CDI-T

TERMINAL INSPECTION REPORT

TECHNICAL QUESTIONNAIRE

Fourth Edition

1st January 2007

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CDI-TERMINALS

TECHNICAL Questionnaire

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ACKNOWLEDGEMENT

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NOTICE OF TERMS OF USE

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TA. SYSTEMS

TB. AREAS

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The Background

This CDI-T Questionnaire was originally developed as part of the CEFIC “Safety and Quality Assessment System for Terminal Operations”.

The aim of the Questionnaire is to give an accurate assessment of the terminal at the time the inspection is carried out. The Questionnaire is essentially a quality assessment of the terminal, its operations and personnel, which also incorporates essential aspects of safety and environmental protection.

The Questionnaire does not attempt to pass or fail the terminal for any particular purpose but rather to give an assessment of performance at the time of the inspection.

The Inspector

The highest standards of ethical behaviour are expected from CDI Inspectors. The findings presented in the Report are to be regarded as confidential and the property of the terminal owner and on no account shall the Inspector discuss the contents of the Report with any third party.

The Inspector will be an observer only and shall not interfere or become involved in the operation of the terminal or be a party in any discussion between the terminal, customer, local authorities, etc.

A courteous and considerate approach is expected of the Inspector in all dealings with the terminal's personnel. The Inspector should take care to ensure that his actions do not in any way delay or interfere with the normal operation of the terminal. The Inspector shall not operate any equipment, but he may request equipment to be run or operated under test. The Inspector may relate industry best practice, but he is not permitted to advise on specific operational or constructional matters.

The Inspector is expected to set a good example with respect to his own safety procedures during the period of the inspection. The Inspector will wear, as appropriate for the location, protective clothing and equipment including boiler suit, safety helmet, safety shoes, safety gloves, ear protectors and goggles / safety glasses.

The terminal's safety procedures and notices displayed at the terminal must be complied with by the Inspector. The Inspector shall not enter restricted areas unless the Manager's permission has been obtained and any relevant permits / checklists have been completed correctly. The Inspector will not enter an enclosed space unless entry procedures are fully complied with.

The Questionnaire

There are three categories of questions, these are:

TPQ indicates a **Terminals Particulars Question**. These may be completed by all terminals and principally deal with the capacity and facilities available at the terminal.

SI indicates a **Self Inspection Question**. Terminals having been previously inspected by CDI, may complete these questions in the days prior to the inspection taking place. These questions principally concern procedures and records, and are subject to audit by the Inspector. **Where an Inspector finds that SI questions have not been answered correctly, the Inspector has the right to revert to a full inspection of the Chapter, the Department or the entire Terminal.**

I indicates an **Inspection Question**. These questions will be inspected by the Inspector, irrespective of previous inspections.

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Questions are to be answered "Yes" or "No", with provision for a "N/A" answer when a piece of equipment or facility does not exist.

Questions within the Questionnaire which clearly do not apply to the terminal should be marked as N/A. Examples of non applicable questions are where an operational assessment is required of equipment fitted and the terminal does not carry the equipment listed.

A "No" answer to a question does not necessarily imply that the terminal is not in compliance. All "No" answers must be supported with an observation explaining the reason and/or circumstance that exists.

Prior to the Inspection

Prior to an inspection being carried out, the terminal **should** complete the appropriate questions in the Questionnaire, ready for presenting to the Inspector. This practice will greatly reduce the time for inspection and provide the Inspector with all pertinent information regarding the terminal.

An inspection shall not normally be carried out during hours of darkness. The only exception to this is when special arrangements have been made with the terminal Manager prior to the Inspector arriving at the terminal.

The Opening Meeting

On arriving at the terminal, the Inspector will identify himself to the Manager and outline the objectives and requirements of the inspection. The Inspector and the Manager should agree the sequence for the inspection and construct a timetable, listing key personnel and their availability to assist with the inspection. The inspection should be planned and carried out in a manner which will not conflict with the safe operation of the terminal.

During the inspection, it is recommended that the Inspector is accompanied at all times by a responsible and suitably qualified person(s), nominated by the Manager.

Proper planning at the Opening Meeting will enable the inspection to be carried out efficiently and with the minimum of disruption to the normal working of the terminal.

The Inspection

Immediately following the Opening Meeting, the Inspector is required to ‘‘go out on site’’ for 4 to 5 hours to observe the actual operating conditions of the terminal.

It is a requirement that all questions, statements and information in the Questionnaire are completed. Sampling of questions within the report, other than pre-completed SI questions, is not permitted. However, sampling within a particular question is permitted. For example, when assessing the question on the operating instructions, the Inspector is not expected to sight every operating instruction at the terminal but only a sufficient number to make a broad judgment that they are displayed or readily available.

With the terminal in operation, some areas may not be capable of inspection, e.g. tanks, restricted loading bays. When any question is not addressed due to operational reasons, the N/A check box should be marked and a note made in the relevant Remarks section.

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With the exception of "familiarity" type questions which by their nature are subjective, answers to all other questions must be based on objective evidence. Objective evidence is defined as qualitative or quantitative information, records or statements of fact which is based on observation, measurement or test and which can be verified.

Asking for a procedure, is ‘‘implicit’’ that the procedure is implemented, followed and enforced. Inspector’s will employ the methodology of ‘‘tell me,’’, ‘‘show me’’, ‘‘prove to me’’ in establishing the answers to questions. The assurance of the terminal's staff will not be accepted by the Inspector as compliance with a particular question, without objective evidence being produced to support their assertions.

Should a request for the demonstration or test of a particular piece of equipment be refused, then the details will be noted in the relevant Remarks section. Requests for a test of equipment shall not be made where this will result in a major disruption to the terminal's normal operations. i.e. stopping operations, blackout, etc.

The Closing Meeting

On completion of the inspection, the Inspector will hold a Closing Meeting with the Manager. At the Closing Meeting the Inspector will provide the Manager with a copy of the Report Summary containing the inspector’s observations and remarks.

The Inspector will discuss with the Manager the answers given in the Report Summary and if requested to do so, explain how the answers have been determined. Should a "No" answer or observation be contested, then the Inspector will give the Manager the opportunity to produce objective evidence to satisfy the requirement. If satisfactory evidence of compliance is produced, then the answer to the question may be amended. Answers to questions, should not be amended after the Inspector leaves the terminal.

The Manager must be given the opportunity to comment in writing on the contents of the Questionnaire. Any written comments from the Manager will be entered to the database by the Inspector.

The Manager will be requested to sign for the Report Summary. The Manager's signature is for receipt only and does not infer that the Manager agrees with the assessment. However, the Manager must be made aware that release of the Report is bound by agreement between the Terminal Company and CDI-T, in that: the Tank Terminal Company undertakes to distribute copies of the Report only via the services provided by CDI-T.

The inspection does not result in a pass or fail. The Report is for consideration by a potential customer(s) only. The Inspector shall not make any recommendations for the correction of any items marked as "No" in the Questionnaire, nor indicate to the Manager, or any other person, the standard of the terminal or the possible eventual outcome of the inspection.

Processing the Report

During, or on completion of the inspection, the Inspector will enter all the inspection data (together with any comments from the Manager), into his computer terminal and then up-load the Report to the CDI-T database in accordance with the procedures governing control of the CDI-T database system.

Except in exceptional circumstances (or when instructed by CDI-T), copies of the Report must not be faxed, or transmitted by any other means, to any person or business who is not the terminal owner. Inspection data is privy to the Inspector (which includes persons employed by the Inspector or under the direct control of the Inspector) and the terminal owner. Persons who do not have approved access to the electronic database, are not permitted to sight the inspection data in hand-written or typed hard copy.

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The use of the electronic database provides a level of security for the inspection data which is severely compromised if information is faxed or mailed to uncontrolled third parties.

The Inspector is responsible for the security of the inspection data between the time of carrying out the inspection and uploading the Report to the database. The Inspector shall ensure that a back up of the inspection data is available in the event that the original data is lost prior to uploading to the database. All hard copy Reports are to be retained by the Inspector.

CDI-T Attestation

The terminal Manager may request the issue of a CDI-T Attestation document. These authenticated documents are issued by CDI Administration and serve as verification of the terminal having undertaken the CDI-T inspection.

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CDI File Reference: TIR-Introduction

To: The Terminal Manager

2007, 4th Edition TIR

Dear Sir,

AFTER THE INSPECTION

At the Closing Meeting, the Inspector will request that you sign and receive a copy of the Report Summary. You are invited to add any comments that you may have at this stage, and these will be entered to the database.

On departing your terminal, the Inspector is obligated to enter the report to the database as quickly as possible, though depending on his work commitment and travel, a 14 day period is permitted. Once your report is accepted on the database, the database will send you an e-mail message advising you of the report number and security code.

Via the website at www.cdit.nl you may now review the report and have a period of 90 days to enter your comments. At anytime in the life of the report, you may amend Section M0 and change the access permission to the various Chemical Company Participants. CDI will provide you with every help and assistance in navigating through the various menu options. If you encounter difficulty, please do not call the Inspector, please contact CDI or the Pharox Program Manager: Mr. E. Horring: ehorring@mail.pharox.nl

Should you require an Attestation document or an authenticated hard copy of the report, please contact CDI. You may also display the CDI-T Inspected Logo on your company literature, details are available from CDI.

Yours faithfully,

CDI-T, Administration

This page to be given to the Terminal Manager

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LIST OF ABBREVIATIONS USED IN THE QUESTIONNAIRE

ADNR	Transport of dangerous goods, by navigation of the River Rhine
ACC	American Chemistry Council
BCH	Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IMO)
CDI	Chemical Distribution Institute
CEFIC	European Chemical Industry Council
CFC	Chloro/Fluoro Compound
COF	Certificate of Fitness
DWT	Deadweight
ESD	Emergency Shut-down
FFE	Fire Fighting Equipment
GFCI	Ground Fault Circuit Interrupter
I	Inspection Question
IBC	International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk (IMO)
ICS	International Chamber of Shipping
IFR	Internal Floating Roof
ILO	International Labour Organisation
IMO	International Maritime Organization
IMDG	International Maritime Dangerous Goods Code
ISGOTT	International Safety Guide for Oil Tankers and Terminals
ISO	International Standards Organisation
ISPS	International Ship and Port Facility Security Code

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LEL	Lower Explosive Limit
LOA	Length Overall
LSA	Life Safety Appliances
MARPOL	International Convention for the Prevention of Pollution from Ships
MOC	Management of Change
MSDS	Material Safety Data Sheet
N/A	Not applicable or not addressed
OCIMF	Oil Companies International Marine Forum
P&A	Procedures and Arrangements Manual
PERC	Pneumatic Emergency Release Coupling
P/V	Pressure/Vacuum
RC	Responsible Care
Res	IMO Assembly Resolution
ROV	Remote Operating Valve
RTC	Rail Tank Car
RTT	Road Tank Trailer/Truck
SDS	Safety Data Sheet
SI	Self-Inspection Question
SSSCL	Ship/Shore Safety Checklist for Safe Transport, Handling and Storage of Dangerous Substances in Port Areas
TPQ	Terminals Particulars Question
TSG (C)	Tanker Safety Guide (Chemicals)
TSG (G)	Tanker Safety Guide (Gas)
UEL	Upper Explosive Limit
USCG	United States Coast Guard
VEC	Vapour Emission Control
VOC	Volatile Organic Compound
VTU	Vapour Treatment Unit
WHO	World Health Organisation

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CDI Terminal Inspection Report
Technical Questionnaire
Technical Report Summary

Very Important Notice

Clause 8 of the Tank Terminal Company Agreement with CDI-T

Tank Terminal Company undertakes to distribute copies of the Report only via the services provided by CDI-T.

Terminal: _____

_____

Name of Inspector (s):

1. _____
2. _____
3. _____

Inspection Completed Date: _____

Terminal Manager *(Signature & Name)* : _____ _____

(For receipt of Report Summary and confirmation of understanding of Clause 8)

Consecutive Number	Reference	Inspectors' Observation / Remarks

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CDI Terminal Inspection Report

Technical Questionnaire

Technical Report Summary

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Technical Questionnaire

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Technical Questionnaire

Technical Report Summary

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Question	Chapter TA1 FIRE FIGHTING	Yes	No	N/A	Category
	Fire Fighting, design philosophy				
TA1.1	Is the largest fire contingency identified ?	☐	☐		I
TA1.2	By whom or which Authority ?				I
	_____				
TA1.3	What is defined as the largest fire?				I
	_____				
	_____				
	_____				
	_____				
	Does the terminal intend to fight it:				
TA1.4	with their own equipment ?	☐	☐		TPQ
TA1.5	with their own personnel ?	☐	☐		SI
TA1.6	Can personnel be operational within 15 minutes from the alarm ?	☐	☐	☐	I
TA1.7	Are outside resources secured?	☐	☐		I
	Water Source				
TA1.8	Can the fire water rate required by the applicable local regulation or standard be supplied to each single fire contingency?	☐	☐		SI
	Is the source of fire water:				
TA1.9	of unlimited capacity?	☐	☐		TPQ
TA1.10	capable of satisfying the requirements of the applicable local regulations or standards?	☐	☐		SI
TA1.11	capable of providing the whole design flow rate for al least 6 hours and half of it thereafter?	☐	☐		I
TA1.12	free of oil and other defoaming agents?	☐	☐		I
	Pumps and Drivers				
TA1.13	Do pumps and drivers satisfy the requirements of the applicable local regulations or standards?	☐	☐		SI
TA1.14	Are the fire pumps capable of providing the water required to fight the largest single fire?	☐	☐		TPQ
TA1.15	Also when one pump is down?	☐	☐		TPQ
TA1.16	Also when the main electricity supply is down?	☐	☐		TPQ
TA1.17	Is there enough fuel to run the diesel pumps for 6 hours?	☐	☐		I
TA1.18	Is the fire main designed to operate continuously at a minimum 8.5 bar at the furthest point from the pump discharge manifold?	☐	☐		TPQ

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Question	Chapter TA1 FIRE FIGHTING	Yes	No	N/A	Category
TA1.19	Can a pressure controller bypass excess flow back to the source?	☐	☐		TPQ
TA1.20	Is the system kept under pressure by a small jockey pump?	☐	☐		TPQ
TA1.21	Can fire water pumps be started from a permanently manned location?	☐	☐		TPQ
	If the pressure drops below a fixed setting, does a low-pressure cut-in:				
TA1.22	start a fire pump?	☐	☐		TPQ
TA1.23	give the alarm to a permanently manned location?	☐	☐		TPQ
TA1.24	Are the fire pumps under continuous positive suction head?	☐	☐		TPQ
TA1.25	Is the pumping station in a protected locality or at least 30m from the nearest fire risk?	☐	☐		TPQ
TA1.26	Are hose connections provided at the jetty for fire boats to pump water into the terminal main?	☐	☐		TPQ
	If river / lake / sea water is used:				
TA1.27	are suction screens provided?	☐	☐	☐	TPQ
TA1.28	can they be cleaned with the pump in service?	☐	☐	☐	TPQ
TA1.29	are they regularly checked and cleaned?	☐	☐	☐	SI
TA1.30	Are the fire pumps flow tested at least every year?	☐	☐		I
	Fire Main System				
TA1.31	Does the fire main system satisfy the requirements of the applicable local regulations or standards?	☐	☐		SI
TA1.32	Is a grid or looped fire main system used?	☐	☐		TPQ
TA1.33	Do isolation valves permit to take sections out of service for repair, while still enabling half the design water rate to reach each area?	☐	☐		TPQ
TA1.34	Are fire mains fireproofed where they cross drainage ditches into which flammable liquids may be discharged?	☐	☐	☐	TPQ
	In freezing climates, is the system maintained operational by:				
TA1.35	being buried well below the frost line?	☐	☐	☐	TPQ
TA1.36	heating and insulating of above ground parts ?	☐	☐	☐	SI
TA1.37	being a dry system ?	☐	☐	☐	SI
TA1.38	circulation ?	☐	☐	☐	SI
TA1.39	If salt water is used, is the system corrosion resistant and regularly checked for corrosion?	☐	☐	☐	SI
TA1.40	Is the fire main system painted red?	☐	☐		I
	Foam Proportioning and Distribution System				
TA1.41	Does the foam system satisfy the requirements of the applicable local regulations or standards?	☐	☐		SI
	Is a foam concentrate solution in water generated:				

