- .01 Determine deficiency's reference cite 46 CFR 137.200
MSM II/A.2.C.4.b
- .02 Discuss deficiencies and corrective measures/timeframe with vessel's master or representative 46 CFR 137.200
MSM II/A.2.C.2
- .03 Issue signed CG-835 to vessel's master or representative 46 CFR 137.200
MSM II/A.2.C

ITV-FU02 - Issue TSMS non-conformity notifications

- .01 Report to OCMI 46 CFR 137.135
46 CFR 138.500
46 CFR 138.505
- .02 Notify Third Party Organization (TPO) 46 CFR 137.135
46 CFR 137.202
46 CFR 138.510
- .03 Notify USCG interested parties 46 CFR 137.305
46 CFR 138.505

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Pre-Inspection (PI)

ITV-PI01 - Research vessel details in MISLE (Marine Information for Safety and Law Enforcement) database

.01	Locate vessel	MSM I/12.G.5
.02	Review vessel particulars	46 CFR 137.200 & .202 MSM I/12.G.5 MSM II/B.1.C.2
.03	Review history (narratives, deficiencies & special notes)	MSM I/12.G.2 MSM I/12.G.7 MSM II/B.1.C.2
.04	Verify user fees	MSM I/12.G.2
.05	Generate new activity	MSM I/12.G.2.a
.06	Verify Certificate of Financial Responsibility is valid	33 CFR 138.15 33 CFR 138.30 33 CFR 138.65
.07	Verify TSMS option vessel current on audits & surveys	46 CFR 138.305(a)

ITV-PI02 - Determine authority, jurisdiction and applicable regulations

.01	Verify authority	46 USC 3301(15) 46 CFR 136.212 MSM II/A.1
.02	Verify route (freshwater/saltwater service)	46 CFR 137.300 46 CFR 136.230
.03	Verify Coast Guard option	46 CFR 137.200
.04	Verify TSMS option	46 CFR 137.202

ITV-PI03 - Coordinate inspection with vessel representative

.01	Verify vessel's representative	46 CFR 137.202 MPS-PR-SEC-01
.02	Determine location and time of inspection	46 CFR 136.210 MPS-PR-SEC-01
.03	Discuss inspection expectations	MSM II/B.3.A 46 CFR 137.215 46 CFR 136.212(b)
.04	Verify vessel's owner/operator information	MPS-PR-SEC-04 46 CFR 136.210
.05	Verify vessel's Classification Society information	46 CFR 136.205
.06	Discuss outstanding conditions and/or CG-835s	MSM II/B.1.C.2 MPS-PR-SEC-04
.07	Review planned repairs and alterations	MSM II/B.1.C.2

ITV-WR05 - Inspect back gouge

.01	Examine welds for defects (discontinuity)	ABS 2-4-1/5.9 NVIC 07-68 V(G)(2) ABS 2-4-1/1.7 NVIC 07-68 V(F) ABS 2-4-1/3.5 NVIC 07-68 V(H)
.02	Verify weld sequencing	
.03	Verify joints are cleaned between interpasses	

ITV-WR06 - Inspect welds

.01	Examine welds for uniformity and reinforcement	ABS 2-4-1/5.15.1 MSM II/A.5 NVIC 07-68 V
.02	Examine welds for defects (discontinuity)	ABS 2-4-1/5.15.1 NVIC 07-68 V(H) MSM II/A.5
.03	Examine adjacent base metal for injurious are strikes, spatter, undercut, overlap, slag and irregular and/or sharp edges	ABS 2-4-1/5.15.1 MSM II/A.5
.04	Verify workmanship through a nondestructive test	ABS 2-4-1/5.15.2

Nondestructive Testing (NT)

ITV-NT01 - Verify nondestructive testing (NDT) using the liquid (dye) penetrant method

.01	Verify technician's qualification and certification	ABS NDT Guide 1/5.0 ABS 2-4-1/5.17
.02	Witness application	ABS NDT Guide 4/5.1
.03	Witness removal of excess after dwell time	ABS NDT Guide 4/5.7
.04	Witness application of developer	ABS NDT Guide 4/5.7
.05	Evaluate test results or technician's report	ABS NDT Guide 4/7.1

ITV-NT02 - Verify nondestructive testing (NDT) using the magnetic particle method

.01	Verify technician's qualification and certification	ABS NDT Guide 5/5.1
.02	Verify magnetic field strength	ABS NDT Guide 5/5.7.2
.03	Witness proper application of visible magnetic particles	ABS NDT Guide 5/5.3
.04	Witness the technician examine/interpret readings	ABS NDT Guide 5/5.9
.05	Evaluate test results or review technician's report	ABS NDT Guide 5/5.9

ITV-NT03 - Verify nondestructive testing (NDT) using the radiography (gamma rays or x-rays) method

.01	Verify technician's qualification and certification	ABS NDT Guide 1/5.0
.02	Verify technique	ABS NDT Guide 2/5.3
.03	Witness technician examine/interpret readings	ABS NDT Guide 2/5.15
.04	Review technician's report	ABS NDT Guide 2/9

ITV-IS02 - Inspect vessel's internal structures

.01 Inspect internal structures	46 CFR 137.330(b) 46 CFR 137.300(a)
.02 Inspect coamings, closures and other fittings	46 CFR 137.330(b) 46 CFR 144.320(b) MSM II/B.3.B
.03 Verify wastage discovered is within acceptable limits	NVIC 07-68 III(C)
.04 Inspect cathodic protection arrangement	46 CFR 143.570(f)

Welding Repair Inspection (WR)**ITV-WR01 - Evaluate structural repair proposals**

.01 Verify extent of damage and/or wastage/corrosion	46 CFR 137.330(a)(1) NVIC 07-68
.02 Review repair proposal	MSM II/A.1.F.2.a NVIC 07-68 IV
.03 Verify repair materials	NVIC 07-68
.04 Verify welding procedures	NVIC 07-68
.05 Evaluate alternative repair methods for equivalency	46 CFR 144.200 46 CFR 144.205 MSM II/A.1.F.2.c

ITV-WR02 - Verify welding Procedure Qualification Record(s) (PQR)

.01 Confirm need for qualified welding procedure	46 CFR 144.200 46 CFR 144.205 ABS 2-4-4/3.1
.02 Verify variables on PQR(s) meet the Welding Procedure Specification(s)(WPS)	ABS 2-4-4/3.1
.03 Verify tests and results	ABS 2-4-3

ITV-WR03 - Verify welder is qualified to perform repair work

.01 Confirm need for qualified welding procedure	46 CFR 144.200 46 CFR 144.205 ABS 2-4-1/1.5
.02 Verify Welder Performance Qualification (WPQ) is valid	ABS 2-4-1/1.7.1
.03 Verify variables on WPQ(s)	ABS 2-4-1/1.7.1
.04 Verify tests are satisfactory	ABS 2-4-1/7.1

ITV-WR04 - Inspect fit-up

.01 Examine material and verify it is fitted to approved joint detail	46 CFR 144.200 & .205 NVIC 07-68 V ABS 2-4-1/3.1
.02 Verify materials (base, filler, gas)	ABS 2-4-1/1.5
.03 Verify welding processes	ABS 2-4-1/5.15 ABS 2-4-1/5.7 ABS 2-4-1/5.19

