



Best Practice for the Safe Packing and Handling of Cargo to and from Offshore Locations



Issue 5
November 2011



Best Practice
(formally known as Guidelines)
for

**THE SAFE PACKING AND HANDLING
OF CARGO TO AND FROM OFFSHORE
LOCATIONS**

ISSUE 5

NOVEMBER 2011

Whilst every effort has been made to ensure the accuracy of the information contained in this publication neither Oil & Gas UK nor any of its members will assume liability for any use made thereof.

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without prior written permission of the publishers.

Crown copyright material is reproduced with the permission of the Controller of Her Majesty's Stationery Office.

Copyright © 2008 Oil & Gas UK

London Office:

2nd Floor, 232 – 242 Vauxhall Bridge Road, LONDON, SW1V 1AU
Tel: 020 7802 2400 Fax: 020 7802 2401

Aberdeen Office:

3rd Floor, The Exchange 2, 62 Market Street, ABERDEEN, AB11 5PJ
Tel: 01224 577250 Fax: 01224 577251

Email: info@oilandgasuk.co.uk

Website: <http://www.oilandgasuk.co.uk/>

CONTENTS

SECTION	PAGE
1.0 PREFACE.....	1
2.0 INTRODUCTION.....	2
3.0 SCOPE AND APPLICATION.....	3
4.0 ABBREVIATIONS	4
5.0 REFERENCES.....	6
6.0 RESPONSIBILITIES AND DUTIES	8
6.1 Vendors	8
6.2 Haulage Contractors	8
6.3 Logistics Service Providers.....	11
6.4 Vessel Operators	11
6.5 Aircraft Operators.....	12
6.6 Offshore Operators.....	12
7.0 DROPPED OBJECTS	13
7.1 Checking for Dropped Objects	13
7.2 Verification of checks.....	13
7.3 Dropped Objects Prevention Scheme (DROPS)	13
8.0 LIFTING AND SLINGING	14
8.1 Lifting Operations.....	14
8.2 The Organisation of Lifting Operations.....	14
8.3 Undertaking the Lifting Operation	15
8.4 Pre-Use Inspection & General Precautions.....	16
9.0 CCU CARGO GUIDANCE.....	22
9.1 Introduction	22
9.2 Responsibilities for Cargo Checks within the Supply Chain.....	22
9.3 General	23
9.4 Cargo Handling and Shipping Equipment.....	24
9.5 General Checks for Open and Closed CCUs	24
9.6 General Checks for Specialist Equipment	25
9.7 Packing Cargo in CCUs.....	25
9.8 Closed Container – Key Points from Checklist.....	29
9.9 Open Container – Key Points from Checklist	30
9.10 Snagging Hazards	30
9.11 CCU Standards and Inspection Requirements	36
9.12 Marking	38
9.13 Expiry of Test Certificate(s) whilst Unit(s) Offshore.....	41
9.14 Types of CCUs	44
10.0 CARRIAGE OF GOODS BY AIR.....	50
10.1 Freight Classifications	50
10.2 General Guidance and Freight Packaging	50

11.0 NON CONFORMING CARGO	52
11.1 Inspection Procedures	52
11.2 Cargo Unfit for Shipment	52
11.3 Non Conformance Code.....	52
12.0 GENERAL DOCUMENTATION.....	53
13.0 DANGEROUS GOODS BY SEA	54
13.1 General	54
13.2 Dangerous Goods Flowchart – Inbound.....	55
14.0 DANGEROUS GOODS BY AIR	56
14.1 General	56
14.2 Dangerous Goods by Air Documentation	56
14.3 Division of Responsibilities & Training required.....	56
14.4 Facilities Required	58
14.5 Procedure for shipping Dangerous Goods	58
14.6 Retention of Paperwork	59
14.7 Minimum Requirements for Training Curricula	60
15.0 WASTE MANAGEMENT	61
15.1 Controlling Waste Offshore	62
15.2 Special Waste (Hazardous/Harmful)	62
15.3 Recyclable Waste	62
APPENDICES	63
APPENDIX 1 – OFFSHORE TANKS – CHEMICALS, OILS, FUEL AND WASTE...64	64
1.1 Introduction	64
1.2 General	64
1.3 Vessel (Tank) Types	64
1.4 IMO Inspection and Testing of Tank Vessel.....	65
1.5 General Checks for Offshore Tanks	65
1.6 Plate Markings	66
1.7 Offshore Tank – Key Points from Checklist.....	67
APPENDIX 2 – PORTABLE GAS EQUIPMENT.....68	68
2.1 Introduction	68
2.2 General	68
2.3 Cylinder Types	68
2.4 General Checks for Portable Gas Equipment	68
2.5 Specific Requirements for Gas Quads/Packs/MEGCs	69
2.6 Specific Requirements for Lift Frames	69
APPENDIX 3 – SPECIAL CARGO	70
3.1 General	70
3.2 Unusual Shape and Weight Distribution	70
3.3 Back-loading of Bulk Underdeck Cargo to Support Vessel Tanks	71
3.4 Bulk Transfer to/from Portable Tanks	71
3.5 Examples of Special Cargo.....	72

APPENDIX 4 – DRILLING TUBULARS.....	74
4.1 General	74
4.2 Bundled Tubulars	75
4.3 Individually Slung Tubulars.....	75
4.4 Access and Egress.....	75
4.5 Examples of Drilling Tubulars	75
APPENDIX 5 – EXAMPLES OF PACKING	77
5.1 Illustrations of Packing	77
APPENDIX 6 – OFFSHORE WASTE CONTROL PACK.....	80
APPENDIX 7 – DOCUMENT EXAMPLES	88
7.1 Oil & Gas UK Cargo Summary Ticket for Outbound Cargo	89
7.2 Oil & Gas UK Inbound Pocket Checklist	90
7.3 Oil & Gas UK Inbound Pocket Checklist - Tanks	91
7.4 Oil & Gas UK Cargo Summary Ticket for Outbound/Inbound Tanks.....	92
7.5 Cargo Safety and Security Tag.....	93
7.6 Dangerous Goods and Marine Pollutants Declaration.....	94
7.7 Dangerous Goods by Air Declaration	97
7.8 Instructions in Writing.....	98
7.9 Oil & Gas UK Cargo Rejection Note – Sea	103
7.10 Oil & Gas UK Cargo Rejection Note – Air	104
APPENDIX 8 – LIFTING OPERATIONS CATEGORISATION AND CONTROLS TABLE	105
APPENDIX 9 – NON CONFORMANCE CODE CHECKLIST	106
APPENDIX 10 – ABNORMAL OR WIDE LOAD MATRIX.....	107
APPENDIX 11 – USE OF TAG LINES	108
11.1 Introduction	108
11.2 Risks	108
11.3 Mitigation of Risks.....	108
APPENDIX 12 – EXAMPLES OF BAD PRACTICE.....	110
APPENDIX 13 – LIFTING EQUIPMENT INSPECTION CRITERIA	118
13.1 Introduction.....	118
13.2 Wire Rope Slings	118
13.3 Chain Slings	119
13.4 Webbing Slings.....	120
13.5 Shackles	120
FEEDBACK.....	123

An original workgroup comprising ASCO, BP Amoco (now BP), Gulf Offshore, Seaforth Maritime, Shell, Swire and Texaco was established by the Marine Safety Forum (MSF) to consider the hazards and risks associated with the safe packaging and handling of cargo to and from offshore installations. The objective of the workgroup was to identify areas where additional guidance would help to secure improvements in safety.

In accordance with the three-year review strategy, a new workgroup (see Cross Industry Workgroup section) was formed to develop the document beyond the original focus, taking into consideration changes in legislation, good working practices and learnings from incidents.

The group acknowledges the assistance given in the preparation of this guidance document by the following bodies:

- Chamber of Shipping (CoS)
- Health and Safety Executive (HSE)
- Helideck Certification Agency Ltd (HCA)
- International Association of Drilling Contractors North Sea Chapter (IADC)
- Maritime and Coastguard Agency (MCA)
- Oil & Gas UK
- Wells Services Contractors Association (WSCA)

The safe carriage of goods relies upon the correct packaging, securing, labelling and handling procedures. Operators, logistics service providers, aircraft operators, shipping and vendor companies have produced this guidance, which provides practical advice. If there is doubt, the reader should always consult the primary reference.

Specific manual and mechanical handling activities associated with cargo handling are not included in this guidance. They should form part of individual company's Safety Management Systems.

In order to ensure the currency of these Industry Best Practices, the workgroup will meet to review them at intervals not exceeding three years, and reissue accordingly.

This revision 5 replaces revision 4 of November 2008.

2.0 INTRODUCTION

- 2.1 The main thrust of the document is to provide an overview of the key processes involved in the safe handling of cargo and is supported by appendices containing recommended working practices.
- 2.2 Alternative practices should only be adopted where they would specifically offer a greater level of safety.
- 2.3 Cargo both on and offshore may be subject to inspection checks.
Non-conformance with this document WILL result in cargo NOT being forwarded until the necessary remedial actions have been carried out in conjunction with the relevant company. See Section 11, Non-conforming Cargo.

3.0 SCOPE AND APPLICATION

3.1 The purpose of this Best Industry Practice document is to assist the following parties involved in the movement of cargo to or from offshore installations:

- Vendors
- Haulage Contractors
- Logistics Service Providers
- Vessel Operators
- Aircraft Operators
- Offshore Operators

recognising the hazards involved in the packaging and handling of cargo during normal operations, and to avoid or reduce the associated risks by the adoption of common industry standards.

3.2 This document applies to the safe packing and handling of cargo to and from offshore locations in support of operations on the United Kingdom Continental Shelf (UKCS) or elsewhere if adopted. Where these guidelines refer to Master or Offshore Installation Manager (OIM) this also includes their nominated representatives.

3.3 Users of this document must pay regard to any relevant legislation or authoritative recommendations which have evolved subsequently to the date of publication or during the life of this edition. These guidelines include references to relevant legislation. See Section 5, References.

3.4 In the absence of appropriate legislation, relevant bodies may use this document to assist in their investigation which could lead to disciplinary action or criminal proceedings.

4.0 ABBREVIATIONS

Initials	Description
ADR	Accord Dangereux Routiers (European Standard on Dangerous Goods Transportation)
BOP	Blow Out Preventer
BS EN	British Standard European Norm
CCU	Cargo Carrying Unit
CE	Conforms to a European Directive
CoG	Centre of Gravity
CoS	Chamber of Shipping
CSC	Cargo Security Certificate
CTU	Cargo Transporting Unit (also known as CCU)
DfT	Department for Transport
DGR	Dangerous Goods Regulations
DG	Dangerous Good
DNV	Det Norske Veritas
EA	Environment Agency
EWC	European Waste Catalogue
HCA	Helideck Certification Agency Ltd
HLO	Helicopter Landing Officer
HSE	Health and Safety Executive
IADC	International Association of Drilling Contractors (North Sea Chapter)
IATA	International Civil Air Transport Association
ICAO	International Civil Aviation Organisation
IMDG	International Maritime Dangerous Goods Code
IMO	International Maritime Organisation
LMC	Last Minute Change
LOLER	Lifting Operations and Lifting Equipment Regulations
MARPOL	International Maritime Organisation Convention for the Prevention of Pollution from Ships
MCA	Maritime and Coastguard Agency
MCAA	Marine Competent Authority Approval
MEGC	Multiple Element Gas Container
MGN	Marine Guidance Note

Initials	Description
MSF	Marine Safety Forum
NOTOC	Notification to Captain
NUI	Normally Unattended Installation
OIM	Offshore Installation Manager
PV	Pressure Vacuum
SADIE	Safety Alert Data Information Exchange
SEPA	Scottish Environmental Protection Agency
SWL	Safe Working Load
TPEC	Temporary Portable Equipment Certificate
TRIC	Task Risk Identification Checklist
UKOOA	United Kingdom Offshore Operators Association
UKCS	United Kingdom Continental Shelf
VCOC	Vendor's Certificate of Conformity
WLL	Working Load Limit
WSCA	Well Services Contractors Association

5.0 REFERENCES

References
Approval of Offshore Containers Handled in Open Seas Guidelines MSC/Circ 860
Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations [SI 2007/1573]
Code of Practice for Inspection and Repair of Offshore Containers BS 7072:1989
Code of Practice for the Safe Use of Wire Rope Slings BS 6210:1983
Dangerous Goods in Cargo Transport Units HSG 78
Department of Transport Code of Practice Safety of Loads on Vehicles
Environmental Protection (Duty of Care) Regulations [SI 1991/2839]
Hazardous Waste (England & Wales) Regulations [SI 2005/894]
HCA Procedure for the Shipment of Dangerous Goods from Offshore Installations and Vessels to Onshore by Helicopter
IATA (International Air Transport Association) Dangerous Goods
ICAO Technical Instructions for the Carriage of Dangerous Goods by Air
International Maritime Dangerous Goods (IMDG) Code
Lifting Operations and Lifting Equipment Regulations [SI 1998/2307] (LOLER)
LOLER Approved Code of Practice (HSE Books L113)
Marine Guidance Note MGN 282 (M)
Marine Guidance Note MGN 283 (M)
Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations [SI 1997/2367]
Merchant Shipping (Prevention of Pollution by Garbage) Regulations [SI 1998/1377]
Offshore Containers, Design, Construction, Testing, Inspection and Marking: BS EN 12079:2006, DNV 2.7-1
Offshore Freight Containers Design and Certification – DNV Certification Notes 2.7-1:1989
Special Waste Amended (Scotland) Regulations [SSI 2004/112]
Special Waste Amended (Scotland) Regulations [SSI 2005/22]
Specification for Wire Rope Slings and Sling Legs for General Lifting Purposes BS 1290:1983
Steel Wire Rope Slings, Safety, Slings for General Lifting Purposes BS EN 13414-1:2003
Step Change in Safety – Design and Handling of Cargo Baskets Guidance
Stowage of Goods in Freight Containers Guidelines BS 5073:1982
Temporary Portable Equipment Certificate [PE001]
Textile slings, Safety, Round-slings, made of man-made fibres, for general purpose use Guidelines BS EN 1492-1 Parts 1 and 2
Transport of Dangerous Goods and Use of Transportable Pressure Receptacles [SI 2004/568]
Transportable Gas Cylinders – Gas Cylinder Identification (excluding LPG) – Part 3 Colour Coding: BS EN 1089 – 3:2011
Transportable Gas Cylinders – Periodic Inspection and Testing of Seamless Steel Gas Cylinders BS EN 1968:2002
Waste Management Regulations [SI 1996/634]
Well Handled – Offshore manual handling solutions HSG 171
Oil & Gas UK Offshore Support Vessel Guidelines

Internet References
UK Statutory Instrument Web site www.legislation.hmso.gov.uk/stat.htm
British Standards Web site www.bsonline.bsi-global.com/server/index.jsp
Maritime and Coastguard Agency Web site www.mcga.gov.uk
Step Change Standard Lifting and Crane Operating Procedures Group www.stepchangeinsafety.net
Health and Safety Executive Home Page www.hse.gov.uk/hsehome.htm
Chamber of Shipping www.british-shipping.org
Oil & Gas UK www.oilandgasuk.co.uk
Marine Safety Forum www.marinesafetyforum.org/about.asp

6.0 RESPONSIBILITIES AND DUTIES

All parties involved in the supply chain have an obligation to ensure that cargo is properly packaged, prepared and secured for the duration of its journey to or from the offshore location, this includes the following:

- Vendors
- Haulage Contractors
- Logistics Service Providers
- Vessel Operators
- Aircraft Operators
- Offshore Operators

Successive parties in this chain are responsible for maintaining the integrity of the cargo.

To ensure compliance with these guidelines; scheduled Safe Cargo Handling Audits may be undertaken by any of the parties listed above. An audit questionnaire is available on the CD ROM and a list of known, annual audits is available from the Marine Safety Forum. This list should be consulted in order to minimise multiple audits of the same party.

Also available on the CD ROM is a best practice document for project related items.

6.1 Vendors

Vendors and their subcontractors are responsible for ensuring that cargo is prepared for shipment throughout its entire journey in compliance with relevant legislation and this document.

Cargo Summary Tickets (see Appendices 7.1 and 7.4) must be fully completed at the start of the cargo's journey. The Cargo Summary Tickets must be completed and signed by the person responsible, at the vendor's premises, for packing and preparing the cargo for its journey to or from the offshore location. Where there are multiple truckloads, one copy is to accompany each truck with the relevant items highlighted.

Yellow Cargo Safety and Security Tags as recommended by STEP Change in Safety (see Appendix 7.5) may be used in addition to Cargo Summary Tickets as a visual indicator that cargo has been checked and is packed in accordance with the Cargo Summary Ticket.

Vendors and their subcontractors must ensure that all applicable documentation accompanies the shipment, e.g. Temporary Portable Equipment Certificate (TPEC), Vendor's Certificate of Conformity (VCOC) or equivalent.

Non-conformance with this document WILL result in cargo NOT being forwarded until the necessary remedial actions have been carried out in conjunction with the relevant company. See Section 11, Non-Conforming Cargo.

6.2 Haulage Contractors

6.2.1 General

Haulage contractors are responsible for ensuring that drivers have the necessary competency levels for the task to be undertaken and that vehicles plus accessories are fit for the intended purpose.

They must therefore ensure that:

- i. Vehicles are suitable for the intended purpose, display the appropriate hazard warning panels and carry the requisite fire fighting equipment.
- ii. Drivers are provided with all other safety equipment that may be required in the event of an emergency involving the goods being transported. Such equipment may include, but is not restricted to, first aid equipment, protective clothing, etc.
- iii. During loading or discharge of cargo the driver, in conjunction with the plant operator, agrees the location of the safe haven and remains there until the operation is completed. Drivers should not remain in their cabs if this can be avoided. No person should be in the loading/unloading area if they are not needed. However there are times when the driver may be required to act as a 'spotter' to assist the forklift driver. The driver will position himself toward the back of the trailer (away from danger) and highlight any snagging hazards during offload of cuttings bins or gas racks. This follows incidents where these items are pulled off trailers as a result of snagging.
- iv. Drivers are provided, by customer/vendor in writing, with the mandatory transport information about the goods to be carried. Additionally, if the goods are classed as dangerous they must have a good understanding of the nature of the hazards and appropriate action to be taken in an emergency, and must possess a suitable Accord Dangereux Routiers (ADR) qualification.
- v. Drivers must not accept any cargo manifested for offshore without the appropriate Cargo Summary Tickets.
- vi. There is a storage space in the cab for this detailed information.
- vii. Drivers are trained to use the emergency equipment provided.
- viii. Drivers are adequately trained and instructed regarding their duties under ADR Regulations and, if required, are in possession of a valid certificate of training relevant to the task being performed.
- ix. Further guidance can be obtained in Dangerous Goods in Cargo Transport Units HSG 78.

Note: The contractor must ensure compliance with the Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations [SI 2007/1573], including the provision of a competent attendant where appropriate.

6.2.2 Dangerous Goods

Drivers must:

- i. Ensure that information about previous loads or substances carried has been destroyed, removed or kept in a securely closed container.
- ii. Keep the written information about the dangerous goods readily available throughout the journey.
- iii. Ensure precautions are available against fire, explosion or any other incident throughout the journey. This includes checking the fire extinguishers, normally on a daily basis.
- iv. Ensure appropriate hazard warning placards are available, accessible and legible.
- v. Ensure loads are properly secured on the vehicle (*Department for Transport Code of Practice Safety of Loads on Vehicles 3rd edition* provides guidance).
- vi. Leave unattended vehicles only in a designated parking area.

