Maritec Tanker Management Private Limited

Vessel - Kensington LG (IMO: 9525182)

Inspection Type	023 - Cargo Operations Audit
Inspection Date	22 Sep 2023
Inspector	Athma Gopaul
From Port	Bridgetown
To Port	Bridgetown
Hours Onboard	12 H
Avg Audit Findings	97 %
No of NCRs	0
No of observation	0

Crew Interview & Attendance Record

Staff Name	Rank	Remarks
10687 - Oleksandr TARNAVSKY	MST	
10708 - Jurijs Polakovs	C/OFF	
10610 - Saltanovskyy Vadym	2/OFF	
10646 - Nikhil Sanga	3/OFF	
10677 - Oleksandr Kozak	C/E	
10657 - Chaky Gesta Tamayo	2/E	
10256 - Rakesh KUMAR	AB	
10618 - Shafeequ Bodulavagothi	OS	

Auditor Signature

Athma Gopaul

Negative Findings

Defect ID	Chapter	Category	Question	Answer Details	Is Critical	Status	Link

Additional NCRs

Defect ID	NCR No	Observations	Date of Disposition	Status

Additional Observations

Defect ID	Observations	Date of Disposition	Status

Positive / Neutral Findings

Maritec Tanker Management Private Limited

Vessel - Kensington LG (IMO: 9525182)

Chapter: 01.00 - 023 - Cargo Operations Audit

Category: 01.01 - Cargo And Associated Operations Audit

Question	Answer Details	Is Critical	Link
01.01.01 - Have stability and, where applicable, stress calculations, been performed for the current cargo operation? Are any limitations understood by the cargo watch Officers? (For the start, interim and completion of transfer. Regular monitoring of stress & stability should be taking place throughout cargo transfer)	Grade - Yes		
01.01.02a - Are written procedures for Cargo/Ballast and transfer practiced/known?	Grade - Yes		
01.01.02b - Is Master & responsible crew well Familiar and keep proficiency understanding with voyage instructions and latest available Time Charterers standing instructions and requirements?	Grade - Yes		
01.01.02c - Loading/Dis orders plans-Tank cleaning /cow schedule to be available to all OOW(S) & any person related with the above activities directly	Grade - Yes		
01.01.03 - Is the vessel free of inherent intact stability problems? (T&S manuals deal only with arrival and departure and crewmembers to be aware that stability problems may exist at intermediate stages during cargo transfers. Ascertain that vessel meets IMO intact stability criteria by requesting the C/O to demonstrate, using the class approved loading instrument, the intact stability at the worst case condition, i.e. all tanks slack and max. free surface)	Grade - Yes		
01.01.04 - Has a Cargo/Ballast plan been prepared (with detailed sequence of cargo and ballast transfer) and followed? (It covers all stages of transfer operations and contains: quantity & grade of each parcel, density, temperature and other properties, a plan of distribution, lines & pumps to be used, transfer rates and max. allowable pressures, critical stages of the operation, notice of rate change, venting requirements, stability & stress info, drafts and trims, ballast operations, Em. stop procedures, Em. spill procedures & spill containment & hazards of cargoes, and also, as required: Precautions against static generation, initial start-up rates, control of cargo heating systems, line clearing, COW procedures, UKC limits, bunkering & special precautions required for the particular operation)	Grade - Yes		
01.01.05a - Has the Cargo plan been signed by the Master, Chief Officer & Junior Officers?	Grade - Yes		
01.01.05b - Has the cargo plan/Tank cleaning plan/cow plan explained and pre-calculated with all OOW(S)?	Grade - Yes		
01.01.06 - Is the Master aware of the worst loading condition?	Grade - Yes		
01.01.07 - Are damage stability guidelines available? Is the Master aware of the worst damage stability condition? (Damage stability is assessed under the IBC Code)	Grade - Yes		
01.01.08 - Check implementation/awareness of procedures for restoring stability in case of unstable conditions developing during cargo operations (where applicable)	Grade - Yes		