ITV-PI04 - Mitigate potential hazards encountered during an inspection

.01 Recognize potential hazards encountered during inspection	NFPA 306 29 CFR 1910 29 CFR 1915.4
.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, Subpart B MSM II/A.5.H
.04 Verify Marine Chemist has been scheduled for exam (when applicable)	MSM I/10 App. A
.05 Prepare necessary personal protective equipment for exam	MSM I/10 App. A Quattro Operator's Manual
.06 Review CG policy for when to leave a space due to hazardous condition	MSM I/10 App. A
.07 Verify competent person scope of responsibilities	MSM II/A.5

Dockside Assessment (DA)**ITV-DA01 - Inspect external portions of vessel prior to embarkation**

.01 Verify name, hailing port and official number markings	46 CFR 144.160(a) & (b) 46 CFR 67.121 46 CFR 67.123
.02 Verify draft marks	46 CFR 144.160(c)
.03 Verify Load Line markings	46 CFR 144.160(d) 46 CFR 144.125 46 CFR 42.13
.04 Verify IMO number	33 CFR 104.297
.05 Evaluate hull for signs of pollution/illegal discharge	33 USC 1321
.06 Evaluate hull condition	46 CFR 137.325
.07 Examine means of embarkation (gangway/ladders)	46 CFR 140.510(a)(10)

Security (Domestic) Inspection (SD)**ITV-SD01 - Inspect Vessel Security Plan or Alternative Security Program**

.01 Verify presence of approval letter for plan type	46 CFR 140.660 33 CFR 104.120(a) SOLAS 14 XI-2/4.2
.02 Verify plan is secured	33 CFR 104.400(c) ISPS Code A/9.7 NVIC 04-03
.03 Examine contents	33 CFR 104.400 CG-543 Policy Ltr 11-04
.04 Verify amendments(s)	33 CFR 104.415(a)
.05 Verify implementation	33 CFR 104.400(a) CG-543 Policy Ltr 11-04

ITV-SD02 - Inspect security records

- .01** Verify records(s) of training
33 CFR 104.235(b)(1)
SOLAS 14 XI-2/4.2
ISPS Code A/10.1.1
- .02** Verify presence of Declarations of Security (DOS)
33 CFR 104.235(b)(7)
ISPS Code A/5.7
NVIC 04-03
- .03** Verify record(s) of drills
33 CFR 104.235(b)(2)
ISPS Code A/10.1.1
- .04** Verify annual exercise has been conducted
33 CFR 104.235(b)(2)
ISPS Code A/10.1.1
- .05** Verify records of breaches of security
33 CFR 104.235(b)(3)
ISPS Code A/10.1.3
NVIC 04-03
- .06** Verify record(s) of audits
33 CFR 104.235(b)(8)
ISPS Code A/10.1.6

ITV-SD03 - Inspect security equipment

- .01** Verify equipment matches plan
33 CFR 104.405(a)(9)
SOLAS 14 XI-2/6
ISPS Code A/9.4.17
- .02** Verify maintenance records
33 CFR 104.235(b)(5)
33 CFR 104.260
NVIC 04-03 Encl. 3 Section 10

ITV-SD04 - Evaluate crew competency

- .01** Identify Company Security Officer (CSO)
33 CFR 104.200(b)(2)
SOLAS 14 XI-2/4.2
ISPS Code A/11.1
- .02** Identify Vessel Security Officer (VSO)
33 CFR 104.200(b)(2)
ISPS Code A/12.1
- .03** Evaluate VSO's knowledge regarding responsibilities
33 CFR 104.215(e)
ISPS Code A/12.2
NVIC 04-03 Encl. 3 Section 9
- .04** Evaluate crew's knowledge regarding responsibilities
33 CFR 104.220
ISPS Code A/13.3
NVIC 04-03 Encl. 3 Section 10
- .05** Verify compliance with current Maritime security (MARSEC) level in effect
33 CFR 104.240
33 CFR 104.215(e)(9)
ISPS Code A/12.2.9

ITV-HI07 - Inspect rudder installation

- .01** Verify type of assembly installed
46 CFR 137.330 & 143.550
ABS 3-2-14/1
MSM II/B.3.E.2
- .02** Examine assembly
46 CFR 137.330
ABS 7-4-1/1
ABS 7-4-4/27
- .03** Verify bearing clearance(s)
ABS 7-4-1/1
- .04** Verify tightness of rudder assembly by pneumatic test
ABS 7-4-1/1
ABS NDT Guide

ITV-HI08 - Inspect hull appendages

- .01** Inspect condition and structural integrity of bilge keel
46 CFR 137.220/.330
ABS 7-4-1/1
- .02** Inspect condition of coolers (keel or grid)
46 CFR 137.220
46 CFR 137.330
ABS 7-4-1/1
- .03** Examine condition of transducers and other similar appendages
- .04** Examine underwater components of steering & propulsion
46 CFR 137.330(a)(3)
- .05** Inspect ATB/ITB tug/barge connector appendage
ABS 7-9-14
NVIC 02-81
- .06** Inspect through hull fittings
46 CFR 137.220(b)(2)
46 CFR 137.330(a)(6)

ITV-HI09 - Inspect non-propulsion thruster(s)

- .01** Inspect propeller
46 CFR 137.330
ABS 7-4-1/1 & 7-9-6/1.3
- .02** Inspect thruster tunnel
ABS 7-4-1/1
ABS 7-A-4/27
- .03** Verify shaft seal or packing gland in place
ABS 7-4-1/1
ABS 7-9-6/1.3

Internal Structural Examination (IS)

ITV-IS01 - Verify confined spaces are safe for entry

- .01** Review Marine Chemist Certificate
29 CFR 1915.12(f)
CIM 5100.47A 13.B.3
NFPA 306/4.3
- .02** Verify Competent Person has maintained Marine Chemist Certificate
29 CFR 1915.15
CIM 5100.47A 13.B.8
NFPA 306/4.6.2
- .03** Verify no changes to vessel's condition
29 CFR 1915.15(b)
- .04** Verify forced ventilation is provided (when applicable)
29 CFR 1915.13(b)(3)
- .05** Verify condition of space access point
29 CFR 1915.76
46 CFR 140.510(a)(5)

ITV-HI03 - Inspect steel and aluminum hulls

.01 Examine for wastage, defect(s) and damage	46 CFR 144.200 46 CFR 144.205 ABS 7-4-1/1
.02 Inspect critical areas (stringer plate, sheer strake)	NVIC 07-68 IV(B) NVIC 11-80
.03 Inspect seachests and overboard discharges for wastage, defect(s) and damage	NVIC 07-68 II(A)
.04 Verify condition of drydock (bottom) plugs	NVIC 07-68 II(A) ABS 7-4-1/1 MSM II/B.3.B
.05 Verify wastage/corrosion is within limits	NVIC 07-68 III(C) ABS 7-A-4/27