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Question	Chapter TA1 FIRE FIGHTING	Yes	No	N/A	Category
TA1.42	in a fixed unit?	☐	☐		TPQ
TA1.43	in a foam proportioning truck?	☐	☐		TPQ
	In case of a fixed system, in freezing climates, is piping:				
TA1.44	buried well below the frost line?	☐	☐	☐	TPQ
TA1.45	heated and insulated?	☐	☐	☐	SI
TA1.46	kept dry?	☐	☐	☐	SI
TA1.47	Does the fire truck fully comply with all applicable local regulations and standards ?	☐	☐	☐	SI
TA1.48	Is there an inventory list of the equipment on board the fire truck and is the equipment present and in good conditions?	☐	☐	☐	I
TA1.49	Does the terminal use a foam concentrate suitable for all stored liquids?	☐	☐	☐	I
	Is the stock of each type of foam concentrate held at the terminal:				
TA1.50	sufficient to cover the demand of the largest single fire for at least 90 min?	☐	☐	☐	I
TA1.51	regularly tested to ensure it is still active?	☐	☐	☐	I
	Hydrants				
TA1.52	Do hydrants satisfy the requirements of all applicable local regulations and standards?	☐	☐		SI
	Is a sufficient number of hydrants provided:				
TA1.53	to supply the required water rate to each area?	☐	☐		TPQ
TA1.54	without deploying an excessive length of hose?	☐	☐		TPQ
TA1.55	Are hydrants located at a safe distance from the nearest fire risk ?	☐	☐		I
TA1.56	Are hydrants located so that connecting hoses do not have to cross pipe line or drainage ditches outside of walkways?	☐	☐		TPQ
TA1.57	In freezing climates only, are hydrants self-draining, where the fire main runs underground?	☐	☐	☐	TPQ
TA1.58	Are hydrant connections compatible with local community and mutual aid mobile fire fighting equipment?	☐	☐		TPQ
	Monitors				
TA1.59	Are all monitors capable of reaching their designated target?	☐	☐		SI
	Are all monitors made of a material which does not:				
TA1.60	crack under heat ?	☐	☐		I
TA1.61	corrode ?	☐	☐		I
TA1.62	Can monitors be operated from a protected/safe and accessible location ?	☐	☐		I

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Question	Chapter TA1 FIRE FIGHTING	Yes	No	N/A	Category
	Fire Equipment Cabinets				
TA1.63	Are cabinets containing fire hose, nozzles and fittings provided in areas where there would be a significant time delay in obtaining these items from the fire truck ?	☐	☐		SI
TA1.64	Is there an inventory list of the equipment to be kept in the cabinets ?	☐	☐	☐	I
TA1.65	Is all the equipment present and in good condition ?	☐	☐	☐	I

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Question	Chapter TA2 POWER DISTRIBUTION	Yes	No	N/A	Category
	Area Classification				
TA2.1	Is there a lay-out plan which indicates the different areas and the matching classification of the electrical equipment ?	☐	☐		I
TA2.2	Is it up to date ?	☐	☐	☐	I
TA2.3	Does all equipment comply with the regulations for the zone which they are situated or used in ?	☐	☐		I
	Electric Power Supply to pump motors				
TA2.4	Do power distribution lines run underground or overhead on suitable poles to the pump slab electrical distribution centre ?	☐	☐	☐	TPQ
TA2.5	Is there a back-up power supply available ?	☐	☐	☐	TPQ
TA2.6	Do cable trays provide a rigid system to support cables for electric power, instruments and communication cables ?	☐	☐	☐	TPQ
	Electrical System Maintenance				
TA2.7	Is all electrical equipment checked for insulation resistance every year by a licensed specialist ?	☐	☐		I
TA2.8	Are all electric tools earthed ?	☐	☐		I
TA2.9	If not, are they double insulated?	☐	☐	☐	I
TA2.10	Do signs restrict access to high voltage power lines/equipment, unless they are either de-energised or insulated ?	☐	☐	☐	I
TA2.11	Are only non metallic ladders used for electrical work ?	☐	☐		SI
TA2.12	Is a power distribution plan available for the whole site ?	☐	☐		I
TA2.13	Is adequate ventilation available in enclosed areas, where batteries are charged, to avoid explosive vapour-air mixtures ?	☐	☐	☐	SI

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Question	Chapter TA3 VEHICLE CIRCULATION	Yes	No	N/A	Category
	Roads and Paving				
TA3.1	Are roads and paving maintained in good condition ?	☐	☐		I
	On Site Parking				
TA3.2	Are separate parking lots provided for trucks ?	☐	☐		TPQ
TA3.3	Is the parking lot adequately illuminated ?	☐	☐		I
TA3.4	Has the truck parking lot sufficient capacity ?	☐	☐		I
TA3.5	Does the lay-out allow smooth and safe traffic ?	☐	☐		I
TA3.6	Is the lay-out such that trucks are not require to back-up ?	☐	☐		I
	Traffic Flow				
TA3.7	Are at least 2 exits provided at opposite sides of the terminal ?	☐	☐		TPQ
TA3.8	Is a one way traffic control system in place ?	☐	☐		TPQ
TA3.9	If not, are roads wide enough for two way traffic ?	☐	☐	☐	TPQ
	Access to Terminal				
TA3.10	Is the terminal access road wide enough so that queuing trucks do not obstruct incoming and outgoing traffic	☐	☐		I

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Question	Chapter TA4 EMERGENCY RESPONSE	Yes	No	N/A	Category
	Communications and Alarms				
TA4.1	Are there effective communication systems in the plant to raise an alarm to a manned location?	☐	☐		I
TA4.2	What are the systems: _____ _____				I
TA4.3	Can emergency communication system still work in case of a power failure ?	☐	☐		I
TA4.4	Is there an emergency communication plan?	☐	☐		I
	Does it include the emergency telephone numbers of:				
TA4.5	fire department ?	☐	☐	☐	I
TA4.6	police ?	☐	☐	☐	I
TA4.7	medical services ?	☐	☐	☐	I
TA4.8	anti poison centre ?	☐	☐	☐	I
TA4.9	harbour authorities ?	☐	☐	☐	I
TA4.10	crisis centre of the authorities ?	☐	☐	☐	I
TA4.11	emergency team members ?	☐	☐	☐	I
TA4.12	terminal management ?	☐	☐	☐	I
TA4.13	Are all above mentioned services covered 24 hrs a day and 7 days a week ?	☐	☐		I
TA4.14	Are all raised emergency alarms recorded ?	☐	☐		I
TA4.15	Is there a general fire alarm system ?	☐	☐		TPQ
TA4.16	Is the alarm automatically triggered (e.g. by fire sensors) ?	☐	☐		TPQ
TA4.17	Is there an automatic gas alarm system ?	☐	☐		TPQ
TA4.18	Is there a general evacuation alarm ?	☐	☐		SI
TA4.19	Is there a clear distinction between the different alarms ?	☐	☐	☐	SI
TA4.20	Can the alarm be heard or seen everywhere in the plant ?	☐	☐		SI
TA4.21	Is there an end of incident signal ?	☐	☐		SI
	Are the different alarm signals communicated to :				
TA4.22	own personnel ?	☐	☐		SI
TA4.23	drivers ?	☐	☐		SI
TA4.24	contractors ?	☐	☐		SI
TA4.25	other third parties on the site ?	☐	☐		SI

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Question	Chapter TA4 EMERGENCY RESPONSE	Yes	No	N/A	Category
TA4.26	neighbours ?	☐	☐		SI
TA4.27	authorities ?	☐	☐		SI
TA4.28	Is there a regular alarm testing procedure ?	☐	☐		SI
TA4.29	Are the authorities notified in case of an emergency ?	☐	☐		SI
	FIRE EMERGENCIES :				
	First Intervention Equipment :				
TA4.30	Is first intervention equipment available in accordance with the local regulations ?	☐	☐		TPQ
TA4.31	Are the extinguishers suitable for the risks on the spot ?	☐	☐		I
TA4.32	Are the extinguishers clearly visible ?	☐	☐		I
	Personnel :				
TA4.33	Has the terminal sufficient personnel trained in fire fighting ?	☐	☐		SI
TA4.34	Are trained terminal personnel available during working hours ?	☐	☐		I
TA4.35	Is every intervention logged ?	☐	☐		I
TA4.36	Are there enough fire-fighters available within 15 min. after the first alarm ?	☐	☐		SI
	MEDICAL EMERGENCIES :				
	Equipment :				
TA4.37	Has the terminal an inventory of the medical intervention equipment ?	☐	☐		SI
TA4.38	Is this inventory reviewed by a medical advisor ?	☐	☐	☐	SI
	Personnel :				
TA4.39	Has the terminal sufficient personnel trained in first aid ?	☐	☐		SI
TA4.40	Is such personnel available during working hours ?	☐	☐		I
TA4.41	Is every intervention logged ?	☐	☐		I
	Second Intervention :				
TA4.42	Is an intervention plan in place and communicated ?	☐	☐		SI
TA4.43	Is there a medical intervention team (ambulance/hospital) available within 15 min. radius ?	☐	☐		SI
TA4.44	Do they get all information concerning the incident on or before their arrival at the plant ?	☐	☐		SI
	ENVIRONMENTAL EMERGENCIES :				
	Personnel :				
TA4.45	Has the terminal sufficient personnel trained in environmental ER ?	☐	☐		SI
TA4.46	Are trained terminal personnel available during working hours ?	☐	☐		I

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Question	Chapter TA4 EMERGENCY RESPONSE	Yes	No	N/A	Category
TA4.47	Is every intervention logged ?	☐	☐		I
	Second Intervention :				
TA4.48	Are neighbours and authorities notified in case of pollution of public waters ?	☐	☐		SI
TA4.49	Are neighbours and authorities notified in case of an air pollution ?	☐	☐		SI

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Question	Chapter TA5 TANK CLEANING	Yes	No	N/A	Category
	Tank Cleaning				
TA5.1	Is a cleaning plan agreed upon for each cleaning between the terminal's safety officer and the cleaning supervisor, including the work scheme and the safety precautions ?	☐	☐		I
TA5.2	Are SDS sheets available for the products in the tanks to be cleaned ?	☐	☐		SI
TA5.3	Is extra fire fighting equipment kept ready in the vicinity of the tank?	☐	☐		I
TA5.4	Are slop tanks and sludge containers available with enough capacity to store all waste prior to treatment or transportation to an approved waste treatment centre ?	☐	☐	☐	SI
TA5.5	Is the safe working zone defined and any activity within, that could produce hazards, prohibited ?	☐	☐		I
TA5.6	Is a rotating tank washer available ?	☐	☐		TPQ
TA5.7	and of safe and spark-free construction ?	☐	☐	☐	TPQ
	If the cleaning is done by means of a rotating tank washer :				
TA5.8	can it be put in place without entering the tank ?	☐	☐	☐	SI
TA5.9	Is the tank thoroughly drained of product, before starting a cleaning operation ?	☐	☐		SI
TA5.10	Are the tank and lines to be cleaned physically isolated from operational systems before cleaning commences ?	☐	☐	☐	SI
TA5.11	Is the tank inerted before the cleaning operation, if required ?	☐	☐		SI
TA5.12	If the tank is not inerted, is it ventilated until the measurement of the concentration of flammable gases falls below 10% of the L.E.L. before the start of the cleaning operation ?	☐	☐	☐	SI
TA5.13	In case of toxic products, is the tank atmosphere made free of toxic vapour until the measurement of the concentration of the toxic gases is under the TLV - value (or a comparable standard) ?	☐	☐	☐	SI
	Are the measurements as described in TA5.12 and TA5.13 executed :				
TA5.14	by skilled staff ?	☐	☐		SI
TA5.15	with approved and calibrated instruments ?	☐	☐		SI
TA5.16	Is ventilation before as well as after cleaning carried out under safe conditions and is the atmosphere in the tank vicinity monitored ?	☐	☐		SI
TA5.17	Are concentrations monitored and maintained below 10% of LEL and TLV (as in TA5.12 and TA5.13) prior to and during every tank entry ?	☐	☐		I
TA5.18	Is there an entry permit for the tank, signed at least by the safety officer and the cleaning supervisor ?	☐	☐		SI
	If the cleaning is carried out by entering the tank:				
TA5.19	do people have independent air supply ?	☐	☐	☐	SI
TA5.20	do people wear protective clothing (overall, helmet, gloves, boots) ?	☐	☐	☐	SI
TA5.21	is spark free equipment used ?	☐	☐	☐	SI
TA5.22	is a safety line used ?	☐	☐	☐	SI

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Question	Chapter TA5 TANK CLEANING	Yes	No	N/A	Category
TA5.23	is the operation permanently monitored by a guard outside the tank ?	☐	☐	☐	SI
TA5.24	is 115V or above equipment used with a GFCI or used in compliance with relevant electrical safety standards?	☐	☐	☐	SI

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Question	Chapter TA6 SEWERS - WASTE & WASTE WATER TREATMENT	Yes	No	N/A	Category
	Sewers and Drain systems, design and lay-out				
TA6.1	Is rain water segregated from product sewers ?	☐	☐		TPQ
TA6.2	Is the lay-out of sewer systems for products such that hazards are minimised ?	☐	☐		I
TA6.3	Are the gullies covered to prevent tripping hazards ?	☐	☐		I
	Is the capacity of the sewer (systems) designed for :				
TA6.4	maximum rain water ?	☐	☐		TPQ
TA6.5	sprinkler systems for non bunded areas ?	☐	☐	☐	TPQ
TA6.6	supplementary fire water (hydrants, monitors, sprinklers) ?	☐	☐	☐	TPQ
	Does the clean surface water sewer discharge into :				
TA6.7	a municipal sewer ?	☐	☐		TPQ
TA6.8	a controlled discharge point ?	☐	☐		TPQ
TA6.9	Are laboratories drained to an independent sewer system ?	☐	☐	☐	TPQ
TA6.10	Is this system equipped with a chemical sump ?	☐	☐	☐	TPQ
TA6.11	Are devices installed in all sewer systems to prevent backflow into buildings ?	☐	☐		TPQ
TA6.12	Is a trap installed at openings where the sewer could pick-up and spread hazardous vapours ?	☐	☐		TPQ
TA6.13	Is the sanitary sewer system independent?	☐	☐		TPQ
TA6.14	Are drain valves installed for the bunded areas ?	☐	☐	☐	TPQ
TA6.15	Are sumps for pump-out installed in bunded areas ?	☐	☐		TPQ
TA6.16	Is the drain system for loading/unloading areas directed to dedicated containment ?	☐	☐		TPQ
	Sewers and Drain systems, control				
	Are the sewers connected to a treatment system for :				
TA6.17	all tank bunds ?	☐	☐	☐	TPQ
TA6.18	all loading/unloading stations ?	☐	☐	☐	TPQ
TA6.19	all pumping areas ?	☐	☐	☐	TPQ
TA6.20	all warehouses ?	☐	☐	☐	TPQ
TA6.21	all connection points ?	☐	☐	☐	TPQ
TA6.22	all drumming areas ?	☐	☐	☐	TPQ
TA6.23	all blending areas ?	☐	☐	☐	TPQ
TA6.24	all laboratories ?	☐	☐	☐	TPQ

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Question	Chapter TA6 SEWERS - WASTE & WASTE WATER TREATMENT	Yes	No	N/A	Category
TA6.25	the maintenance workshop ?	☐	☐	☐	TPQ
TA6.26	the waste storage areas ?	☐	☐	☐	TPQ
TA6.27	Are all drain valves checked daily open/closed ?	☐	☐		I
TA6.28	Is there an automatic shut-off in case of incident ?	☐	☐		TPQ
	Waste Water, treatment and handling				
TA6.29	Is a waste water treatment system available ?	☐	☐		TPQ
TA6.30	Is the system suitable for all products handled ?	☐	☐	☐	I
TA6.31	Is the system suitable for all drain sources ?	☐	☐	☐	I
TA6.32	Has the terminal a permit for this system ?	☐	☐	☐	I
TA6.33	Does the system include a gravity separator ?	☐	☐	☐	TPQ
TA6.34	Does the system include a physico-chemical treatment system ?	☐	☐	☐	TPQ
TA6.35	Is there a biological treatment system installed ?	☐	☐	☐	TPQ
	Is the capacity big enough to handle :				
TA6.36	contaminated rain water ?	☐	☐	☐	TPQ
TA6.37	contaminated fire water ?	☐	☐	☐	TPQ
TA6.38	water from tank cleaning ?	☐	☐	☐	TPQ
TA6.39	water from clean-up spills ?	☐	☐	☐	TPQ
TA6.40	ballast water ?	☐	☐	☐	TPQ
TA6.41	ship tank wash water from the carriage of oil (Marpol Annex I)?	☐	☐	☐	TPQ
TA6.42	ship tank wash water from the carriage of chemicals (Marpol Annex II)?	☐	☐	☐	TPQ
TA6.43	Is there an automatic shut-off system in case of incident ?	☐	☐	☐	TPQ
	Discharge of (Treated) Waste Water				
TA6.44	Is the sewer outlet equipped with a flammable/toxic/pH ppm alarm?	☐	☐		TPQ
TA6.45	Is the sewer outlet protected by a high liquid level alarm?	☐	☐		TPQ
TA6.46	Are normally closed drain valves operated in a controlled manner ?	☐	☐		I