Question	Answer Details	Is Critical	Link
01.01.09 - Are cargo or ballast tanks free of sloshing or weight restrictions? Are Officers aware of the dangers of high free surface effects and the possibility of structural damage due to sloshing?	Grade - Yes		
01.01.10 - Are the Cargo Operations filing/records up to date and forwarded to the Company as required? Check forms/logbooks for completeness and accuracy of entries i.e. hourly rates, overside and P/R checks, valve position checks, etc	Grade - Yes		
01.01.100 - Is personal protective equipment provided and being worn by all personnel, as appropriate?	Grade - Yes		
01.01.101 - Are all hand torches approved for use in gas-hazardous area?	Grade - Yes		
01.01.102 - Is the fire plan available in the accommodation and in watertight containers outside the accommodation P&S? Does it correspond to actual vessel condition? Is a crew list included? Are MSDS's and stowage plan included?	Grade - Yes		
01.01.103 - Is personal protective equipment provided and being worn by all personnel, as appropriate?	Grade - Yes		
01.01.104 - Are the duties of the watch-standing officers and ratings defined/posted?	Grade - Yes		
01.01.105 - Are the bilge overboard valves marked closed and sealed? (warning sign posted)	Grade - Yes		
01.01.106 - Is the pump room ventilation system working properly?	NA		
01.01.107 - Is the level of lighting in the pump room adequate?	NA		
01.01.108 - Is the pump room clean, tidy and free of combustible material?	NA		
01.01.109 - Are pump room fire and flooding dampers clearly marked as to their operation and in order?	NA		
01.01.11 - Is the ORB Part II updated as per MARPOL requirements?	NA		
01.01.110 - Are pump room bilge high level alarms regularly tested and the results recorded? Last test date	NA		
01.01.111 - Are the pump room bilges free of cargo product, leakages and excess oil residues?	NA		

Question	Answer Details	Is Critical	Link
01.01.111 - Are the pump room bilges free of cargo product, leakages and excess oil residues?	NA		
01.01.112 - Have satisfactory column/cofferdam purging routines been established where deep well pumps are fitted?	Grade - Yes		
01.01.113 - Is the fixed oxygen analyzer system calibrated? Last calibration date	Yes		
01.01.114 - Are high level alarms and over fill alarms tested prior to cargo operations?	Grade - Yes		
01.01.115 - Is the SSSCL followed at port and OOW performs as per instructions?	Grade - Yes		
01.01.116 - Other Comments			
01.01.12 - Are the Officers familiar with the cargo system? Has relevant training been carried out?	Grade - Yes		
01.01.13 - If a loading computer or program is in use, is it Class approved? (It should calculate SF & BM in any load or ballast condition at specified readout points and should indicate the permissible values)	Grade - Yes		
01.01.14 - Do records indicate that the loading computer is tested regularly for operational accuracy? (Class approved data should be used and the tests should be carried out at least quarterly) - Date of last test	Grade - Yes		
01.01.15 - Is information on cargo loading limitations available?	Grade - Yes		
01.01.16 - Is information on maximum cargo loading rates and venting capacities posted in the CCR?	Grade - Yes		
01.01.17 - Are all Officers familiar with carriage requirements for cargoes on board ? (i.e. shipboard operations and cargo handling, closed loading, discharging and sampling, requirements for medical treatment following exposure to hazardous cargoes, effects of high density cargoes, hazards due to toxic or corrosive cargoes, hazards of electrostatic generation, etc. For Chemical Tankers additionally: meaning of Category X, Y, Z cargoes, IBC and/or BCH Codes, and as required: Drying, padding and inerting, precautions for reactive & self-reactive cargoes, hazards associated with handling nitrogen, handling solidifying & high viscosity cargoes, pre-wash requirements)	Grade - Yes		
01.01.18 - Is the Cargo Record Book correctly completed and up to date? (Chemicals Only) (When carrying chemicals under either a CoF or a NLS Cert.)	NA		