ITV-HI04 - Inspect hull markings

.01 Verify placement of hull markings	46 CFR 144.160 46 CFR 67.120 46 CFR 42.13-40
.02 Verify markings are permanently affixed	46 CFR 144.160 46 CFR 67.121 46 CFR 42.13-40
.03 Verify markings are of contrasting colors	46 CFR 42.13-40

ITV-HI05 - Inspect main propulsion propeller(s)

.01 Inspect condition	46 CFR 137.330 46 CFR 144.200 46 CFR 144.205
.02 Verify locking nut is installed and secured	ABS 7-4-1/1 ABS 7-5-1/1.5 ABS 7-5-1/3.5
.03 Witness NDT of propeller coupling bolts and flange radius	ABS 7-5-1/3
.04 Verify no leaks (variable pitch)	46 CFR 137.330 46 CFR 143.205 ABS 7-4-1/1

ITV-HI06 - Inspect tailshaft(s) and stern bearing(s)

.01 Determine if tailshaft(s) need to be drawn	46 CFR 137.300 46 CFR 137.330(a)(2) MSM II/B.3.D.3
.02 Verify bearing clearance and inboard seal assembly	46 CFR 137.330(a)(2)
.03 Visually examine shaft	ABS 7-5-1/1 ABS 7-5-1/3 ABS 7-5-2/1
.04 Witness non-destructive testing (NDT) of shaft's taper section and keyway	ABS 7-5-1/1 ABS NDT Guide
.05 Verify condition and wear of strut bearing(s)	MSM II/B.3.D.10
.06 Verify condition of blade hardware on Controllable Pitch Propeller (CPP)	ABS 7-5-1/3

Certificates and Documents (CD)**ITV-CD01 - Review Certificate of Inspection (COI)**

.01 Verify presence of original	46 CFR 136.200 46 CFR 136.220
.02 Verify amendments	46 CFR 136.235
.03 Verify manning	MSM III?? 46 CFR 15.501 46 CFR 140.205(c) 46 CFR 137.200(b)
.04 Verify certificate is endorsed	46 CFR 136.130
.05 Verify appropriate for compliance option chosen	
.06 Verify regulatory exceptions	46 CFR 136.110 46 CFR 136.230

ITV-CD02 - Verify vessel's stability documents

.01 Verify presence of stability documents	46 CFR 144.300(a) 46 CFR 144.305 46 CFR 170.110 & .120 46 CFR 170.110 46 CFR 170.120 46 CFR 136.210(b)(2)
.02 Verify contents	

ITV-CD03 - Inspect Merchant Mariner Credentials (MMCs), Medical Certificates & Transportation Worker Identification Credentials (TWICs)

.01 Verify MMCs meet COI manning requirements	46 CFR 15.515 46 CFR 15.805(a)(5) 46 CFR 15.810(b) & (d)
.02 Verify presence of original MMCs	46 CFR 10.201(b) 46 CFR 140.205
.03 Verify validity of MMCs	46 CFR 10.205
.04 Verify medical certificate	46 CFR 10.301 STCW I/9.3
.05 Verify Transportation Worker Identification Credential (TWIC)	46 CFR 10.203(b) CG-543 Policy Ltr 11-15
.06 Verify STCW Endorsements	46 CFR 15.815 STCW IV/1
.07 Verify valid radar endorsements	46 CFR 15.815
.08 Verify identification of non-credentialed personnel	46 CFR 140.205(e)
.09 Verify GMDSS endorsements	46 CFR 140.625 SOLAS 14 IV/16.1 STCW IV/2
.10 Verify Pilot endorsement or pilotage requirement met	46 CFR 15.812(a) 46 CFR 15.812(b)(3)

ITV-CD04 - Inspect compliance with Drug and Alcohol Program

- .01 Verify current Employee Assistance Program (EAP) 46 CFR 16.401
- .02 Verify presence and currency of drug and alcohol testing equipment 46 CFR 4.06-15
- .03 Verify training of designated testing crewmember (when applicable) 46 CFR 4.06-20(a)(3)
46 CFR 4.06-20(b)(2)
- .04 Verify pre-employment testing program for dangerous drugs 46 CFR 16.210
- .05 Verify random chemical testing program for dangerous drugs 46 CFR 16.230
- .06 Verify means of post accident testing chemical testing for dangerous drugs 46 CFR 4.06-15

ITV-CD05 - Inspect personnel records and emergency duty station assignments

- .01 Verify personnel records 46 CFR 140.400(a)
46 CFR 140.400(b)
46 CFR 140.915(a)(1)
- .02 Verify emergency duty station assignments 46 CFR 140.405(b)
- .03 Verify emergency duty station assignments posted 46 CFR 140.405(c)

ITV-CD06 - Verify State Registration

- .01 Verify presence of Certificate of Number 33 CFR 173.21
33 CFR 173.23
33 CFR 173.25
- .02 Verify validity of Certificate of Number 33 CFR 173.77
33 CFR 173.79

ITV-CD07 - Verify Certificate of Documentation (COD)

- .01 Verify presence 46 CFR 67.7
46 CFR 67.313
- .02 Verify validity 46 CFR 67.15
46 CFR 67.120
- .03 Verify endorsements 46 CFR 67.17
46 CFR 67.19

ITV-CD08 - Inspect Federal Communication Commission (FCC) documents

- .01 Verify documents 47 CFR 80.403
- .02 Verify operator permit or license (when applicable) 47 CFR 80.159
47 CFR 80.161 & .163
33 CFR 164.72(a)(3)
- .03 Verify Station License validity 47 CFR 80.13
47 CFR 80.25
47 CFR 80.401
- .04 Verify Bridge-to-Bridge Act Safety Certificate 47 CFR 80.401
- .05 Verify Great Lakes Inspection requirements (when applicable) 47 CFR 80.953
- .06 Verify radio log

ITV-TG03 - Inspect administrative procedures

- .01 Verify emergency procedures 46 CFR 140.801(c)
46 CFR 140.820(b)
- .02 Verify record of tow gear 33 CFR 164.74(a)(3)
NVIC 05-92
- .03 Verify inspection of towing gear is recorded 46 CFR 140.915(a)(9)
46 CFR 140.820(a)
- .04 Verify analysis of connection has been conducted 46 CFR 143.460(e)

Hull Inspection (HI)

ITV-HI01 - Verify if vessel qualifies to participate in Underwater Survey Program (UWILD)

- .01 Review application 46 CFR 137.335(b)
NVIC 01-89
- .02 Inspect condition of hull and protection system 46 CFR 137.335(a)
NVIC 01-89 Encl. 1/1.a
- .03 Verify reference points 46 CFR 137.330(a)(1)
NVIC 01-89 Encl. 1/1.b
- .04 Verify all sea chest(s) are accessible 46 CFR 137.330(a)(6)
NVIC 01-89 Encl. 1/1.c
- .05 Verify means for taking shaft-bearing and rudder-bearing clearances 46 CFR 137.330
- .06 Review hull gauging report 46 CFR 137.335(c)(2)
NVIC 01-89 Encl. 1/1.a
- .07 Review reference video 46 CFR 137.330(a)(6)
NVIC 01-89 Encl. 1/1.d
- .08 Forward application with OCMI's recommendation MSM II/B.9.K.7