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Question	Chapter TA6 SEWERS - WASTE & WASTE WATER TREATMENT	Yes	No	N/A	Category
	Waste Handling				
	General				
	Is the following waste handled separately:				
TA6.47	the oily phase from the gravity separator ?	☐	☐	☐	I
TA6.48	filter cakes ?	☐	☐	☐	I
TA6.49	waste product ?	☐	☐	☐	I
TA6.50	packaging waste ?	☐	☐	☐	I
TA6.51	contaminated solid waste ?	☐	☐	☐	I
	Product Waste (incl. oils)				
TA6.52	Is product waste collected ?	☐	☐	☐	I
TA6.53	Is the system such that product/groups are collected separately ?	☐	☐	☐	I
TA6.54	Is there a product waste storage area ?	☐	☐		TPQ
TA6.55	Is the area separated from other activities ?	☐	☐	☐	I
TA6.56	Is the area covered ?	☐	☐	☐	I
TA6.57	Does the area have containment ?	☐	☐	☐	I
TA6.58	Are all waste products known, identified and labeled ?	☐	☐		I
	Packaging Waste				
TA6.59	Is packaging waste collected ?	☐	☐		I
TA6.60	Are empty drums cleaned before disposal ?	☐	☐	☐	I
TA6.61	Are empty drums/pallets recycled ?	☐	☐	☐	I
TA6.62	Is packaging waste compacted ?	☐	☐	☐	I
TA6.63	Is all product polluted waste incinerated ?	☐	☐	☐	I
	Other Waste				
TA6.64	Is all solid waste collected, identified and separated ?	☐	☐		I
TA6.65	Is contaminated solid waste disposed of properly ?	☐	☐		I
	Is all solid waste from the water treatment unit :				
TA6.66	disposed off by land fill ?	☐	☐	☐	I
TA6.67	incinerated ?	☐	☐	☐	I
TA6.68	sent to an authorized treatment centre ?	☐	☐	☐	I
TA6.69	Is all used equipment properly cleaned before disposal ?	☐	☐		I

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Question	Chapter TA7 VAPOUR EMISSION CONTROL	Yes	No	N/A	Category
	General				
TA7.1	Are there any emission control devices for treatment of VOC's ?	☐	☐	☐	TPQ
	Are there devices on site to treat the vapours from :				
TA7.2	Jetties : ship loading ?	☐	☐	☐	TPQ
TA7.3	RTC loading area ?	☐	☐	☐	TPQ
TA7.4	RTT loading area ?	☐	☐	☐	TPQ
TA7.5	Drum filling units ?	☐	☐	☐	TPQ
	Vapour Return Systems				
TA7.6	Are all vapour lines product dedicated ?	☐	☐		SI
TA7.7	Are non-dedicated vapour lines controlled by enriching or diluting or inerting?	☐	☐	☐	SI
TA7.8	If required, are vapour lines fitted with a flame arrestor at each end ?	☐	☐	☐	TPQ
TA7.9	If required, are vapour lines fitted with a detonation arrestor at each end ?	☐	☐	☐	TPQ
TA7.10	Is a knock-out drum available on the lowest point of vapour lines ?	☐	☐	☐	TPQ
TA7.11	Are blowers used in the system ?	☐	☐	☐	TPQ
TA7.12	Have precautions been taken to avoid incompatibility of vapours ?	☐	☐	☐	I
TA7.13	Are vapour lines in which vapours can solidify, traced and insulated?	☐	☐	☐	TPQ
TA7.14	Is the instrumentation and control system of the vapour return system designed to maintain a fail safe situation ?	☐	☐	☐	TPQ
TA7.15	Is there a system in place to prevent over and under pressure of the vapour return system ?	☐	☐	☐	TPQ
	Internal Floating Roof (IFR)				
TA7.16	Are all IFR of self-buoyant position design ?	☐	☐	☐	TPQ
	Type of seal applied :				
TA7.17	wipers - vapour mounted	☐	☐	☐	TPQ
TA7.18	wipers - liquid mounted	☐	☐	☐	TPQ
TA7.19	inflatable	☐	☐	☐	TPQ
TA7.20	mechanical shoe type	☐	☐	☐	TPQ
TA7.21	membrane seal	☐	☐	☐	TPQ
TA7.22	combination of above mentioned seal types	☐	☐	☐	TPQ
TA7.23	Is the atmosphere above the IFR periodically checked ?	☐	☐	☐	SI

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Question	Chapter TA7 VAPOUR EMISSION CONTROL	Yes	No	N/A	Category
	Vapour Treatment Unit (VTU)				
TA7.24	Was an independent Hazop study carried out prior to installation?	☐	☐	☐	SI
	What type(s) of VTU are installed:				
TA7.25	refrigeration ?	☐	☐		TPQ
TA7.26	scrubbers ?	☐	☐		TPQ
TA7.27	incinerators ?	☐	☐		TPQ
TA7.28	activated carbon ?	☐	☐		TPQ
TA7.29	Is the VTU protected by flame / detonation arrestors ?	☐	☐	☐	TPQ
TA7.30	In case of activated carbon based VTU is there a system in place to control the saturation of the activated carbon ?	☐	☐	☐	SI

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Question	Chapter TA8 SECURITY	Yes	No	N/A	Category
	Exterior Lighting				
TA8.1	Is there adequate exterior lighting throughout the terminal?	☐	☐		I
TA8.2	Is lighting protected by a backup power supply ?	☐	☐		I
TA8.3	Does the lighting provide total coverage around the perimeter of the terminal ?	☐	☐		I
	Fencing and Gates				
TA8.4	Is the terminal adequately fenced ?	☐	☐		I
TA8.5	Will the fence deter intrusion ?	☐	☐		I
TA8.6	Are gates locked or guarded during off-hours ?	☐	☐		I
	Security Alarms				
TA8.7	Is the terminal protected by security alarms?	☐	☐		TPQ
TA8.8	Is the alarm audible ?	☐	☐	☐	I
TA8.9	Is the alarm connected to a supervised central station ?	☐	☐	☐	TPQ
	Security Patrols				
TA8.10	Are security patrols carried out at the terminal ?	☐	☐		I
TA8.11	Is there a local police patrol ?	☐	☐		I
TA8.12	Is a tele-surveillance system in use at the terminal entrance and jetties ?	☐	☐		I
	Access Control				
TA8.13	Are access signs posted ?	☐	☐		I
TA8.14	Is there a controlled access system ?	☐	☐		I
	Does the system include:				
TA8.15	specific door entry	☐	☐		I
TA8.16	sign in/sign out	☐	☐		I
TA8.17	sign in sign out with receptionist or guard	☐	☐		I
TA8.18	security pass procedure	☐	☐		I
TA8.19	restricted areas	☐	☐		I
TA8.20	separate drivers waiting room	☐	☐		I

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Question	Chapter TA8 SECURITY	Yes	No	N/A	Category
	Control Measures				
	Are physical inventories conducted and reconciled with movements?				
TA8.21	of customer product ?	☐	☐		SI
TA8.22	of terminal property ?	☐	☐		SI
TA8.23	During physical inventories are packages checked for integrity ?	☐	☐	☐	SI

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Question	Chapter TA9 HOSES	Yes	No	N/A	Category
	Hoses				
TA9.1	Are hoses suitable for their intended service ?	☐	☐		I
TA9.2	Are hoses tested and inspected in accordance with established criteria ?	☐	☐		I
TA9.3	Are hose history records kept ?	☐	☐		I
TA9.4	Are hoses rejected and retired in accordance with established criteria ? (e.g. manufacturers instructions)	☐	☐		I
	Can all hoses be identified for :				
TA9.5	date of next test ?	☐	☐		I
TA9.6	maximum allowable working pressure ?	☐	☐		I
TA9.7	product(s) intended ?	☐	☐		I
TA9.8	temperature range ?	☐	☐		I
TA9.9	Are electrically discontinuous hoses easily identifiable ?	☐	☐	☐	I
TA9.10	Are hoses properly suspended during handling and use, so that the hose will not be damaged and their bend radius is satisfactory ?	☐	☐		I
TA9.11	Is a sufficient length of hose used considering the tide differences ?	☐	☐	☐	I
TA9.12	Is there a bolt in every flange hole on all connections ?	☐	☐	☐	I
TA9.13	Is the hose kept straight during bolt-up ?	☐	☐		I
TA9.14	Are hoses in good condition, without any damaged flange or connection, kink, exposed carcass, abrasion or swelling ?	☐	☐		I
TA9.15	Is the Safe Working Load of the hose lifting equipment displayed at the location ?	☐	☐	☐	I
TA9.16	Is the weight of hoses in empty and full conditions displayed at the location ?	☐	☐	☐	I
TA9.17	Are limit switches of hose lifting equipment frequently checked ?	☐	☐	☐	I
TA9.18	Are all spools and reducers made of steel ?	☐	☐	☐	I
	Are hoses after use :				
TA9.19	emptied ?	☐	☐		I
TA9.20	cleaned, unless dedicated?	☐	☐		I
TA9.21	closed on both ends ?	☐	☐		I
TA9.22	properly stored in a protected position ?	☐	☐		I
TA9.23	Are operating instructions for hose lifting equipment displayed ?	☐	☐	☐	I
TA9.24	Is hose support equipment in good condition ?	☐	☐	☐	I

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Question	Chapter TB1 ROAD/RAIL LOADING AND UNLOADING	Yes	No	N/A	Category
	General Health and Safety				
TB1.1	Are all lines and valves in good condition and free from leaks ?	☐	☐	☐	I
TB1.2	Are the pipe lines tagged with line/product identification ?	☐	☐	☐	SI
TB1.3	Are caution signs well displayed at the loading area ?	☐	☐	☐	I
TB1.4	Is, in case of loading/unloading liquids in flammable range, the distance to potential ignition sources sufficient?	☐	☐	☐	TPQ
TB1.5	In the case of loading/unloading liquids in flammable range, are tanks inerted ?	☐	☐	☐	SI
TB1.6	Is the loading area covered / weather proof ?	☐	☐	☐	TPQ
TB1.7	Is the loading area adequately illuminated ?	☐	☐	☐	I
TB1.8	Are sufficient eye wash/ safety showers located in each operating area?	☐	☐	☐	I
TB1.9	Is the equipment clearly signposted, easily accessible and in good condition?	☐	☐	☐	I
TB1.10	Is the equipment protected against freezing?	☐	☐	☐	I
TB1.11	Is appropriate personal protective equipment for the products being handled in use?	☐	☐	☐	I
TB1.12	Is adequate fall protection provided ?	☐	☐	☐	I
TB1.13	Are vapours, hazardous to personnel, extracted from the area?	☐	☐	☐	I
TB1.14	Is general housekeeping in the area satisfactory ?	☐	☐	☐	I
	Static Ignition Prevention (for products handled in the flammable range)				
TB1.15	Are vehicles properly earthed before loading or unloading ?	☐	☐	☐	I
TB1.16	Is there an interlock system to prevent loading or unloading if the earthing is not satisfactorily made ?	☐	☐	☐	TPQ
TB1.17	Is the earthing connection properly marked ?	☐	☐	☐	I
TB1.18	Are all metal parts of the fill pipe assembly electrically continuous to earth ?	☐	☐	☐	I
TB1.19	If a vapour recovery system is employed, are all metallic components electrically continuous to earth ?	☐	☐	☐	TPQ
TB1.20	Is a procedure in place which prohibits to lower conductive objects like sample containers, thermometers, level gauges into the tank during filling or within a period of 5 minutes after all pumping into the tank has ceased ?	☐	☐	☐	SI
TB1.21	Is there a system/procedure to limit the liquid velocity in the fill pipe to 1 m/s until the outlet is submerged ?	☐	☐	☐	SI
TB1.22	Is there a system/procedure to limit the liquid velocity in the fill pipe to 7 m/s after the outlet is submerged ?	☐	☐	☐	SI

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Question	Chapter TB1 ROAD/RAIL LOADING AND UNLOADING	Yes	No	N/A	Category
	EMERGENCY RESPONSE				
TB1.23	Are fire blankets available ?	☐	☐	☐	I
	Is an emergency stop push button provided at the rack to :				
TB1.24	stop all loading pumps ?	☐	☐	☐	TPQ
TB1.25	close all emergency isolation valves on the loading lines ?	☐	☐	☐	TPQ
TB1.26	Is another emergency stop button provided on the escape route from the loading area ?	☐	☐	☐	TPQ
TB1.27	Are emergency stop buttons clearly marked and easily accessible ?	☐	☐	☐	I
TB1.28	Are emergency isolation valves installed on all loading lines at a safe distance ?	☐	☐	☐	TPQ
TB1.29	Are communication facilities available with the control room ?	☐	☐	☐	I
	FIRE FIGHTING				
	Application to tank vehicle loading racks (for flammable products)				
TB1.30	Is sufficient and adequate fire fighting equipment available?	☐	☐	☐	I
	Are all loading areas protected by :				
TB1.31	fixed foam sprinklers ?	☐	☐	☐	TPQ
TB1.32	fixed water spray sprinklers ?	☐	☐	☐	TPQ
TB1.33	fixed monitors ?	☐	☐	☐	TPQ
TB1.34	trailer mounted monitors ?	☐	☐	☐	TPQ
TB1.35	portable foam equipment and hose stations ?	☐	☐	☐	TPQ
	If sprinklers are fitted are they activated :				
TB1.36	automatically by fire detectors ?	☐	☐	☐	TPQ
TB1.37	manually ?	☐	☐	☐	TPQ
TB1.38	Can 6.5 l/min foam be applied per m^2 of potential fire area ?	☐	☐	☐	SI
	Is foam solution provided by :				
TB1.39	a fixed distribution system ?	☐	☐	☐	TPQ
TB1.40	a foam proportioning unit supplied from a nearby hydrant ?	☐	☐	☐	TPQ

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Question	Chapter TB1 ROAD/RAIL LOADING AND UNLOADING	Yes	No	N/A	Category
TB1.41	Is there a flow control valve on foam supply?	☐	☐	☐	TPQ
TB1.42	is it automatic ?	☐	☐	☐	TPQ
TB1.43	is it in a fire protected location ?	☐	☐	☐	TPQ
TB1.44	is it close to the loading rack and easily accessible ?	☐	☐	☐	I
	Is the fire alarm started :				
TB1.45	automatically by the fire sensors ?	☐	☐	☐	TPQ
TB1.46	manually by pushing a button at each loading position ?	☐	☐	☐	TPQ
TB1.47	manually by pushing a button along the escape way ?	☐	☐	☐	TPQ
TB1.48	Are hose reels with firm type hose and combination straight stream/fog nozzles provided and located to cover the whole loading area ?	☐	☐	☐	TPQ
TB1.49	Are sand buckets (or equivalent) available ?	☐	☐	☐	I
TB1.50	Is a 50 kg wheeled dry powder extinguisher located near each hose reel ?	☐	☐	☐	TPQ
	Is a portable dry powder extinguisher located at each bay :				
TB1.51	at ground level ?	☐	☐	☐	TPQ
TB1.52	on the platform ?	☐	☐	☐	TPQ
	Environmental				
TB1.53	Is the loading area considered to be impermeable ?	☐	☐	☐	TPQ
TB1.54	Is the loading area graded to direct spills away from the vehicle ?	☐	☐	☐	TPQ
TB1.55	Does the area have sufficient containment capacity ?	☐	☐	☐	TPQ
	LOADING				
	Pre Loading Checks				
	Has the terminal a pre-loading check list for :				
TB1.56	trucks/containers ?	☐	☐	☐	SI
TB1.57	rail cars ?	☐	☐	☐	SI
TB1.58	Are all check lists filled out, signed and filed for future reference ?	☐	☐	☐	I
	Does the pre-loading checklist include whether :				
TB1.59	the tractor is licensed to carry the product to be loaded ?	☐	☐	☐	SI
TB1.60	the trailer is licensed to carry the product to be loaded ?	☐	☐	☐	SI
TB1.61	the container is licensed to carry the product to be loaded ?	☐	☐	☐	SI