6.2.3 *Securing and Safety of Loads*

6.2.3.1 The driver is responsible for the safety and security of any load whilst it is on the vehicle and, wherever practical, should ensure that there are no loose objects on any cargo carried.

Safety and security of cargo being returned to vendors is the responsibility of the logistics service provider. Where several cargoes are carried on the same vehicle factors to be taken into account in planning the route must include:

- i. Compatibility of materials carried
- ii. Order of discharge

Forward planning will minimise risks associated with off-loading vehicles.

6.2.3.2 The method of securing the cargo on the vehicle will depend on the load being carried. When containers are being carried the following factors shall be taken into consideration:

- i. Twist locks are the preferred means of securing the items.
- ii. Where twist locks are not used, a minimum of two restraints per container must be used, ensuring the combined Safe Working Load (SWL) of the restraints in the configuration applied exceeds the weight of the cargo. Haulage Contractor may apply a third restraint to a unit that encroaches within the last 3ft of the trailer.

Local rules which have been subject to thorough Risk Assessment may, however, be applied to site transportation.

- iii. Container door(s) should be closed and the closing mechanism secured so that it cannot inadvertently open during handling and transport.
- iv. Empty Cargo Carrying Units (CCUs) specifically designed for the purpose may be stacked for road transport when compatible. Attention is drawn to the possibility that units that appear similar may not be compatible, and due care should be taken. Where CCUs are not designed to be stacked but nevertheless require road transportation in a stacked manner, a Risk Assessment must be performed which should include, but is not limited to:
 - the CCU is empty
 - no metal to metal contact
 - substantial dunnage is used
 - strapping is in excess of the normal requirements
 - where necessary, trailer stanchion pins are fitted

6.2.3.3 Lashing material will depend on the weight to be secured. Polyester cargo restraints will be sufficient for the majority of cargo but extremely heavy loads may have to be secured using high tensile chains and ratchet style loadbinders.

6.2.3.4 To minimise hazards to other road users, lifting sets should always be adequately secured while cargo is being transported. Where container lifting arrangements include a fifth leg, it shall also be secured.

6.2.3.5 When transporting tubulars they should, wherever possible, be “butted up” to trailers with steel headboards. The load shall be suitably secured, not exceeding the height of the headboard.

To ensure stability of the load, trailer pins should be fitted at the sides of the trailer and secure wedges employed where necessary. As each tubular bundle is landed the slings should be laid along the length of the bundle to prevent them being crushed by the next bundle. This will also simplify off-loading.

- 6.2.3.6 The weight of all items of cargo being carried must be known. Consignees should be notified in advance of any items considered as heavy lifts (7 tonnes or over) in order that the necessary arrangements for transporting and receiving the cargo can be made. Heavy lifts are defined in section 8.4.11.
- 6.2.3.7 Unstable objects will require special arrangements. Securing arrangements for such items should not be removed until the lifting equipment has been attached and tensioned in preparation for removal from the vehicle.

6.3 Logistics Service Providers

Logistics service providers are responsible for the safety of personnel and cargo during quayside operations, and for the safe loading or discharge of vessels whilst in port. Where service provision includes warehousing and central packing, see comments in Vendors Section 6.1.

During loading or discharge of cargo the Plant Operator, in conjunction with the Driver, agrees the location of the safe haven and the Driver remains there until the operation is completed.

Logistics service providers shall ensure that the vessel deck area occupied by cargo does not exceed utilisation factors, previously agreed with Vessel Master and charterers.

Loading should be in accordance with the installation's specific quayside shipping instructions.

Due consideration should be given to known discharge priorities for the cargo on that voyage in order to prevent "Cherry Picking".

6.4 Vessel Operators

The Master of a vessel is responsible for the safety of the crew and vessel at all times and has authority to decide whether operations affecting the vessel should proceed or be terminated.

- 6.4.1 The vessel Master is responsible for the safe and correct loading of his vessel. He should liaise with the Logistics Service Provider to ensure that the vessel is loaded correctly and in accordance with the Charterer's specific requirements.

The Master shall ensure that the deck area occupied by cargo does not exceed agreed utilisation factors.

Due consideration should be given to known discharge priorities for the cargo on that voyage in order to avoid "Cherry Picking".

- 6.4.2 In conjunction with the base operator, vessel Deck Crew should ensure the lifting equipment is readily available for handling at point of discharge, with particular attention to half height open top containers.

The vessel Deck Crew should make a final visual check to ensure the lift is safe prior to the hook being attached to the load for discharge offshore.

- 6.4.3 The Logistics Service Provider or Offshore Materials Coordinator must provide the vessel with a copy of the loading list complete with all relevant Dangerous Goods information for each installation to be visited and also an accurate manifest. These documents must be received in sufficient time to permit proper stowage of the cargo for the route envisaged.

- 6.4.4 The International Maritime Dangerous Goods (IMDG) Code contains internationally agreed recommendations for the safe transport of dangerous goods by sea. Although primarily aimed at vessel operators, the Code requirements affect everyone involved in the transport chain, from the manufacturer of the dangerous goods through to the consumer.

The Maritime and Coastguard Agency (MCA) prepare rules relating to the transportation of dangerous goods on offshore support vessels within the UKCS, Marine Guidance Note (MGN) 282 (M).

6.5 Aircraft Operators

The Captain of the aircraft is responsible for the safety of the passengers and aircraft at all times and has authority to decide whether operations affecting the aircraft should proceed or be terminated.

- 6.5.1 The aircraft Captain is responsible for the safe and correct loading of his aircraft. He should liaise with the Helicopter Landing Officer (HLO) or onshore equivalent to ensure that the aircraft is loaded correctly.
- 6.5.2 The HLO or onshore equivalent must provide the Captain with a copy of the manifest complete with all relevant Dangerous Goods information. These documents must be received in sufficient time to permit proper planning of the flight.
- 6.5.3 The International Civil Air Transport Association (IATA) Dangerous Goods Regulations contain internationally agreed recommendations for the safe transport of dangerous goods by air. These Regulations affect everyone involved in the transportation of Dangerous Goods by air.
- 6.5.4 The Captain of an aircraft must be supplied with information concerning any Dangerous Goods placed aboard his aircraft. This is a "Notice to Captain" or "NOTOC", and this function is carried out by either the operator or an agent.

Note: Offshore - a person providing the information is acting as the helicopter operator's agent and the captain will need to see and keep a copy of the completed checklist, and may need to view a copy of the qualified person's acceptance certification.

6.6 Offshore Operators

The OIM is responsible for the safety of the Offshore Installation, all personnel on board and for safe cargo handling operations.

- 6.6.1 Offshore Operators are responsible for ensuring that cargo is prepared for shipment throughout its entire journey in compliance with relevant legislation and this document.
- 6.6.2 Cargo Inbound Pocket Checklists (see Appendix 7.2 and 7.3) should be fully completed at the start of the cargo's journey. The Cargo Inbound Pocket Checklist to be completed and signed by the person, at the installation, responsible for checking the packaging and preparation of the cargo for its journey back to the vendor's premises.
- 6.6.3 Alternatively, inbound orange, as recommended by STEP Change in Safety, or interfield green Cargo Safety and Security Tags (see Appendix 7.5) may be used as a visual indicator that cargo has been checked and is packed in accordance with the Cargo Inbound Pocket Checklist.
- 6.6.4 Non-conformance with this document WILL result in cargo NOT being forwarded until the necessary remedial actions have been carried out. This may result in delays or other problems in the onward shipment of the cargo.
- 6.6.5 All non-conformances will be formally documented and written resolution required from the offending location.

7.0 DROPPED OBJECTS

Dropped objects continue to be a major health and safety issue within the industry.

A dropped object can be defined as any loose item found on cargo which is not properly restrained and therefore has the potential to fall off whilst in transit by road or sea.

Common examples of potential dropped objects are hand tools which have been used in preparation of the lift, debris, stones, and even ice.

The law of physics dictates that even the smallest nut can have a devastating effect when it falls 90 feet on to a person handling cargo on the deck of a supply vessel. Similarly, a loose object falling from a travelling truck could have disastrous results to other road users.

7.1 Checking for Dropped Objects

At every stage of the supply chain, the following checks should be taken to mitigate the risk of potential dropped objects:

- i. Check all forklift pockets (transverse and longitudinal) for loose objects or debris.
- ii. Check top of all lifts.
- iii. Check all horizontal and vertical surfaces including grating floors e.g. gas racks.
- iv. Check within and around the structure of open framed lifts.
- v. Check tanks to ensure all valve caps are closed and secured.
- vi. Check bundles of pipe externally and internally and that protectors are properly fitted.
- vii. Ensure thread protectors and end-caps are securely fastened.
- viii. Ensure contents are properly secured to prevent items escaping during transit.

Any potential dropped objects that are found must be removed prior to transportation.

7.2 Verification of checks

To verify that the CCU has been fully checked for potential dropped objects it is a mandatory requirement that the applicable section of the Cargo Summary Ticket is completed for all outbound cargo and the Cargo Inbound Pocket Checklist and/or the Orange Cargo Safety and Security Tag is completed for all inbound cargo. Please refer to Section 9.0 CCU Cargo Guidance.

7.3 Dropped Objects Prevention Scheme (DROPS)

To access detailed information and best practices regarding dropped objects please visit the following web site www.dropsonline.org.

8.0 LIFTING AND SLINGING

8.1 Lifting Operations

All lifting operations performed and the lifting equipment utilised must satisfy the requirements of the Lifting Operations and Lifting Equipment Regulations [SI 1998/2307] (LOLER).

Specific guidance on complying with these Regulations is given in the LOLER Approved Code of Practice (HSE Books L113).

The Duty Holder for the Offshore Installation will have, in their Safety Management System, documented procedures which will ensure that the requirements of LOLER are met. Reference must be made to such documentation for any lifting operations undertaken on an installation; lifting equipment going to an installation, and items which have to be lifted onto an installation.

LOLER applies both offshore and onshore. For onshore operations reference must be made to the 'employers' procedures for complying with LOLER.

Offshore specific legislation places duties upon the 'Duty Holder' but as LOLER is not industry specific, LOLER place the duty upon 'the employer' or 'a self-employed person' or 'a person (carrying out a trade or business) who has control of the lifting equipment', that is in control of the way it is used, or of the persons managing or supervising the use of the lifting equipment.

The Duty Holder for an offshore installation is an employer and can therefore have duties under LOLER.

8.2 The Organisation of Lifting Operations

A key change introduced by LOLER is associated with the organisation of lifting operations. Every lifting operation involving lifting equipment must be properly planned by a competent person, appropriately supervised and carried out in a safe manner.

8.2.1 *Planning the Lifting Operation*

The degree of planning will depend upon the type of the lifting operation to be undertaken. Reference must be made to the Duty Holders documented procedures for LOLER compliance. An approach, which is frequently adopted, is to classify the lifting operation as either routine or non-routine.

Routine lifting operations are those that are frequently undertaken and will generally include all normal cargo operations. Documented procedures will have been developed for each of these routine lifts based upon a Risk Assessment and a lifting plan. Each time the operation is to be performed reference will be made to the procedure and all personnel involved in the lifting operation prior to performing the task will discuss this at the toolbox talk. Procedures must be kept under review to ensure that they remain valid.

In the case of a non-routine lifting operation this will need to be planned by a competent person, be subjected to a Risk Assessment and the method be detailed in a written lifting plan. The Duty Holder's LOLER compliance document will specify the competent person(s) who perform this function.

Further guidance on lifting operations is shown in a typical Lifting Operations Categorisation and Controls Table, see Appendix 8.

8.2.2 Supervision of the Lifting Operation

The degree of supervision is dependent upon the type of lifting operation to be undertaken and is therefore proportionate to the risk.

For routine operations, dedicated supervision of the operation may not be required but a competent person must be in control of the operation. This competent person will co-ordinate and control all aspects of the lifting operation, for example this person could be the Banksman. In addition someone will also need to be in control of the toolbox talk, to ensure all the personnel are aware of the task, the documented procedures to be followed and their responsibilities. The person responsible for conducting the toolbox talk will again be documented in the Duty Holder's LOLER compliance document.

Non-routine operations will always require supervision and this will probably be undertaken by the competent person who has undertaken the Risk Assessment and produced the lifting plan.

8.2.3 Competence and Training

A lifting operation can only be carried out in a safe manner if it is undertaken by competent personnel.

Reference must be made to the Duty Holder's LOLER compliance document which will detail the personnel required for particular lifting operations, the training requirements to ensure initial knowledge and subsequent training/experience to ensure competence is maintained.

8.2.4 Classification of Lifting Operations

The classification of the lifting operation to be performed is an essential part of the planning activities. How this is undertaken will be documented in the Duty Holder's LOLER compliance document, but all the planned lifting operations will need to be classified by a competent person. It is important that this person continually reviews all operations, as there will be factors that may change the operation from being a routine into a non-routine activity.

This person will probably be the same as the one who produces the lifting plans and will identify, for example, certain types of loads which have an unusual lifting geometry, or be inherently unstable, or have other unusual characteristics.

Such lifts may include:

- i. Loads with the centre of gravity above the lifting points.
- ii. Loads with an offset centre of gravity.
- iii. Loads with a narrow or small base.
- iv. Extremely long loads that tend to rotate.

Refer to Appendix 3 for further Special Cargo instructions and Appendix 10 for transport of Abnormal or Wide Loads.

8.3 Undertaking the Lifting Operation

Prior to carrying out any lifting operation certain precautions shall be observed.

They are applicable to any lifting operation and include holding a toolbox talk at which the details of the task are discussed.

This will include for routine lifts the documented procedures and in the case of non-routine lifts the Risk Assessment and lifting plan. Specific responsibilities will be allocated to nominated persons at the toolbox talk, including the identification of the competent person who will co-ordinate and control all aspects of the lifting operation.

The nominated person(s) will:

- i. Ensure at all times that the load does not pass over personnel.
- ii. Ensure that a clear and effective communication system is employed and understood by all personnel involved with the lifting operation.
- iii. Ensure there is adequate lighting in the pick-up and lay-down areas and effective and unobstructed access ways and escape routes exist.
- iv. Ensure the lifting equipment is certified for current use.
- v. Ensure any restrictions to the lift are removed, e.g. hold-down bolts, sea fastenings.
- vi. Confirm that the appropriate rigging for the lift is correctly installed and the lifting sets are not twisted or snagged.
- vii. Ensure shackle bolts are tight and adequately secured.
- viii. Ensure pick-up and lay-down areas are within the crane radius for the load being lifted.
- ix. Confirm the weight of any particular load or bundle. This should be confirmed when a load is stationary and all load cells used for this purpose should be calibrated on a 12 monthly basis, as a minimum.
- x. Ensure the hook is positioned above the load's centre of gravity.
- xi. Ensure only one CCU is lifted at any one time.
- xii. Ensure slings of equal length are used when handling tubulars.
- xiii. Ensure the load lifts horizontally.
- xiv. Ensure that the operation is controlled from a position with an unobstructed view. If at any stage the view becomes obstructed, the job should be stopped while the Banksman re-positions.

Should any doubt exist concerning the stability or security of any load the competent person for planning lifting operations must be consulted.

Refer to Appendix 4 for details when shipping drilling tubulars.

8.4 Pre-Use Inspection & General Precautions

In each and every case where lifting equipment is to be employed it must be checked for defects in arrangements and/or physical damage, before use by the person in direct charge of the operation to comply with LOLER.

The employer must ensure that their personnel have received appropriate training and instruction to carry out these checks.

Trained personnel must be able to identify damage to the elements of the equipment and accessories, distortions and other obvious faults that could affect the safe operation and use of the equipment.

8.4.1 General Precautions

Checks prior to the attachment and use of slings and shackles include:

- i. Confirm that and the sling has a visible unique number and Safe Working Load (SWL) mark.
- ii. Examine for wear, corrosion, abrasion and mechanical damage, which may render the sling(s) unsafe.
- iii. Check that the sling set is correctly fitted, e.g. no twists in the legs.

- iv. Confirm that the SWL capacity for the sling set at EACH side of load is adequate for the entire weight to be lifted.
- v. Check that pin size and type is correct for the type of shackle.
- vi. Check that the appropriate securing arrangements are installed (split pins, wire housing, etc.). R clips should not be used for this purpose.

The preferred style of shackle is the bow or anchor type fitted with a safety pin, which is, bolt, nut and split pin. The bolt or pin shall be of the same material as the body of the shackle.

Note: Screw pin type shackles will only be accepted if they have been secured with a steel serving / seizing wire. No alternative solutions will be accepted.

Ensure the correct type of shackle bolt or pin is fitted. A common problem exists where missing high-grade shackle pins are replaced with standard bolts that are not of the same material as the body and are not capable of taking the designated load.

The crane hook link (master-link) must have a minimum dimension of 270mm x 140mm (specification for Wire Rope Slings and Sling Legs for General Lifting Purposes, BS EN 12079) to minimise the risk of trapped fingers when attaching the hook to the lifting arrangements.

8.4.2 Lifting Arrangements – CCUs

CCU Lifting arrangements almost universally consist of either wire or chain sling sets made up using appropriate connection arrangements.

Each form of rigging type has advantages and disadvantages. It is important that users understand the particular features and risks associated with each.

Arrangements incorporating wire slings are preferred in the UK, Irish, Danish and Dutch waters, those which include chain are preferred in the Norwegian sector and also elsewhere.

Guidance in the use and inspection of arrangements made up using each type of sling are included in the following sub-sections.

8.4.3 Wire Slings – General Precautions

General precautions when using lifting arrangements made up using wire slings include:

- i. All sling legs, which are connected directly to master-links or to shackles, should have thimbles fitted to reduce the bend radius on the wire and increase their serviceable life.
- ii. To avoid out-of-plane forces, the maximum number of lifting legs allowed on a single master link or ring is two. It is permissible to have a third leg on this ring, but only if it is to be used as a top lifting leg. Three and four leg lifting slings should be fitted to quadruple assemblies, i.e. a main lifting ring with two sub-links.
- iii. CCUs should be fitted with either a four or five leg lifting assembly with master link, depending on CCU type. The fifth leg is designed to hang over the side of the unit to assist in its hook-up, eliminating the need for personnel having to climb on top of containers to attach or release the crane hook.
- iv. This fifth leg is not a design requirement, but it is a preferred option and, if fitted, should "fall short" of the height of the CCU to facilitate connection and release of the hook. If the dimensions of the CCU are such that the fifth leg would present a snagging hazard at other stages of the supply chain, the fifth leg should be omitted.

- v. There is a recommended minimum wire rope diameter of 13mm allowed for wire rope slings. Operationally, it may be necessary to use wire rope of a smaller diameter however, wire rope of a smaller diameter is susceptible to impact damage and appropriate checks should be carried out.

Pre Use Inspection

Check that the SWL is adequate for the load.

Check that the sling has a plant number / ID mark.

Examine each individual leg along its entire length and check for:

- i. Wear
- ii. Corrosion
- iii. Abrasion
- iv. Mechanical Damage
- v. Broken Wires
- vi. Internal Deterioration (only if wire rope is suspect e.g. excessive external corrosion).

Check that the end of the loop does not terminate inside the ferrule (i.e. the rope end should protrude slightly but no more than 1/3rd of the diameter) unless the ferrule is of the longer tapered design which has an internal step.

The ferrule should be free from cracks or other deformities.

Examine each thimble and check for correct fitting, snagging damage and elongation (stretched thimbles / eyes could indicate possible overload).

Examine wire rope around thimbles as it is often abraded due to sling being dragged over rough surfaces.

Examine master-link/quadruple assembly and check for wear, corrosion and cracking.

If fitted with hooks, check for wear, corrosion and cracking and ensure safety latch functions.