ITV-HI02 - Inspect hull for defects during an underwater survey

- .01 Review vessel's application for UWILD drydocking examination 46 CFR 137.335(b)
NVIC 01-89 Encl. 1/2.a
- .02 Verify procedures to be followed 46 CFR 137.335(b)
46 CFR 197.202
- .03 Verify suitability of location 46 CFR 137.335(b)(2)
NVIC 01-89 Encl. 1/5.c
- .04 Review reference plans and video 46 CFR 137.335(b)(2)
NVIC 01-89 Encl. 1/2.a(12)
- .05 Meet with the vessel's representative, TSMS representative and diving supervisor to discuss the details of survey 46 CFR 137.335(b)(2)
NVIC 01-89 Encl. 1/4
- .06 Verify that details of survey meet TSMS requirements 46 CFR 137.325(e)
- .07 Verify vessel's representative submitted a signed letter stating vessel's overall condition 46 CFR 137.335(a)
- .08 Verify qualification of divers, type of diving equipment and their nondestructive testing (NDT) capabilities 46 CFR 137.335(b)(5)
NVIC 01-89 Encl. 1/2.a(7)
- .09 Verify all areas of the hull have been cleaned 46 CFR 137.335(b)(7)
46 CFR 197.346
NVIC 01-89 Encl. 1/5.f
- .10 Witness underwater survey from a video monitor 46 CFR 137.335(b)(7)
NVIC 01-89 Encl. 1/5.g

ITV-TE03 - Inspect air ports, dead covers and vent openings

- .01 Verify vent covers are readily available and operational 46 CFR 144.605
- .02 Inspect condition 46 CFR 144.605
- .03 Inspect covers for proper fit and seal 46 CFR 144.605
- .04 Inspect accomodation space ventilation 46 CFR 144.600
46 CFR 144.320(b)
- .05 Inspect means to secure ventilation 46 CFR 144.605
- .06 Inspect mechanical ventilation system 46 CFR 144.610

ITV-TE04 - Inspect fuel tank vents

- .01 Verify condition and location 46 CFR 143.265(c)
- .02 Verify installation and condition of flame screens 46 CFR 143.265(c)

Terminal Gear Inspection (TG)**ITV-TG01 - Inspect towing gear for towing along side or pushing ahead**

- .01 Visually examine vessel rigging and wires 46 CFR 140.801 & .805
46 CFR 140.820
33 CFR 164.76(c) & (d)
- .02 Verify towing safety conditions 46 CFR 140.805
- .03 Visually examine deck machinery (i.e. controls, guards, alarms & safety features) 46 CFR 140.801
33 CFR 164.76
NVIC 05-92
- .04 Visually examine fittings (i.e. bits, cleats, chocks & push gear) 46 CFR 140.801
33 CFR 164.76

ITV-TG02 - Inspect terminal gear - towing astern

- .01 Verify condition of towline (i.e. hawsers, wires) 46 CFR 140.801 & .805
33 CFR 164.74
NVIC 05-95
- .02 Verify fairleads are fitted/available 33 CFR 164.74(b)(3)
46 CFR 140.805
- .03 Verify method for releasing towline 33 CFR 164.74(b)(4)
- .04 Verify presence of chafing gear 33 CFR 164.74(b)(5)
NVIC 05-95
- .05 Verify winch is fitted with brake and towline spooling gear (when applicable) 33 CFR 164.74(b)(6) & (7)
46 CFR 143.460
NVIC 05-95
- .06 Inspect deck machinery (i.e. norman pins, capstan, controls, guards, alarms & safety features) 33 CFR 164.74(b)
46 CFR 143.460
- .07 Visually examine towing equipment foundations and structures for integrity 33 CFR 164.74
46 CFR 143.460

Logs and Manuals Inspection (LM)**ITV-LM01 - Review Health and Safety Plan**

- .01 Verify presence of health and safety plan 46 CFR 140.500
46 CFR 140.505
- .02 Verify procedures to report unsafe conditions 46 CFR 140.505(a)
46 CFR 140.515(a)(2)
- .03 Verify recordkeeping 46 CFR 140.500(a)
46 CFR 140.505(a)
46 CFR 140.515(f)
- .04 Verify appropriate personal protective equipment available to crew 46 CFR 140.505(d)
- .05 Verify crew training 46 CFR 140.505
46 CFR 140.515
- .06 Verify non-crew safety information 46 CFR 140.515(e)

ITV-LM02 - Inspect logbooks, towing vessel record (TVR) or TSMS record

- .01 Verify presence of official logbook 46 CFR 140.905
- .02 Verify presence of TVR or TSMS record 46 CFR 140.910
- .03 Verify all required entries are recorded 46 CFR 140.915

ITV-LM03 - Inspect Nontank Vessel Response Plan (NTVRP)

- .01 Verify presence 33 CFR 155.5015
- .02 Verify validity 33 CFR 155.5065(c)
- .03 Verify content 33 CFR 155.5030
33 CFR 155.5035

ITV-LM04 - Oil Record Book

- .01 Verify presence 33 CFR 151.25(a)
33 CFR 151.25(i)
33 CFR 151.25(k)
- .02 Verify edition of ORB 33 CFR 151.25(b)
CG-CVC Letter
- .03 Verify required entries 33 CFR 151.25(d)
33 CFR 151.25(g)
33 CFR 151.25(h) & (j)
- .04 Verify required signatures 33 CFR 151.25(h)

ITV-LM05 - Inspect garbage management plan and placard(s)

- .01 Verify presence of garbage management plan 33 CFR 151.51
33 CFR 151.57(a)
- .02 Verify plan content 33 CFR 151.57(b)
- .03 Verify plastics retained or incinerated 33 CFR 151.67
33 CFR 151.59
- .04 Verify presence of placard(s) 33 CFR 151.59

ITV-LM06 - Inspect ballast water management documents

- .01 Verify Ballast Water Management System approval 33 CFR 151.2025(a)(1)
- .02 Verify Ballast Water Management Plan 33 CFR 151.2050(g)
- .03 Verify reporting compliance 33 CFR 151.2060
- .04 Verify records 33 CFR 151.2070

ITV-LM07 - Verify compliance with the Vessel General Permit (VGP)

.01 Verify Notice of Intent (NOI) has been submitted	VGP 1.5.1.1 & 10 VGP Table 1 CG-543 Policy Ltr 11-01
.02 Verify compliance with ballast water record keeping requirements	VGP 4.3 CG-543 Policy Ltr 11-01
.03 Verify noncompliance & reportable quantity reports have been submitted	VGP 4.4.1 VGP 4.4.2 CG-543 Policy Ltr 11-01

ITV-LM08 - Verify crew training

.01 Verify safety orientation	46 CFR 140.410 46 CFR 140.415
.02 Verify navigation safety training	46 CFR 140.645(a)
.03 Verify orientation and training documented	46 CFR 140.515 46 CFR 140.645(b) 46 CFR 140.915
.04 Verify firefighting training	46 CFR 142.245
.05 Verify emergency procedures for towing training	46 CFR 140.801(c)