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Question	Chapter TB1 ROAD/RAIL LOADING AND UNLOADING	Yes	No	N/A	Category
TB1.62	the railcar is licensed to carry the product to be loaded ?	☐	☐	☐	SI
TB1.63	the driver is licensed to drive the vehicle with the product ?	☐	☐	☐	SI
TB1.64	the vehicle shows any apparent visual defect ?	☐	☐	☐	SI
TB1.65	the truck fire extinguisher is in good condition and in date?	☐	☐	☐	SI
TB1.66	the driver has all required safety appliances on board and if they are in good working conditions ?	☐	☐	☐	SI
TB1.67	the required labeling plates are on board ?	☐	☐	☐	SI
TB1.68	the tank compartments and the discharge connections are empty, clean and gas free (except if in dedicated service) ?	☐	☐	☐	SI
TB1.69	the driver has been given the appropriate safety information ?	☐	☐	☐	SI
TB1.70	the driver has the personal protective devices mentioned in the safety information with him and in good conditions ?	☐	☐	☐	SI
TB1.71	the driver has been informed of relevant site regulations, safety instructions and emergency procedures affecting him during his stay at the terminal ?	☐	☐	☐	I
TB1.72	Are the causes of truck/railcar rejections reported and kept on file ?	☐	☐	☐	I
	Top Loading				
TB1.73	Are truck and railcars checked before loading to prevent spillage?	☐	☐	☐	SI
	Rack Safety :				
TB1.74	Is the primary access to the platform a stair ?	☐	☐	☐	TPQ
TB1.75	Is there a safe emergency escape route at the opposite end ?	☐	☐	☐	TPQ
TB1.76	Is there a railing on each side of the stairs ?	☐	☐	☐	TPQ
TB1.77	Is there a railing around the platform ?	☐	☐	☐	TPQ
TB1.78	Is there a drop down platform to the truck ?	☐	☐	☐	TPQ
TB1.79	Is this platform easily lowered and raised by one person ?	☐	☐	☐	I
TB1.80	Is this platform securely fastened in raised position when not in use ?	☐	☐	☐	I
TB1.81	Are the stairs, main platforms and drop-down platforms equipped with an anti-slip grating ?	☐	☐	☐	TPQ
TB1.82	Is the rack equipped with handrails for people to grab when on top of the vehicle tank, located on the outside of the vehicle ?	☐	☐	☐	TPQ
TB1.83	Is the elevation of the platform correct vs. the height of the trucks ?	☐	☐	☐	TPQ
TB1.84	Is the working surface unobstructed and free from tripping hazards ?	☐	☐	☐	I
TB1.85	Is the loading rack and associated pipe work protected from collisions ?	☐	☐	☐	TPQ

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Question	Chapter TB1 ROAD/RAIL LOADING AND UNLOADING	Yes	No	N/A	Category
	Loading equipment :				
TB1.86	Are loading arms employed to load product ?	☐	☐	☐	TPQ
TB1.87	Are hoses used to load product ?	☐	☐	☐	TPQ
TB1.88	Is a self closing valve used to control product flow ?	☐	☐	☐	TPQ
TB1.89	Is an overflow protection system installed ?	☐	☐	☐	TPQ
	Static ignition prevention :				
TB1.90	Is the design of fill pipe and or procedures such that splash filling is avoided in case of product handled in there flammable range ?	☐	☐	☐	SI
TB1.91	Are vehicle loading procedures clearly displayed at the loading rack in case of driver loading ?	☐	☐	☐	I
	Bottom Loading				
TB1.92	Are loading arms employed to load product ?	☐	☐	☐	TPQ
TB1.93	Are hoses used to load product ?	☐	☐	☐	TPQ
TB1.94	Are vehicle loading procedures clearly displayed at the loading rack in case of driver loading ?	☐	☐	☐	I
TB1.95	Are dry break couplings used for hazardous products ?	☐	☐	☐	TPQ
TB1.96	Are clear instructions given for control of pump speed during start-up of bottom loading ?	☐	☐	☐	SI
TB1.97	Is all equipment, pipe work and hoses protected against collisions ?	☐	☐	☐	TPQ
	After Loading Checks				
	Are all vehicles checked for :				
TB1.98	correct marking and labeling ?	☐	☐	☐	SI
TB1.99	correct documentation ?	☐	☐	☐	SI
TB1.100	closed hatches and outlets ?	☐	☐	☐	SI
TB1.101	safety information ?	☐	☐	☐	SI
TB1.102	disconnected hoses ?	☐	☐	☐	SI
TB1.103	disconnected earthing ?	☐	☐	☐	SI
TB1.104	compliance with max. freight weights in countries to be crossed?	☐	☐	☐	SI
TB1.105	Is the vehicle checked on compliance with legal requirements before leaving the site ?	☐	☐	☐	SI

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Question	Chapter TB1 ROAD/RAIL LOADING AND UNLOADING	Yes	No	N/A	Category
	UNLOADING				
	Pre Unloading Checks				
	Has the terminal pre-unloading checklists for :				
TB1.106	trucks/containers ?	☐	☐	☐	SI
TB1.107	railcars ?	☐	☐	☐	SI
TB1.108	Are all check lists filled out, signed and filed for future reference ?	☐	☐	☐	I
	Do they ask whether :				
TB1.109	the vehicle shows any apparent defect ?	☐	☐	☐	SI
TB1.110	the receiving tank is properly identified and has the required ullage to receive the product ?	☐	☐	☐	SI
TB1.111	the driver has been informed of relevant site regulations, safety instructions and emergency procedures affecting him during his stay at the terminal ?	☐	☐	☐	I
TB1.112	Are causes of any truck rejections reported and kept on file ?	☐	☐	☐	I
	Unloading				
TB1.113	Is a written procedure for unloading available ?	☐	☐	☐	SI
	Does it cover the following :				
TB1.114	checks on hose suitability ?	☐	☐	☐	SI
TB1.115	use of vehicle battery isolation switch ?	☐	☐	☐	SI
TB1.116	earthing ?	☐	☐	☐	SI
TB1.117	physical check on integrity of connections ?	☐	☐	☐	SI
TB1.118	any required vapour return connections ?	☐	☐	☐	SI
TB1.119	checks for leakage after commencement ?	☐	☐	☐	SI
	After Unloading Checks				
TB1.120	Is a written procedure for after-unloading available?	☐	☐	☐	SI
	Does it cover the following :				
TB1.121	that hoses are emptied ?	☐	☐	☐	SI
TB1.122	proper closure of valves on vehicle tanks and storage tanks ?	☐	☐	☐	SI
TB1.123	proper containment and discharge of excess product ?	☐	☐	☐	SI

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Question	Chapter TB2 JETTY	Yes	No	N/A	Category
	Pre Arrival Communications				
TB2.1	Does the terminal have available a list of vessel acceptance criteria for each berth within the terminal?	☐	☐	☐	I
TB2.2	Are the acceptance criteria reviewed with pilots and mooring crews, and checks conducted that incoming vessels and barges meet the terminal's acceptance criteria?	☐	☐	☐	I
TB2.3	Does the terminal/ships agent send a pre-arrival communication to vessels in line with the guidance given in ISGOTT?	☐	☐	☐	I
	Berthing and Mooring				
TB2.4	Is the fendering at each berth engineered to suit the size of vessels expected to use the berth ?	☐	☐	☐	SI
TB2.5	Are fender surfaces in good condition to prevent any damage to vessels using the berth ?	☐	☐	☐	I
TB2.6	Are fender supports in good condition ?	☐	☐	☐	I
TB2.7	Are mooring equipment and arrangements on the berth appropriate for vessels using the berth ?	☐	☐	☐	SI
TB2.8	Are all mooring points where night berthing is permitted adequately lit ?	☐	☐	☐	I
TB2.9	Are terminal personnel aware of the risk of failure and snapback of highly loaded synthetic ropes and do they keep off the relative danger zones ?	☐	☐	☐	I
	Mooring Management				
TB2.10	Is shore mooring equipment adequate in type, quantity and location (substructure, quick release hooks, bollards, cleats) ?	☐	☐	☐	TPQ
TB2.11	Has the capacity of the mooring point equipment and substructures been checked against the applied mooring loads, considering number, type and strength of lines and vertical and horizontal sectors?	☐	☐	☐	TPQ
TB2.12	Is there safe access to mooring strong points by mooring personnel ?	☐	☐	☐	I
TB2.13	Are routings of mooring lines free from obstructions ?	☐	☐	☐	I
TB2.14	Does the terminal receive and review an updated weather forecast at least every 12 hours ?	☐	☐	☐	I
	VESSEL - SHORE ACCESS				
TB2.15	Is there a safe means of access between ship and shore ?	☐	☐	☐	I
	Is access equipment :				
TB2.16	provided and operated by the terminal, rather than by the vessel ?	☐	☐	☐	TPQ
TB2.17	in good condition ?	☐	☐	☐	I
TB2.18	Is the access located at a safe distance from loading arms, hoses and manifolds ?	☐	☐	☐	I
TB2.19	Are safety nets used ?	☐	☐	☐	I
TB2.20	Are lifebuoys available?	☐	☐	☐	I
TB2.21	Is the access area adequately lit ?	☐	☐	☐	I

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Question	Chapter TB2 JETTY	Yes	No	N/A	Category
	Ship / Shore Interface				
	Ship-shore safety checklists.				
TB2.22	Is the ISGOTT recommended ship / shore safety-checklist completed before starting cargo, bunkers or ballast transfer ?	☐	☐	☐	SI
TB2.23	Are follow-up checks made and recorded at predefined intervals ?	☐	☐	☐	SI
TB2.24	Has the jetty operator the responsibility and the authority to stop operations when safety or pollution violations occur ?	☐	☐	☐	SI
TB2.25	Are all safety and pollution violations reported to the supervisor?	☐	☐	☐	SI
	Pre-cargo-transfer conference.				
TB2.26	is there , immediately after docking, a conference held between the terminal dock operator and the ship's senior officer to agree on procedures concerning cargo, ballast and bunkers transfer operations and emergency situations ?	☐	☐	☐	I
TB2.27	are material safety data sheets for all products to be handled available to both jetty operator and vessel ?	☐	☐	☐	I
	Are the following parameters agreed upon :				
TB2.28	maximum loading and unloading rates ?	☐	☐	☐	I
TB2.29	are the initial flow rates to empty tanks limited for static accumulators ?	☐	☐	☐	I
TB2.30	maximum pressures at the ship manifold ?	☐	☐	☐	I
TB2.31	the number of grades which can be handled simultaneously?	☐	☐	☐	I
TB2.32	procedures for normal cargo transfer stops and for emergency stops ?	☐	☐	☐	I
TB2.33	starting and topping off rates ?	☐	☐	☐	I
TB2.34	the amount of forewarning for changing flow rates ?	☐	☐	☐	I
TB2.35	the method of handling vapours ?	☐	☐	☐	I
TB2.36	ullaging and sampling procedures ?	☐	☐	☐	I
	Emergency communication and procedures.				
TB2.37	Are Terminal Regulations delivered to the vessel ?	☐	☐	☐	SI
TB2.38	Are the terminal emergency response instructions given to the vessel's senior officer and reviewed with him ?	☐	☐	☐	SI
TB2.39	Is a reliable communication system in place to control the cargo transfer operation ?	☐	☐	☐	I
TB2.40	Is there a backup communication system ?	☐	☐	☐	I
TB2.41	Can vessel and terminal personnel communicate effectively in a common language ?	☐	☐	☐	I

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Question	Chapter TB2 JETTY	Yes	No	N/A	Category
	Ship / Shore Transfer Equipment - Loading arms/hoses				
TB2.42	Are loading arms designed, operated and maintained in accordance with industry standards ?	☐	☐	☐	TPQ
TB2.43	Is an electrical insulating flange installed at each loading arm and hose, in flammable liquid service ?	☐	☐	☐	TPQ
	If the ship is earthed to the pier :				
TB2.44	is the earthing cable provided with an explosion-proof switch ?	☐	☐	☐	TPQ
TB2.45	is the switch closed after connection and open before removal of the earthing cable ?	☐	☐	☐	SI
TB2.46	is the earthing cable at a safe distance from cargo transfer connection ?	☐	☐	☐	TPQ
TB2.47	is the earthing cable and connection regularly checked and in good condition ?	☐	☐	☐	I
	Are loading arms used for :				
TB2.48	liquefied gas transfer ?	☐	☐	☐	SI
TB2.49	toxic liquid transfer ?	☐	☐	☐	SI
TB2.50	flammable liquid transfer ?	☐	☐	☐	SI
	Are loading arms equipped with :				
TB2.51	a working envelope detection system ?	☐	☐	☐	TPQ
TB2.52	an emergency release system ?	☐	☐	☐	TPQ
TB2.53	Are emergency release systems tested on a regular basis ?	☐	☐	☐	SI
TB2.54	Is the cargo transfer system protected against over pressure ?	☐	☐	☐	TPQ
TB2.55	Have couplers positive locking mechanisms ?	☐	☐	☐	TPQ
TB2.56	Is the cargo transfer system inspected in accordance with established criteria ?	☐	☐	☐	SI
TB2.57	Are environmental limits, operating envelopes and manifold criteria for loading arms displayed for ready reference of operators ?	☐	☐	☐	I
	Cargo Transfer				
TB2.58	In the case of loading/unloading liquids in flammable range, are tanks inerted ?	☐	☐	☐	SI
TB2.59	Are adequate means to control pressure surges and other possible over pressures in place ?	☐	☐	☐	TPQ

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Question	Chapter TB2 JETTY	Yes	No	N/A	Category
TB2.60	Are manual valves readily accessible ?	☐	☐	☐	TPQ
TB2.61	Are valves and manifolds colour coded or otherwise marked ?	☐	☐	☐	I
TB2.62	Is the vessel adequately and timely informed when shore tank swing is taking place during discharge ?	☐	☐	☐	SI
TB2.63	Are loading and discharge rates monitored by both ship and terminal ?	☐	☐	☐	SI
TB2.64	Are flow controllers installed where necessary on loading lines for static accumulators product ?	☐	☐	☐	TPQ
TB2.65	Is bunker transfer forbidden during cargo transfer ?	☐	☐	☐	SI
TB2.66	Is ship stores transfer forbidden during cargo transfer ?	☐	☐	☐	SI
	Pollution Prevention				
TB2.67	Are checks made that all scuppers are plugged prior to starting transfer ?	☐	☐	☐	SI
TB2.68	Is line up checked for leakage ?	☐	☐	☐	SI
TB2.69	Does the terminal have provision for empty the cargo transfer system ?	☐	☐	☐	TPQ
TB2.70	Are arms and hoses drained before disconnection ?	☐	☐	☐	SI
	Is the cargo transfer area on the jetty :				
TB2.71	of closed construction to contain small spills ?	☐	☐	☐	TPQ
TB2.72	surrounded by a 15 cm. high toewall, or by channel troughs ?	☐	☐	☐	TPQ
TB2.73	sloping down to a dedicated catch basin, which drains to a collection sump ?	☐	☐	☐	TPQ
TB2.74	Is containment ashore normally kept empty and ?	☐	☐	☐	SI
TB2.75	closed and vented ?	☐	☐	☐	TPQ
	Is containment facility equipped with :				
TB2.76	automatic pump-out facilities, discharging to a slop or ballast water system ?	☐	☐	☐	TPQ
TB2.77	a high level alarm, which registers at a constantly manned location ?	☐	☐	☐	TPQ
TB2.78	Are containment facilities designed to prevent spreading of fire from one berth to another via sewers ?	☐	☐	☐	TPQ
	Are floating booms :				
TB2.79	available in sufficient length to effectively contain a spill ?	☐	☐	☐	TPQ
TB2.80	put in place preventively ?	☐	☐	☐	SI
TB2.81	Are effective means of rapidly putting the boom in place ?	☐	☐	☐	SI
TB2.82	Are hose, arm and line ends blanked with full bolting when not in use ?	☐	☐	☐	I
TB2.83	Are gaskets inspected/replaced after every connection ?	☐	☐	☐	SI
TB2.84	Is the transfer point adequately safeguarded ?	☐	☐	☐	SI

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Question	Chapter TB2 JETTY	Yes	No	N/A	Category
TB2.85	Is a shelter provided for the operator ?	☐	☐	☐	TPQ
TB2.86	Is the design of pipelines crossing open water such that there are no flanges or deadlegs ?	☐	☐	☐	TPQ
	Emergency Isolation and Shutdown				
TB2.87	Is a motor operated emergency block valve (EBV) installed at each product transfer line before the loading arm or hose and is it located in a protected position ?	☐	☐		TPQ
	If not:				
TB2.88	Does the terminal have a means of isolating cargo lines in an emergency ?	☐	☐	☐	TPQ
TB2.89	Are closure rates of EBV designed to prevent pressure surge potential ?	☐	☐	☐	TPQ
	Is there an emergency actuation station for each berth :				
TB2.90	located at least 30 m. away from the manifold area ?	☐	☐	☐	TPQ
TB2.91	readily accessible by operators ? from which :	☐	☐	☐	TPQ
TB2.92	all the berth EBV can be closed ?	☐	☐	☐	TPQ
TB2.93	all loading pumps can be stopped ?	☐	☐	☐	TPQ
TB2.94	the alarm signal can be given ?	☐	☐	☐	TPQ
TB2.95	Does the terminal provide the vessel with a control box or equivalent to shut down the shore loading system ?	☐	☐	☐	SI
	Is a linked vessel-shore shutdown system used for:				
TB2.96	liquefied gas carriers ?	☐	☐	☐	TPQ
TB2.97	other chemical products ?	☐	☐	☐	TPQ
TB2.98	Do isolation valves close automatically in case of a power failure ?	☐	☐	☐	TPQ
TB2.99	Does the loading arm EBV close automatically when the arm reaches the limits of its operating envelope ?	☐	☐	☐	TPQ
	Fire Fighting				
TB2.100	If the fire pumps are located on a wharf or jetty, are they installed on a solid, fire resistant deck ?	☐	☐	☐	TPQ
	In freezing climates :				
TB2.101	Is the fire main heated/insulated or drained empty?	☐	☐	☐	TPQ
	Is an isolation valve provided on the fire main :				
TB2.102	at the foot of each wharf and jetty ?	☐	☐	☐	TPQ
TB2.103	at least 30 m away from manifolds, loading arms and sumps ?	☐	☐	☐	TPQ
TB2.104	Is sufficient foam available for each berth ?	☐	☐	☐	TPQ