Question	Answer Details	Is Critical	Link
01.01.19 - When an unfamiliar cargo is to be carried, is there a procedure (e.g. risk assessment) to review the cargo safety aspects and handling procedures? (For each chemical carried a review of the carriage requirements should have been made in order to ensure that the cargo plan contains all necessary information for the safe carriage of the product. The review should reference: IBC Code Ch. 17, CoF, P&A Manual and MSDS).	Grade - Yes		
01.01.20a - Is a cargo compatibility chart available?	NA		
01.01.20b - Is Master –Chief officer and responsible crew for cargo transfer aware/well familiar and implement in full latest company's Alerts for HANDLING NON COMPATIBLE PRODUCTS WITH DOUBLE VALVE SEGREGATION & INTERNAL TRANSFER?	Grade - Yes		
01.01.20c - Confirm that Non-compatible cargo on board is ALWAYS handled under double valve segregation	NA		
01.01.20d - Confirm that in case that vessel is going to load or discharge more than one parcel,a loading/discharging plan showing the vessel's lines and manifolds to be sent to Office for review	Grade - Yes		
01.01.21 - If the cargo is required to be inhibited, is the required information available?	Grade - Yes		
01.01.22 - Check records of calibration of key cargo instrumentation and temperature and pressure gauges	Grade - Yes		
01.01.23 - Are vapour locks, where fitted, calibrated and certified by a recognised cargo inspection organisation? (Corrections for datum levels and for list and trim should be approved if ullages from retrofitted vapour locks are used)	NA		
01.01.24 - Is the vessel free of unauthorised inter-connections between cargo, bunker & ballast systems?	Grade - Yes		
01.01.25 - Are legible and up to date pipeline and/or mimic diagrams of the cargo, IG and venting systems available in the CCR?	Grade - Yes		
01.01.26 - Is a tank cleaning plan established prior to cleaning operations?	NA		
01.01.27 - Are there procedures for tank cleaning after flammable and toxic products, using chemicals and solvents, gas freeing and for steaming cargo tanks?	NA		
01.01.28 - Is a completed ISGOTT Ship/Shore Safety checklist available and followed? Are Items marked to be rechecked being properly addressed? Do Items requiring comment properly completed?	Grade - Yes		
01.01.29 - Is the verbal communication between the ship and the shore adequate? Are records of regular communications checks with the shore maintained?	Grade - Yes		

Question	Answer Details	Is Critical	Link
01.01.30 - Are Material Safety Data Sheets (MSDS) posted/available for all the products (including Crude Oil) being handled and are all Officers familiar with their use?	Grade - Yes		
01.01.31 - If the vessel is COW, has a checklist been completed and a COW plan prepared and followed?	NA		
01.01.32 - Are records maintained of previous COW operations?	NA		
01.01.33 - Do records indicate that the COW system has been pressure tested prior to use?	NA		
01.01.34 - Is the person in charge of COW operations suitably qualified? (i.e.: (a) Have at least 1 year's experience with duties on discharge of cargo and COW. Where his duties have not included COW, he shall have completed training in COW as per Res. A.446 (XI); (b) Have participated at least twice in COW one of which on the particular or in a similar ship; and (c) Be knowledgeable of contents of the Operations & Equipment Manual)	NA		
01.01.35 - Do records indicate that oxygen readings of the tanks to be crude oil washed have been checked by portable meter and found to be within maximum permissible limits?	NA		
01.01.36 - Are the trim, the drafts and the mooring arrangement been checked during cargo operations?	Grade - Yes		
01.01.37 - Is the calculation of the cargo volume in each tank possible?	Grade - Yes		
01.01.38 - If applicable, please produce ODME print out. Is there evidence of recent testing? Date of last test	NA		
01.01.39 - If the ODME has not been operational, was the fact recorded in the ORB? (The time of, and reason for, the failure and the time when the system was made operational again should be recorded in the ORB	NA		
01.01.40 - Do Officers understand the principles involved when cargo and booster pumps and cargo heaters, where fitted, are lined up in series?	Grade - Yes		
01.01.41 - Are decontamination showers and an eye-wash, where required, provided in marked locations?	Grade - Yes		
01.01.42 - Are weather forecasts received and assessed before commencing any operations?	Grade - Yes		
01.01.43 - Are the appropriate loading terminal procedures manuals on board for each offshore terminal to which the vessel trades (when applicable)?	Grade - Yes		