Safety Management System (SM)**ITV-SM01 - Inspect Towing Safety Management System (TSMS)**

.01 Verify issuance of TSMS Certificate	46 CFR 138.115 46 CFR 138.305(f)
.02 Verify validity of TSMS Certificate	46 CFR 138.305(b)
.03 Verify internal audits conducted	46 CFR 138.310(c) 46 CFR 138.405
.04 Verify external audits conducted	46 CFR 138.315(c) 46 CFR 138.410 46 CFR 138.505
.05 Verify TSMS content	46 CFR 138.215 46 CFR 138.220
.06 Verify TSMS reports and documentation	46 CFR 137.135
.07 Verify policies and procedures applicable to the vessel are available to the crew	46 CFR 137.220(a)(2)

ITV-SM02 - Witness Towing Safety Management System (TSMS) audit

.01 Observe Third Party Organization (TPO) vessel audit	46 CFR 138.510(a) 46 CFR 139.100(b) 46 CFR 139.160
.02 Verify corrective actions	46 CFR 138.505 46 CFR 139.160
.03 Review audit report	46 CFR 138.505 46 CFR 139.160 46 CFR 139.165

ITV-PP03 - Inspect transfer hose(s)/piping, fittings and containment

.01 Verify hose minimum design burst pressure	33 CFR 154.500(a)
.02 Verify hose maximum allowable working pressure (MAWP)	33 CFR 154.500(b)
.03 Verify nonmetallic hoses are suitable for product transferred	33 CFR 154.500(c)
.04 Inspect hose assembly	33 CFR 154.500(d) 33 CFR 155.800
.05 Verify hose markings	33 CFR 154.500(e) 33 CFR 154.500(f) 33 CFR 154.500(g) 33 CFR 154.500(h)
.06 Verify back pressure shutoff nozzle (when applicable)	33 CFR 155.805
.07 Verify means for blanking off disconnected hose(s)	33 CFR 155.410
.08 Verify discharge piping systems arrangements	33 CFR 155.420
.09 Verify containment capacity (when applicable)	33 CFR 155.320(a) 33 CFR 155.320(b) 46 CFR 140.655(b)(2)
.10 Verify tests and inspection records	33 CFR 155.820(b)
.11 Verify oil is not stored forward of the collision bulkhead	33 CFR 155.470
.12	

ITV-PP04 - Inspect Oily Water Separator (OWS)

.01 Verify approval	33 CFR 155.380 MARPOL I/14
.02 Verify overboard discharge valve is closed	33 CFR 151.10 MARPOL I/15
.03 Witness operation	33 CFR 155.380 33 CFR 151.10 Manufacturer's Instructions
.04 Verify means to retain oily waste	33 CFR 155.330 33 CFR 155.350 MARPOL I/14.3-.5

Topside Equipment Inspection (TE)**ITV-TE01 - Inspect handrails, bulwarks, storm rails & fall overboard prevention procedures**

.01 Verify arrangement	46 CFR 144.800 46 CFR 144.810
.02 Verify condition	46 CFR 144.800
.03 Verify fall overboard prevention procedures	46 CFR 140.425(a)

ITV-TE02 - Inspect freeing ports and scuppers

.01 Verify no modifications	46 CFR 137.325 46 CFR 144.135
.02 Verify unobstructed	46 CFR 144.320(a) 46 CFR 140.655(b)(1)

ITV-SW02 - Inspect watertight bulkhead penetrations

- .01 Verify locations 46 CFR 143.400(h)
46 CFR 143.265(d)(2)(iii)
- .02 Verify ability to seal 46 CFR 140.610(f)
MSM II/B.1.E.5

ITV-SW03 - Inspect hull structure

- .01 Inspect for damage, wastage and fractures 46 CFR 144.200 & .215
ABS 7-4-1/1
MSM II/B.1.E.1
- .02 Verify no unauthorized repairs 46 CFR 140.665
46 CFR 144.200
NVIC 07-68

Pollution Prevention Inspection (PP)**ITV-PP01 - Inspect Marine Sanitation Device (MSD)**

- .01 Verify Type 33 CFR 159.7(a)(1)
33 CFR 159.7(a)(2)
- .02 Verify certification label 33 CFR 159.5
MSM II/B.6.F.4
- .03 Verify presence of manufacturer's instructions 33 CFR 159.57
- .04 Verify placard posted 33 CFR 159.59
- .05 Verify operation 33 CFR 159.57
- .06 Verify Type I & II MSD securing device 33 CFR 159.7(b)
- .07 Verify Type III MSD securing device 33 CFR 159.7(c)
- .08 Verify Type I & II MSD chemical level indicators 33 CFR 159.65

ITV-PP02 - Inspect oil transfer procedures and pollution placard

- .01 Verify procedures 33 CFR 155.720
33 CFR 155.730
46 CFR 140.655(b)
- .02 Verify availability 33 CFR 155.740(a)
33 CFR 155.740(c)
- .03 Verify content 33 CFR 155.750
33 CFR 155.740(b)
- .04 Examine Declarations of Inspection 33 CFR 155.820(d)
33 CFR 156.150
- .05 Verify proper documentation for Persons in Charge (PIC) 33 CFR 155.700
33 CFR 155.715
46 CFR 13.129
- .06 Verify presence of placard 33 CFR 155.450

Bridge/Navigation Inspection (BN)**ITV-BN01 - Inspect navigation assessment**

- .01 Verify navigation assessment conducted 46 CFR 140.635
46 CFR 140.640
33 CFR 164.80(c)(3)
46 CFR 140.635(d)
- .02 Verify navigation assessment entry is logged 46 CFR 140.640(a)(1)
- .03 Verify communication of navigation assessment

ITV-BN02 - Inspect charts and publications

- .01 Verify presence of current and corrected charts or maps 46 CFR 140.705(b)(1)
33 CFR 164.72(b)(1)
NVIC 01-16
- .02 Verify presence of current and applicable U.S. Coast Pilot 46 CFR 140.705(b)(2)
33 CFR 164.72(b)(2)
NVIC 01-16
- .03 Verify presence of current and applicable U.S. Coast Guard Light List 46 CFR 140.705(b)(3)
33 CFR 164.72(b)(2)
NVIC 01-16
- .04 Verify presence of USACOE or river authority river stage(s) or Water Surface Elevations (Western Rivers) 46 CFR 140.705(b)(4)
33 CFR 164.72(b)(2)
- .05 Verify presence of current and applicable Tidal-Current Tables or River-Current Tables 46 CFR 140.705(a)
33 CFR 164.72(b)(2)
NVIC 01-16
- .06 Verify presence of Inland Navigation Rules (when applicable) 33 CFR 83.01(g)
- .07 Verify presence of applicable Notices to Mariners, Notices to Navigation and/or Local Notices to Mariners 33 CFR 164.72(b)(2)
NVIC 01-16
- .08 Verify presence of VTS rules (when applicable) 33 CFR 161.4
NVIC 01-16

ITV-BN03 - Inspect radar(s)