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Question	Chapter TB2 JETTY	Yes	No	N/A	Category
TB2.105	Is the type of foam suitable for all products handled ?	☐	☐	☐	TPQ
TB2.106	If foam is supplied from the terminal fixed system, is the line dedicated to foam solution only ?	☐	☐	☐	TPQ
TB2.107	If foam is supplied from a local proportioning unit, fixed or mobile, is it located at least 60 m away from manifolds, loading arms and sumps ?	☐	☐	☐	TPQ
TB2.108	Has each berth an international fire connection to supply water to a tanker's fire main ?	☐	☐	☐	TPQ
TB2.109	Is coverage of dock and ship manifold areas and loading arms provided by a sufficient number of foam-monitors ?	☐	☐	☐	TPQ
TB2.110	Are monitors located at least 15 m away from the areas to be protected or remotely actuated from a similar distance ?	☐	☐	☐	TPQ
TB2.111	Are elevated monitors installed, if the deck of an empty ship can be more than 20 m above the pier deck ?	☐	☐	☐	TPQ
TB2.112	Are cables to remotely controlled monitors fireproofed ?	☐	☐	☐	TPQ
TB2.113	Is the access to the jetty safe and unobstructed ?	☐	☐	☐	I
TB2.114	Have piers over 30 m long an access road and parking area for fire fighting vehicles ?	☐	☐	☐	TPQ
	Emergency Evacuation				
TB2.115	Is a secondary escape route to shore provided ?	☐	☐	☐	I
	Is there an evacuation point on the jetty that is:				
TB2.116	protected by a fire screen and at least 30 m. away from manifolds, loading arms and sumps ?	☐	☐	☐	TPQ
TB2.117	at least 60 m. away from manifolds, loading arms and sumps ?	☐	☐	☐	TPQ
	Is the evacuation point provided with :				
TB2.118	an emergency cabinet, containing first aid supplies, life jacket, portable alarm devices, survival suite in cold water locations ?	☐	☐	☐	TPQ
TB2.119	a reliable communication system ?	☐	☐	☐	TPQ
TB2.120	an escape craft of adequate capacity ?	☐	☐	☐	TPQ
TB2.121	Can an adequate craft be made available within 15 min. from an emergency ?	☐	☐	☐	SI
TB2.122	Is there a permanent adequate ladder below low water level ?	☐	☐	☐	TPQ
TB2.123	Is a life jacket located on the pier within 5 m. of each ladder ?	☐	☐	☐	TPQ
TB2.124	Is a life buoy with at least 25 m. of lifeline present at each berth ?	☐	☐	☐	TPQ

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Question	Chapter TB2 JETTY	Yes	No	N/A	Category
	Security				
TB2.125	Is the jetty area fenced off ?	☐	☐	☐	TPQ
	Is the fence :				
TB2.126	made of suitable material ?	☐	☐	☐	TPQ
TB2.127	at least 2 m. high ?	☐	☐	☐	TPQ
TB2.128	topped with barbed wire ?	☐	☐	☐	TPQ
TB2.129	Are entrance gates kept closed when no operation is taking place at the jetty ?	☐	☐	☐	SI
TB2.130	Is the movement of people to and from the ship effectively controlled ?	☐	☐	☐	SI
	Cathodic Protection				
TB2.131	Has the jetty structure cathodic protection ?	☐	☐	☐	TPQ
	Working Conditions				
TB2.132	Are the working areas free from obstructions ?	☐	☐	☐	I
TB2.133	Have stairs and platforms anti-slip grating and railings ?	☐	☐	☐	TPQ
TB2.134	Does terminal have an appropriate level of lighting to ensure that all ship/shore interface activities can be safely conducted during periods of darkness ?	☐	☐	☐	I
TB2.135	Does the terminal display notices to alert personnel to critical information ?	☐	☐	☐	TPQ
TB2.136	Is general housekeeping in the area satisfactory ?	☐	☐	☐	I
	First Aid				
TB2.137	Are sufficient eye wash/ safety showers located at each berth?	☐	☐	☐	I
TB2.138	Is the equipment clearly signposted, easily accessible and in good condition?	☐	☐	☐	I
TB2.139	Is the equipment protected against freezing?	☐	☐	☐	I
TB2.140	Is a fire blanket provided at each berth ?	☐	☐	☐	I
TB2.141	Is there a first aid kit readily available at each berth ?	☐	☐	☐	I
TB2.142	Are specific antidotes available at the jetty for chemicals handled ?	☐	☐	☐	I

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Question	Chapter TB3 TANK FARM	Yes	No	N/A	Category

RISK: FIRE/EXPLOSION INSIDE TANKS CONTAINING PRODUCTS IN THEIR FLAMMABLE RANGE

Products in their Flammable Range

TB3.1	Are products in their flammable range stored under inert conditions?	☐	☐	☐	SI

Prevention

TB3.2	Are tanks equipped with a suitable flame arrester ?	☐	☐	☐	TPQ
TB3.3	are flame arresters regularly inspected and kept clean ?	☐	☐	☐	SI
	Are release of static electricity prevented in all tanks storing static electricity accumulators; in particular :				
TB3.4	are tanks and lines grounded ?	☐	☐	☐	TPQ
TB3.5	is splash filling avoided ?	☐	☐	☐	SI
TB3.6	is a procedure in place to prevent static accumulation by "non inert gas" gas blowing (purge) ?	☐	☐	☐	SI
	Unless inerted: for cone roof tanks (with or without internal floating roof) storing static accumulators:				
TB3.7	is it prohibited to lower into the tank any conductive object (e.g. gauge tapes, sample cans, thermometer cages) for a period of 30 min. after filling has ceased ?	☐	☐	☐	SI
TB3.8	can after this waiting period, such conductive objects be introduced into the tank only if all conductive components are bonded to the tank ?	☐	☐	☐	SI
TB3.9	is personnel access on the tank roof prohibited during filling, emptying and water draw-off ?	☐	☐	☐	SI
TB3.10	Are all metallic tank internals (e.g. gauge floaters) bonded to the tank ?	☐	☐	☐	TPQ
TB3.11	Is the tank inlet velocity maintained below 1m./sec. until the liquid level reaches one pipe diameter above the inlet nozzle ?	☐	☐	☐	SI
TB3.12	Is the tank inlet velocity maintained below 7m/sec. thereafter ?	☐	☐	☐	SI
TB3.13	Is water regularly and frequently drawn off the bottom of the tank ?	☐	☐	☐	SI
TB3.14	If filters are installed in tank inlet piping, is at least 30 sec. residence time provided in the inlet pipe between the filter and the tank.	☐	☐	☐	I
TB3.15	In case of IFR; is the IFR bonded to the tank ?	☐	☐	☐	TPQ

Mitigation

TB3.16	Can sufficient water be applied to cool down each tank within a downwind quadrant of a tank storing a product with a flash point not higher than 55℃ and located less than twice its diameter away from the centre of the former tank ?	☐	☐	☐	TPQ
TB3.17	Are remote operated valves, lines and pumps laid out in a way that makes it possible to transfer the content of a tank on fire into an empty one or a tank vehicle in a controlled and safe manner ?	☐	☐	☐	TPQ

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Response - fire fighting

Application to all tanks

Is foam solution supplied :

TB3.18	from a fixed distribution system ?	☐	☐	☐	TPQ
TB3.19	from a foam proportioning truck ?	☐	☐	☐	TPQ

If foam proportioning truck is used: are lateral terminal connections located :

TB3.20	on the road side of all pipe lines and drainage ditches ?	☐	☐	☐	TPQ
TB3.21	so that the truck can be connected to the hydrant with one standard length of hose ?	☐	☐	☐	TPQ

Application to tanks to fight surface fires

TB3.22	Are all tanks equipped with a number of foam chambers sufficient to supply the required foam solution rate ?	☐	☐	☐	TPQ
TB3.23	Are foam chambers mounted on the shell ?	☐	☐	☐	TPQ
TB3.24	Is each foam chamber equipped with its own riser and foam maker ?	☐	☐	☐	TPQ
TB3.25	Are foam maker's aspirator openings easily inspectable and above the height of the bundwall ?	☐	☐	☐	I
TB3.26	Can each tank be reached from a sufficient number of hydrants/monitors to receive the required rate of cooling water ?	☐	☐	☐	TPQ
TB3.27	Are hydrants/monitors safely accessible and located at a safe distance from the nearest fire risk ?	☐	☐	☐	SI

Application to open top FRT to fight rim fires only

TB3.28	Is foam guided to rim zone ?	☐	☐	☐	TPQ
TB3.29	Is a sufficient number of foam outlet stations installed on the top platform of each FRT to supply 10 l/min of foam solution per meter of circumference ?	☐	☐	☐	TPQ
TB3.30	Are they equally spaced around the circumference ?	☐	☐	☐	TPQ
TB3.31	Does each outlet station have a foam maker and a foam deflector ?	☐	☐	☐	TPQ
TB3.32	Can the distribution piping to all foam outlets located on top of the wind girder be inspected ?	☐	☐	☐	I
TB3.33	Are guard railings installed all around wind girders ?	☐	☐	☐	TPQ
TB3.34	Can each tank be reached from a sufficient number of hydrants to receive 4,000 l/min of cooling water ?	☐	☐	☐	TPQ

RISK: LOSS OF CONTAINMENT

Risk Evaluation - tank construction and integrity

TB3.35	Do tanks meet the requirements of all locally applicable mandatory codes and standards ?	☐	☐	☐	SI
TB3.36	Do tanks meet the requirements of all locally applicable recommended codes and standards ?	☐	☐	☐	SI

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Question	Chapter TB3 TANK FARM	Yes	No	N/A	Category
TB3.37	Do tanks meet the requirements of API Standards 650 or 620 or equivalent ?	☐	☐	☐	SI
TB3.38	Is corrosion of tanks prevented through : cathodic protection, protective coating or any other means ?	☐	☐	☐	TPQ
	Prevention - tank in-service inspection				
TB3.39	Is the general rate of corrosion determined by a non - destructive testing method, carried out at regular intervals ?	☐	☐	☐	SI
	By visual inspection of accessible components is it routinely checked that :				
TB3.40	ladders and stairways, platforms and walkways, including hand-rails and supports are sound ?	☐	☐	☐	SI
TB3.41	concrete foundation rings are free from cracks ?	☐	☐	☐	SI
TB3.42	the seal between tank bottom and foundation is integer ?	☐	☐	☐	SI
TB3.43	no water is retained on the pad surface around the tank ?	☐	☐	☐	SI
TB3.44	anchor bolts are sound ?	☐	☐	☐	SI
TB3.45	pipe connections do not show signs of crack ?	☐	☐	☐	SI
TB3.46	ground connections have a resistance to earth of not more than 10 ohm ?	☐	☐	☐	SI
TB3.47	the paint is free of rust spots and blisters ?	☐	☐	☐	SI
TB3.48	shell and roof show no sign of external corrosion, leaks, cracks, buckles and bulges ?	☐	☐	☐	SI
TB3.49	Are tanks settlements and inclination regularly monitored ?	☐	☐	☐	SI
	Prevention - tank out-of service inspection				
TB3.50	Has each tank been inspected at least once in the last 15 year ?	☐	☐	☐	SI
TB3.51	Are up-to-date historical records of tank inspections and repairs available ?	☐	☐	☐	I
TB3.52	Is the retiring thickness of relevant tank components defined and documented ?	☐	☐	☐	SI
TB3.53	Are measurements scheduled and covered by written procedures ?	☐	☐	☐	SI
	Is there a check list in use, including the following items :				
	tank shell :				
TB3.54	thickness ?	☐	☐	☐	SI
TB3.55	welds ?	☐	☐	☐	SI
TB3.56	distortion ?	☐	☐	☐	SI
TB3.57	nozzles and man ways ?	☐	☐	☐	SI
TB3.58	rivets and bolts ?	☐	☐	☐	SI

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Question	Chapter TB3 TANK FARM	Yes	No	N/A	Category
	tank bottom :				
TB3.59	annular plates ?	☐	☐	☐	SI
TB3.60	bottom plates ?	☐	☐	☐	SI
TB3.61	bottom plate weld ?	☐	☐	☐	SI
TB3.62	bottom settlements ?	☐	☐	☐	SI
TB3.63	bottom lining ?	☐	☐	☐	SI
TB3.64	foundation pad ?	☐	☐	☐	SI
TB3.65	water draw-off sump ?	☐	☐	☐	SI
	fixed roof :				
TB3.66	plate thickness ?	☐	☐	☐	SI
TB3.67	plate welds ?	☐	☐	☐	SI
TB3.68	top angle ?	☐	☐	☐	SI
TB3.69	frangible weld ?	☐	☐	☐	SI
TB3.70	rafters and girders ?	☐	☐	☐	SI
TB3.71	support columns ?	☐	☐	☐	SI
TB3.72	P-V vents ?	☐	☐	☐	SI
	internal floating roofs :				
TB3.73	roof deck ?	☐	☐	☐	SI
TB3.74	supporting legs ?	☐	☐	☐	SI
TB3.75	column and ladder seals ?	☐	☐	☐	SI
TB3.76	peripheral seal and skirt seal ?	☐	☐	☐	SI
TB3.77	cover bleeder vents ?	☐	☐	☐	SI
TB3.78	man way, hatch, anti-rotation pole ?	☐	☐	☐	SI
	accessories:				
TB3.79	gauging equipment ?	☐	☐	☐	SI
	Prevention - separation from traffic (lay-out)				
TB3.80	Is the impact with vehicles effectively prevented by distances, grading, resistant walls, or guard rails ?	☐	☐	☐	TPQ
	Prevention - pressure/vacuum relief				
TB3.81	Are liquids with a true vapour pressure at the maximum storage temperature in excess of 90 kPa stored in pressure tanks ?	☐	☐	☐	I
TB3.82	Are pressure/vacuum (PV) valves installed on all tanks, except for atmospheric operated tanks ?:	☐	☐	☐	TPQ

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Question	Chapter TB3 TANK FARM	Yes	No	N/A	Category
TB3.83	Are goose-neck type open vents installed in all other tanks which are not equipped with PV valves ?	☐	☐	☐	TPQ
TB3.84	Are vents sized for the current maximum filling and emptying rates?	☐	☐	☐	TPQ
TB3.85	In tanks filled through a piggable line, in which the pig is propelled by gas pressure, is the vent sized to safely release the maximum pressure of such gas ?	☐	☐	☐	TPQ
TB3.86	When the daily mean temperature falls below freezing for more than one day, are PV valves provided with non-freezing features, like pallets with clip rings or flexible diaphragms ?	☐	☐	☐	SI
TB3.87	Are PV valves heated on tanks where solidification of the product in the PV can occur at ambient temperature ?	☐	☐	☐	SI
TB3.88	Are cone roof tanks built with a frangible joint at the roof to shell junction or with other means of emergency relief ?	☐	☐	☐	TPQ
TB3.89	Are design of vents sized for fire exposure ?	☐	☐	☐	TPQ
	Are tanks operated above atmospheric pressure and not meeting frangibility requirements:				
TB3.90	anchored by bolts to the foundation ?	☐	☐	☐	TPQ
TB3.91	provided with explosion hatches meeting the requirements of NFPA 68 (or equivalent standards) ?	☐	☐	☐	TPQ
TB3.92	equipped with vents sized for fire exposure, in accordance with API Standard 2000 "Venting Atmospheric and Low-Pressure Storage Tanks" latest edition (or equivalent standards) ?	☐	☐	☐	TPQ
TB3.93	Are "Non"-cone roof tanks provided with emergency vents sized for fire exposure, in accordance with the said API Standard 2000 (or equivalent standards) ?	☐	☐	☐	TPQ
	Prevention - piping design				
TB3.94	Can all lines connected to a tank be closed at the tank by means of a valve ?	☐	☐	☐	SI
	Are product pipelines which are normally filled with product and can be blocked in protected by following devices:				
TB3.95	a pressure relief valve discharging back to the tank ?	☐	☐	☐	SI
TB3.96	a bypass and check valve around the block valve ?	☐	☐	☐	SI
TB3.97	Is there evidence that stresses exerted on tank pipelines appear normal ?	☐	☐	☐	I
	Prevention - containment				
TB3.98	Are tanks storing hazardous liquids, either alone or in groups, surrounded by tight and impermeable bundwalls, forming containment basin ?	☐	☐	☐	TPQ
TB3.99	Are all piping passages through the bundwall tight and protected against corrosion ?	☐	☐	☐	I
TB3.100	Is the sealant fire retardant ?	☐	☐	☐	SI
TB3.101	Does piping pass concrete bundwalls in a sleeve ?	☐	☐	☐	SI