Question	Answer Details	Is Critical	Link
01.01.44 - Is the type of foam compound suitable for the cargoes which the vessel is certified to carry? (Ship should be provided with a fixed deck foam system. Only one type of foam should be supplied. For cargoes for which foam is not effective or incompatible, additional arrangements to the satisfaction of the administration should be provided. Regular protein foam should not be used)	NA		
01.01.45 - Are spaces adjacent to cargo tanks, pipe ducts, etc. regularly monitored for gas?	Grade - Yes		
01.01.46 - Where a fixed system to monitor flammable atmosphere in non-cargo spaces is fitted, are recorders and alarms in order?	Grade - Yes		
01.01.47 - Are emergency escape sets provided for every person on board, where required? (Ships intended for carriage of some Chemical cargoes shall be provided with suitable respiratory and eye protection for all on board: Filter type respiratory protection is unacceptable. SCBA duration of service>15 minutes. Emergency escape respiratory protection should not be used for fire-fighting or cargo handling purposes and marked to that effect)	Grade - Yes		
01.01.48 - Is the accommodation air conditioning system maintained on partial re-circulation during cargo operations? (Accommodation should be kept under positive pressure to prevent entry of vapours. The operation of sanitary & galley extraction fans will cause vacuum, so the air conditioning intakes must not be kept fully closed)	Grade - Yes		
01.01.49 - Are all required external doors, ports and windows kept closed in port? (If doors have to be opened for access, they should be closed immediately after use. Where practical, a single door to be used in port. Doors that must be kept closed to be marked. Doors and openings can be open if vessel is storing provided there is no possibility of gas entering the accommodation and doors do not remain open for longer than necessary)	Grade - Yes		
01.01.50 - Are all cargo hoses and lines in order, tested annually to the design working pressure and marked accordingly? Check records of all hose tests and inspections. Every 2.5 years, pipelines to be tested to 1.5 times of their designed working pressure. (Each hose to be stencilled or marked with date of test, its specified max. working pressure and, if used in services other than the ambient temperature services, its max. and min. service temperature, as applicable. The specified max. working pressure should be>10 bar gauge. This applies to cargo hoses delivered after 1/7/02. Each hose to be individually numbered)	Grade - Yes		
01.01.51 - Has the Company regularly dispatched a Superintendent for supervising cargo operations? Do you have any report made by him?	Grade - No NA		
01.01.52 - Is the oxygen and hydrocarbon content of the interbarrier spaces regularly monitored and the results recorded?	Grade - Yes		
01.01.53 - Are personnel aware of the requirements for the emergency shutdown system (ESD)?	Grade - Yes		