8.4.4 Chain Slings – General Precautions

General precautions when using lifting arrangements made up using chain slings include:

- i. All arrangements are correctly certified in accordance with the relevant legislation (BS EN 818-4).
- ii. Chains and components employed in the make-up of the arrangements are constructed from alloy grade 8 (or better), and have properties suitable for working in extremely cold conditions (-20 °C).
- iii. All connections are compatible and fit for the purpose intended.
- iv. Agreement is obtained from all the parties involved.

Pre Use Inspection

Check that the SWL is adequate for the load.

Check that the sling has a plant number/ID mark.

Visually examine the chain sling along its entire length and check for:

- i. Distortion in chain links (nicks, bends, twists, elongated links)
- ii. Wear between chain links

- iii. Wear between chain links and load pins
- iv. Heat damage
- v. Chemical damage
- vi. Wear, stretch, and twisting on end terminations (including shortening clutches if fitted)
- vii. Function of safety catches (where fitted)
- viii. Security of load pins.

8.4.5 Webbing Slings – General Precautions

Certified webbing (or fibre) slings, with adequate site control, are suitable for particular lifting operations at the worksite or on board the installation.

Such slings should not normally be used as the primary means of lifting from or to vessels unless the operation has been the subject of a thorough Risk Assessment.

Pre Use Inspection

Check that the SWL is adequate for the load.

Check that the sling has a plant number/ID mark.

Visually examine web sling along its entire length and check for:

- i. Cuts or tears
- ii. Burst stitching (especially around the eyes)
- iii. Chemical damage
- iv. Heat damage
- v. Ingress of foreign bodies into fibres
- vi. Distortion/wear in metal eyes (where fitted).

Note: When checking round slings, should any cuts be found in the outer protective cover, the sling should be condemned i.e. do not use as the inner strength core could be damaged.

8.4.6 Shackles – Pre Use Inspection

- i. Check that the SWL is adequate for the load.
- ii. Check that the shackle has a plant number/ID mark.
- iii. Remove shackle pin (if accessible) and examine for wear, deformation and cracking.
- iv. Ensure it is the correct pin for the shackle (i.e. NOT a high tensile pin in an alloy shackle).
- v. Check pin threads for wear/deformation.
- vi. Examine shackle body and check for wear in the crown and pin holes, deformation and cracking.
- vii. Check alignment of pin holes and ensure the pin fits correctly.
- viii. In the case of safety pin shackles, ensure split pins are fitted.

8.4.7 Master Links and Quadruple Assemblies – Pre Use Inspection

Check that the SWL is adequate for the load.

Visually examine master link(s) along its entire length and check for:

- i. Wear
- ii. Distortion
- iii. Elongation
- iv. Cracks
- v. Excessive corrosion

8.4.8 *Fabricated Items*

Where fabricated items include integrated lifting points and are not supported by a CE declaration of conformity, written documentation from a certifying authority that they are 'fit for the purpose' shall be forwarded to the handling agent.

Lifting arrangements must be designed to comply with BS EN 13414 as well as Code of Practice for Inspection and Repair of Offshore Containers (BS 7072).

Lifting arrangements for fabricated items should be consolidated into a single master point.

Multiple terminations are not normally acceptable.

8.4.9 *Transit Slings*

Transit slings are used for the transportation of equipment to and from offshore installations and onshore sites and should only be used for this purpose.

Transit slings should not be used for general lifting purposes, as they are not part of the installation's lifting equipment.

A formal system is required to manage the use of transit slings to ensure that they comply with all relevant legislation and can be identified.

8.4.10 *Plastic Coated Transit Slings*

Plastic coated transit slings may be used for transporting easily damaged items, subject to thorough Risk Assessment which must take into account seasonal factors, such as low temperature cracking of plastic sheathing.

These slings must be subject to the same controls as normal transit slings.

8.4.11 *Heavy Load Identification*

If the load is seven (7) tonnes or over it should be considered as "HEAVY" and identified as such by means of a pennant or flag attached to the fifth leg or close to the master link assembly of the lifting set prior to shipping.

Although seven tonnes is a normally accepted standard, certain locations may have a higher or lower heavy lift threshold. Location specific information should be provided by the offshore operator.

Particular care must be taken when shipping to or from small, normally unattended installations.

8.4.12 *Use of Tag Lines*

The use of tag lines should be avoided as they could involve personnel standing in unsafe positions. If it is considered necessary tag lines shall only be used after a Risk Assessment has been undertaken, see Appendix 11.

8.4.13 *Thorough Examination and Inspection of Lifting Equipment*

A "thorough examination" is a visual inspection carried out by a competent person.

In the case of equipment or accessories for lifting persons (all forms of “man riding” equipment) this examination should take place at least every six months or in accordance with a written scheme of examination.

The user or owner has a choice whether to thoroughly examine the equipment according to the intervals specified in LOLER or, alternatively, have a written scheme of examination drawn up and thoroughly examine the equipment in accordance with such scheme.

If the item is being shipped under the provision of a CE declaration of conformity, this must be dated within one year of date of shipment.

8.4.14 *Written Scheme of Examination*

A written scheme of examination may be drawn up by the user or owner provided they have the necessary competence.

The scheme should specify the intervals at which the lifting equipment should be thoroughly examined. Any examination scheme for lifting equipment should take into account the lifting equipment’s condition, the environment in which it is used, the number of operations and the nature of load the equipment will be subject to.

If a written scheme of examination is to be used, it is essential that the user or owner is able to produce the examination scheme if requested by an inspector from the relevant enforcing authority.

If the user or owner is unable to produce the examination scheme, the enforcing authority will assume that the specified examination period laid down in LOLER has been followed.

8.4.15 *Colour Coding of Lifting Equipment*

Arrangements based on colour codes attached to lifting equipment are frequently used to indicate the test status of lifting equipment in use on a particular site.

Where such arrangements are in use the current colour, indicating that the examination certificates of any lifting equipment bearing this colour is “in date”, should be conspicuously displayed immediately adjacent to the work site.

9.0 CCU CARGO GUIDANCE

9.1 Introduction

Cargo guidance in this section outlines the principal points to be considered when preparing cargo for shipment to and from offshore locations.

A Cargo Summary Ticket, showing the minimum checks to be performed, must be fully completed before the start of the cargo's outbound journey, and accompany the cargo to its ultimate destination.

The Cargo Inbound Pocket Checklist and/or the Cargo Safety and Security Tag (see Appendices 7.2, 7.3 and 7.5) should be fully completed before the start of the cargos' inbound journey, and accompany the cargo to its ultimate destination.

The above documents must be completed and signed by the personnel accepting responsibility for the completed checks.

9.2 Responsibilities for Cargo Checks within the Supply Chain

9.2.1 Packing

Management at each site shall ensure that a person or persons are nominated to act as Load Checker(s). Their responsibility will be to carry out a check of cargo carrying units (CCUs) to ensure that it is packed and secured properly as soon as practicable prior to it being lifted onto transport.

In the event that the Load Checker believes that a load has not been properly packed, he/she shall bring this to the attention of the Packer so that remedial action can be taken immediately.

9.2.2 Vendors

Prior to cargo being transported from the vendor premises to the Shore Base for shipment offshore by sea, the vendor shall ensure that a person or persons are nominated to act as a Load Checker (s). Their responsibility will be to ensure that all cargo is inspected to ensure that it is packaged properly and is safe and secure for transportation by road and sea. Once the vendor is satisfied that the cargo is packaged properly and safe and secure for shipment, the appointed person shall attach a tie-wrap and yellow label to the load and initial and date same. They shall also ensure that a Cargo Summary Ticket (see Appendix 7.1) is completed in accordance with the Oil & Gas UK Best Practice for 'The Safe Packing and Handling of Cargo To and From Offshore Installations' and accompanies each load.

9.2.3 Shore Base

On receipt and prior to outbound cargo being transferred to the quayside for loading onto a supply vessel, the Load Checker shall carry out a visual inspection of all cargo to ensure that it is secured properly.

Once the Load Checker is satisfied that the cargo is safe to be transported by road and sea, he will ensure that a tie-wrap and yellow label is attached to a suitable and conspicuous point on the load. Where the cargo has been packed at the Shore Base, the label is to be initialled and dated by the Load Checker for traceability and accountability purposes.

9.2.4 Quayside

Once the cargo has been loaded and is in transit there should be no occasion that should cause its security/ integrity to be jeopardised. However it is imperative that final cargo safety and security inspection is carried out by the Shipper at the nominated quayside, although the fitting of additional security ties and labels is not required.

9.2.5 Shipper (Offshore)

The above procedure shall also apply for all inbound cargo prepared at the offshore site, except that loads will be tagged with an orange label and tie-wrapped.

Inbound cargo destined for onshore base or onward shipping to a vendor shall be inspected at the quayside prior to it being loaded on to the transporting vehicle.

Refer to Appendix 1 for the particular points to be considered when preparing cargo for shipment to and from offshore installations in tanks.

9.3 General

All companies providing a service for owners and operators of installations should ensure that:

- i. All CCUs and lifting gear used to ship materials to or from offshore installations are correctly chosen for the purpose, in terms of type, size and load carrying capacity. They should satisfy themselves that a current testing and inspection regime is in place.
- ii. All certification is fully in date at the time of use, and has sufficient test period remaining so as to avoid the CCU certification expiring when offshore – normally 30 days minimum.
- iii. Only CCUs specifically designed for the purpose and which are compatible should be stacked.
- iv. Where any possibility exists that units are to be double stacked, the procedures and arrangements to be employed must be fully risk assessed. Explicit permission is required from the Site manager/OIM before the commencement of relevant operations.
- v. Precautions to be observed when stacking long cargo baskets are specifically addressed in 'Design and Handling of Cargo Baskets' published by the Step Change initiative, details of which are included in the list of References.
- vi. Containers with corner castings, which are employed as a means of lifting the container, should not be presented for shipment.
- vii. Containers that are lifted using corner castings are, in reality, ISO containers, and are designed for use in general marine transport, loading and unloading in ports and inland waterways, by means of a four-point vertical lifting device i.e. spreader beam.
- viii. Reference should be made to MSC/Circ 860 dated 22 May 1998 'Approval of Offshore Containers Handled in Open Seas Guidelines MSC/Circ 860', which can be found in the IMDG Code Supplement.

Note: It should be noted that some operators may require a longer minimum period of test validity as a condition of a unit being shipped offshore.

9.4 Cargo Handling and Shipping Equipment

- 9.4.1 All CCUs should be provided complete with lifting sets in place.
- 9.4.2 CCU doors must be properly secured, with both top and bottom locking cams fully engaged, and door handle locking mechanism secured with a seal. Typical latch securing arrangements include custom seals, steel bands, stainless steel karabiners or tie-wraps with minimum width of 7.6 mm (1/4").
- 9.4.3 When the CCU contains Dangerous Goods, to enable ready access in the event of an emergency, padlocks should not be used. It is however, recognised that certain classes of Dangerous Goods, i.e. explosives and radioactive material, are required to be padlocked for security purposes to prevent interference.
- 9.4.4 The use of boat-shaped skips has been identified as a factor in incidents, and for the purposes of offshore use should be discontinued.
- 9.4.5 Where open cargo baskets are provided for the return of general waste, they must be provided with safety nets to retain the contents.
- 9.4.6 Wherever possible scaffolding tubes and boards must be pre-slung into a CCU designed for dynamic loading, i.e. (4 point lift) and transported to facilitate the safe removal / unloading offshore. Other associated equipment, e.g. clips, should be secured and containerised.
- 9.4.7 Alternative arrangements for shipping these goods should be subject to Risk Assessment.

9.5 General Checks for Open and Closed CCUs

The following checks, some of which are illustrated in 9.7 and 9.8, must be carried out:

- i. Check condition of CCU, including operation of doors, door hinges, seals and locks, tie-down points and ensure that generally there are no signs of excessive corrosion or deformation.
- ii. Check all certification is fully in date at the time of use, and has sufficient test period remaining so as to prevent the CCU certification expiring when offshore.

Containers with less than 30 days currency of certification will not be shipped to any offshore installation, except by written agreement with the offshore installation.
- iii. Remove old hazard placards and labels when the unit does not contain hazardous goods.
- iv. With open CCUs, ensure the drainage holes are clean and free of debris. The larger open top containers with blocked drainage holes can hold up to 18 tonnes of water.
- v. Check that the units are clean and free of debris prior to loading.
- vi. Use cargo restraining nets in all closed CCUs. Ensure that nets are the correct size and type for the CCU and that the fixing points and nets are in good condition.

- vii. Check CCU roof, forklift pockets and all ledges for potential dropped objects such as tools, dunnage, stones, etc.
- viii. Always perform visual inspection of lifting sets and fixed lifting points.
- ix. Check the container door(s) are closed, dogs (cams/claws) at top and bottom are fully engaged and the closing mechanism secured with a form of secondary retention e.g. tie wraps or karabiners so that it cannot inadvertently come open during handling and transport. Full integrity checks must be performed as part of the trip examination.

9.6 General Checks for Specialist Equipment

Examples of specialist equipment are compressors, ROV cable units, Wireline Cabins, skid mounted pumps, and other skid mounted units. However, this list is not exhaustive.

In addition to the checks listed in 9.4 above, the following checks should also be considered:

- i. Removable items are secured for shipment or removed and placed within a CCU.
- ii. Locking mechanisms released for operation are re-secured, as per manufacturer's instructions, for transportation.
- iii. Due consideration should be given to reducing the additional snagging hazards associated with this type of equipment.
- iv. The carriage of machinery containing dangerous goods (fuel) should be in accordance with the IMDG Code and MGN 282 (M). Where relevant, a copy of the Marine Competent Authority Approval (MCAA) documentation shall accompany the shipment.

9.7 Packing Cargo in CCUs

In the course of offshore operations, cargo in transit and its sea fastening arrangements are likely to be subjected to forces acting in the three axis. Such forces can be the result of shock loadings during transfer operations or vessel motions in a seaway, particularly during bad weather.

Goods being transported by other means will also experience significant forces as a result of vehicle motions or rough handling during transit. Whilst being carried on moving vehicles, goods and their securing arrangements may also be subjected to exceptional loads during emergency situations.

These forces can result in violent, unexpected movements of the goods both at the time an incident occurs or when the package or CCU is subsequently opened. Goods must therefore be adequately secured against potential movement within their individual packages. In turn, where the packages are loaded into a CCU they must likewise be correctly stowed and secured.

Further guidance can be found in Dangerous Goods in Cargo Transport Units HSG 78.

Failure to recognise and comply with these requirements could result in severe injury to personnel and material damage.

- 9.7.1 All packaging must be suitable. It must prevent any of the contents moving or escaping under adverse weather conditions and rough handling. Examples of packing are in Appendix 5.
- 9.7.2 When packing goods, metal to metal contact should be avoided where possible, to minimise movement during transit. Where this becomes a necessity, a Risk Assessment should be carried out.
- 9.7.3 Management arrangements in the organisation must ensure that the personnel who do the work are properly trained. Training should cover theoretical guidance and practical application of the relevant sections of this document relative to their everyday duties.
- 9.7.4 As a minimum requirement the duties of the Packer should include the following areas:
- i. All packages must be suitable, properly labelled and in satisfactory condition
 - ii. Packages must be stowed safely and properly secured in the CCU. Checks must be made on the weights of the packages to ensure a safe load distribution and to prevent the maximum permitted gross weight of the CCU being exceeded.
 - iii. Placard the CCU with the destination label.
 - iv. When suspended, lift must be level in both axes, <3% of length/breadth (equivalent to 6" in 20', 18" in 50').
 - v. Affix any relevant hazard placards and labels when hazardous goods are carried.
 - vi. When loading CCUs, consideration should be given to manual handling constraints according to the Operators requirements, e.g. Shipping Matrix. Always load the heavier cargo at the bottom of the container if using a shelved mini container. Particularly heavy items should generally be shipped in open CCU's.
 - vii. If necessary, use appropriate packing between items in CCU.
 - viii. Ensure CCU contents are lashed or wedged securely, to avoid movement in transit.
 - ix. Use cargo restraining nets in all closed CCUs. Ensure that nets are the correct size and type for the CCU and that the fixing points and nets are in good condition.
 - x. Check the container door(s) are closed, dogs (cams/claws) top and bottom are fully engaged and the closing mechanism secured so that it cannot inadvertently come open during handling and transport.
 - xi. Ensure that no equipment is loaded above the height of an open CCU without a Risk Assessment. This is to prevent snagging, damage to contents and potential dropped objects. The use of a net, tarpaulin, wooden battens or roof bars is recommended to mitigate the risk of snagging.
 - xii. Tape must never be used to secure loose items which could constitute a potential dropped object hazard. Loose items should be containerised and

protective packaging should be secured using a certified lashing product (refer to manufacturer's instructions for correct use of lashing product).

- xiii. To ensure there is no cargo movement, take extra care when packing cargo into CCUs that have internal sea-fastening lugs, otherwise cargo could move and be punctured and/or an environmental spill could result.
- xiv. Operator's requirements vary, but it is generally accepted that sacked and drummed mud and cement chemicals do not require sea-fastening within mini containers provided they are palletised, double shrink-wrapped, occupy most of space within the container, a secondary door net is fitted and there are no protrusions within the container which could puncture the cargo (refer to 9.7.4 xiii). Intermediate bulk carriers (IBCs) should always be sea-fastened within their CCU because they do not fulfil all the above criteria.

Written information concerning loading and the potential hazards must be prepared. This must be made available to the next person handling the CCU.

9.7.5 *Selection of Lashing Equipment for Packing CCUs*

During transportation, acceleration, braking, centrifugal and vertical act on the load. A prerequisite for safe transport is a suitable CCU with the appropriate structure and necessary load lashing devices. The task of load lashing is to secure the load against the effect of these forces to prevent slipping, tipping or falling.

Lashing arrangements must be made up using appropriately rated and certified materials e.g. woven cord-lash or ratchet binding straps. Wooden dunnage or similar material should only be used after a suitable and sufficient Risk Assessment has been completed and only ever in association with certified lashing material.

Total certified capacity of the lashing arrangements should be greater than the weight of the items being secured. Lashings should be equally distributed across the item.

9.7.6 *Wheeled Cargo*

All wheeled cargo, irrespective of weight or dimensions, should be secured sufficiently for shipping by effectively taking the wheels out of commission, i.e. raised on timber. It is unlikely that conventional lashing would be sufficient for this task.