- .01 Verify presence 46 CFR 140.710
33 CFR 164.72(a)(1)
- .02 Verify safety precautions associated with the testing of radar equipment are followed Operation Manual
- .03 Witness operational test 33 CFR 164.80(a)(2)
Operation Manual

ITV-BN04 - Inspect communications equipment

- .01 Verify presence 46 CFR 140.715(a)
33 CFR 164.72(a)(3)
33 CFR 26.03(a)(3)
- .02 Verify installation 46 CFR 140.715(b)
33 CFR 26.03
47 CFR 80.955
- .03 Verify operation 46 CFR 140.715
33 CFR 26.03
- .04 Verify hand-held radio 46 CFR 140.715(c)
- .05 Verify battery backup 46 CFR 140.715(b)
46 CFR 143.555(a)(3)

ITV-BN05 - Inspect navigation lights and dayshapes

- .01 Verify approved type navigation lights 46 CFR 140.720
46 CFR 143.415
33 CFR 84.13 & .15
- .02 Verify proper installation (i.e. arc, side-screens, height) 33 CFR 84.03
33 CFR 84.05
33 CFR 84.09
- .03 Verify light configuration and operation without a tow 33 CFR 83.23(a) (Rule 23)
33 CFR 83.04
- .04 Verify configuration and operation for towing astern 33 CFR 83.24(a) (Rule 24)
33 CFR 83.04
- .05 Verify configuration and operation for pushing ahead or towing alongside 33 CFR 83.24(c) (Rule 24)
33 CFR 83.04
- .06 Verify configuration and operation for towing under Western River exceptions 33 CFR 83.24(i) (Rule 24)
33 CFR 83.04
- .07 Inspect dayshapes 33 CFR 83.20(d) (Rule 20)
33 CFR 84.11

ITV-BN06 - Inspect sound signaling device(s)

- .01 Verify presence 46 CFR 140.720
33 CFR 83.33 (Rule 33)
- .02 Witness operational test 33 CFR 83.33 (Rule 33)
33 CFR 86.01
33 CFR 86.02

ITV-BN07 - Inspect fathometer/echo depth-sounding device

- .01 Verify presence 46 CFR 140.725(a)
33 CFR 164.72(a)(5)
SOLAS 14 V/19.2.2.1
- .02 Verify device is readable from main steering station 33 CFR 164.72(a)(5)

ITV-BN08 - Inspect vessel search lights

- .01 Verify presence 46 CFR 140.725(b)
33 CFR 164.72(a)(2)
- .02 Verify control from main steering station 46 CFR 140.725(b)
33 CFR 164.72(a)(2)

ITV-ES02 - Inspect main service generator(s) and prime mover(s)

- .01 Verify power source requirements 46 CFR 143.555(a)(2)
46 CFR 143.555(b)(1) & (b)(3)
46 CFR 143.580
- .02 Inspect condition of generator(s) and prime mover(s)' components 46 CFR 143.400(a)
46 CFR 143.400(b)
46 CFR 143.555(b)(6)
- .03 Verify installation of protective covers and/or guards 46 CFR 143.220(b)
46 CFR 144.820
46 CFR 144.830
- .04 Verify generator(s) data plate(s) attached 46 CFR 143.555(b)(2)
- .05 Verify overcurrent protection 46 CFR 143.555(b)(3)
46 CFR 143.555(b)(4)
- .06 Verify two independent sources of electricity for essential loads 46 CFR 143.555(a)(3)
46 CFR 143.555(b)(7)
46 CFR 143.555(b)(8)

ITV-ES03 - Inspect battery installation

- .01 Verify adequate load for 3 hours of operation 46 CFR 143.555(b)(9)
- .02 Verify means of monitoring condition 46 CFR 143.555(b)(9)
- .03 Verify battery inspected every 3 months 46 CFR 143.245(b)

ITV-ES04 - Inspect distribution panels and switchboards

- .01 Verify installation 46 CFR 143.560
- .02 Verify presence of nonconductive mats/grating 46 CFR 143.560(c)
- .03 Verify overcurrent protection 46 CFR 143.565
- .04 Verify grounding and ground detection 46 CFR 143.570
- .05 Verify warning sign(s) 46 CFR 143.250(b)
- .06 Verify markings/labeling 46 CFR 143.400

Structural/Watertight Integrity Inspection (SW)**ITV-SW01 - Inspect hatches and Class-1 watertight doors**

- .01 Verify condition of knife edges 46 CFR 144.305
46 CFR 144.330
46 CFR 42.15-10
- .02 Verify condition of gasket material 46 CFR 144.330
MSM II/B.1.E.5
- .03 Verify watertight integrity between gasket and knife edge 46 CFR 144.330
46 CFR 140.610
MSM II/B.1.E.5
- .04 Verify condition and operation of hinges and dogs 46 CFR 144.330
MSM II/B.1.E.5
- .05 Verify design, operation and installation of quick acting closing-device 46 CFR 170.270(a)
46 CFR 170.270(b)
- .06 Verify operation of indicator lights at operating station 46 CFR 170.270(e)
- .07 Verify doors are installed in permissible locations 46 CFR 170.255
- .08 Verify markings 46 CFR 144.160(e)

ITV-MI06 - Verify additional requirements for vessels that move tank barges carrying oil or hazardous materials in bulk

.01 Inspect alternate means to control propulsion and steering systems	46 CFR 143.585(a) 46 CFR 143.600
.02 Verify internal communications	46 CFR 143.585(b) 46 CFR 143.585(i) 46 CFR 143.585(c)
.03 Verify means of stopping propulsion engine(s) and steering motor(s)	46 CFR 143.585(d)
.04 Verify independent thrust, rudder angle and direction control monitors	46 CFR 143.585(e)
.05 Verify propulsion control system single failure default	46 CFR 143.585(f) 46 CFR 143.585(g)
.06 Verify audible and visual alarms at each operating station	46 CFR 143.585(h) 46 CFR 143.585(j) 46 CFR 143.585(k) 46 CFR 143.585(l)
.07 Verify emergency power	46 CFR 143.590
.08 Verify propulsor redundancy	46 CFR 143.595
.09 Verify test procedures	46 CFR 143.605

Electrical Systems Inspection (ES)

ITV-ES01 - Inspect electrical conductors, connections and equipment

.01 Verify cable size and condition	46 CFR 143.575(a)(1) 46 CFR 143.575(a)(9) 46 CFR 143.575(a)(11)
.02 Verify cable run installation	46 CFR 143.575(a)(2) 46 CFR 143.575(a)(3) 46 CFR 143.400(h)
.03 Verify cable is protected	46 CFR 143.575(a)(6) 46 CFR 143.575(a)(7) 46 CFR 143.575(a)(8)
.04 Verify connections	46 CFR 143.575(a)(4) 46 CFR 143.400(e) 46 CFR 143.400(i)
.05 Verify no hazardous conditions exist	46 CFR 143.400(g) 46 CFR 143.575(b) 46 CFR 143.575(c)

ITV-BN09 - Inspect electronic position fixing device (GPS)

.01 Verify presence	46 CFR 140.725(c) 33 CFR 164.72(a)(6)
.02 Verify operation	46 CFR 140.725(c) 33 CFR 164.72(a)(6)