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Question	Chapter TB3 TANK FARM	Yes	No	N/A	Category
TB3.102	Is the bottom of such containment basins tight and impermeable?	☐	☐	☐	I
TB3.103	Can bundwalls resist the hydraulic pressure of a tank rupture ?	☐	☐	☐	TPQ
	Is the containment sufficient to contain :				
TB3.104	the capacity of the largest tank inside it, allowing for the displacement of all other tanks ?	☐	☐	☐	TPQ
TB3.105	the capacity of the largest tank inside it, plus 10 % ?	☐	☐	☐	TPQ
	Are bundwalls not closer to any property line than :				
TB3.106	10 m. ?	☐	☐	☐	TPQ
TB3.107	60 m. ?	☐	☐	☐	TPQ
	Are bundwalls not closer to tanks than :				
TB3.108	3 m. ?	☐	☐	☐	TPQ
TB3.109	15% of the height of the tank shell ?	☐	☐	☐	TPQ
TB3.110	Are containment basins further subdivided by lower walls into sub-sections ?	☐	☐	☐	TPQ
TB3.111	Are rain water and small spills directed away from tanks and piping ?	☐	☐	☐	I
	Can every containment basin be drained through :				
TB3.112	a normally closed catch basin with discharge to the sewer system in a controlled manner ?	☐	☐	☐	TPQ
TB3.113	a pipe system discharging to a drainage system, outside the enclosure ?	☐	☐	☐	TPQ
	Is the drain system provided with a valve:				
TB3.114	located in an accessible and clearly signposted position outside the bundwall ?	☐	☐	☐	TPQ
TB3.115	in good operating condition ?	☐	☐	☐	I
	Response - pump out and recovery				
TB3.116	Is a plan in place to pump out and recover liquid from containment basins in case of major spillage ?	☐	☐	☐	SI
	RISK : TANK OVERFILL				
	Prevention - plan and control receiving operations				
TB3.117	Are procedures in place for a double independent check of line-up, before product is received into a tank ?	☐	☐	☐	SI
TB3.118	Are tanks and service lines clearly marked ?	☐	☐	☐	I
TB3.119	Are procedures in place for a double independent check that sufficient ullage is left in the tank for receiving the incoming parcel?	☐	☐	☐	SI
TB3.120	If the parcel has to be split into more than one tank, are procedures in place to effectively control tank change over ?	☐	☐	☐	SI
TB3.121	Are tanks equipped with level gauging instruments readable from the ground or at a remote location ?	☐	☐	☐	TPQ

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Question	Chapter TB3 TANK FARM	Yes	No	N/A	Category
TB3.122	Are effective communications maintained between the tank farm and control room on one side and the unloading ship or vehicle on the other, throughout the receiving operation ?	☐	☐	☐	SI
TB3.123	Are tanks receiving from ships or pipelines equipped with high level alarms, independent from the level gauging instruments ?	☐	☐	☐	TPQ
TB3.124	Is tank inflow measured by volume meters, provided with alarms or cut-off devices ?	☐	☐	☐	TPQ
	Mitigation - block valves/pump shut down				
TB3.125	Are remote operated valves (ROV) installed on all tanks ?	☐	☐	☐	TPQ
TB3.126	Are they and their control wiring and piping fire proof ?	☐	☐	☐	TPQ
TB3.127	Can pumps be stopped from a safe location ?	☐	☐	☐	TPQ
	RISK : FIRE IN A DRY CONTAINMENT BASIN				
	Prevention - eliminate potential fuel				
TB3.128	Are bunded areas kept free of vegetation and other combustible materials ?	☐	☐	☐	I
TB3.129	Does water draw-off procedures address the risk of product leakage?	☐	☐	☐	SI
TB3.130	Are all piping, valves and other fittings made of steel ?	☐	☐	☐	TPQ
TB3.131	Is the piping free of bellows-type expansion joints ?	☐	☐	☐	TPQ
TB3.132	Are pipes free of sight glasses ?	☐	☐	☐	TPQ
TB3.133	Are tank valves kept closed when no transfer is taking place?	☐	☐	☐	SI
	Prevention - eliminate potential ignition sources				
TB3.134	Do electric wires run outside bunded areas, unless absolutely unavoidable ?	☐	☐	☐	TPQ
TB3.135	Are pumps and other equipment located outside tank containment basins, unless for high flash viscous products ?	☐	☐	☐	SI
	Response - fire extinguishing capacity				
TB3.136	Can sufficient foam be supplied per square metre of bunded surface ?	☐	☐	☐	SI
	RISK : INJURIES TO OPERATORS DUE TO FALLING, TRIPPING, SLIPPING, ETC…				
	Prevention - design and construction of tank accessories				
TB3.137	Is safe access possible to gauging and sampling hatches ?	☐	☐	☐	I
TB3.138	Are such hatches located in the upwind quadrant of the prevailing wind ?	☐	☐	☐	TPQ
TB3.139	Are hatches tightly closed, when not in use ?	☐	☐	☐	I

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Question	Chapter TB3 TANK FARM	Yes	No	N/A	Category
	Are walkways for interconnecting tanks arranged in such a way that personnel :				
TB3.140	are not required to walk across the roof of any tank ?	☐	☐	☐	TPQ
TB3.141	have two ways of exit from the roof of any tank ?	☐	☐	☐	TPQ
TB3.142	Are platform floor plates safe and in good condition ?	☐	☐	☐	I
TB3.143	Is guard railing installed along the edge of the roof, with toe plates?	☐	☐	☐	TPQ
TB3.144	Are procedures in force to make sure that items like gauge tapes, thermometers, sample containers and logs are carried only in suitable bags, in order to leave operators hands free ?	☐	☐	☐	SI
TB3.145	Are there at least two stairways over the bundwall, on opposite sides ?	☐	☐	☐	TPQ
TB3.146	Is adequate lighting available ?	☐	☐	☐	I
TB3.147	Are sufficient safe pipe crossing points provided ?	☐	☐	☐	TPQ
TB3.148	Is general housekeeping in the area good ?	☐	☐	☐	I
TB3.149	Are clear warning signs placed where required ?	☐	☐	☐	I
	Mitigation - personnel protection/communication				
TB3.150	Is there a procedure in place to enforce the wearing of hard hat, safety shoes and gloves ?	☐	☐	☐	SI
TB3.151	Is there a procedure in place ensuring that operators can communicate with each other at any given time ?	☐	☐	☐	SI

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Question	Chapter TB4 PUMPING STATIONS & TRANSFER LINES	Yes	No	N/A	Category
	Pumping Station and Transfer Lines				
	General				
TB4.1	Are pumps, lines and valves numbered or identified by their contents ?	☐	☐	☐	I
TB4.2	Are blind-flanges installed, if line is not in use ?	☐	☐	☐	I
TB4.3	Are all bolts installed on flanges and blind-flanges ?	☐	☐	☐	I
TB4.4	Have lines been engineered in such a way that product can be drained at the lowest point of the line ?	☐	☐	☐	TPQ
TB4.5	Do all the drain points have caps ?	☐	☐	☐	I
TB4.6	Are product lines purged/pigged with nitrogen in the case of flammable products ?	☐	☐	☐	SI
TB4.7	Are multi-product lines piggable ?	☐	☐	☐	TPQ
TB4.8	Are all pigging stations easy to open and to clean ?	☐	☐	☐	I
TB4.9	Are pig stations designed in such a way that no gas can enter in the ship- or shore tank ?	☐	☐	☐	TPQ
TB4.10	Are there no visible leaks from fittings, valves, pumps etc. ?	☐	☐	☐	I
TB4.11	Is there no evidence of spills ?	☐	☐	☐	I
TB4.12	Is drip-collection available at connection points ?	☐	☐	☐	I
TB4.13	Are connecting points provided with a curbed area forming spill containment and is the surface impermeable ?	☐	☐	☐	TPQ
TB4.14	Is there sufficient earthing to prevent build-up of static electricity ?	☐	☐	☐	TPQ
TB4.15	Is the flow controlled by metering or equivalent ?	☐	☐	☐	TPQ
TB4.16	Is the tracing system (electric/steam/hot belt) in good condition and subject to regular checks ?	☐	☐	☐	I
	Pumps				
TB4.17	Are pumps installed with a high pressure protection system ?	☐	☐	☐	TPQ
TB4.18	Does it stop the pump ?	☐	☐	☐	TPQ
TB4.19	Are pumps installed with an automatic temperature shut-off ?	☐	☐	☐	TPQ
TB4.20	Is rotating equipment protected to avoid contact ?	☐	☐	☐	I
TB4.21	Is spill containment installed for pumps ?	☐	☐	☐	TPQ
TB4.22	Are motors earthed ?	☐	☐	☐	TPQ
TB4.23	Are pump foundations in good condition ?	☐	☐	☐	I
TB4.24	Are pump emergency stops installed ?	☐	☐	☐	TPQ

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Question	Chapter TB4 PUMPING STATIONS & TRANSFER LINES	Yes	No	N/A	Category
	Are double seals or equivalent used for:				
TB4.25	liquefied gas transfer ?	☐	☐	☐	SI
TB4.26	toxic liquid transfer ?	☐	☐	☐	SI
TB4.27	flammable liquid transfer ?	☐	☐	☐	SI
TB4.28	Are magnetic drive or "canned" pumps installed ?	☐	☐	☐	TPQ
TB4.29	Are pump-flush points installed for cleaning ?	☐	☐	☐	TPQ
TB4.30	Are motor air intake cleaned regularly ?	☐	☐	☐	SI
TB4.31	Is the electrical insulation in good condition ?	☐	☐	☐	I
	Transfer Lines				
TB4.32	Are procedures in place to avoid blocked-in liquids ?	☐	☐	☐	SI
TB4.33	Do all product-lines run above ground ?	☐	☐	☐	TPQ
TB4.34	Are underground lines regularly pressure tested or in any other way inspected ?	☐	☐	☐	SI
TB4.35	Are pipes free of corrosion ?	☐	☐	☐	I
TB4.36	Are pipe-supports in good condition ?	☐	☐	☐	I
TB4.37	Are all lines resistant for the products transferred ?	☐	☐	☐	SI
TB4.38	Are product lines free of screwed connections ?	☐	☐	☐	TPQ
TB4.39	Are all valves made of material that does not crack if exposed to a fire ?	☐	☐	☐	TPQ
TB4.40	Are adequate sample points installed ?	☐	☐	☐	I
TB4.41	Is stress on lines minimised by proper design ?	☐	☐	☐	SI
	Appendages				
TB4.42	Are remote operated valves installed on critical product lines ?	☐	☐	☐	SI
TB4.43	Are automatic valves closed slowly enough to avoid pressure surges ?	☐	☐	☐	SI
TB4.44	Are all valves in good conditions ?	☐	☐	☐	I
TB4.45	Are operating valves easily accessible ?	☐	☐	☐	I
	Filters				
TB4.46	Are filters subject to regular checks ?	☐	☐	☐	SI
TB4.47	Are filters subject to regular cleaning ?	☐	☐	☐	SI
TB4.48	Are filters equipped with pressure control to check on functionality?	☐	☐	☐	TPQ

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Question	Chapter TB4 PUMPING STATIONS & TRANSFER LINES	Yes	No	N/A	Category
TB4.49	Are filters protected against overpressure in the event of blocking ?	☐	☐	☐	TPQ
TB4.50	Are filters installed in a position where sufficient relaxation time is allowed for the dissipation of static electricity?	☐	☐	☐	SI
	First Aid				
TB4.51	Are sufficient eye wash/ safety showers located at each pump station?	☐	☐	☐	I
TB4.52	Is the equipment clearly signposted, easily accessible and in good condition?	☐	☐	☐	I
TB4.53	Is the equipment protected against freezing?	☐	☐	☐	I

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Question	Chapter TB5 DRUMMING AND BLENDING AREA	Yes	No	N/A	Category
	Drumming and Blending Area				
	SAFETY / EMERGENCY RESPONSE				
TB5.1	Are the loading lines and valves identified with clear, easy to read markings indicating contents or line number ?	☐	☐	☐	I
TB5.2	Are eye wash / safety showers in close proximity?	☐	☐	☐	TPQ
TB5.3	Is the equipment in good conditions ?	☐	☐	☐	I
TB5.4	Is the equipment protected against freezing ?	☐	☐	☐	TPQ
TB5.5	Is the lighting sufficient for the operation purpose ?	☐	☐	☐	I
TB5.6	Is the housekeeping good, does the area look clean and orderly, with nothing laying around ?	☐	☐	☐	I
TB5.7	Have the tripping hazards been minimised ? (no pipes / hoses at ground level, pavement without holes)	☐	☐	☐	I
TB5.8	Have warning signs been posted to warn personnel of hazards, rules and safety equipment to be worn?	☐	☐	☐	I
TB5.9	Is there evidence that appropriate personnel protective equipment for the products to be handled is being used ?	☐	☐	☐	I
TB5.10	Is the personnel protective equipment in good condition ?	☐	☐	☐	I
TB5.11	Are vapours, which are hazardous to personnel, extracted from the drumming area ?	☐	☐	☐	TPQ
TB5.12	Are adequate means provided to prevent operators from being exposed to hazards ?	☐	☐	☐	I
TB5.13	Are suitable (sub surface) filling lances used for flammable and toxic products ?	☐	☐	☐	TPQ
TB5.14	Is direct drum filling of hazardous products from truck or rail car prohibited ?	☐	☐	☐	SI
	Environmental				
TB5.15	Are areas around pumps, valves, fittings, etc. free of any evidence of drips ?	☐	☐	☐	I
TB5.16	Does the area show no evidence of spills (spots, contamination) ?	☐	☐	☐	I
TB5.17	Do all drumming operations take place on impermeable spill containment pads ?	☐	☐	☐	TPQ
TB5.18	Is the drumming area covered ?	☐	☐	☐	TPQ
TB5.19	Has the drumming area a containment ?	☐	☐	☐	TPQ
TB5.20	Is there an alarm to indicate that a spill has occurred ?	☐	☐	☐	TPQ
TB5.21	Will a spill be contained in the immediate area ?	☐	☐	☐	TPQ
TB5.22	Could any spill be collected for disposal ?	☐	☐	☐	TPQ
TB5.23	Does the spill containment gully have a sump ?	☐	☐	☐	TPQ
TB5.24	Is secondary containment equipped with leak detection ?	☐	☐	☐	TPQ
TB5.25	Are drips from dip tubes, hoses, samples etc. collected for disposal ?	☐	☐	☐	I

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Question	Chapter TB5 DRUMMING AND BLENDING AREA	Yes	No	N/A	Category
TB5.26	Is any spillage drained away from the storage area ?	☐	☐	☐	TPQ
TB5.27	Is this contained in a remote location ?	☐	☐	☐	TPQ
TB5.28	Is direct run off to public sewers prevented?	☐	☐	☐	TPQ
TB5.29	Are containment facilities properly maintained?	☐	☐	☐	I
	Plant Condition				
TB5.30	Is equipment (pumps, piping, valves, etc.) in good conditions and well maintained ?	☐	☐	☐	I
TB5.31	Is the measuring system in good condition and well maintained ?	☐	☐	☐	I
TB5.32	Is the measuring system equipped with an automatic set / stop ?	☐	☐	☐	TPQ
TB5.33	Is the electrical equipment in good conditions and well maintained?	☐	☐	☐	I
	Loss Prevention				
TB5.34	Are fire extinguishers suitable for the products handled ?	☐	☐	☐	I
TB5.35	Are fire extinguishers readily available and in good condition ?	☐	☐	☐	I
TB5.36	Can a deluge system be activated at the filling station (automatically or remotely) ?	☐	☐	☐	TPQ
TB5.37	Is fire water available in the area either from properly located monitors or from hoses of sufficient length ?	☐	☐	☐	TPQ
TB5.38	Are automatic emergency block valves (EBV's) installed on hazardous fill lines ?	☐	☐	☐	TPQ
TB5.39	Can, in case of an emergency the drumming / blending operation be shut down from a remote location ? (reasonable distance) ?	☐	☐	☐	TPQ
TB5.40	Is an alarm system available in the area, so that a loader can summon help if needed ?	☐	☐	☐	TPQ
TB5.41	Is a drum inspection programme in use prior to filling to ensure proper specification, cleanliness and integrity ?	☐	☐	☐	SI
	Are drums labeled in accordance with current packaging regulations :				
TB5.42	for supply ?	☐	☐	☐	I
TB5.43	for transport ?	☐	☐	☐	I
TB5.44	Is the drum earthed during filling ?	☐	☐	☐	SI
TB5.45	Is earthing equipment in good condition and is it regularly tested ?	☐	☐	☐	I
TB5.46	Is the drum inerted prior to filling ?	☐	☐	☐	SI
TB5.47	Are drums free from damage ?	☐	☐	☐	I
TB5.48	Are drums free from spilled product ?	☐	☐	☐	I
TB5.49	Are filled and empty drums stored in such a way as to prevent the environment from affecting drums and / or product ?	☐	☐	☐	SI