9.7.7 *Packages*

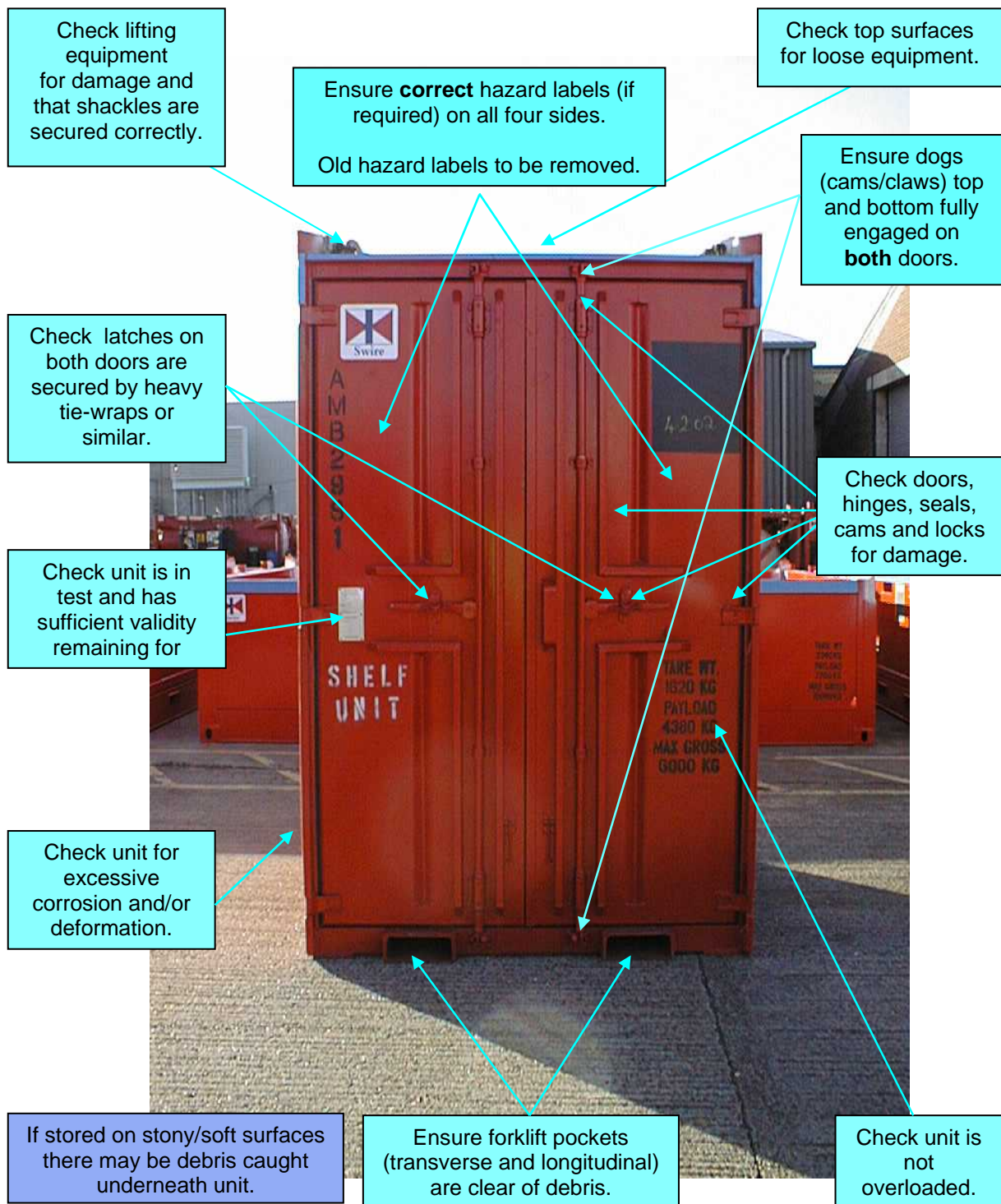
General packing provisions are as follows:

- i. Polystyrene chip packing and hessian sacks should not be used due to environmental and safety reasons. The product should be packed using bubble wrap.
- ii. Nylon sacks used to send heavy items by air should be packed into cardboard boxes.
- ii. Items weighing more than 25kg should be labelled as "heavy" for manual handling reasons. Attention is drawn to Step Change recommendations regarding the use of coloured weight tape to identify handling risks.
- iii. All sharp and protruding objects should be removed.

9.7.8 *Crates and Pallets*

- i. Wooden crates are suitable for single use shipments of new equipment, spares etc., they should **NOT** be used for repeated use e.g. shipping of tools/equipment that are to be returned onshore after use etc.
- ii. When wooden crates are used, lids should be 'nailed' and 'banded', or have other means of secondary retention fitted during all transit operations and when being stored in exposed areas offshore and onshore.
- iii. Refer to British Standard BS1133-8:1991 for more information on wooden boxes, cases and crates standards.
- iv. Refer to International Standard ISO 6780:2003 for more information on pallet standards.

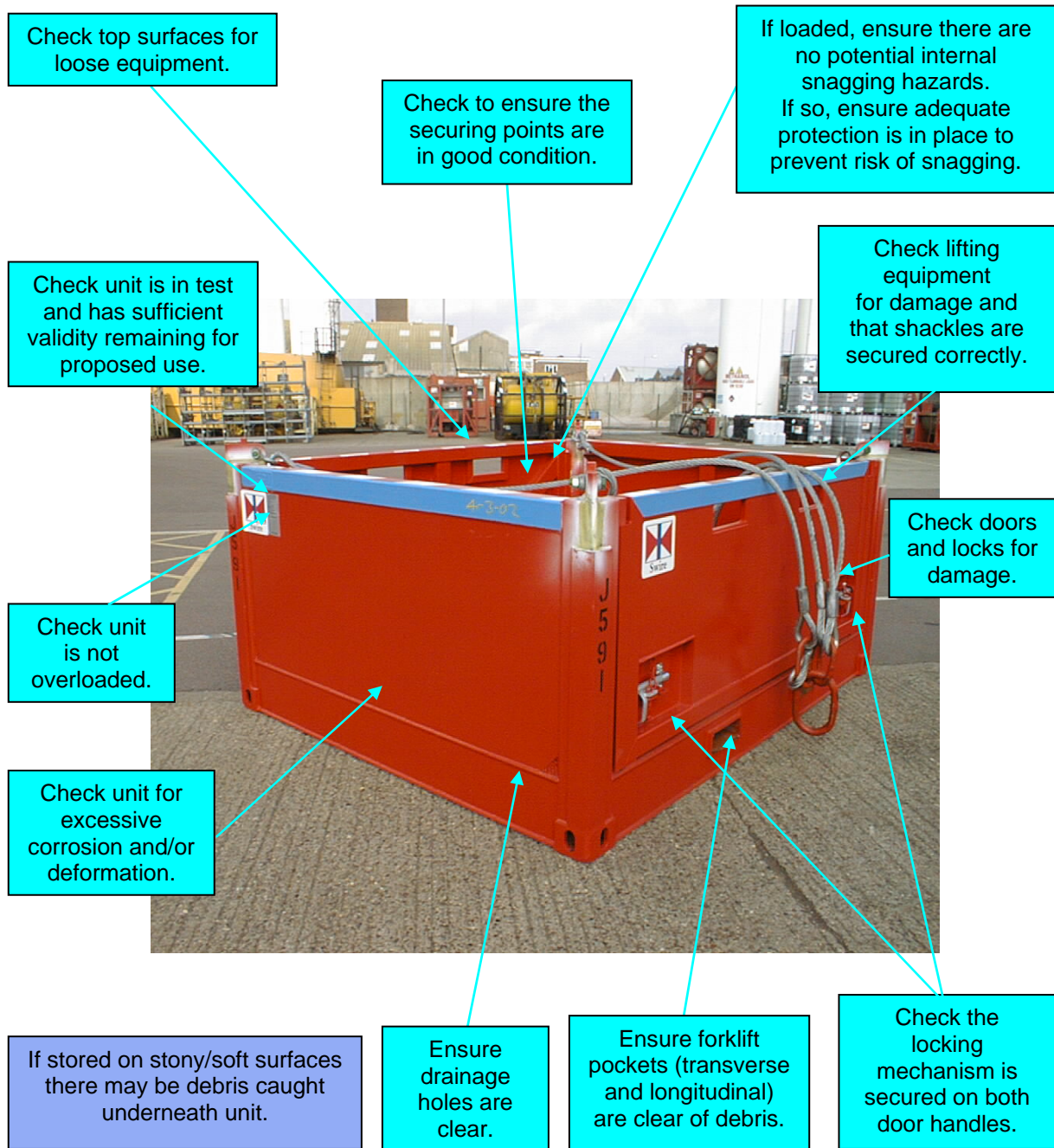
9.8 Closed Container – Key Points from Checklist



Check that the cargo restraining net is serviceable and that the method of securing it is in working condition.

9.9

Open Container – Key Points from Checklist



9.10 Snagging Hazards

Prior to shipping, the vendor or person responsible for packing CCUs must perform appropriate Risk Assessments and, if appropriate, introduce control measures to prevent snagging of lifting arrangements with contents during cargo operations.

Examples of measures to be considered include:

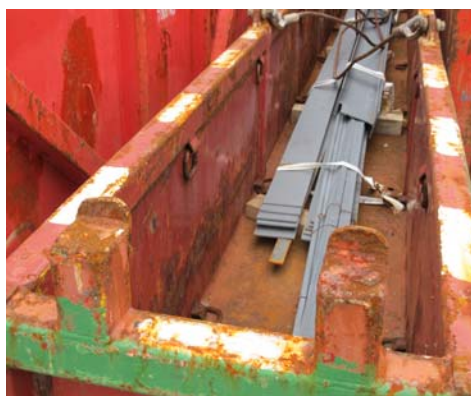
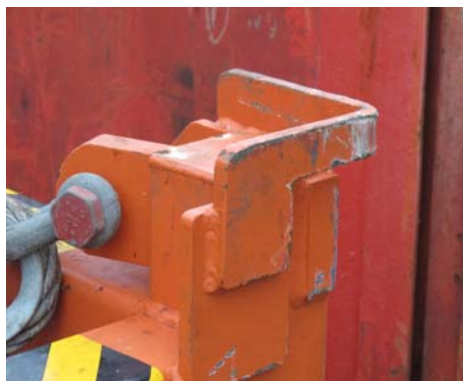
- i. Use of the correct CCU for the job, e.g. consider using closed CCU as opposed to cargo baskets and half heights.
- ii. Where there is a risk of lifting sets snagging the cargo, make use of suitable material to cover equipment. This could include, but is not limited to, cargo nets, tarpaulins, wood battens, roof bars, cord-lashing and crating of equipment.
- iii. Remove protruding parts from cargo in the CCU and secure in the appropriate manner.

During cargo planning, logistics service providers and supply vessel crew should consider the potential for CCUs to snag on vessel structures, in particular the safe havens.

9.10.1 Distinct types of Snag Hazards

There are two distinct types of snag hazard:

1. The lift itself - e.g. CCU/Deck Cargo which has significant integral protrusions such as stacking points and pad eye protectors which snag on other cargo or snag on the structure of the vessel itself (commonly safe havens)



2. The equipment/materials packed within a CCU in a manner which allows the lifting set to snag on it.



- i. Snag Hazards occur onshore or offshore. Onshore, CCUs can snag whilst being offloaded during crane lifting operations and from a truck using a forklift.
- ii. Offshore, the problem is exacerbated by the motion of the sea. The primary reason for this is that, as the supply vessel is alongside the installation and the lift is being performed, there is a natural rise and fall of the vessel created by the sea state.
- iii. The rise of the vessel leads to a relaxation in the tension of the sling set, which creates the potential for the relaxed sling set to slacken off and lower into the open CCU and snag on the material contained within.
- iv. The fall of the vessel subsequently increases the tension on the sling set. Therefore, where the sling set has looped under or around the material within the CCU, an excessive amount of strain is placed both on the material and the sling.

- v. In the case of Open Top containers, the Vessels Crew and the Crane Operator are commonly unaware that the snag has occurred until its being lifted. This may be too late to rectify it.
- vi. The snag, combined with the dynamic forces of the lifting operation has the potential to cause something to break, usually the materials but potentially the sling set.
- vii. In some cases it has been known for part of the material to snap off and become a projectile. In severe cases there is the potential for the snagged leg of the sling set to snap putting even more pressure on the remaining three legs to conclude the lift. This forces the Crane Operator to land the now spinning CCU either back onto the ship's deck or the installation, both of which have limited space.

Worst case scenario is that the lift fails and drops from height or similarly the projectile strikes someone.

9.10.2 Snag Hazards - Best Practice

In order to identify the risk and implement control measures which mitigate the risk, the following guidelines should be followed.

9.10.2.1 CCU/Deck Cargo

- i. Careful consideration should be given to the type and design of CCU/Deck Cargo used when shipping cargo offshore.
- ii. CCUs/Deck Cargo should be inspected to determine whether there is any risk of snagging from protruding parts. These include but are not limited to – Stacking points and Pad Eye protectors which are larger than usual, tie-down hooks, door handles, and any items which are fabricated to the external surfaces of the unit.
- iii. Where it is not feasible to modify the CCU/Deck Cargo and there is no suitable alternative, the CCU/Deck Cargo should be stowed on deck away from other cargo and away from safe havens or anything else which it might snag on.

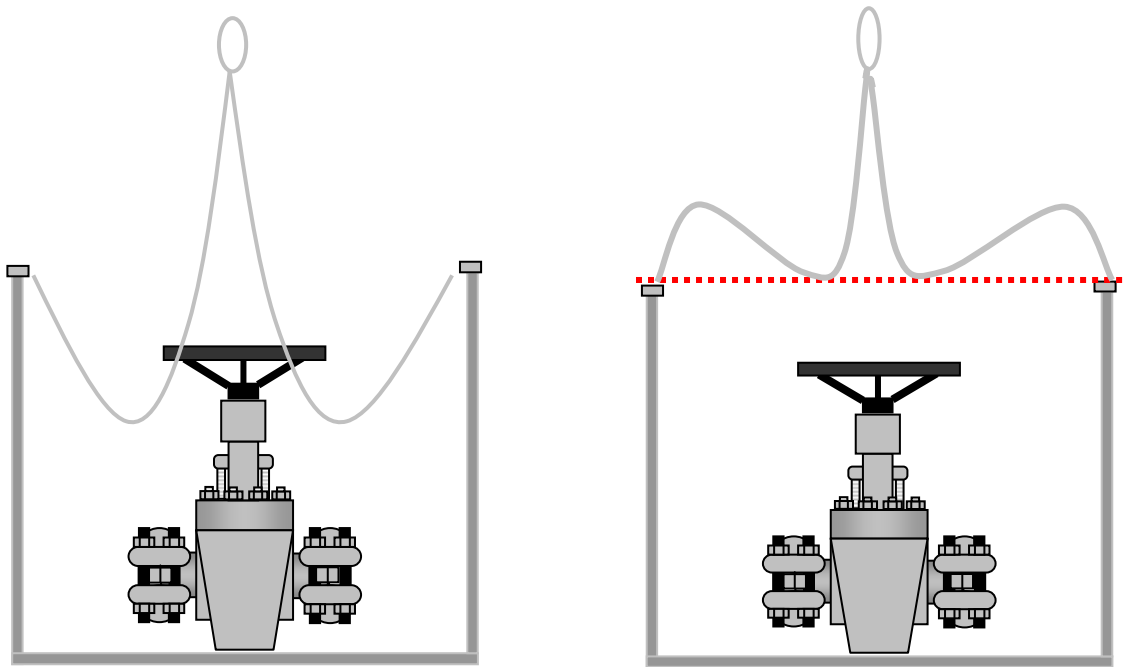
9.10.2.2 Equipment/Materials within the CCU

- i. As detailed within section 9.7.4.xi of this document, Equipment/Materials should not protrude above the top of an open CCU/Deck Cargo (Basket, Open Top, Skip, Fabricated structure) without specific Risk Assessment. Notwithstanding this, the potential still remains for the CCU/Deck Cargo slings to snag on contents which are lower down inside an open CCU /Deck Cargo.
- ii. Every open CCU should be risk assessed to determine whether there is the potential for the sling set to catch on the contents during the lifting operation. Where the potential has been identified, control measures must be implemented to prevent the CCU lifting set from snagging on the protruding equipment or falling inside the CCU and snagging on the contents.
- iii. Examples of suitable control measures to cover the top of the open CCU are tarpaulins and nets to cover the top of the CCU. It is vital that the tarpaulin or net used to cover the open CCU is sufficiently tensioned to prevent the weight of the sling set from falling inside the unit. Roof bars or similar braces can also be used to prevent the sling set from falling in.

- iv. The fitting of tarpaulins/nets will not only prevent snag hazards but is also intended to prevent the lifting set from falling back inside the open CCU.



- v. Identification of snag hazards is not always apparent; therefore to remove any subjectivity, best practice is to cover all open CCUs. Standard tarpaulins can be unwieldy and difficult to fit and they also have the negative effect of retaining water. The optimum solution is to use bespoke netting designed to fit the specific CCU size.



9.10.2.3 Responsibilities

It is the responsibility of the Packer to identify the snag hazards and implement effective control measures. The shipper has the responsibility of performing the final inspection of the cargo and approving it for shipment.

9.10.2.4 Innovations

The issue of snag hazards is not unique to individual operators or indeed service providers, it is an industry problem. As such, there are many innovative solutions being developed. (See below)



Open Top Extension Frame.



Bespoke Tarpaulin including drainage



Tarpaulins with Bungee Cords



Tarpaulin with reinforced wire

9.11 CCU Standards and Inspection Requirements

9.11.1 Construction Standards

CCUs used for the carriage and handling of cargo to and from offshore installations must conform to one of the following standards:

- i. BS EN 12079:2006 Parts 1, 2 and 3 Offshore containers – design, manufacture and marking, and periodic inspection, examination and testing
This standard specifies requirements for the design, manufacture and marking of offshore containers with a maximum gross mass not exceeding 25,000kg and also gives guidance with reference to lifting sets. Part 3 deals with the periodic inspection, examination and testing.

- ii. DNV 2.7-1:2006 Offshore containers

This certification note covers the requirements for offshore containers with respect to design, manufacture, testing and certification including the lifting sets. The DNV certifying authorities issued a 'Position Paper' in January 2007 which related to the marking and certification of sling sets with reference to DNV 2.7-1:2006.

- iii. DNV 2.7-3: 2006 Portable offshore units

This standard covers types of portable offshore units with a maximum gross mass exceeding 25,000kg but not exceeding 50,000kg.

- iv. DNV 2.7-3:2011 Portable offshore units

This Standard for Certification No 2.7-3 covers all other types of portable offshore units, other than offshore containers.

- v. BS EN 12079:1999 Offshore containers – design, construction, testing, inspection and marking.

This standard specifies requirements for design, manufacture and marking of offshore containers with a maximum gross mass not exceeding 25,000kg. It also established a system for plating offshore containers linked to a define scheme for periodic examination and test and introduced a requirement for pre-trip inspection.

- vi. DNV 2.7-1:1995 Offshore containers

This certification note covers the requirements for offshore containers with respect to design, manufacture, testing and certification including the lifting sets.

- vii. DNV 2.7-1:1989 Offshore containers

This certification note covers the requirements for offshore containers with respect to design, manufacture, testing and certification including the lifting sets.

- viii. BS 7072:1989 Inspection and repair of offshore containers

This code gives recommendations for plating, marking, examination, testing and repair of offshore containers. This standard has been withdrawn from publication but is still available to cover containers manufactured to this standard.

All offshore containers shall be periodically inspected, examined and if necessary tested in accordance with the relevant manufacturing standard.

Note: It should be noted that BS7072 was withdrawn on 15 October 1999 and Cargo Transporting Units (CTU) constructed to BS7072 alone, may not comply fully with MSC/Circ.860, requirements. Therefore CTUs that do not fully comply with MSC/Circ.860 built to BS 7072 may continue to be used subject to them being maintained and surveyed in accordance with a recognised standard until 1 January 2015. - MGN282 (M).

Please see table below:

Schedule of periodic inspection, examination and testing of container					
Inspection interval	Manufacturing standards inspection requirements				
	BS 7072 1989	DNV 2.7-1 1995	EN 12079 1999	DNV 2.7-1 2006	EN 12079 2006
On manufacture	T	T or VN	T or VN	T or VN	T or VN
6 months	V				
12 months	VN	V	V	V	V
18 months	V				
24 months	T	V	V	V	V
48 months	T	V	V	VN	VN
60 months	VN	V	VN	V	V

After substantial repair or alteration	T	T	T	T	T
--	---	---	---	---	---

T	Proof load test, non-destructive examination and visual inspection
VN	Non-destructive examination (NDE) and visual inspection
V	Visual examination only

9.11.2 **Pre-use Inspections**

Immediately before transporting a container offshore and before its return trip a person that the user has deemed competent shall inspect the container.