ITV-BN10 - Inspect magnetic compass/swing meter

.01 Verify illuminated	46 CFR 140.725(d) 33 CFR 164.72(a)(4)
.02 Verify operational	46 CFR 140.725(d) 33 CFR 164.72(a)(4)
.03 Verify readable from main steering station	46 CFR 140.725(d)

ITV-BN11 - Inspect general alarm system

.01 Witness test of general alarm	46 CFR 143.235 46 CFR 143.245
.02 Verify activation location(s)	46 CFR 143.235(b)(1)
.03 Verify audible location(s)	46 CFR 143.235(b)(2)
.04 Verify lights and signage	46 CFR 143.235(b)(3)
.05 Verify public address/alternate system	46 CFR 143.235(b)(4)

ITV-BN12 - Inspect alarms at operating station(s)

.01 Verify presence at each operating station	46 CFR 143.230(a)
.02 Verify alarms visible	46 CFR 143.230(b)(1)
.03 Verify test capability	46 CFR 143.230(b)(2)

ITV-BN13 - Inspect internal communications

.01 Verify presence of required equipment	46 CFR 143.240(b)
.02 Verify operation of equipment	46 CFR 143.240(b)(2) 33 CFR 164.80 SOLAS 14 III/6.4.1
.03 Verify independent power supply	46 CFR 143.240(b)(1)
.04 Verify testing of communications equipment	46 CFR 143.245(b)

ITV-BN14 - Inspect pilothouse alerter system or Bridge Navigation Watch Alert System (BNWAS)

.01 Verify presence	46 CFR 143.450(a) SOLAS 14 V/19.2.2.4 46 CFR 143.200
.02 Verify time interval and operation information	46 CFR 143.450(b)
.03 Verify system test	46 CFR 143.245

ITV-BN15 - Inspect Automated Identification System (AIS)

.01 Verify presence	33 CFR 164.46(a)(3)(ii)
.02 Verify operation	33 CFR 164.46(b)

ITV-BN16 - Verify operating station visibility

- .01 Verify provisions to maintain adequate visibility in all weather conditions 46 CFR 144.905(b)
- .02 Verify field of vision from the operating station 46 CFR 144.905(c)
46 CFR 144.905(d)
- .03 Verify window light transmission 46 CFR 144.905(e)

Lifesaving Equipment Inspection (LS)**ITV-LS01 - Inspect survival craft**

- .01 Verify appropriate survival craft onboard 46 CFR 141.305
46 CFR 141.330
SOLAS 14 III/21
- .02 Verify condition 46 CFR 141.305(b)
46 CFR 141.230
46 CFR 141.235
- .03 Verify stowage 46 CFR 141.305(b)(1)
46 CFR 141.310
46 CFR 199.130
- .04 Verify inflatable survival craft placards 46 CFR 141.320
- .05 Verify markings 46 CFR 141.315
46 CFR 199.176
46 CFR 199.178
- .06 Verify equipment 46 CFR 141.325
46 CFR 199.175

ITV-LS02 - Inspect life jackets

- .01 Verify type approval 46 CFR 141.340
- .02 Verify quantity 46 CFR 141.340
SOLAS 14 III/2
- .03 Verify stowage 46 CFR 141.340(d)
46 CFR 141.340(b)
46 CFR 141.340(h)
- .04 Verify markings 46 CFR 141.340(f)
- .05 Verify lights 46 CFR 141.340(g)(1)
- .06 Verify whistle 46 CFR 141.340(g)(2)
- .07 Verify condition 46 CFR 141.230
46 CFR 141.235

ITV-MI02 - Inspect fuel system

- .01 Verify installation, arrangement and condition of piping, manifolds and filters 46 CFR 143.255
46 CFR 143.265
46 CFR 143.220
- .02 Verify spare fuel filters 46 CFR 143.255(c)(1)
- .03 Verify arrangement and marking of fuel system isolation and remote fuel shutoff valve(s) 46 CFR 143.260
46 CFR 143.250(c)
- .04 Witness test of remote fuel shutoff valve(s) 46 CFR 143.260(d)
- .05 Inspect nonmetallic flexible hoses and fittings 46 CFR 143.265(d)(2)
46 CFR 143.265(d)(3)
- .06 Inspect portable fuel system 46 CFR 143.265(b)

ITV-MI03 - Inspect bilge system

- .01 Verify location and operation of pumps 46 CFR 143.275
46 CFR 143.205
- .02 Inspect manifolds, valves and piping 46 CFR 143.250(d)
46 CFR 143.205
46 CFR 143.270
- .03 Verify bilge suction(s) are fitted with check/foot valve(s) 46 CFR 143.275
- .04 Verify portable pump has adequate hose and pumping capability 46 CFR 143.275

ITV-MI04 - Inspect unfired pressure vessels (UPVs)

- .01 Verify MAWP is marked and legible 46 CFR 143.300(c)
- .02 Verify UPV size and MAWP 46 CFR 143.300(a)
46 CFR 143.545
- .03 Verify external exam and relief valve testing needs 46 CFR 143.300(b)
46 CFR 143.245(b)
- .04 Verify installation and operation of pressure gauges 46 CFR 143.300(a)
- .05 Verify installation and operation of relief valve(s) 46 CFR 143.300(a)
- .06 Inspect externally 46 CFR 143.300(b)
46 CFR 143.545

ITV-MI05 - Inspect steering gear

- .01 Verify operation and control 46 CFR 137.220(d)
- .02 Inspect electrical, mechanical and hydraulic connections and linkages of main and auxiliary (emergency) systems 46 CFR 143.400
46 CFR 143.220

ITV-FF08 - Inspect fixed fire pump and fire main

- .01 Verify arrangement 46 CFR 142.325(a)
- .02 Verify condition and operation 46 CFR 142.325(a)(1)
46 CFR 142.240(a)6)
- .03 Verify control locations 46 CFR 142.325(a)(2)
46 CFR 142.325(b)
- .04 Verify number and location of fire hydrants 46 CFR 142.325(c)
- .05 Verify fire hoses 46 CFR 142.325(d)
46 CFR 142.325(c)
46 CFR 142.240(a)(7)
- .06 Verify nozzles 46 CFR 142.325(d)
- .07 Verify valves marked 46 CFR 143.250(c)
46 CFR 143.250(d)

ITV-FF09 - Inspect fire-detection system

- .01 Verify presence 46 CFR 142.330(a)
- .02 Verify type approval or listing by nationally recognized testing laboratory 46 CFR 142.330(a)(1)
- .03 Verify system is maintained IAW manufacturer's specifications 46 CFR 142.330(a)(2)
- .04 Verify location of control panel 46 CFR 142.330(a)(3)
- .05 Verify control panel components and operation 46 CFR 142.330(a)(4)
46 CFR 142.240(a)(8)
- .06 Verify system power sources 46 CFR 142.330(a)(5)
- .07 Verify smoke detection system 46 CFR 142.330(b)
46 CFR 142.240(a)(8)
- .08 Verify heat detection system 46 CFR 142.330(c)
46 CFR 142.240(a)(8)
- .09 Verify design and installation 46 CFR 142.330(a)(7)