Question	Answer Details	Is Critical	Link
01.01.54 - Is the ESD system tested prior to cargo transfer and are records maintained?	Grade - Yes		
01.01.55 - Are all manifold valves and tank filling valves, if they form part of the ESD system, tested and timed to close within 30 seconds?	Grade - Yes		
01.01.56 - Is a log kept of I.G. operations, test and maintenance?	Grade - No NA		
01.01.57 - Check policy to comply with IMO guidelines in case of failure of IGS and do the Master, C/O and Officers standing cargo watches understand this? (If IGS is unable to meet requirements then cargo discharge, deballasting & tank cleaning only resumed when emergency conditions as per 'IMO Guidelines on IGS' are complied with. Guidelines state that: 1) In case of carriage of crude oil, tanks to be maintained in inerted condition to avoid the danger of pyrophoric iron sulphide ignition. If it is impossible before the IGS repaired, an external supply of IG to be connected to system to avoid air being drawn into cargo tanks. 2) In case of carriage of products, discharge may only be resumed if an external supply of IG is connected, or following precautions are taken: Approved devices or flame screens to prevent passage of flame into cargo tanks fitted and checked to ensure they are in order; The valves on mast risers are opened; No free fall of water or slops is permitted; and No dipping, ullaging, sampling or other equipment to be introduced into tank until 5 hours since injection of IG ceased. This should be done only after 30 minutes have elapsed and all metal components should be securely earthed)	NA		
01.01.58 - Are the P/V valves in order, tight, inspected and cleaned as part of the PMS? (High jet cones & flaps not be jacked open, particularly when loading. Verify that P/V valves are tight and venting system operated as per SOLAS. High velocity vents are not fitted with flame screens and their correct operation relies on a pressure buildup within the compartment, which opens the valve at a predetermined level and then results in gas exit velocity> 30 m/sec. Request the manual lifting of P/V valves. P/V valves checked for free movement prior operation as per Ship to Shore Safety Check List. Date of last overhaul:??)	Grade - Yes MARVS		
01.01.59 - Check records of cargo system and equipment maintenance, including the overhaul of the non-return valve or equivalent fitted forward of the deck water seal, with positive means of closure. (As an alternative, an additional valve having such means of closure may be provided forward of the non-return valve to isolate the deck water seal from the IG main)	NA		
01.01.60 - Are cargo pumps and associated equipment fully operational?	Grade - Yes		
01.01.61 - Are scuppers properly plugged and is the deck area free of oil?	Grade - Yes		
01.01.62 - Are safety procedures related to cargo operations strictly adhered?	Grade - Yes		

Question	Answer Details	Is Critical	Link
01.01.63 - Is the C/O familiar with charter party clauses related to cargo operations?	Grade - Yes		
01.01.64 - If ballast lines pass through cargo tanks are they tested regularly and the results recorded?	NA		
01.01.65 - Is a written procedure provided for the safe handling of heavy weather ballast in cargo tanks?	Grade - Yes		
01.01.66 - Are Ship-to-Ship transfer checklists completed and SMS procedures implemented (if applicable)? (Five checklists are used at time of transfer and when operation is planned: 1. Pre-fixture information; 2. Before operations commence; 3. Before run-in and mooring; 4. Before cargo transfer; and 5. Before unmooring	Grade - Yes		
01.01.67 - Have senior deck Officers had open-water STS transfer experience within the last 12 months?	Grade - No		
01.01.68 - Are procedures provided for STS operations as per OCIMF/ICS STS Transfer Guide?	Grade - Yes		
01.01.69 - Is C/O familiar with the term ‘reference temperature’ and has it been determined for this cargo?	Grade - Yes		
01.01.70 - If the cargoes carried are not listed on the CoF, on whose authority were the cargoes loaded?	NA		
01.01.71 - Are adequate procedures in place for carrying out wall wash tests? (There are many types including chloride, colour, chemical oxygen demand, methanol, non volatile matter, permanganate time and water miscibility tests. Procedures include the use of PPE where required).	NA		
01.01.72a - Are voyage instructions and guidelines forwarded to the vessel regarding - Details for the next port and the attending agent? Type and quantity of spare parts forwarded for delivery to the next port of call, etc.	Grade - Yes		
01.01.72b - Are voyage instructions and guidelines forwarded to the vessel regarding - Possible mooring and depth restrictions for the next port of call?	Grade - Yes		
01.01.72c - Are voyage instructions and guidelines forwarded to the vessel regarding - Information and Safety Data Sheets for the next cargo?	Grade - Yes		
01.01.72d - Are voyage instructions and guidelines forwarded to the vessel regarding - Cargo loading / unloading particular requirements for the next cargo?	Grade - Yes		
01.01.72e - Are voyage instructions and guidelines forwarded to the vessel regarding - Expected bunkering operations?	Grade - Yes		
01.01.72f - Are voyage instructions and guidelines forwarded to the vessel regarding - Special navigation and sea traffic information?	Grade - Yes		
01.01.72g - Are voyage instructions and guidelines forwarded to the vessel regarding - Expected crew changes at next port?	Grade - Yes		