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Question	Chapter TB5 DRUMMING AND BLENDING AREA	Yes	No	N/A	Category
TB5.50	Are loaded containers blocked and braced ?	☐	☐	☐	I
TB5.51	Is all equipment (hoses, pipes, pumps, etc.) dedicated to a specific product, to avoid cross contamination ?	☐	☐	☐	SI
TB5.52	Are drums of the right specifications according to the product ?	☐	☐	☐	I

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Question	Chapter TB6 WAREHOUSE	Yes	No	N/A	Category
	Building Construction				
	Supporting construction :				
TB6.1	concrete ?	☐	☐	☐	TPQ
TB6.2	metal ?	☐	☐	☐	TPQ
TB6.3	wood ?	☐	☐	☐	TPQ
TB6.4	other ?	☐	☐	☐	TPQ
	External walls :				
TB6.5	concrete / bricks ?	☐	☐	☐	TPQ
TB6.6	metal ?	☐	☐	☐	TPQ
TB6.7	wood ?	☐	☐	☐	TPQ
	Internal walls :				
TB6.8	concrete / bricks ?	☐	☐	☐	TPQ
TB6.9	metal ?	☐	☐	☐	TPQ
TB6.10	wood ?	☐	☐	☐	TPQ
	Roof :				
TB6.11	concrete ?	☐	☐	☐	TPQ
TB6.12	tiles ?	☐	☐	☐	TPQ
TB6.13	metal ?	☐	☐	☐	TPQ
TB6.14	wood ?	☐	☐	☐	TPQ
	floor :				
TB6.15	concrete ?	☐	☐	☐	TPQ
TB6.16	asphalt ?	☐	☐	☐	TPQ
TB6.17	paved ?	☐	☐	☐	TPQ
TB6.18	dust proof ?	☐	☐	☐	TPQ
TB6.19	other ?	☐	☐	☐	TPQ
TB6.20	Is the floor constructed for at least 5 tonne/m² floorload ?	☐	☐	☐	TPQ
TB6.21	Are windows and / or roof light panels installed ?	☐	☐	☐	TPQ

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Question	Chapter TB6 WAREHOUSE	Yes	No	N/A	Category
	External doors :				
TB6.22	steel ?	☐	☐	☐	TPQ
TB6.23	aluminium ?	☐	☐	☐	TPQ
TB6.24	wood ?	☐	☐	☐	TPQ
TB6.25	other ?	☐	☐	☐	TPQ
	Internal doors :				
TB6.26	steel ?	☐	☐	☐	TPQ
TB6.27	aluminium ?	☐	☐	☐	TPQ
TB6.28	wood ?	☐	☐	☐	TPQ
TB6.29	other ?	☐	☐	☐	TPQ
TB6.30	Are the internal doors self closing (automatic) ?	☐	☐	☐	TPQ
TB6.31	Are the internal doors of a "fire door approved" type ?	☐	☐	☐	TPQ
TB6.32	Is the insulation of non-combustible material ?	☐	☐	☐	TPQ
TB6.33	Is there a clear zone around the exterior warehouse walls ?	☐	☐	☐	I
TB6.34	Are the warehouse offices separated in a safe manner from the warehouse ?	☐	☐	☐	I
	Electrical Installation				
TB6.35	Does the electrical installation comply with the local regulations ?	☐	☐	☐	SI
TB6.36	Is the electrical installation explosion proof ?	☐	☐	☐	TPQ
TB6.37	Is lightning protection installed ?	☐	☐	☐	TPQ
TB6.38	Is the warehouse / building earthed ?	☐	☐	☐	TPQ
	Is the lighting level sufficient				
TB6.39	interior ?	☐	☐	☐	I
TB6.40	exterior ?	☐	☐	☐	I
	Warehouse Layout				
TB6.41	Is all the product stored inside the building ?	☐	☐	☐	I
TB6.42	Is there a clear segregation between the different product classes ?	☐	☐	☐	I
TB6.43	Are the products stored compatible ?	☐	☐	☐	I
TB6.44	Are food / pharma grade products totally segregated from others ?	☐	☐	☐	I
TB6.45	Is the warehouse only used for storage (no other activities) ?	☐	☐	☐	I

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Question	Chapter TB6 WAREHOUSE	Yes	No	N/A	Category
TB6.46	Is the warehouse operated by own terminal personnel ?	☐	☐	☐	SI
TB6.47	Can the temperature inside the warehouse be regulated ?	☐	☐	☐	TPQ
TB6.48	Are no open combustion heaters used ?	☐	☐	☐	TPQ
TB6.49	Is the building weatherproof ?	☐	☐	☐	TPQ
TB6.50	Is the building air ventilated ?	☐	☐	☐	TPQ
TB6.51	Is the storage distance between wall and product at least 60 cm ?	☐	☐	☐	I
TB6.52	Are the storage / stacking conditions acceptable ?	☐	☐	☐	I
TB6.53	Does the warehouse have containment ?	☐	☐	☐	TPQ
	Safety / Emergency Response				
TB6.54	Are safety data sheets readily available per product ?	☐	☐	☐	I
TB6.55	Are sufficient safety showers / eye wash stations available especially at strategic points ?	☐	☐	☐	TPQ
TB6.56	Is smoking prohibited in the warehouse ?	☐	☐	☐	SI
TB6.57	Are sufficient fire extinguishers installed in the warehouse ?	☐	☐	☐	I
TB6.58	Are fire extinguishers easily accessible ?	☐	☐	☐	I
TB6.59	Is the local fire brigade informed about products stored ?	☐	☐	☐	SI
TB6.60	Are sufficient fire escape doors available ?	☐	☐	☐	TPQ
TB6.61	Are emergency signs posted ("no smoking", "emergency exit") ?	☐	☐	☐	I
TB6.62	Is a sprinkler system installed ?	☐	☐	☐	TPQ
TB6.63	Is foam injection possible ?	☐	☐	☐	TPQ
TB6.64	Is foam readily available in/near the warehouse ?	☐	☐	☐	SI
TB6.65	Is a fire detection alarm installed ?	☐	☐	☐	TPQ
TB6.66	Are ventilators fitted with smoke shutters ?	☐	☐	☐	TPQ
TB6.67	Are the smoke shutters automatically operated ?	☐	☐	☐	TPQ
TB6.68	Is fire water supply guaranteed for at least 2 hours ?	☐	☐	☐	SI
TB6.69	Is there means for (contaminated) fire water drainage ?	☐	☐	☐	SI
TB6.70	Are fire hydrants available ?	☐	☐	☐	TPQ
TB6.71	Is there a preventive maintenance program for safety equipment ?	☐	☐	☐	SI
TB6.72	Is the warehouse surface less than 6000 m² ?	☐	☐	☐	TPQ

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Question	Chapter TB6 WAREHOUSE	Yes	No	N/A	Category
TB6.73	Is the emergency access (on-site / off-site) sufficient ?	☐	☐	☐	I
TB6.74	Are emergency phone numbers posted for quick response ?	☐	☐	☐	I
	Security				
TB6.75	Is the warehouse protected against unauthorised entrance ?	☐	☐	☐	SI
TB6.76	Is access to the warehouse controlled ?	☐	☐	☐	SI
TB6.77	Is the storage area locked outside work hours ?	☐	☐	☐	SI
TB6.78	Is the storage area accessible for authorised persons outside work hours ?	☐	☐	☐	SI
TB6.79	Is a security alarm installed ?	☐	☐	☐	TPQ
	Operations				
TB6.80	Are stowage plans available ?	☐	☐	☐	SI
TB6.81	Is housekeeping satisfactory ?	☐	☐	☐	I
TB6.82	Is there a procedure for handling and recording damage to goods stored ?	☐	☐	☐	SI
TB6.83	Is the warehouse covered by the site emergency plan ?	☐	☐	☐	SI
TB6.84	If not, is a separate emergency plan available ?	☐	☐	☐	SI
TB6.85	Is absorbent material available for small spills ?	☐	☐	☐	I

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Question	Chapter TB7 BUILDINGS	Yes	No	N/A	Category
	Computer Room				
TB7.1	Is access to the computer room controlled ?	☐	☐	☐	SI
TB7.2	Is access to the computer room only permitted to authorised persons ?	☐	☐	☐	SI
TB7.3	Is computer room equipped with a fire alarm system ?	☐	☐	☐	TPQ
TB7.4	Is computer room protected by a fixed fire extinguishing system ?	☐	☐	☐	TPQ
TB7.5	Are sufficient portable fire extinguishers available ?	☐	☐	☐	TPQ
TB7.6	Is the construction of the computer room fire retardant in accordance with local legislation ?	☐	☐	☐	TPQ
TB7.7	Is power supply dedicated to computer facilities ?	☐	☐	☐	TPQ
TB7.8	Is there a fall back facility in case of power failure ?	☐	☐	☐	TPQ
TB7.9	Is computer room located in accordance with the electrical zone classification ?	☐	☐	☐	TPQ
TB7.10	Is data back-up provided outside the terminal ?	☐	☐	☐	SI
TB7.11	Is the software back-up provided outside the terminal ?	☐	☐	☐	SI
	Are computer systems used for :				
TB7.12	order flow and stock keeping ?	☐	☐	☐	TPQ
TB7.13	administration ?	☐	☐	☐	TPQ
TB7.14	process control ?	☐	☐	☐	TPQ
TB7.15	Does the computer system run in real time ?	☐	☐	☐	TPQ
TB7.16	Is there a fall back procedure available ?	☐	☐	☐	SI
TB7.17	Is fall back procedure regularly tested ?	☐	☐	☐	SI
TB7.18	Are the consequences of a system failure examined ?	☐	☐	☐	SI
	Laboratories				
TB7.19	Are local regulations adhered to in design ?	☐	☐	☐	SI
TB7.20	Are at least two exits available ?	☐	☐	☐	TPQ
TB7.21	Is emergency lighting installed (battery driven) ?	☐	☐	☐	TPQ
TB7.22	Are eye wash units installed in the lab ?	☐	☐	☐	TPQ
TB7.23	Are safety showers installed in the lab ?	☐	☐	☐	TPQ
TB7.24	Is housekeeping satisfactory ?	☐	☐	☐	I
TB7.25	Have warning signs been posted to warn personnel of hazards, rules and safety equipment to be worn?	☐	☐	☐	I
TB7.26	Are bottles properly labeled ?	☐	☐	☐	I

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Question	Chapter TB7 BUILDINGS	Yes	No	N/A	Category
TB7.27	Are fume cabinets available ?	☐	☐	☐	TPQ
TB7.28	Is appropriate personal protective equipment used ?	☐	☐	☐	I
TB7.29	Are reactive materials stored away from each other ?	☐	☐	☐	I
TB7.30	Is lab waste collected in appropriate containers ?	☐	☐	☐	I
TB7.31	Does the lab have spill containment ?	☐	☐	☐	TPQ
TB7.32	Does the sample storage have spill containment ?	☐	☐	☐	TPQ
TB7.33	Are traps available in floor drains ?	☐	☐	☐	TPQ
TB7.34	Are sink drains directed to a chemical sump ?	☐	☐	☐	TPQ
TB7.35	Are floor drains directed to a chemical sump ?	☐	☐	☐	TPQ
TB7.36	Is the lab equipment in good condition / well maintained ?	☐	☐	☐	I
TB7.37	Is the lab-gas piping well supported / is condition o.k. ?	☐	☐	☐	I
TB7.38	Is the general condition of the lab satisfactory ?	☐	☐	☐	I
TB7.39	Are fire extinguishers installed at strategic points ?	☐	☐	☐	I
TB7.40	Is the reagent storage organised and kept to a minimum ?	☐	☐	☐	I
TB7.41	Is the sample storage organised and kept to a minimum ?	☐	☐	☐	I
TB7.42	Is waste segregated to avoid reactive chemicals ?	☐	☐	☐	I
TB7.43	Are flammables stored according to local regulations ?	☐	☐	☐	SI
	Boiler House				
TB7.44	Is the boiler house equipped with sufficient internal illumination ?	☐	☐	☐	I
TB7.45	Is housekeeping satisfactory ?	☐	☐	☐	I
TB7.46	Is the boiler house equipped with sufficient fire-fighting equipment such as portable foam extinguishers ?	☐	☐	☐	I
TB7.47	Does the boiler house provide protection against wind and rain ?	☐	☐	☐	TPQ
TB7.48	Is the boiler house ventilated ? (air for burner)	☐	☐	☐	TPQ
TB7.49	Is the boiler installation equipped with an emergency shut-down button ?	☐	☐	☐	TPQ
TB7.50	Is the boiler installation fitted with shut down button located outside the boiler house ?	☐	☐	☐	TPQ
TB7.51	Is the building equipped with at least one additional exit (emergency exit) ?	☐	☐	☐	TPQ
TB7.52	Is the height of the boiler chimney according the national regulations ?	☐	☐	☐	TPQ
TB7.53	Is the access to the boiler house controlled ?	☐	☐	☐	SI

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Question	Chapter TB7 BUILDINGS	Yes	No	N/A	Category
	Is the boiler :				
TB7.54	gas fired ?	☐	☐	☐	TPQ
TB7.55	oil fired ?	☐	☐	☐	TPQ
TB7.56	In case the boiler is oil operated, are the boiler gases treated ?	☐	☐	☐	TPQ
TB7.57	Do emissions comply with local regulations ?	☐	☐	☐	SI
TB7.58	Is the boiler fully inspected (out of operation) according to local statutory requirements ?	☐	☐	☐	SI
TB7.59	Is the boiler inspected weekly with respect to proper operation ?	☐	☐	☐	SI
TB7.60	Is the formation of NOx monitored periodically ?	☐	☐	☐	SI
TB7.61	Is the boiler equipped with a low NOx-burner ?	☐	☐	☐	TPQ
TB7.62	Is the boiler equipped with a pressure alarm ?	☐	☐	☐	TPQ
TB7.63	Is the boiler equipped with pressure-relief ?	☐	☐	☐	TPQ
TB7.64	Is the boiler equipped with a level alarm on the boiler water ?	☐	☐	☐	TPQ
TB7.65	Are all hot areas of the boiler system equipped with insulation ?	☐	☐	☐	I
TB7.66	Is liquid fuel for the boiler stored in accordance with the same standards as for the storage facilities ?	☐	☐	☐	TPQ
	Maintenance Workshop				
TB7.67	Does the workshop have two exits ?	☐	☐	☐	TPQ
TB7.68	Are eye wash units available in the direct area ?	☐	☐	☐	I
TB7.69	Is the building constructed of non-combustible materials ?	☐	☐	☐	TPQ
TB7.70	Is the location of the workshop outside the hazardous area (process) ?	☐	☐	☐	SI
TB7.71	Is the lighting in the work area sufficient ?	☐	☐	☐	I
TB7.72	Have warning signs been posted to warn personnel of hazards, rules and safety equipment to be worn?	☐	☐	☐	I
TB7.73	Are sufficient fire extinguishers available ?	☐	☐	☐	I
TB7.74	Is housekeeping satisfactory ?	☐	☐	☐	I
TB7.75	Are cranes marked with the maximum allowable load ?	☐	☐	☐	I
TB7.76	Is there a dedicated area for spare parts ?	☐	☐	☐	SI
TB7.77	Is there a dedicated area for cleaning / handling of parts which have been in service with hazardous chemicals ?	☐	☐	☐	SI
TB7.78	Does the workshop have a dedicated area with containment for oil storage ?	☐	☐	☐	SI
TB7.79	Are the equipment / tools used in the workshop subject to regular controls with respect to functionality and safety ?	☐	☐	☐	SI

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Question	Chapter TB7 **BUILDINGS**	Yes	No	N/A	Category
TB7.80	Where necessary, is protection installed for working in elevated areas ?	☐	☐	☐	I
TB7.81	Is an alarm system available for personnel to summon help in case of emergency ?	☐	☐	☐	I
TB7.82	Is the workshop included in the site emergency plan ?	☐	☐	☐	SI
TB7.83	Is the air-intake constructed in such a way that contaminated air would be alarmed and / or stopped automatically ?	☐	☐	☐	TPQ
TB7.84	Are utility supplies well marked and / or colour coded ?	☐	☐	☐	I

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Question	Guidance Notes Chapter TA1 FIRE FIGHTING

The extent and capacity of the fire fighting equipment provided is based on the assumption that only one major fire will occur at any one time. Thus, the requirements of the largest single fire contingency determine the design of the major fire fighting facilities.