Machinery Equipment Inspection (MI)**ITV-MI01 - Inspect main propulsion system**

- .01 Inspect condition, installation and arrangement of system components 46 CFR 143.205(c)
- .02 Verify required gauges 46 CFR 143.230(c)
- .03 Verify installation of protective covers and/or guards 46 CFR 143.220(b)
46 CFR 144.820
46 CFR 144.830
- .04 Inspect system's hull penetrations for structural integrity and markings 46 CFR 143.250(c)
46 CFR 143.250(d)
46 CFR 143.270
- .05 Witness operational test of main propulsion machinery 46 CFR 136.212(b)
46 CFR 143.205(b)

ITV-LS03 - Inspect immersion suits

- .01 Verify type approval 46 CFR 141.350(a)(1)
- .02 Verify required quantity and size 46 CFR 141.350(a)
SOLAS 14 III/32
- .03 Verify stowage 46 CFR 141.350
46 CFR 199.70(c)(2)
46 CFR 199.70(d)
- .04 Verify markings 46 CFR 141.350(b)
46 CFR 199.70(c)(3)
- .05 Verify lights 46 CFR 141.350(b)
46 CFR 199.70(c)(4)(i)
- .06 Verify whistles 46 CFR 141.350(b)
46 CFR 199.70(c)(4)(ii)
- .07 Verify condition 46 CFR 141.235
46 CFR 141.230
NVIC 01-08

ITV-LS04 - Inspect ring life buoy

- .01 Verify type approval 46 CFR 141.360(b)(1)
46 CFR 160.050
- .02 Verify quantity 46 CFR 141.360(a)
- .03 Verify stowage 46 CFR 141.360(a)
46 CFR 141.360(b)
- .04 Verify markings 46 CFR 141.360(b)
46 CFR 160.050-6
- .05 Verify condition 46 CFR 141.360
46 CFR 141.230
- .06 Inspect lifeline 46 CFR 141.360(c)(1)
- .07 Inspect waterlight 46 CFR 141.360(c)

ITV-LS05 - Inspect distress signals

- .01 Verify type approval 46 CFR 141.375(b)
46 CFR 141.375(c)
- .02 Verify quantity 46 CFR 141.375
46 CFR 141.370 Table
SOLAS 14 III/6.3
- .03 Verify expiration date 46 CFR 141.230
46 CFR 141.235
- .04 Verify stowage and marking 46 CFR 141.375(e)

ITV-LS06 - Inspect Emergency Position Indicating Radio Beacon (EPIRB)

- .01 Verify type 46 CFR 141.380(a)
47 CFR 80.1085(a)(6)
SOLAS 14 IV/7.1.6
- .02 Verify stowage 46 CFR 141.380(b)
- .03 Examine hydrostatic release 46 CFR 141.380(b)
- .04 Verify markings 46 CFR 141.380(c)
- .05 Verify National Oceanic Atmospheric Administration (NOAA) registration 46 CFR 141.380(d)
47 CFR 80.1061(e)
47 CFR 80.1061(f)
- .06 Verify testing & inspections 46 CFR 141.230
46 CFR 141.235
46 CFR 199.190(e)(2)

ITV-LS07 - Inspect line throwing equipment

- .01 Verify type approval 46 CFR 141.385
46 CFR 160.040
- .02 Verify quantity 46 CFR 141.385
46 CFR 160.040-4
SOLAS 14 III/18
- .03 Verify stowage 46 CFR 141.385(a)
- .04 Verify additional equipment 46 CFR 141.385(b)
- .05 Verify markings 46 CFR 160.040-6

Firefighting Systems Inspection (FF)**ITV-FF01 - Verify fire hazards minimized**

- .01 Verify bilges free of excess accumulation of combustible and flammable materials and liquids 46 CFR 142.220(a)
46 CFR 143.220(a)
46 CFR 140.655(c)
- .02 Verify storage areas free of excess accumulation of combustible and flammable materials 46 CFR 142.220(b)
- .03 Verify presence of designated storage space for flammable or combustible products 46 CFR 142.225(a)
46 CFR 143.220(c)
- .04 Verify designated storage room free of ignition sources 46 CFR 142.225(b)
- .05 Inspect dedicated storage cabinet 46 CFR 142.225(c)
- .06 Verify presence of portable fire extinguisher 46 CFR 142.225(d)
- .07 Verify hot piping and machinery components are insulated 46 CFR 143.220(b)

ITV-FF02 - Inspect fire fighter's outfit

- .01 Verify outfit presence 46 CFR 142.226(a)
- .02 Verify outfit compliance 46 CFR 142.226(a)
NFPA 1971
- .03 Verify self-contained breathing apparatus (SCBA) presence 46 CFR 142.226(b)
- .04 Verify self-contained breathing apparatus (SCBA) approval 46 CFR 142.226(b)
42 CFR Part 84
- .05 Verify SCBA air supply 46 CFR 142.226(b)

ITV-FF03 - Inspect fire axe

- .01 Verify presence 46 CFR 142.227
- .02 Verify location 46 CFR 142.227

ITV-FF04 - Inspect portable firefighting extinguishers

- .01 Verify quantity 46 CFR 142.230(d)
SOLAS 14 II-2/10.3
- .02 Verify type approval 46 CFR 142.215
46 CFR 142.205
- .03 Verify servicing compliance 46 CFR 142.240
NFPA 10
SOLAS 14 II-2/14.2.2
- .04 Verify location and stowage 46 CFR 142.230(d)(2)(i)
SOLAS 14 II-2/15.2
- .05 Verify condition 46 CFR 142.240

ITV-FF05 - Inspect semi-portable firefighting equipment

- .01 Verify presence 46 CFR 142.300
46 CFR 142.315(a)
- .02 Verify servicing compliance 46 CFR 142.240
46 CFR 147.60
46 CFR 147.65
- .03 Verify condition 46 CFR 142.240(b)
SOLAS 14 II-2/14.1
- .04 Verify stowage 46 CFR 142.230(e)
46 CFR 147.60
- .05 Verify type approval 46 CFR 142.215

ITV-FF06 - Inspect fixed fire-extinguishing system

- .01 Verify type approval & arrangement 46 CFR 142.240(a)
46 CFR 142.215
46 CFR 136.110
- .02 Verify condition 46 CFR 142.240
46 CFR 147.65
- .03 Verify servicing compliance 46 CFR 142.240
46 CFR 147.65
46 CFR 142.235(a)(5)
- .04 Verify markings 46 CFR 142.240(a)(4)
46 CFR 147.60
- .05 Verify stowage 46 CFR 147.65
46 CFR 147.66

ITV-FF07 - Inspect portable fire pump and equipment

- .01 Verify arrangement 46 CFR 142.325(e)
- .02 Verify pressure and flow rate 46 CFR 142.325(e)(1)
- .03 Verify fire hose 46 CFR 142.325(e)(2)
46 CFR 142.240(a)(7)
- .04 Verify nozzle 46 CFR 142.325(e)(3)
- .05 Verify stowage 46 CFR 142.325(f)