Question	Answer Details	Is Critical	Link
01.01.72h - Are voyage instructions and guidelines forwarded to the vessel regarding - Type and quantity of spare parts forwarded for delivery to the next port of call, etc	Grade - Yes		
01.01.73 - Check awareness of crew for SMS procedures related to Static electricity precautions (When a tank is in an inert condition, when handling static non-accumulator cargoes, or when the tank atmosphere is non-flammable, no anti-static precautions are necessary. Question should only be completed for vessels carrying static accumulator cargoes in non inert tanks. Static accumulator cargoes are all those except fuel with anti-static additive, heavy black fuel oils, crude oil, alcohols, ketones, residual fuel oils, black diesel oils and asphalts (bitumens). Some chemicals are known static accumulators i.e. Cumene, Cyclohexane, Diethylether, Heptanes, MTBE, Nonene, Octenes, Styrene, Toluene and Xylene. In case of doubt it shall be assumed that a product is a static accumulator	Grade - Yes		
01.01.74 - Are precautions relating to maximum flow rates during initial loading being observed? (Depending on the trade, a number of loading rates need to be determined for each cargo tank, which will be dependent on max. flow rates in cargo lines for different products and loading operations. The following flow rates may need to be calculated for each section of the cargo system: • A loading rate based on a linear velocity of 1 m/sec. at the tank inlet for the initial loading rate for static accumulator cargoes into non-inerted tanks; • A loading rate based on a linear velocity of 7 m/sec. for bulk loading static accumulator cargoes into non-inerted tanks; • A loading rate based on a linear velocity of 12 m/sec. for loading non-static accumulator cargoes and also for loading static accumulator cargoes into inerted tanks).	Grade - Yes		
01.01.75 - Are required relaxation periods being observed?	Grade - Yes		
01.01.76 - Are metal tapes, UTI tapes, and other gauging or sampling devices bonded before being introduced into tanks? (UTI tapes which have quick couplings to connect the unit to the vapour lock may not require bonding wires. However, the internal bonding of such units should be checked every 6 months or as per manufacturer's requirements	Grade - Yes		
01.01.77 - Are natural fibre ropes, as opposed to synthetic, used for dipping etc.? (Dipping, ullaging or sampling with non-metallic equipment lowered on clean natural fibre line is permissible at any time).	NA		
01.01.78 - If portable tank cleaning hoses are used, are continuity tests carried out and the results recorded? (Portable tank washing hoses should have a bonding wire within them for electrical continuity. Hoses marked to allow identification. A record to be kept showing the date and result of electrical continuity testing. Hoses tested for electrical continuity in a dry condition prior to use for tank cleaning. Resistance<6 ohms per metre length)	NA		
01.01.79 - Are personnel aware of the hazards associated with tank cleaning/steaming cargo tanks after the carriage of volatile or toxic products? (The recommendations contained in ISGOTT must be observed)	NA		