The appointed person shall check the validity of the certification by reference to the inspection plate and verify that the container, including its lifting set, is free from obvious defects rendering it unfit for use. It is recommended that this inspection should consist of, as a minimum, the following checks:

Pre-trip inspection check list		
	Fail	Pass
a. Check inspection plate to ensure that the inspection date is current (see 9.12.4)		
b. Check safety markings to ensure they meet the standard requirement (see 9.11.1)		
c. Check lifting set for obvious signs of damage (see 8.4.4)		
d. Check lifting set to establish that all parts are present, correct, properly connected and secure		
e. Check container roof, forklift pockets, frames etc. for loose items		
f. Check that safety nets are in position where necessary and that tie down points are in place and are fit for purpose		
g. Check container doors are closed, secured and locking mechanism undamaged		
h. Check drainage holes are clear on open containers		

9.12 **Marking**

9.12.1 **Safety Marking**

All offshore containers must have a reasonable amount of safety markings.

Although the requirements for these markings can differ slightly from standard to standard, the basics remain the same. To clearly delineate the perimeter of a container, particularly in poor lights, the tops of closed containers and the top rails of open framed containers should be marked as follows:

- Closed containers shall be marked with a band of solid contrasting colour not less than 100mm wide round the roof perimeter. If the roof of the container is recessed below the top perimeter rail, at least the top surface of the top rail shall be marked.
- Open and frame containers shall be marked on the top surface of the top rails, with either hatching in a contrasting colour or a solid light colour.
- Where a container is fitted with fork pockets designed for handling the container only when empty (e.g. on some tanks and long baskets) then the words "Empty lift only" shall be clearly displayed near each set of fork pockets in characters not less than 50mm high.

9.12.2 **Identification Marking**

All offshore containers shall be marked with a unique identification number issued by either the fabricator or the owner. It is a requirement of manufacturing standards that the identification number is to be marked on the container as follows:

- i. The identification number shall be prominently and indelibly displayed on all sides of the container (as viewed from ground level) in characters of contrasting colour, not less than 75mm high.
- ii. If a container has a roof, the container number shall be displayed on the roof, in characters 300mm high or more. The markings should be carried out in such a way as to avoid incorrect interpretation, e.g. by underlining. Where applicable, the lower edge of the marking shall be positioned near the front of the container in which the door is located.
- iii. Each container shall have the fabricator's serial number welded on the frame in characters at least 50mm high. This is NOT a requirement of BS 7072:1989.

9.12.3 *Information Marking*

Each container shall be clearly marked with the container maximum gross weight (kg), tare weight (kg) and payload (kg). This information shall be displayed in characters of a contrasting colour no less than 50mm high. In addition if a container is carrying hazardous material the container must be marked with the relevant dangerous goods placarding.

On each CCU a matt black square of sufficient size should be provided for information markings such as destination, cargo hazards, etc.

9.12.4 *Data and Inspection Plate Marking*

Each container shall be fitted with data and inspection plates (generally these plates are merged into one). These plates shall be made of corrosion resistant material securely attached externally in a manner designed to avoid unauthorised or accidental removal. Aluminium rivets have been found to be unsuitable as a securing method in the offshore environment and should not be used. The information required on the data plates differs from standard to standard. See examples of data plates:

OFFSHORE DATA PLATE
BS7072 Code of practice for inspection and repair of offshore containers

Swire Oilfield Services
UNIT MUST BE RE-EXAMINED AT LEAST EVERY SIX MONTHS

UNIT NUMBER	
TARE WT	KG
PAYLOAD	KG
MAX GROSS WT	KG

DATE LAST TESTED/EXAMINED

SWIRE HOUSE, ALTENS, ABERDEEN AB12 3LF
TELEPHONE (01224) 872707 FAX 874516

Data Plate in accordance with BS 7072

OFFSHORE CONTAINER DATA PLATE - EN 12079
OWNER: Swire Oilfield Services
Telephone: +44 (0) 1224 872707

UNIT NUMBER: _____

FABRICATION No: _____

TARE MASS: _____ KG

PAYLOAD - CONTAINER: _____ KG

PAYLOAD - INTERMEDIATE DECK: _____ KG

MAX GROSS MASS @ 45°: _____ KG

CERTIFICATE No: _____

DESIGN TEMPERATURE: -20°C

DATE LAST EXAMINED

UNIT MUST BE RE-EXAMINED AT LEAST EVERY 12 MONTHS

Data plate in accordance with BS EN 12079

On the satisfactory completion of an inspection of the container the inspection plate shall be permanently marked. This marking shall consist of the date of inspection together with:

- i. Suffix T - indicating proof load test, non-destructive examination and visual Inspection
- ii. Suffix VN - indicating non-destructive examination and visual inspection
- iii. Suffix V - indicating visual examination only

9.12.5 Inspection Reports

When, in the opinion of the inspector, a container and its lifting set are suitable for service, a certificate to that effect will be issued. These certificates should accompany the container and be available for viewing as and when required.

9.13 **Expiry of Test Certificate(s) whilst Unit(s) Offshore**

Owners and users of CCUs and similar equipment should ensure that precautions are taken to prevent the validity of test certification expiring whilst in use.

As discussed elsewhere in these guidelines, one such precaution may be to ensure that the test certificates relating to all CCUs have a minimum period of validity prior to them being shipped offshore.

Alternatively, where it is known that equipment may be retained on the installation for an extended period, it may be necessary to arrange for an offshore recertification programme by a competent person mobilised for this purpose. Typically, such equipment will include temporary control cabins, generators, Wire-line units etc.

However circumstances do occur when, for a variety of reasons, certification relating to units or equipment may be allowed to lapse.

In such circumstances, and in the event of any subsequent requirement to be returned onshore as 'controlled lifts', it is recommended that the following practices, which are dependent on the issue date of the most recent certificate be adopted.

It should be noted that in ALL circumstances where the practices recommended in this Section are adopted, the relevant units must be returned or transported onshore in an EMPTY condition, i.e. they must contain NOTHING except free air at ambient pressure.

9.13.1 ***Test Certificate(s) Less than 18 Months Old***

Relates to equipment where the test certificate has expired less than one year ago.

- i. The unit or equipment, together with all lifting equipment, to be fully inspected by competent person on installation in direct charge of lifting operations using guidelines relating to "thorough examinations" as described in Appendix 13.
- ii. All damaged or defective equipment to be replaced as required.
- iii. Sea fastenings, if installed, to be removed.
- iv. Letter(s) to be prepared, to be signed by competent person referred to above, confirming inspection and suitability of unit(s) or equipment to be lifted as required in the course of one transit from the offshore installation to eventual onshore destination. Letter(s) to accompany the lift(s) to the destination.
- v. Prior to any subsequent use of the unit(s) or equipment after return, a thorough examination in a controlled environment by a competent person having access to all necessary testing facilities and in accordance with the requirements of any written scheme of examination, must be undertaken.

Following such examination all certification must be re-issued and plates re-marked as required.

9.13.2 Test Certificate(s) More than 18 and Less than 66 Months Old

Relates to equipment where the test certificate has expired more than one year but less than five years ago.

- i. The unit or equipment, together with all lifting equipment to be fully inspected by a competent person, who should be mobilised to the installation and may use information in this document relating to “thorough examinations” as described in Appendix 13.
- ii. Following inspection this competent person will make any recommendations seen fit to facilitate return of the unit(s) onshore which may include:
 - All damaged or defective equipment to be replaced as required.
 - Sea fastenings, if installed, to be removed.
- iii. Prior to any subsequent use of the unit(s) or equipment after return, a thorough examination in a controlled environment by a competent person having access to all necessary testing facilities and in accordance with the requirements of any written scheme of examination, must be undertaken

Following such examination all certification must be re-issued and plates re-marked as required.

9.13.3 Test Certificate(s) More than 66 and Less than 126 Months Old

Relates to equipment where the test certificate has expired more than five years but less than ten years ago.

- i. The unit or equipment, together with all lifting equipment to be fully inspected by a competent person, who should be mobilised to the installation and may use information in this document relating to “thorough examinations” as described in Appendix 13.
- ii. Following inspection this competent person will make any recommendations seen fit to facilitate return of the unit(s) onshore which may include:
 - All damaged or defective equipment to be replaced as required.
 - Sea fastenings, if installed, to be removed.

It is unlikely that any unit(s) or equipment returned onshore in this manner will be suitable for further offshore use.

However should particular circumstances require that the unit(s) or equipment are re-used, a thorough examination, in a controlled environment by a competent person having access to all necessary testing facilities and in accordance with the requirements of any written scheme of examination, must be undertaken.

Following examination all certification must be re-issued and plates re-marked as required.

9.13.4 Test Certificate(s) More than 126 Months Old

Relates to equipment where the test certificate has expired more than ten years ago.

The unit or equipment, together with all lifting equipment to be fully inspected by a competent person, who should be mobilised to the installation and may use information in this document relating to “thorough examinations” as described in Appendix 13.

Following inspection this competent person will make any recommendations seen fit to facilitate disposal of the unit onshore. This may include the unit or equipment to be scrapped on site being loaded into transit container provided for the purpose of returning the scrap onshore. In such circumstances the provisions for the disposal of waste must be complied with, see Section 15.

Alternatively, and only likely in exceptional circumstances, recommendations may include:

- i. All damaged or defective equipment to be replaced as required.
- ii. Sea fastenings, if installed, to be removed.

Any unit(s) or equipment returned onshore in this manner should not be re-used offshore.

9.13.5 Summary of Recommendations Relating to Out of Test Equipment

- i. In the event that the certification relating to the lifting arrangements installed on a CCU or other lifting equipment on an offshore installation has expired within the past year, the items may be transported onshore and onward to a final destination as “controlled lifts” for recertification following inspection on the installation by the competent person in direct charge of lifting operations, using the guidelines for inspections included in this document and rectification of any defects found.

A letter confirming the inspection must accompany the item to its final destination.

- ii. In the event that the certification relating to the lifting arrangements installed on a CCU or other lifting equipment to an offshore installation has expired more than one year ago, a suitably qualified competent person must be mobilised to inspect the item(s). Recommendations made by this competent person as conditions of transporting the item(s) onshore and onward to any final destination must be complied with.

A letter confirming compliance with these recommendations must accompany the item(s) to its final destination.

9.14 Types of CCUs




1. Container - Standard Closed
2. Chemical Transit Tank
3. Chemical Transit Tank - Plastic
4. Aviation Tank
5. Compactor Unit
6. Compactor Bag (Bagging Compactor)
7. Full size 20' Container
8. Gas Cylinder Rack or Carrier
9. Ten Foot Half Height
10. Half Height Container with Doors
11. Swarf Skip
12. Drill Cuttings Skip
13. Long Basket or Tool Carrier
14. Waste Skip or Dual Purpose CCU
15. Waste Skip - boat style

9.14.1 Illustrations of CCUs


No	Description	Illustration
1.	Container - Standard Closed	
2.	Chemical Transit Tank	

No	Description	Illustration
3.	Chemical Transit Tank - Plastic	
4.	Aviation Tank	
5.	Compactor Unit Ensure electrical and air supplies are disconnected.	

No	Description	Illustration
6.	Compactor Bag (Bagging Compactor)	
7.	Full size 20' Container	
8.	<p>Gas Cylinder Rack or Carrier</p> <ul style="list-style-type: none"> i. Ensure positive security of cylinders in rack by strapping in place. ii. Small cylinders may require additional packing and/or a special container. iii. Bottles shipped in racks without valve protection plates must be capped. 	

No	Description	Illustration
9.	Ten Foot Half Height	
10.	Half Height Container with doors	
11.	Swarf Skip	

No	Description	Illustration
12.	Drill Cuttings Skip	
13.	Long Basket or Tool Carrier	
14.	Waste Skip or Dual Purpose CCU	

No	Description	Illustration
15.	<p>Waste Skip – boat style</p> <ul style="list-style-type: none"> The use of boat shaped skips has been identified as a factor in accidents and their use should be strongly discouraged. 	

10.0 CARRIAGE OF GOODS BY AIR

The primary route for the carriage of goods to and from offshore is by sea. By exception, due to operational circumstances, it may be necessary to transfer goods by air. However, due to the limitations on payload and space, prior authorisation for freight must be obtained.

- Approval – permission granted by requesting company nominated person
- Notification – details of approved freight submitted to aircraft operator
- Acceptance – agreement received from aircraft operator to load freight

The information required to be provided by the shipper to the aircraft operator includes the following:

- i. Delivery time and date to shipper
- ii. Destination
- iii. Check-in Time
- iv. Flight Departure Time
- v. Consignee
- vi. Priority rating
- vii. Supplier
- viii. Description of goods
- ix. Dimensions and actual weight of each package

Goods which have not been pre-notified should not be loaded unless the Captain's permission has been obtained. Pre-notification is required to enable the Captain to complete flight planning and to ensure the appropriate personnel are available to handle the goods on departure/arrival. Last Minute Changes (LMCs) may be accepted at the Captain's discretion.

10.1 Freight Classifications

Some offshore operators have specific airfreight priority ratings, for example:

"Vital" this will take priority over all other freight and, if necessary, passengers.

"Priority" this will be dispatched on the first available flight, payload and space permitting.

Shippers should check with the relevant operating company's procedures.

10.2 General Guidance and Freight Packaging

- i. In line with the helicopter operator procedures and Department for Transport (DfT) guidelines, all freight being shipped offshore via helicopter is required to be classified as 'known cargo' and must be accompanied by a correctly completed Cargo Security Certificate (CSC).
 - Freight can only be classified as 'known' after it has undergone either x-ray screening by x-ray trained personnel or hand-search procedures by DfT level 1 or 2 trained personnel and is securely segregated, stored and transported in line with DfT regulations.

- The CSC declares the method of security screening that has been applied to the freight and needs to be completed by the person carrying out the security search. Cargo which is not accompanied by a valid CSC will be rejected by the helicopter operators.
- ii. All items must be “clearly, legibly and accurately” labelled not only with its contents but also with its weight.
 - iii. Labelling should be durable and should remain in place for the duration of transit.
 - iv. Unless specified otherwise by the Aircraft Operator, approved airfreight must be delivered to the appropriate freight shed (heliport/airport) at least one hour prior to the scheduled departure time.
 - v. Dangerous Goods must be declared in accordance with the requirements stipulated in Section 14 Carriage of Dangerous Goods by Air.
 - vi. Hold restrictions are enforced where freight is carried in the baggage compartment hold on all scheduled passenger flights to offshore installations.
 - vii. The combined weight of the goods, i.e. baggage and freight must never exceed the maximum floor loading of the aircraft.
 - viii. The maximum weight per item for personal baggage when travelling via helicopter is 11kg (25lb).
 - ix. The weight limit for freight items carried in the hold should not normally exceed 25kg (55lb) per item due to manual handling considerations, but certain offshore locations may impose a lower limit. The carriage of heavier freight items in the hold shall be subject to a Manual Handling Assessment prior to loading and unloading. The exception is the S92 aircraft, which is limited to 100kg.
 - x. Goods required to be loaded in the cabin, whether as a result of weight restriction or size, are subject to additional constraints such as, floor-loading, Centre of Gravity (CoG) limitations, access dimensions, etc., which would be subject to further assessment prior to loading and unloading. The decision to accept the goods should recognise any restrictions that may apply at the destination.

Some operators may restrict simultaneous carriage of passengers and cabin freight on the same aircraft.
 - xi. Mechanical handling aids should be considered to reduce handling risks. Further guidance is available in Well Handled – Offshore Manual Handling Solutions HSG171.
 - xii. When being transported by air, heavy items (11kg/25lb and over):
 - must be adequately and appropriately packed
 - must be secure within its package with its weight distributed evenly
 - cannot move or leak
 - have appropriate means for lifting or unloading
 - must be clearly labelled “HEAVY”
 - xiii. Polystyrene chips MUST NOT be used as a packing material as these can clog helicopter and installation’s engine intakes. Where found they shall be held until the originator can re-pack using appropriate material, e.g. bubble wrap, or returned for re-packing.

- xiv. Lightweight items that could be blown off the helideck when removed from the aircraft should be shipped in transit bags.
- xv. Hessian sacks are not suitable packaging for air freight and must not be used.

Failure to comply with any of the above will result in rejection of goods (see Appendix 7.10 UK Cargo Rejection Note – Air) with potential impact on offshore operations.

11.0 NON CONFORMING CARGO

11.1 Inspection Procedures

The purpose of this section is to facilitate a common analysis of cargo, CCU and lifting set faults in order to identify problem areas and minimise risk to industry.

All faults observed on cargo received will be categorised and coded as per Appendix 9 Non Conformance Code Checklist.

Companies having their own methods of capturing these non-conformances i.e. Non Conformances Reports, Cargo Rejection Note or User Feedback Reports should, wherever practicable, adopt the codes identified in Appendix 9.

Random checks of CCUs will be carried out to establish whether they have been packed in accordance with these guidelines. These checks will be arranged to take place in the presence of the operator, vendor or contractor.

11.2 Cargo Unfit for Shipment

On inspection, any cargo deemed unsafe for shipment will be quarantined and a Cargo Rejection Note (see Appendix 7) will be raised. Contact will then be made with the appropriate representative to arrange for the fault to be rectified.

11.3 Non Conformance Code

Code numbers are allocated to specific items identified in this document. The code is broken down into the following seven sections and each category can be referenced in Appendix 9.

100	CCUs
200	Lifting and slinging
300	Dangerous/Hazardous Goods
400	Documentation
500	Packing
600	Others
700	Positive Feedback

The specifics of the fault should be detailed on the relevant UK Cargo Rejection Note, see Appendix 7.

12.0 GENERAL DOCUMENTATION

It is important that all documentation is completed in accordance with the following guidance. It must accurately reflect the contents of the package or container being shipped.

Failure to comply with this requirement may result in injury, damage or loss of equipment.

Customs requirements regarding manifests and cargo summary tickets must be fully complied with.

Appendix 7 includes standardised examples of the following documents:

- Oil & Gas UK Cargo Summary Ticket for Outbound Cargo
- Oil & Gas UK Inbound Pocket Checklist
- Oil & Gas UK Inbound Pocket Checklist - Tanks
- Oil & Gas UK Cargo Summary Ticket for Outbound/Inbound Tanks
- Cargo Safety and Security Tags
- Dangerous Goods and Marine Pollutants Declaration
- Dangerous Goods by Air Declaration
- Transport Emergency Response Card (TREM card)
- Oil & Gas UK Cargo Rejection Note – Sea
- Oil & Gas UK Cargo Rejection Note – Air

Instructions for completion are detailed on the relevant forms.

13.0 DANGEROUS GOODS BY SEA

13.1 General

The IMDG Code defines methods of packaging, the types of labels required, and the appropriate information needed to complete the declaration.

13.1.1 The MCA prepares rules relating to the transportation of dangerous goods on offshore support vessels within the UKCS, MGN 282 (M). It is recognised that additional guidance may be given by the MCA in Marine Competent Authority Approval. Requests for assistance in the transportation of dangerous goods by sea can be directed to the MCA at dangerous.goods@mcga.gov.uk (this email address is valid at the time of publication).

13.1.2 It is essential that dangerous goods are packed and marked fully in accordance with regulations as well as having all labelling and placarding in place.