To facilitate an answer, the Inspector should adapt questions TA1.8 to TA1.30 to the local conditions.

The largest possible fire should be identified by acknowledge fire specialist and report available from which the largest fire contingency can be identified. Note: this report should be periodically updated to reflect any expansion or change of activity.

TA1.8 In case of a negative answer, the Inspector should report the actual rate available and comment upon its adequacy in the given circumstances.

TA1.9-12 The sea, a lake or a river are preferred.

TA1.11 Source: Exxon experience. If the answer is no, the Inspector should report the actual duration and comment upon it.

TA1.15 Source: OCIMF Guide on Marine Terminal Fire Protection, 1987. Either 2 pumps x 100% or 3 pumps x 50% each.

TA1.16 Source: OCIMF Guide on Marine Terminal Fire Protection, 1987. One electric pump, the others diesel driven.

TA1.17 If the answer is no, the Inspector should report the actual fuel tank capacity and comment upon it.

TA1.18 Source: Exxon experience. If the answer is no, the Inspector should report the actual pressure and comment upon its adequacy.

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TA1.24 So that no priming is required.

TA1.26 Source : OCIMF Guide for Marine Terminal Fire Protection

TA1.37-38 Inspector must check that procedures for these two options are in place.

TA1.37 The Inspector should report the time needed to reach the full design capacity at the farthest point of the main. A field test may be required for verification.

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TA1.49 Certain products require alcohol resistant foam.

TA1.53 One hydrant can deliver 2,000 l/min. through 65 mm. hoses and 3,000 to 4,000 l/min. through a pumper.

TA1.54 The fire truck should not need more than one length of hose to pump out from a hydrant and another to pump into a tank lateral..

TA1.55 For guidance, 15m is considered to be a safe distance.

TA1.57 Or winterised in an equivalent manner?

TA1.58 Such equipment may be used in a major accident.

TA1.59 Proof should be provided if the required range is > 30 m.

TA1.62 For guidance, 15m is considered to be a safe distance.

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TA1.64 The question does not infer that the Inventory list must be retained in the cabinet.

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TA2.1-3 Inspector should review recent/valid statutory/specialist inspection reports and make spot-checks. If unsatisfied, he should arrange for a specific survey by a qualified electrical engineer.

TA2.4-6 Terminal could be using hydraulic pumps, in which case this group should be answered N/A.

TA2.4 Cables within duct banks with concrete cover may be considered as underground.

TA2.7 Inspector should look for evidence.

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TA3.9 A road should be at least 6 m. wide for two way traffic

TA3.10 A road should be at least 6 m. wide for two way traffic

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TA4.1 Communications systems in use, may include: radio, two-way radio, telephone, EX mobile telephone, push button, system alarms.

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TA4.45 The following may be considered as examples of Environmental emergencies :
water and air and ground pollution by spillage of product, slops, waste, gas releases.

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TA5.4 Removal of slop and sludge may be carried out by third parties. In this case NA reply can be given.

TA5.5 Activity may refer to any type of system and equipment capable of generating a source of ignition. This includes all spark and heat generating systems and equipment.

TA5.10 Isolation is physical separation, blinds or double block and bleed system.

TA5.19 Independent air supply refers to Self-Contained air supply, either worn by the person or supplied from a source external to the tank.

TA5.21 Not applicable for non-hazardous products.

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Question	Guidance Notes Chapter TA5 TANK CLEANING

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TA6.2 Plans and drawings should be inspected for segregation of reactive products.

TA6.7-8 A controlled discharge point has a retention capacity where water can be tested before being either discharged into the environment, if clear, or delivered to a treatment plant.

TA6.9 This excludes the municipal sewer systems

TA6.12 Traps are intermediate catch basins to prevent the backflow of vapour or gas into the facility.

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TA6.30 Check materials of construction for resistant properties.

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Question	Guidance Notes Chapter TA6 SEWERS - WASTE & WASTE WATER TREATMENT

TA6.59-63 These functions could be contracted to third parties

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TA7.7 The Inspector should be looking for a system to monitor vapour concentrations and evidence of measurement of these concentrations.

TA7.14 Fail-safe" refers to a situation where following any failure, the system will automatically prevent the creation of an unsafe condition.

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TA7.29 For VTU's having no ignition source, this question may be answered as N/A.

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Question	Guidance Notes Chapter TA8 SECURITY

Note: The ACC Security Code requirements are covered in the Management Questionnaire.

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Note: The ACC Security Code requirements are covered in the Management Questionnaire.

TA8.21-22 Routine physical inventories reduce pilferage and help identify problems early. Inventories should include both terminal property and customer product.

TA8.23 Physical inventories must be thorough with special attention given to visual inspection of each unit.

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Question	Guidance Notes Chapter TA9 HOSES

TA9.0 The section refers to the entire terminal site and not just the jetty.

TA9.2 This testing may be carried out by a third party.

TA9.3 Hose records should contain information on testing, previous products, cleaning, etc

TA9.10 Hose saddles, cradles, lifting straps, etc.

TA9.24 Hose support equipment, refers to all equipment including: strops, cradles, hooks, wires, ropes, etc.

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NOTE: THE N/A ANSWER OPTION IN THIS CHAPTER IS ONLY TO BE COMPLETED IN CASES WHERE THE ACTIVITY IS NOT PART OF THE TERMINAL OPERATION. ALL QUESTIONS ARE TO BE ANSWERED YES or NO WITH APPROPRIATE EXPLANATION AGAINST THE NEGATIVE ANSWERS.

TB1.2 Colors for utility systems acceptable, tagging can be number or product identification.

TB1.4 EEX zone or at least 20 m distance from sources like fences, electrical switch room, boiler house etc ?

TB1.8 Each operating area should have a minimum of one eye wash/ safety shower.

TB1.9 Eye washes and safety showers should be located in relatively safe areas, near too and with unobstructed access from the operational area.

TB1.10 Where systems are protected by heating, inspectors should verify that dangerously high temperatures are prevented.

TB1.17 Self-loading of trucks need proper marking for driver.

TB1.18 These systems tend to undergo regular changes, a visual inspection must be made to ensure bonding straps and devices are in place and properly secured.

TB1.20 Poor conducting materials significantly reduce risk of sparking

TB1.20-22 If by N2 (or other) purging, no flammable range exists, the answers to these questions are "not applicable".

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TB1.28 A safe distance is required and to limit the amount of product spilled

TB1.39 General or local

TB1.40 The truck should be connected with one standard length of hose

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TB1.48 Firm" hoses refer to non-collapsible hose wall construction that will not kink or deform passing over rails/objects.

TB1.43 E.g. underground

TB1.48 Their purpose is to provide flush down water in case of spills and fog protection for rescue and cooling of equipment in case of fire.

TB1.50 Dry chemical powder extinguishers permit operators to quickly attack small fires.

TB1.51 For top loading bays, at the foot of the staircase.

TB1.52 For top loading bays only.

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TB1.74-85 Inspectors should check that there is adequate fall protection provided for people when on top of the vehicle, e.g.. safety harness, safety cage, handrails, etc.

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Question	Guidance Notes Chapter TB1 ROAD/RAIL LOADING AND UNLOADING

NOTE: THE N/A ANSWER OPTION IN THIS CHAPTER IS ONLY TO BE COMPLETED IN CASES WHERE THE ACTIVITY IS NOT PART OF THE TERMINAL OPERATION. ALL QUESTIONS ARE TO BE ANSWERED YES or NO WITH APPROPRIATE EXPLANATION AGAINST THE NEGATIVE ANSWERS.

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Question	Guidance Notes Chapter TB1 ROAD/RAIL LOADING AND UNLOADING

NOTE: THE N/A ANSWER OPTION IN THIS CHAPTER IS ONLY TO BE COMPLETED IN CASES WHERE THE ACTIVITY IS NOT PART OF THE TERMINAL OPERATION. ALL QUESTIONS ARE TO BE ANSWERED YES or NO WITH APPROPRIATE EXPLANATION AGAINST THE NEGATIVE ANSWERS.

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Question	Guidance Notes Chapter TB2 JETTY

NOTE: THE N/A ANSWER OPTION IN THIS CHAPTER IS ONLY TO BE COMPLETED IN CASES WHERE THE ACTIVITY IS NOT PART OF THE TERMINAL OPERATION. ALL QUESTIONS ARE TO BE ANSWERED YES or NO WITH APPROPRIATE EXPLANATION AGAINST THE NEGATIVE ANSWERS.

For terminals with several jetties, the Inspector should answer questions negative if there is non compliance on one of the available jetties. He should indicate in comments which jetty.

The Inspector should answer questions related to the ship-shore interface after having conducted appropriate interviews and checks with all parties involved, possibly including the port authorities.

TB2.3 ISGOTT: terminal and vessel operational requirements, mooring requirements and limitations, limitations on the vessel's operation and cargo transfer equipment requirements.

TB2.8 Check availability of lights (winter time earlier dark)

TB2.11 Inspectors should check mooring plans, defining safe mooring criteria for each berth and range of vessel as verification of this question.

TB2.15 In assessing safe ship/shore access, inspectors should consider: securement, stability, reach, width, gradient, railings, etc.

TB2.21 Check for availability of sufficient lighting.

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Question	Guidance Notes Chapter TB2 JETTY

NOTE: THE N/A ANSWER OPTION IN THIS CHAPTER IS ONLY TO BE COMPLETED IN CASES WHERE THE ACTIVITY IS NOT PART OF THE TERMINAL OPERATION. ALL QUESTIONS ARE TO BE ANSWERED YES or NO WITH APPROPRIATE EXPLANATION AGAINST THE NEGATIVE ANSWERS.

TB2.24 See question and guidance note M7.35

TB2.29 Is not applicable when total system is inerted, can be covered by procedure or be automated.

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Question	Guidance Notes Chapter TB2 JETTY

NOTE: THE N/A ANSWER OPTION IN THIS CHAPTER IS ONLY TO BE COMPLETED IN CASES WHERE THE ACTIVITY IS NOT PART OF THE TERMINAL OPERATION. ALL QUESTIONS ARE TO BE ANSWERED YES or NO WITH APPROPRIATE EXPLANATION AGAINST THE NEGATIVE ANSWERS.

TB2.42 E.g. OCIMF Design and Construction Specifications for Marine Loading Arms, latest edition or equivalent

TB2.43-47 These questions are asked for information purposes only.

TB2.51 Refers to the system for protecting the working envelope of the loading arm.

TB2.52 E.g. PERC (emergency release coupling)

TB2.53 Record frequency applies for both loading arms and hoses.

TB2.59 Control logic, safety relief valves, pump bypass etc.

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TB2.84 Operator in vicinity or video control with remote transfer control

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TB2.87 Protected location is considered to be outside of the loading platform and safe from jetty head fire and contact damage.

TB2.89 Check for evidence.

TB2.100-114 In answering this series of questions, the inspector must consider if the fighting capability is adequate for the size of vessels and type and volume of cargo handled.

TB2.100 To protect them from a fire on the water underneath the jetty.

TB2.102-103 To be able to maintain the fire water system under normal working pressure in case of rupture.

TB2.104 E.g. DIN, NFPA, OCIMF or equivalent.

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TB2.105 At each berth.

TB2.111 Or to reach beyond obstacles like loading arms.

TB2.115 In case of jetty, boat, ladder etc.

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TB2.125 Unrestricted entrance of un-authorized people coming from outside the terminal prohibited.

TB2.134 Check for availability of sufficient lighting.

TB2.135 Color marking or symbols etc.

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TB3.7 Exception: inside grounded metallic sounding pipe

TB3.14 In accordance with API standard.
distance = flow-rate times 30 sec. At max flow rate of 7 m/s = 210 m.

TB3.16 Indicatively, the following water rate requirements can be assumed :

a) within a distance of 15 m. from the burning tank : 4 l/min. per square meter of surface exposed to the fire; or:
b) between 15 and 30 m. from the burning tank : 2 l/min per square meter of surface exposed to the fire.
The surface exposed to the fire is assumed equal to 25% of the shell surface plus 40% of the roof surface.

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TB3.28 E.g. foam dams installed on floating roof tanks.

TB3.29 A standard outlet delivers 225 l/min.

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TB3.40-48 Checklist or documents should be available.

TB3.50 Complete internal + external inspection including bottom thickness measurements + corrosion Exception if based on historical data and agreement with authorities the time of 15 year may be extended to 20 year.

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Question	Guidance Notes Chapter TB3 TANK FARM

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Question	Guidance Notes Chapter TB3 TANK FARM

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TB3.89 If frangibility requirements of API 650 are not satisfied, vents size meet API Standard 2000 "Venting Atmospheric and Low-Pressure Storage Tanks" latest edition (or equivalent standards) ?

TB3.95-96 From 75mm diameter and with a length of 30m or more.

TB3.97 This question refers to stress moments that may have developed due to incorrect alignment, settlement, load distribution or any other abnormal stress conditions.

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TB3.104-105 Double wall tanks are excluded.

TB3.117-124 Tank overfill = spill without loss of integrity.

TB3.117 Double independent check happens if another operator checks rather than the operator which made the line up.

TB3.119 Manual or independent instruments like level gauge, independent alarm, etc.

TB3.121 It should not be necessary to climb on top of the tank to verify level.

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TB3.123 'Independent' refers to a separate system, independent from the automated gauging device.

TB3.127 Safe location is pumps outside pit or by remote control.

TB3.135 This is not applicable when the electromotor have electrically intrinsic safe design in combination with the electrical classification of the area. The actual product stored should be taken into account (flashpoint).

TB3.136 Rate and standard or requirement should be provided (indication: min 4 liter per square meter).

TB3.137 e.g. API Standard 650 + no obstructions.

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TB3.142 e.g. anti-skip surface; drainable (if applicable) and free of obstructions.

TB3.143 Toe plate prevent falling objects.

TB3.147 Safe pipe crossing points are equipped with ladders, handrails anti-skip in good condition ?

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TB4.25-27 Company or Legal requirement should define the use of double seals

TB4.33 Refers to the entire length of the line. If any part of the line is underground, the answer must be 'No'

TB4.42 Company or Legal requirement should define the use of ROV

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TB4.49 Filter unit must be fitted with a pressure relief system to operate if inlet and outlet valves are closed.

TB4.50 Inspectors should confirm that design of filter location has considered the distance from both the tank and discharge point.

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Question	Guidance Notes Chapter TB5 DRUMMING & BLENDING AREA

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TB5.8 Warning signs should appropriately include: No Smoking, Corrosive, Eye Protect, etc.

TB5.24 Examples of secondary containment may be: bunded areas and secure sewer systems.

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TB5.26 Examples may be: sloping area, underground collection system, holding tanks

TB5.40 The alarm system may be push button, radio communication, telephone, etc.

TB5.42 Refers to end user labels

TB5.43 Refers to transportation labels, e.g. IMDG, ADR

TB5.46 For the handling of products in their flammable range

TB5.47 No dents, or paint missing at the storage location?

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TB5.52 Check UN coding embossed on the rim of the drum.

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Question	Guidance Notes Chapter TB6 WAREHOUSE

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TB6 The term "Warehouse" refers to an enclosed building having four walls, a roof and doors. Covered areas are not included in this section.

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TB6.32 The question refers to all insulation incorporated in the construction of the building.

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Question	Guidance Notes Chapter TB6 WAREHOUSE

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TB7.19-43 The term "Laboratory" refers to an on-site facility of owned or third party, used for analysis of products handled, but exempts facilities for analysis of waste water.

TB7.25 Warning signs should appropriately include: No Smoking, Corrosive, Eye Protect, etc.

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TB7.19-43 The term "Laboratory" refers to an on-site facility of owned or third party, used for analysis of products handled, but exempts facilities for analysis of waste water.

TB7.48 Boiler house ventilation may be either natural or forced.

TB7.49 This question refers to a unit shut down button located inside the boiler house.

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TB7.72 Warning signs should appropriately include: No Smoking, Corrosive, Eye Protect, etc

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Question	Guidance Notes Chapter TB7 BUILDINGS

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