Question	Answer Details	Is Critical	Link
01.01.80 - Are personnel aware of the need to avoid the free fall of liquid into tanks which are not inerted?	Grade - Yes		
01.01.81 - Are cargo pipe joints bonded? (All gasketed cargo pipe joints and hose connections should be electrically bonded. Some gaskets are electrically conductive and bonding is not required)	Grade - Yes		
01.01.82 - Check awareness of personnel about relevant SMS procedures	Grade - Yes		
01.01.83 - Check approved and up to date SOPEP/VRP (these can be in a single combined plan. The name of OPA-90 qualified individual must be recorded in VRP. IMO Coastal Contact List up to date (published on 31/12, 31/3, 30/6 and 30/9), Master aware of port contact procedures. A contact list for this port is available to Master and displayed in CCR/posted on bridge. The list should include contact numbers for the DPA or the ERT, port authorities, P&I Club, the agent and the national pollution reporting centre from the Coastal Contact List).	Grade - Yes		
01.01.84 - Is the oil pollution prevention equipment available to the SOPEP/SMPEP prescribed positions?	Grade - Yes		
01.01.85 - Does the plan include a description of equipment, its location, a plan for deployment and specific crewmember duties for handling small spills?	Grade - Yes		
01.01.86 - Is the crew familiar with the use of the equipment and their duties according to the SOPEP/ SMPEP/VRP and emergency response plan?	Grade - Yes		
01.01.87 - Are portable gas and oxygen analyzers appropriate to the cargoes being carried and are they in order? Check spares and suitable means for calibration. (At least 2 oxygen, % volume hydrocarbon, LEL and toxic gas analysers for enclosed space or P/R entry. Vessels equipped with IG also carry 2 analysers for measuring hydrocarbon content in an inert atmosphere.).	Grade - Yes		
01.01.88 - Are the portable gas and oxygen analyzers instruction manuals available?	Grade - Yes		
01.01.89 - Are Officers familiar with their use and calibration? (Analysers checked for correct operation before each use. Nitrogen must be used when calibrating oxygen analysers, but some multiple function analysers use a test gas which serves all functions of analyser with one sample gas and which has oxygen 20.9%. In case of hydrocarbon gas analysers, the correct test gas specified by the manufacturer must be used and Officers must know what the result of using that test gas should be).	Grade - Yes		
01.01.90 - Check records of regular testing and calibration of portable analysers, as per manufacturers' recommendations. (There must be a routine for the replacement of parts i.e. filters at recommended intervals. The use of a self test facility does not necessarily mean that an analyser is operating correctly. It is possible for a machine to satisfactorily self-test, but then fail to register a lack of oxygen or the presence of gas. The only way to be sure that a machine is operating satisfactorily is to use a sample check gas. Crew to be aware whether or not these analyzers are in fact capable of doing so accurately. An analyzer designed to do so is the MSA Tankscope)	Grade - Yes		

Question	Answer Details	Is Critical	Link
01.01.91 - Where toxic gases may be encountered, are appropriate toxic gas detection analysers available and in order? (Check personal H2S gas monitoring instruments for personnel engaged in cargo operations. Two toxic gas detectors are required on vessels carrying noxious liquids. There should be an adequate supply of valid tubes (e.g. Draeger tubes), specific to cargoes carried. An up to date inventory of tubes to be maintained. Personnel to be aware that some instrument sensors could be poisoned if exposed to high concentrations of CO2)	Grade - Yes		
01.01.92 - Is sufficient span calibration gas available for the fixed and portable analysers onboard?	Grade - Yes		
01.01.93 - Are pump room entry procedures including the checking of the atmosphere being complied with? A notice should be displayed at the P/R entrance with entry requirements.	NA		
01.01.94 - Is a stretcher available and is lifting equipment permanently rigged for the pumproom?	NA		
01.01.95 - Is communication with the pumproom to CCR and ECR in good working order and is there a back up means of communication?	NA		
01.01.96 - Is a log maintained of personnel entering pumproom during cargo operations and are deck log entries made when at sea?	NA		
01.01.97 - Are pump turbine, glands and seals temperature gauge readouts and alarms in good working order?	Grade - Yes		
01.01.98 - Is the vessel equipped with sufficient number of intrinsically safe portable radios? (to allow communications between CCR, the deck officer, the deck watch, Master and the pumpman)	Grade - Yes		
01.01.99 - Are the portable pumps on deck ready for use?	Grade - Yes		