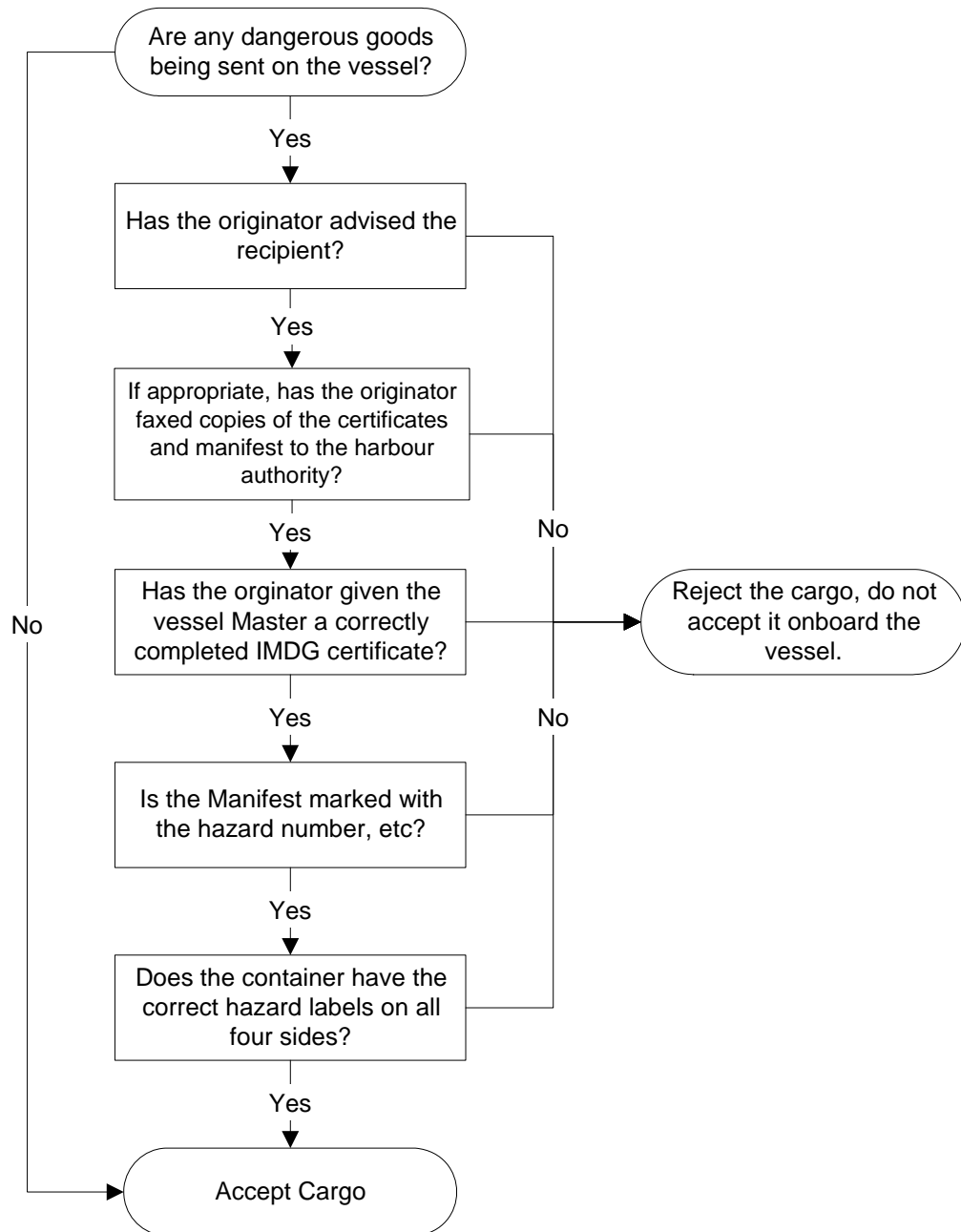
13.1.3 When completing Dangerous Goods Declaration, verify that information on the Materials Safety Data Sheets dated prior to 1st January 2002 corresponds to the latest revision of IMDG Code.

13.1.4 Non-compliance with any of these points may have legal implications and will mean delay until rectified.

13.1.5 The definitions of key persons responsible for dangerous goods are detailed in The Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations [SI 1997/2367]:

“Any incidents, such as incorrectly declared or documented backloads/or shipments or unsafe stowage or incorrect segregation, identified in the supply chain, should be notified to the Environmental Quality Branch of the MCA. Such incidents may be pursued under the Merchant Shipping (Dangerous Goods and Marine Pollutants) Regulations 1997 [SI 1997/2367].”

13.2 Dangerous Goods Flowchart – Inbound



The cargo will only be accepted if all the above steps have been taken. Failure to comply with any of the above steps will result in rejection.

14.0 DANGEROUS GOODS BY AIR

14.1 General

The legislation governing the carriage of Dangerous Goods is laid down in the "International Civil Aviation Organisation (ICAO) Technical Instructions for the Carriage of Dangerous Goods by Air" it is recognised that the great majority of shippers use the "IATA Dangerous Goods Regulations" (DGRs) as their working document. The IATA DGRs contain all the requirements of the Technical Instructions and also include additional requirements, which may be more restrictive than the Technical Instructions or reflect industry standard practices.

For further guidance and procedures for the shipment of dangerous goods to and from offshore locations by air, refer to relevant documents issued by the Helideck Certification Agency. These documents are also on the Oil & Gas UK CD which contains the Best Practice for the Safe Packing and Handling of Cargo to and from Offshore Locations, Issue 5, November 2011.

It is essential that dangerous goods are packed and marked fully in accordance with regulations as well as having all labelling and placarding in place.

Dangerous Goods must be declared in advance, and be delivered to the appropriate freight shed (heliport/airport) at least two hours prior to the scheduled departure time.

All airfreight is examined for undeclared dangerous goods and any such items found shall be returned to shipper and reported to the relevant authority.

The IATA DGRs are revised on an annual basis and issued each January. When completing Dangerous Goods Declarations, shippers must verify that information complies with the latest revision. Non-compliance with the regulations will have legal implications and incur delay until rectified.

14.2 Dangerous Goods by Air Documentation

The following books and documentation are required:

- Up-to-date copy of IATA Dangerous Goods Regulations
- Copies of the Shippers Declaration.
- Copies of the checklists for both non-radioactive & radioactive shipments.
- Copies of the Notification to Captains (NOTOC).
- Sufficient Dangerous Goods labels.

In addition to the above, the installation should make provision, in the appropriate procedures manual, for:

- The storage & security of packages, prior to loading/after unloading, from the helicopter.
- The emergency response steps required in the event of a damaged or leaking package being discovered.
- Retention of the paperwork as per DGR 9.8

14.3 Division of Responsibilities & Training required

The legislation governing the carriage of Dangerous Goods by Air requires that all staff involved with this process, be properly trained.

DGR Table 1.5.A (see 14.7) details the training required according to the specific duties of the staff involved:

- Onshore, the shipper delivers his consignment to the aircraft operator, who double checks (using an appropriate checklist) that the article has been properly packaged; all the requirements of the DGRs have been complied with and the package is in all respects fit to fly.
- Offshore, the same procedure must be followed to avoid undeclared or mis-declared dangerous goods being loaded on the aircraft.

This 'check' is a legal requirement placed on all aircraft operators. For practical purposes offshore, employees or contractors of the oilfield installation may carry out these checks. There are 3 main areas that need to be addressed in the offshore environment. These are:

- The Consignor's duties - Who is the Consignor and is he/she qualified to pack the shipment and sign the declaration?
- The Acceptance staff - Who is accepting the package for carriage on behalf of the aircraft operator and is he/she qualified to sign the checklist?
- The Loading staff - Who will be loading the shipment onto the aircraft and is he/she qualified to sign the NOTOC (Notification to Captain)?

Due to the limitations on manpower offshore, the same person may carry out some, or all of these functions. Consequently there is a greater risk of undeclared or mis-declared dangerous goods packages being loaded on the aircraft.

Therefore, for the purposes of these procedures only, the responsibilities of the offshore staff are broken down as follows:

- The Storeman, Materials Coordinator or other nominated person are regarded as the consignor and consignee for packing and presenting the package for transport and signing the shipper's declaration and the checklist on behalf of the aircraft operator.
- The LOADING Staff are deemed to be the HLO and Helideck crew.

The minimum training requirements will be as follows:

- SHIPPERS / ACCEPTANCE STAFF (Storemen/Materials Controllers etc.): Shall undergo 'Full' Dangerous Goods Training as detailed in DGR Table 1.5A for Shippers and Acceptance staff. Such training shall be conducted at a CAA approved Dangerous Goods Training School and will include certification that the student has passed an examination to assess his/her level of knowledge in the subject. He/she will hold ultimate responsibility for ensuring that all packages for shipment by air are packed, marked and labelled in accordance with the DGRs. He/she will be available to advise the helideck crew as required.
- LOADERS (HLOs and Helideck Crews): Shall undergo 'awareness' training appropriate to the 'Loading' of said packages in an offshore helicopter. Such training will include an element of Emergency Response to equip helideck crews with sufficient knowledge to deal with damaged or leaking packages found, either in the helicopter hold, or prior to loading.
- Wherever possible at least one member of the loading team will be trained to "check" the packages and the shipper's declaration, using an approved checklist to ensure that they comply with the requirements. This recognises the difficulties in the Shipper checking his own work and instils a 'best practise culture' when shipping Dangerous Goods.

14.4 Facilities Required

It is not acceptable to leave dangerous goods packages on the helideck or on access routes to/from the helideck where they could contribute to any incident on the helideck; present a tripping hazard on access stairs or be exposed to damage by the weather. Therefore provision should be made for the 'temporary storage' of all dangerous goods packages, prior to loading and after unloading, from helicopters. Where temporary storage is not provided arrangements should be made for the immediate removal of dangerous goods packages from the helideck area.

In addition, a 'spill kit' is to be made available to HLO's to deal with the unlikely event of a damaged and leaking package being discovered either on the helicopter or immediately before loading.

14.5 Procedure for shipping Dangerous Goods

The shipment must be packaged and documented in the normal way in accordance with the IATA Dangerous Goods Regulations.

Notification of intention to ship dangerous goods must be faxed or e-mailed to the helicopter operator. The notification must include:

- The Proper Shipping name of the dangerous goods
- The UN Number
- The Packing Group
- The net quantity
- The gross weight and dimensions of the package.

(Faxing or e-mailing the shippers declaration is a simple and effective means of achieving this)

The helicopter operator will acknowledge receipt of this notification. This acknowledgement does NOT constitute ACCEPTANCE of the Dangerous Goods, but merely indicates that appropriate staff will be ready to receive the goods on arrival at the heliport.

The package and documentation must then be checked for accuracy using the appropriate checklist. Ideally, a member of the helideck crew who has been appropriately trained in this function will do this. However, in extremis; the Stores person/Shipper may do it. On completion, the acceptance checklist must be signed on behalf of the helicopter operator and a copy of the training certificate of the signatory attached.

Upon satisfactory completion of the checklist the package should be stored prior to loading and two (2) copies of the Notification to Captain (NOTOC) prepared, but not signed. **Note:** *The NOTOC requires the exact loading position to be detailed therefore it may not be possible to complete this until after loading.*

On arrival of the helicopter and immediately before loading, the package must be visually inspected for signs of damage and leaking. If any such signs are found, the package must not be loaded.

The stowage location for the Dangerous Goods should be agreed with the aircraft commander. The package can then be loaded.

Note: where more than one dangerous goods package is involved, consideration must be given to the segregation of incompatible dangerous goods.

Note the stowage position of the dangerous goods on the NOTOC. The HLO or other trained member of the deck crew must sign the NOTOC.

The following paperwork should then be presented to the pilot:

- 2 copies of the Shippers Declaration
- 1 copy of the completed checklist
- 2 copies of the signed NOTOC
- A copy of the Dangerous Goods Certificate for the person signing the Checklist.

The pilot will sign both copies of the NOTOC and retain one (1) copy. The HLO will keep the other copy, to be retained on the installation.

On departure of the helicopter, all stations en route and the final destination must be notified that there are Dangerous Goods onboard. This will be done by either faxing or e-mailing the NOTOC to all destinations.

Note: an e-mail containing all the relevant details found on the NOTOC will also suffice.

14.6 Retention of Paperwork

DGR 9.8 requires that all paperwork be retained for a minimum period of three months. As a minimum the following documentation will be retained:

- One (1) copy of the Shippers Declaration
- One (1) copy of the signed Checklist
- One (1) copy of the NOTOC signed by both HLO (or other trained person) and Pilot.

14.7 Minimum Requirements for Training Curricula

DGR Table 1.5.A

Aspects of transport of dangerous goods by air with which they should be familiar, as a minimum	Shippers and packers		Freight forwarders			Operators and ground handling agents						Security Screeners
	1	2	3	4	5	6	7	8	9	10	11	12
General philosophy	X	X	X	X	X	X	X	X	X	X	X	X
Limitations	X		X	X	X	X	X	X	X	X	X	X
General requirements for shippers	X		X			X						
Classification	X	X	X			X						X
List of dangerous goods	X	X	X			X				X		
General packing requirements	X	X	X			X						
Packing instructions	X	X	X			X						
Labelling and marking	X	X	X	X	X	X	X	X	X	X	X	X
Shipper's Declaration and other relevant documentation	X		X	X		X	X					
Acceptance procedures						X						
Recognition of Undeclared Dangerous Goods	X	X	X	X	X	X	X	X	X	X	X	X
Storage and loading procedures					X	X		X		X		
Pilots' notification						X		X		X		
Provisions for passengers and crew	X	X	X	X	X	X	X	X	X	X	X	X
Emergency procedures	X	X	X	X	X	X	X	X	X	X	X	X

KEY

1. Shippers and persons undertaking the responsibilities of shippers', including operator's staff acting as shippers, operator's staff preparing dangerous goods as Company Materials (COMAT)
2. Packers
3. Staff of freight forwarders involved in processing dangerous goods
4. Staff of freight forwarders involved in processing cargo, mail or stores (other than dangerous goods)
5. Staff of freight forwarders involved in the handling, storage and loading of cargo, mail or stores
6. Operator's and ground handling agent's staff accepting dangerous goods
7. Operator's and ground handling agent's staff accepting cargo, mail or stores (other than dangerous goods)
8. Operator's and ground handling agent's staff involved in the handling, storage and loading of cargo, mail or stores and baggage
9. Passenger handling staff
10. Flight crew members and load planners
11. Crew members (other than flight crew members)
12. Security staff who deal with the screening of passengers and their baggage and cargo, mail or stores, e. g. security screeners, their supervisors and staff involved in implementing security procedures

The primary legislation for waste management offshore is The Merchant Shipping (Prevention of Pollution by Sewage and Garbage from Ships) Regulations 2008 SI 2008 No 3257. The Regulation covers waste produced offshore (fixed or mobile). The OIM of every fixed manned installation or mobile rig is required to provide a garbage management plan on-board showing roles and responsibilities, waste types produced and a waste collection locator plan. The OIM is responsible to display signage forbidding waste to be thrown overboard.

All Offshore locations (fixed and mobile) are regarded as a Waste Producer. The subsequent transfer of waste to an onshore receiving facility is controlled mainly by: Special Waste Amended (Scotland) Regulations [SSI 2004/112]; Special Waste Amended (Scotland) Regulations [SSI 2005/22], Hazardous Waste (England & Wales) Regulations [SI 2005/894], Environmental Protection (Duty of Care) Regulations [SI 1991/2839]; Waste Management Regulations [SI 1996/634]. It should be noted that the waste regulated by the Scottish Environmental Protection Agency (SEPA) in Scotland and by the Environmental Agency (EA) for England and Wales require different paperwork and that the type of paperwork to be used is governed by the port of landing in the UK.

Note: *Regulations in Scotland and England/Wales are subject to change out-with the review update of this guideline and it is the "producer's" responsibility to ensure update awareness and compliance.*

Each Offshore location is required to prepare and maintain a "Cradle to Grave" Audit Trail of all waste streams generated on the facility. The removal of waste by Supply Vessel may only take place in compliance with the Regulations. The Supply Vessel is regarded as the 'Waste Carrier' and for that reason should hold a Waste Carrier License for moving waste in the UK sector. The Vessel Master is responsible for receiving and discharging waste 'cargo' from the Supply Vessel.

The movement of waste from Offshore to final disposal site may require a number of controlled transfers - this is known as the Waste Handling Chain. Within the Waste Handling Chain, the carrier is required to hold copy of all waste transfers. Exchange of signatures on paperwork (Special/Hazardous Waste) is required to take place for each Controlled Waste Note (as issued and controlled by SEPA/EA) prior to transfer to quayside.

In accordance with UK Oil and Gas Industry, Operator Policy and UK National Waste Strategy, all waste is reported showing disposal routing with specific requirement to reduce, re-use and recycle waste where possible. All locations are required to segregate waste in order to reduce amounts sent to landfill.

The handling of waste from "Cradle to Grave" is controlled via approved licensed services only. Under the Duty of Care, all Waste Producers are required to ensure that their waste streams move and are received under such condition only. Violation of the Regulations may result in both Company and Individual prosecution by the relevant Regulatory Authority.

CCUs manifested to onshore as "empty" must physically **be empty**. Any contents must be manifested, regardless of the apparent insignificance, e.g. pallets, wood, rope, bags, paper, cardboard, packaging. Any hazardous or unidentifiable waste not manifested will be the subject on an investigation.

If at all possible, shipping waste materials in the same container as non-waste materials should be avoided.

15.1 Controlling Waste Offshore

It is the responsibility of the OIM to ensure that all waste is kept and transferred in a safe and compliant manner. All personnel (including service company personnel and visitors) must follow the Installation Waste Control Policy/Procedures.

Comprehensive guidance is found in Appendix 6 – Offshore Waste Control Pack example. (This covers packaging options and methods of preparing paperwork for safe and compliant transfer).

15.2 Special Waste (Hazardous/Harmful)

The preparation of a Special/Hazardous Waste Consignment Note is normally undertaken by the person who prepares the backload manifest. The person preparing the manifest is also responsible for completing the Dangerous Goods (DG) declarations. It is most important that any declared Special/Hazardous Waste is packaged in accordance with applicable Dangerous Goods by Sea Classification code. All waste streams now have an applicable European Waste Catalogue (EWC) code which must appear (as relevant) on waste transfer notes. In addition, normal DG notifications must take place with relevant DG stickers in place as appropriate.

15.3 Recyclable Waste

In general, it is necessary for Offshore Operators to segregate recyclable waste streams. Typical recyclable waste is shown as:

- i. Paper
- ii. Cardboard
- iii. Timber
- iv. Drums (metal/plastic)
- v. Scrap Metals
- vi. Cable
- vii. Plastics (wrapping/bottles)
- viii. Fluorescent Tubes
- ix. Batteries
- x. Solvents
- xi. Drink Cans
- xii. Toner Cartridges
- xiii. Ink Cartridges
- xiv. Electronic equipment
- xv. Circuit boards
- xvi. Paint tins/paint/brushes, etc.
- xvii. Oily solids
- xviii. Oils / Fuels

Collections are encouraged using clear plastic bags (where appropriate) to assist with easy identification and hazard spotting for handlers. The use of black sacks is not acceptable practice.

It has become normal practice for the waste service provider to establish a help-line for support and assistance on any waste issues to reduce risk, be it technical/administrative.

APPENDICES

APPENDIX 1	OFFSHORE TANKS – CHEMICALS, OILS, FUEL AND WASTE
APPENDIX 2	PORTABLE GAS EQUIPMENT
APPENDIX 3	SPECIAL CARGO
APPENDIX 4	DRILLING TUBULARS
APPENDIX 5	EXAMPLES OF PACKING
APPENDIX 6	OFFSHORE WASTE CONTROL PACK
APPENDIX 7	DOCUMENT EXAMPLES
APPENDIX 8	LIFTING OPERATIONS CATEGORISATION AND CONTROLS TABLE
APPENDIX 9	NON CONFORMANCE CODE CHECKLIST
APPENDIX 10	ABNORMAL OR WIDE LOAD MATRIX
APPENDIX 11	USE OF TAG-LINES
APPENDIX 12	EXAMPLES OF BAD PRACTICE

CROSS INDUSTRY WORKGROUP

FEEDBACK

APPENDIX 1 – OFFSHORE TANKS – CHEMICALS, OILS, FUEL AND WASTE

1.1 Introduction

Offshore tanks are a common feature of most, if not all offshore installations. They are used principally for the containment and transportation of a variety of oils and chemicals as well as returning waste products from offshore locations.

1.2 General

All companies providing chemicals and oils in offshore tanks for owners and operators of offshore installations and all offshore installations returning products and waste to the shore should ensure that:

- i. The appropriate type and size of tank is selected for the product to be carried. For more detailed information refer to IMDG Code Chapter 3.2 – Dangerous Goods List and Chapter 4.2 – Use of Portable Tanks and MEGCs.
- ii. All lifting equipment, frame and International Maritime Organisation (IMO) certification for the tank is fully in date at the time of use, and has sufficient validity remaining so as to avoid certification expiring when offshore.

1.3 Vessel (Tank) Types

- 1.3.1 A new coding system (portable tank instruction) for offshore portable tanks was introduced in the 2000 Edition of the IMDG Code and replaces the IMO classification for IMO Type tanks with a UN classification. For details of the transitional provision to the new code refer to Chapter 4.2 – Use of Portable Tanks and MEGCs of the IMDG Code.
- 1.3.2 IMO Type portable tanks designed, constructed and approved before the 1st of January 2003, under the provisions of the IMDG Code, can continue to be used until the end of their life, provided such tanks are inspected and tested in accordance with 6.7 of the IMDG Code. As the detailed provisions for these tanks are no longer in the current IMDG Code, DSC/Circ 12 was developed to allow the continued use of these tanks.
- 1.3.3 Offshore tanks (IMO and UN approved) used for the transportation of dangerous goods of classes 3 to 9 should be designed, constructed, inspected and tested in accordance with the provisions of Chapter 6.7 of the IMDG Code.

1.4

IMO Inspection and Testing of Tank Vessel

INSPECTION AND TESTING			
Time or Interval	Hydraulic Test (Periodic Inspection)	Leak proof Test on fully assembled tank (Intermediate Periodic Inspection)	Marking on Tank Data Plate
Initial Certification	Yes	Yes	Competent authority stamp
At intervals not exceeding 2.5 years (1)	No	Yes	Competent authority stamp
At intervals not exceeding 5 years (1)	Yes	Only when shell and equipment pressure tested separately	Competent authority stamp
Where tank vessel shows evidence of damage, corroded areas or leakage	At the discretion of the competent authority	At the discretion of the competent authority	Competent authority stamp (if test carried out)

An offshore tank may not be filled and offered for shipment after the date of expiry of the last five year or two and a half year periodic inspection and test. However, an offshore tank filled prior to the date of expiry of the last periodic inspection and test may be shipped for a period not to exceed three months beyond the date of expiry of the last periodic inspection and test.

In addition, an offshore tank may be shipped after the expiry of the last periodic inspection and test:

- i. after emptying but before cleaning, for the purposes of performing the next required inspection and test prior to refilling; and
- ii. unless otherwise approved by the competent authority, for a period not to exceed six months beyond the date of expiry of the last periodic inspection and test, in order to allow the return of dangerous goods for proper disposal or recycling. Reference to this exemption should be mentioned on the shipment documentation.

Further details regarding the inspection and testing of offshore tanks can be found in Chapter 6.7 paragraph 6.7.2.19 of the IMDG Code.

1.5

General Checks for Offshore Tanks

The following checks should be carried out as a minimum:

- i. Check the condition of the frame and ensure that generally there are no signs of excessive corrosion or deformation.
- ii. Ensure that the tank is not overloaded. This can be done by calculating the product weight and comparing the result against the plated maximum payload on the offshore data plate. The following formula should be used to achieve this:

$$\text{Volume of product in tank} \times \text{product density} = \text{payload}.$$
- iii. In the case of tanks being shipped full or part-full, ensure there are no signs of leakage.
- iv. Check that all certification is fully in date at the time of use, and has sufficient test period remaining so as to prevent certification expiring when offshore. IMO certification should be checked in accordance with paragraph 1.4 of this appendix.
- v. Ensure that any old hazard and supply labelling has been removed.
- vi. Affix all relevant hazard and supply labelling (where required).

- vii. Check all valve assemblies for damage and security ensuring end caps are in place and fastened.
- viii. Check the man-lid is securely closed.
- ix. Check the lifting equipment for any signs of damage or incorrect bridle arrangement.
- x. Ensure the fifth leg of the lifting assembly is stowed on the outside of the tank frame for ease of connection to the crane both onshore and offshore.
- xi. Check the grating for any signs of damage or loose fittings.
- xii. Check the top surfaces for any potential dropped objects.
- xiii. Check the forklift pockets for loose items such as tools, stones, dunnage, etc.
- xiv. Check all bolts securing tank to crash frame are firmly secured.

After completion of all checks, a Tank Despatch/Return Checklist should be completed for each load being despatched offshore or returned onshore.

An illustration of the checks to be carried out on offshore tanks can be found in Appendix 7.3.

- 1.5.1 Increasingly, offshore tanks are being fitted with manual vacuum breaker valves at the same end as the main bottom discharge valve. This is to remove the need for personnel to climb on top of the tank to vent prior to discharge.

This valve is sometimes difficult to see through the frame of the tank and must be checked for security

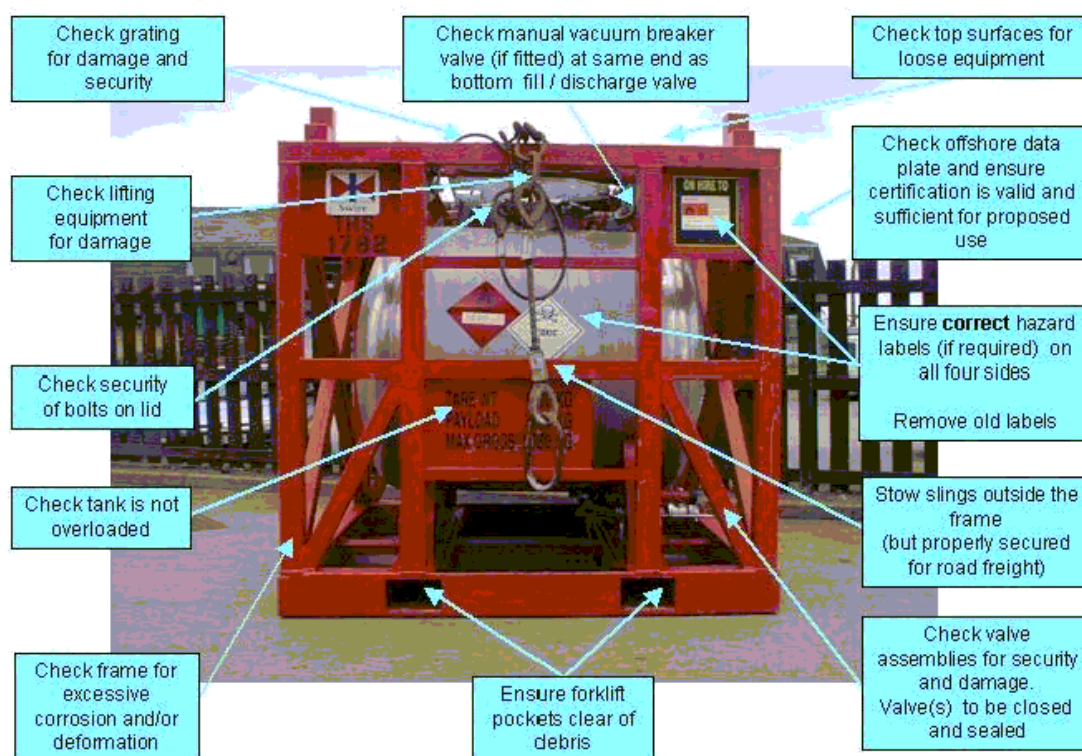
Where no manual valve exists, the automatic Pressure Vacuum (PV) valve should not be manually over-ridden to facilitate decanting. This valve is intended to operate automatically when the tank pressure or vacuum exceeds predetermined limits. Frequent manual operation has been found to damage the valve and may prevent it operating as intended in an emergency.

1.6 Plate Markings

A typical example of the format for a plate fitted to an offshore IMO tank is shown below.

OWNER	SHELL UK EXPLORATION & PRODUCTION	
	TANK No.	627
MANUFACTURED BY CONTAINERS AND PRESSURE VESSELS LTD.		
DATE OF MANUFACTURE	NOV 01	TANK No. 11436
TANK MATERIAL	BS 1501 - 3 GRADE S16 S31	
EQUIV. THICKNESS IN MILD STEEL	5 MM	
DESIGN TEMPERATURE	-20°C TO 50°C	
CALCULATION PRESSURE	3.20 BAR	
WORKING PRESSURE	2.65 BAR	
TEST PRESSURE	4.00 BAR	
DESIGN CODE PD 5500 : 2000		
INSPECTING AUTHORITY	BUREAU VERITAS	
HYD. TEST DATE	02/10/01 <i>EB T/m</i>	
PERIODIC TEST DATES		
2.5 YEAR 1.	5 YEAR 1.	
TEST 2.	TEST 2.	
3.	3.	
APPROVALS.:	BUREAU VERITAS	BVCT C170145/N
IMO TYPE 1	ADR/RID	
TARE WEIGHT	2460 kg	
MAX. WEIGHT OF LIQUID	3660 kg	
MAX. GROSS WEIGHT	6,060 kg	
MAX. WATER CAPACITY	2920 litres	
NOMINAL CAPACITY	2,728 litres	

1.7 Offshore Tank – Key Points from Checklist



APPENDIX 2 – PORTABLE GAS EQUIPMENT

2.1 Introduction

Gas products are used in various forms on all offshore installations. They are typically transported within portable gas equipment such as cylinders either transported in racks or built into quads, although single cylinders in lift frames are also widely used. Such racks and quads are subject to the certification and testing requirements as specified in section 9.

2.2 General

All companies providing gas in portable gas equipment to contractors, owners and operators of offshore installations, and all offshore installations returning transportable gas containers shall ensure that:

- i. Suitable cylinder types are used (see 2.3 below).
- ii. Portable gas equipment is thoroughly checked prior to shipment (see 2.4 below).
- iii. Specific requirements are met for Gas Quads/Packs/Multiple Element Gas Containers (MEGCs) (see 2.5 below).
- iv. Specific requirements are met for Lift Frames (see 2.6 below).

2.3 Cylinder Types

Equipment used for the offshore transportation of dangerous goods of Class 2 should be designed, constructed, inspected and tested in accordance with the provisions of the current IMDG Code (and in particular section 4.1.6, special packing provisions for goods of class 2), The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations [SI 2007 1573], and any other appropriate standards (i.e. BS EN 1968, BS7072, BS EN 12079, DNV 2.7 – 1).

2.4 General Checks for Portable Gas Equipment

All companies providing gas products in transportable equipment for owners and operators of offshore installations and all offshore installations returning products and waste onshore should ensure that their pre-dispatch checks take account of equipment integrity including:

- i. No signs of excessive corrosion or deformation.
- ii. Slings and shackles are fitted, free from damage, and are secure (i.e. split pins/ tie wraps fitted).
- iii. All certification is fully in date at the time of use, and has sufficient test period remaining so as to reduce the likelihood of certification expiring when offshore (normally minimum 30 days certification unless otherwise stated).
- iv. Any old, irrelevant or confusing hazard and supply labelling has been removed.
- v. All relevant hazard and supply labelling (where required) is affixed to equipment, appropriate to the gas contained within.
- vi. Equipment is painted in colour appropriate to the gas or gas mixture contained within, in accordance with BS EN 1089-3:2011, Transportable Gas Cylinders – Gas Cylinder Identification (excluding LPG) - Part 3: colour coding).

- vii. Forklift pockets are free of any loose items such as tools, stones, debris, etc.
- viii. All flat surfaces are free of any potential dropped objects (i.e. tools). Any that are found must be removed prior to transportation.
- ix. Lifting slings are in test, of the appropriate capacity, and that stamp marking identification agrees with test certification supplied.

2.5 Specific Requirements for Gas Quads/Packs/MEGCs

- i. Ensure that valves and manifolds are suitably protected from potential damage with valve guarding mesh.
- ii. Ensure that valve guarding mesh is secure and in good condition.
- iii. Ensure that all valves are in good condition and operate correctly.
- iv. Ensure that manifold is free from damage.
- v. Ensure that all cylinders are properly secured in frame.
- vi. Ensure that manifold has been vented for transport and all cylinder valves and king (main) valves are fully closed.

2.6 Specific Requirements for Lift Frames

- i. Ensure that door is in good condition and operates correctly.
- ii. Where fitted, ensure that the door-securing pin retaining pin is free from corrosion and engaged.
- iii. Ensure equipment identification number is painted clearly on roof (**note:** not applicable where mesh roof is fitted).
- iv. Ensure cylinders are securely restrained within lift frame to prevent movement during transit (**note:** particular care should be taken with smaller cylinders to ensure they are secure and they may require additional packing and/or a special container).
- v. Ensure positive security of cylinders in rack by strapping, of serviceable condition, is in place. Small cylinders may require additional packing and/or a special container. Bottles shipped in racks without valve protection plates must be capped.

APPENDIX 3 – SPECIAL CARGO

3.1 General

All cargo in this category must be considered as non-routine and the lifting operations planned as in Section 8, Lifting and Slinging.

It is strongly recommended that, when planning the shipment of special cargo, logistics personnel are involved at the earliest opportunity.

3.2 Unusual Shape and Weight Distribution

3.2.1 *Assessment of unusual cargo*

Considerations which must be taken into account when assessing unusual items of cargo are as follows:

- i. Items with high and/or offset centre of gravity will be unstable.
- ii. Whether any additional securing arrangements are required.
- iii. Cargo may be shipped or lifted in horizontal position for later up-ending offshore. In these circumstances all aspects of transportation, lifting and installation operations to be subject to a full Risk Assessment being carried out.
- iv. Cargo may require use of lifting beams or frames or asymmetric rigging arrangements.
- v. During road transportation beams or frames must be removed and stowed as separate cargo items. Where removed and subsequently re-attached for the lifting operations a full Risk Assessment should be performed. Otherwise they must be secured in a suitable manner to prevent damage.
- vi. Long cargo baskets should lift horizontally (see 9.4.2 iv).

3.2.2 *Unusually Heavy Items (>20 tonnes)*

- i. May require stowage in particular part of vessel's deck.
- ii. Should involve discussion between all parties, including vessel Master.
- iii. Must involve assessment of lifting dynamics.
- iv. May involve further reduction in environmental criteria for operation.

3.2.3 *Unusually Long, Fragile Items*

- i. May require use of special packing arrangements.
- ii. May require the use of tag lines. If it is considered necessary it should only be done after a Risk Assessment has been undertaken, see Appendix 11.
- iii. Items vulnerable to water damage must be suitably protected.

3.2.4 *Internal Sea Fastenings in CCUs*

Internal Sea Fastening in CCUs involving welding must only be undertaken following engineering review and consultation with the Operator and container fabricator/ owner.

3.2.5 *Lift Integrity*

Ensure that all securing bolts and fastenings are present and tightened up appropriately.

3.2.6 *Fragile Items, Pre-assembled and Pre-commissioned Machinery Items Requiring to be Kept Dry*

Because of the fragile nature and the high value of these items, they should be transported in a specially designed lifting frame/module. If not, the following points should be considered:

- i. These items should be crated in a heavy-duty material to reduce the potential for damage.
- ii. The crate should also be made adequately to be able to be lifted from a CCU.
- iii. The crate should come complete with its own lifting arrangements.
- iv. The crate should be labelled to clearly identify the fragile nature of the goods.
- v. The crate should be loaded into a container ensuring due consideration has been taken for removal when it reaches its final destination. The item should then be secured in the container as detailed within these guidelines.
- vi. Consideration should be given to items requiring to be kept dry.
- vii. Refer to the British Standard for crates: BS1133-8: 1991.

3.2.6 *Special Lifts to Normally Unattended Installations (NUIs)*

Some NUIs have crane weight restrictions, which mean that placing even the smallest of equipment in a CCU will lead to the SWL of the crane being exceeded.

Where such crane weight restrictions apply, operations must be Risk Assessed, with the following points being considered:

- i. It may be safer to use fibre slings or suitably coated wire rope slings to lift equipment or place equipment inside and remove equipment from CCUs.
- ii. In the case of scaffolding, if it cannot be loaded into a half height container due to crane weight restrictions then it should be pre-slung and secured using steel banding or other suitable alternatives around the bundle to prevent movement.

3.3 *Back-loading of Bulk Underdeck Cargo to Support Vessel Tanks*

Vessels supplying the offshore industry are required to carry a variety of bulk liquids in dedicated tanks within the ship to supply installations offshore. It has been noted on a number of occasions that bulk liquids back-loaded to ships have been incorrectly declared by offshore installations and drilling rigs. These products can have the potential to seriously impact the technical integrity of the vessel.

For specific bulk backload procedures refer to Oil & Gas UK Offshore Support Vessel Guidelines. Particular attention is drawn to MGN 283 (M).


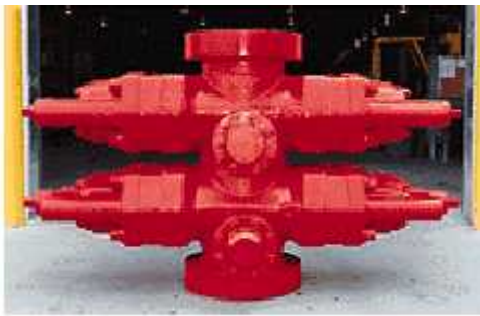

3.4 *Bulk Transfer to/from Portable Tanks*


When offshore support vessels are required to carry portable tanks that are to be loaded or discharged whilst onboard, the suggested template as per MCA Disc/Circ 12, Annex 3 "Procedures for the discharge and loading of dangerous goods from portable tanks carried on the deck of offshore supply/support vessels" should be completed and submitted to the local MCA's Marine office prior to loading the tanks to gain approval. Particular attention is drawn to MGN 282 (M).

3.5 Examples of Special Cargo

1. Anchors
2. Blow out Preventer (BOP)
3. Lifeboat in Transportation Frame
4. Fishing Friendly Frame

3.5.1 Illustrations of Special Cargo

No	Description	Illustration
1.	Anchors	
2.	Blow Out Preventer Frames are the preferred means of transportation	
3.	Lifeboat in Transportation Frame	

No	Description	Illustration
4.	Fishing Friendly	

APPENDIX 4 – DRILLING TUBULARS

This category includes items, such as drill pipe, risers, conductor, casing and tubing.

4.1 General

The following principles apply to both individual and bundled tubulars. However they do NOT apply where dedicated or bespoke lifting points have been provided as attachment points for the slings.

- 4.1.1 Each tubular lift must always be slung with two slings, each of the same length and of the same SWL. The SWL of each sling should be equal to or greater than the Gross Weight of the load. Every tubular lift must lift level.
- 4.1.2 Slings should be placed at equal distance (approximately 25%) from the ends of the load with the internal angle at the hook not greater than 90°. They should be double wrapped and choked around the tubular. When it is necessary to bundle tubulars of different lengths, the shortest tubular should be no less than 75% of the length of the longest tubular.
- 4.1.3 In the case of slung tubulars a wire rope grip (DIN 1142 type preferred) or other approved device should be used above the reeved eye that forms the 'choke'. In addition a tie wrap of robust design should be used on the reeved eye of the sling to prevent the eye from slipping over the rope grip. This arrangement prevents the bundle from coming slack when it's landed.
Note: The live end of the sling should not be threaded under the first wrap.
- 4.1.4 Excessively long tubular lifts may have a tag line attached. This should be subject to a Risk Assessment.
- 4.1.5 Care should be taken on removing slings due to possible stowage movement.
- 4.1.6 Tubular 'stacks' should be segregated by pipe posts.
- 4.1.7 The bottom row of a tubular stow should be individually 'choked' at positions forward and aft ends of each joint or secured by other mechanical means to stop movement. This also applies if there is only one row of tubulars.
- 4.1.8 In preparing tubulars for transportation it is good practice to pick up the tubular lift for a second time to see if more slack can be taken out using clamps or bulldog clips.
- 4.1.9 The offshore operator may have a requirement for tubulars to be loaded in sequence for discharge at the installation. This can only be completed if a Risk Assessment has been conducted and all tubular requirements are met.
- 4.1.10 Ensure thread protectors and end-caps are securely fastened.
- 4.1.11 Due care and attention should be taken when loading tubulars to avoid damage to slings.
- 4.1.12 All tubulars should be correctly orientated on the trailers and when loading on vessels.
- 4.1.13 All back-loaded tubulars should be cleaned or capped to prevent spillage of any contaminant.
- 4.1.14 When shipping loose protectors, it is recommended that they be placed in compactor bags or equivalent before placing in CCU. Care must be given to ensure that the compactor bag's SWL is not exceeded.

4.2 Bundled Tubulars

- 4.2.1 Certified transportation frames are considered best practice for smaller dimension tubulars.
- 4.2.2 Only tubulars of the same diameter should be bundled together and whenever possible should be of similar length.
- 4.2.3 The number of tubulars in each bundle should be such that the inside/middle tubulars are gripped and will not slip out of the bundle. Whenever practicable tubulars over 5.5" in diameter should be bundled in 'odd' numbers.

4.3 Individually Slung Tubulars

- 4.3.1 Prior to loading individual tubular cargo, bedding rope must be placed at appropriate positions on the vessels intended loading area. The minimum of two certified securing arrangements must be placed at equal distance approximately 25% from the ends of the intended stow. The length and/or height of securing arrangements must be sufficient to ensure that the entire tubular stow is secured.

Examples of certified securing arrangements are: lashing chain, webbing, wire, pipe pins/stanchions, stretchers, ratchets, shackles, etc.
- 4.3.2 Specifically for vessel loading, only tubulars of the same diameter are to be stowed together and wherever possible should be of similar length to ensure the tubulars are properly secured and positioned between the securing arrangements.
- 4.3.3 Smaller individual joints or pup joints that cannot be stowed between securing arrangements and are considered to be less than 60% overall length of average joint, must be secured as a separate item or shipped in cargo baskets.

4.4 Access and Egress

During loading and unloading of bundled tubulars on a vessel, consideration must be given to the Load Handlers and specifically safe means of access and egress to the bundle.

Samson posts should always be put into deck slots where tubing / drill pipe is bundled. The use of Samson posts is considered good practice in the event that the installation only takes 'part' of the load. This also ensures that bundles are kept in "small parcels".

Tag lines and industry approved 'hooks' for retrieving slings should be used wherever possible preventing Working at Height, reducing the potential of a fall.

Personnel should never attempt a lift from a bundle of tubulars whilst standing on surrounding tubulars.

Employers must also ensure that suitable PPE is donned paying particular attention to anti-slip footwear.

4.5 Examples of Drilling Tubulars

1. Tubing Frame
2. Tubing Bundle
3. Tubing – small frame
4. Tubular Packing System



4.5.1 Illustrations of Drilling Tubulars

No	Description	Illustration
1.	<p>Tubing Frame</p> <p>Restraining bars to be securely fastened to avoid pipe slipping.</p>	
2.	<p>Tubing Bundle</p> <p>Care should be exercised on removing slings due to stowage movement.</p>	
3.	<p>Tubing – small frame</p> <p>Secure method of maximising storage and transportation of tubing.</p>	
4.	<p>Tubular Packing System</p>	


APPENDIX 5 – EXAMPLES OF PACKING

1. Air Bag
2. Insert Baskets
3. Container Net
4. Corded Polyester Lashing
5. Door Secondary Securing Device

5.1 Illustrations of Packing

No	Description	Illustration
1.	Air Bag	
2.	<p>Insert Basket</p> <p>For loading inside a closed container (also known as stillage).</p> <p>Do not overload.</p> <p>Consider receiving installation's freight handling facilities.</p>	

No	Description	Illustration
3.	<p>Container Net</p> <p>Ensure bottom and top skirt is fully tightened.</p>	
4.	<p>Corded Polyester Lashing</p> <p>Ensure lashing is certified.</p> <p>Use 25mm and 31mm lashing with 1.5 tonne and 2.5 tonne SWL.</p> <p>Heavier SWL lashing is also available.</p>	 

No	Description	Illustration
5.	<p>Door Secondary Securing Device</p> <p>Typical methods include:</p> <ul style="list-style-type: none"> • "Custom" type metal seals • Metal "karabiner" • Heavy duty tie-wrap (7.6mm minimum width) • Wire door seal • Step Change Inspection Tags 	

APPENDIX 6 – OFFSHORE WASTE CONTROL PACK

User Guide

The following guidelines are for reference by material controllers/persons responsible for preparing manifests for back load.

1. A waste catalogue/reference list is provided to identify type/terminology as standard supply.
 - a) Please package waste in accordance with Oil & Gas cargo transfer guidelines/IMDG classification.
 - b) Use the waste reference lists to identify waste type and follow the preparation guidelines for special and non-special waste consignment note completion.
2. Use the step-by-step instructions to complete the necessary paperwork.
3. If further assistance is required please phone your Enviroco Waste helpline/EBA on (01224) 884669 (Aberdeen) or (01779) 485200 (Peterhead) for advice on sourcing paperwork, completing paperwork, choosing packaging, advice on unknown wastes and your legal requirements.

Waste offshore is controlled under 'Control of Pollution (by Garbage) at Sea Regulations' and regulated by the Maritime Coastguard Agency.

Once waste cargo is discharged quayside, the regulator is SEPA (Scottish Environmental Protection Agency).

UK Waste Regulations and 'Duty of Care' apply throughout the handling chain.

Special Waste Regulations

Some wastes are harmful to human health or to the environment, either immediately or over an extended period of time. These are called special wastes in Scotland. If your business produces special (or indeed non-special) waste you have a legal obligation to make sure it's disposed of legally.

Your waste will fall into one of the following categories:

- Waste considered to be special under the Special Waste Regulations - for example, lead acid batteries or fluorescent tubes.
- Waste that is not considered to be special waste - for example, uncontaminated paper or scrap metal.
- Waste that needs to be assessed to find out whether it is special waste or not.

Enviroco have produced a waste reference list for both special and non-special waste. This gives you all the details you should need to complete both a consignment note for special waste and a duty of care note for non-special waste, the waste reference lists are available from the helpline or website.

The Special Waste Consignment Note

For offshore waste consigned through Scottish ports you should only use the Enviroco provided special waste consignment notes when consigned to an Enviroco facility.

For consignments to other facilities (e.g. mud cuttings) you should use the Consignment Note as provided by the Drill Cuttings Processor.

How to complete the Enviroco Special Waste Consignment Note (Scotland)

The note is split into 6 Parts; YOU are only required to complete 3 Parts! (as highlighted in yellow below)

	Part	Who Completes?
A	Consignment Details	Producer
B	Description of Waste	Producer
C	Carrier's Certificate	Carrier – Onshore
D1	Consignor's Certificate	Producer
D2	Ship's Master Certificate	Ship's Master
E	Consignee's Certificate	Disposal Site – Enviroco

SPECIAL WASTE REGULATION 1996 No of previous (if different) _____		SPECIAL CONSIGNMENT NOTE NR SC 50222233	
A. CONSIGNMENT DETAILS		Please tick if you are a transfer station <input type="checkbox"/> Sheet _____ of _____	
1. The waste described below is to be removed from (name, address & postcode) (operator company & offshore unit)		Supply Vessel: _____ Manifest No: _____	
2. The waste will be taken to (name, address & postcode): Enviroco Limited, Helview Waste Transfer Station, Greenbank Crescent, East Turf, Aberdeen AB12 3BQ			
3. The consignment(s) will be: one single <input type="checkbox"/> a succession <input type="checkbox"/> carrier's round <input type="checkbox"/> other <input checked="" type="checkbox"/> please specify _____			
4. Expected removal date of first consignment: _____ last consignment: _____		Oil & Gas Exploration & Production	
5. Name: _____ Signature: _____ Date: _____, 20 _____		On behalf of (company, address & postcode) (operator company & offshore unit): _____	
6. Tel: _____		7. The waste producer was (if different from 1.) (name, address & postcode): _____ Offshore Location: _____	
B. DESCRIPTION OF THE WASTE No. of additional sheets <input type="checkbox"/>			
1. The waste is _____		2. The EWC* six digit code(s) assigned to the waste is: _____	
3. Physical form: Liquid <input type="checkbox"/> Powder <input type="checkbox"/> Sludge <input type="checkbox"/> Solids <input type="checkbox"/> Mixed <input type="checkbox"/> 4. Colour: _____			
5. Total quantity for removal (include units kg/ltrs/tonnes etc.): _____		Container size, type & number: _____	
6. The chemical/biological components that make the waste special are:			
Component	Concentration (% or mg/kg)	Component	Concentration (% or mg/kg)
7. The hazard codes (e.g. H7) are: _____			
8. The process giving rise to the waste is: Offshore Oil & Gas Exploration & Production			
C. CARRIER'S CERTIFICATE			
I certify that today I collected the consignment and that the details in A1, A2 and B1 are correct. The quantity collected is _____ ltrs/kg.			
Name: _____		On behalf of (company, address & postcode): _____	
Signature: _____		Date: _____ at _____ hours	
1. Carrier registration No./reason for exemption: _____		2. Vehicle registration No (or mode of transport, if not road): _____	
D1. CONSIGNOR'S CERTIFICATE		D2. SHIP'S MASTER CERTIFICATE	
I certify that the information in B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures.		I certify that I moved this waste on _____ at _____ hrs.	
Name: _____		The quantity of waste moved in this consignment was _____	
Signature: _____ Date: _____		The waste was loaded at: _____ on _____	
On behalf of (company, address & postcode): _____		Name: _____ Signature: _____	
		On behalf of (Co): _____ Date: _____	
E. CONSIGNEE'S CERTIFICATE			
1. I received this waste on _____ at _____ hrs.		2. Quantity received (include units kg/ltrs/tonnes etc.): _____	
3. Vehicle registration No: _____		4. Waste Management Operation(s): Transfer/Transfer Station	
I certify that waste management licence/authorisation/exemption No _____ authorises the management of waste described in B			
Name: _____		On behalf of (company, address & postcode): _____	
Signature: _____		Enviroco Limited Helview Waste Transfer Station Greenbank Crescent East Turf, Aberdeen AB12 3BQ	
Date: _____			
PLEASE COMPLETE IN BLOCK CAPITALS			
*The European Waste Catalogue (EWC) sets out a list of wastes pursuant to Article 1(a) of the Waste Directive and Article 1(4) of the Hazardous Waste Directive and is set out in Commission Decision 2000/532/EC (OJ No. L 194, 25.7.1995, p. 30), as amended.			
REF: ENV12 408			

Figure 1 – The Special Waste Consignment Note

Part A – Consignment Details

SPECIAL WASTE REGULATION 1996 SPECIAL CONSIGNMENT
No of permits (if different) _____ NOTE NR. **SC50222233**

A. CONSIGNMENT DETAILS Please tick if you are a transfer station ☐ Sheet _____ of _____

1. The waste described below is to be removed from:
(name, address & postcode) (operator company & offshore unit)
Supply Vessel:
Manifest No: _____

2. The waste will be taken to (name, address & postcode):
Enviroco Limited, Hildesley Waste Transfer Station, Greenbank Crescent, East Tuford, Aberdeen AB12 3RQ

3. The consignment(s) will be: one single ☐ a succession ☐ carrier's round ☐ other ☒ please specify
Oil & Gas Exploration & Production

4. Expected removal date of first consignment: _____ last consignment: _____

5. Name: _____ On behalf of (company, address & postcode/operative company & offshore unit)
Signature: _____
Date: _____

6. Tel: _____ 7. The waste producer was (if different from 1) (name, address & postcode)
Offshore Location: _____

Figure 2 – Part A of a Special Waste Consignment Note

Part A – Consignment Completion Requirement

Each SWCN has a unique number consigned to it by SEPA. Enter the offshore tracking details (i.e. your location, the supply vessel used and relevant manifest number for the shipment). PLEASE USE CAPITAL LETTERS.

1. You MUST enter the asset name and the Field Operator's full UK address in here including postcode.
2. The Enviroco Waste Reception Facility address is pre-printed on the form. If not, please check the correct Transfer Station address to enter here.
3. The consignment will be marked – ☒ other – and is pre-printed.
4. N/A
5. Add YOUR name / signature and date. NOTE: If the field operators address is added in full (item A1) there is no need to duplicate the address.
6. Please add offshore asset phone number.

7. Add asset name as 'Producer' if not shown in item A1 above.

Part B – Description of the Waste

B. DESCRIPTION OF THE WASTE No. of additional sheets ☐ 1

1. The waste is **OILY WASTE** 2. The SWCN site alpha code assigned to the waste is **APAL**

3. Physical form: Liquid ☐ Powder ☐ Sludge ☐ Solids ☐ Mixed ☒ 4. Colour **VARIED**

5. Total quantity for removal (include units kg/tons/etc.): _____ Container class, type & number: **SKIP 1234 + AMB 20s**

6. The chemical/biological components that make the waste special are:

Component	Concentration (% or mg/kg)	Component	Concentration (% or mg/kg)
APAL			

7. The hazard codes (e.g. H7) are: _____

8. The process giving rise to the waste is: **Offshore Oil & Gas Exploration & Production**

Figure 3 – Part B of a Special Waste Consignment Note

1. List waste type (e.g. oily waste). Or if multiple items state APAL (as per attached list).

2. State APAL (as per attached list).

3. Tick the MIXED box.

4. Colour: add - VARIED.

5. Give approximate total weight of waste types. And container I.D. numbers.
NOTE: It is important to list CCU numbers carrying special waste.

6. This section can show APAL (as per attached list) when attaching information extracted from the Special Waste Reference List as an attachment.

Once completed, remove the top white copy of the consignment note and keep a copy of the waste reference list. Hand the rest of the consignment note and waste reference list to the Ship's Master. Ensure that for every colour copy of the consignment note handed to the Ship's Master, the same number of copies of the attached list are also present.

There is no need to receive the Ship's Masters signature on your copy held on board (Rig/Platform etc).

Part D1 – Consignor's Certificate

<p>D1. CONSIGNOR'S CERTIFICATE</p> <p>I certify that the information in B and C above is correct, that the carrier is registered or exempt and was advised of the appropriate precautionary measures.</p> <p>Name: _____</p> <p>Signature: _____ Date: _____</p> <p>On behalf of (company, address & postcode)</p> <p>As per A1 above _____</p>
--

Figure 4 – Part D1 of a Special Waste Consignment Note

Completed by the producer detailing:

- Enter your name / signature and date.
- On behalf of:
State 'as per A1 above' or add full operator onshore address and postcode.

The special waste consignment note is a recognised waste note, from producer point to onshore transfer station.

In order to take best advantage of the SWCN it is advisable to use the special waste pick list (cut and paste option).

This can be provided on request from the EBA via the waste helpline.

Each producer **MUST** hold special waste documentation on file for a minimum of 3 years following transfer.

Instructions for the Processing of Consignment Notes for Bulk Liquid / Mud Disposals

- Offshore Location shall raise SC consignment note, completing sections A, B and D1 and provide a waste analysis report to the UKOOA standard.
- Offshore Location must retain the **WHITE** copy for files and pass all other copies to the Vessel Master.

The Non-Special Waste Transfer Note

The paperwork below is used for non-special waste shipments to Enviroco from offshore assets (fixed or mobile).

The non-special waste note has sections that must be completed by the Producer. These are highlighted in yellow.

- Complete sections as highlighted in yellow. (see figure 5, page 12)
- For waste descriptions use the 'Non-Special Waste Reference List' to identify and enter EWC codes next to the waste streams being shipped.
- Sign & date the form.
- Retain the white copy of the form.
- Hand the rest of the form to the Ship's Master.

[illegible]

Figure 5 – The Non-Special Waste Consignment Note

Control of Pollution (by garbage) at Sea Regulations

Regulated by the MCA (Marine Coastguard Agency) all Offshore Units (Drill Rigs / Platforms / FPSO's) are required to display a WASTE MANAGEMENT PLAN that outlines Roles & Responsibilities; lists waste streams generated; shows a WASTE LOCATOR PLAN which designates main collection points onboard. In addition, the regulations require that a record of all waste generated and sent ashore for disposal is kept on file (copies of waste notes and attachments will suffice).

It is a requirement for placards to be on display advising that 'NO WASTE IS TO BE THROWN OVERBOARD' and you may get stickers from Enviroco to place on external exit points.

An initial 'Starter Pack' including waste consignment notes / reference sheets / posters etc will be provided by the assigned EBA / Offshore Waste Coordinator.

Packaging of Waste

In accordance with Industry 'Best Practice', black plastic sacks must not be used for waste collection and clear plastic degradable / bio degradable / standard must be used instead. This is necessary to 'spot the hazard' through the waste handling chain. Safety for all is paramount!

Deck crew must follow the Oil & Gas 'Guidelines for the Safe Packing and Handling of Cargo to and from Offshore Locations' and persons preparing manifests and special waste consignment notes must be vigilant and aware of the packing requirements under IMDG (dictated by the UN number classification). For significant volumes of non routine waste please ensure that you are aware of the correct option for containment required both legally but also dictated by the potential end disposal route, to avoid any costly repackaging work.

Basic Tips for Collecting Waste Onboard

Batteries –

- Tape over terminals.
- Package lithium batteries individually in clear plastic and with a non-conductive media, i.e. micafil.
- Never specify as non-special.
- Consider rechargeable batteries where possible to reduce waste.

Fluorescent tubes / Sodium lamps – Avoid breakage for maximum recycle recovery. Send back in original packaging where possible.

Food Waste – Use the onboard galley macerator to dispose of unwanted food stuff. Food residues that cannot be disposed of in this manner must be bagged in clear sacks, sealed and placed in the galley waste skip.

Aerosols – Unwanted aerosols must be kept secure and out of direct sunlight. Use smaller containment units rather than a 205 litre clip top drum and transfer ashore to avoid dangerous waste build up onboard.

Paint Tins – Empty paint tins must be completely empty and without aroma to be classified as non-special.

Plastic / Glass Containers – All containers should be rinsed to ensure they can be recycled. If containers previously contained hazardous products and have not been cleaned, please class as special waste.

All waste is checked on arrival at the registered waste transfer station by a chemist. Non-compliant waste may be reported as a non conformance to the Operator or as an 'observation' depending on the issue. There is a lawful requirement to reject / report non-compliant waste deliveries so deck crew and materials controller vigilance is imperative.

Provide advance notice of any loads of the following waste types to ensure a disposal / recycling route can be found / arranged – LSA, PCB, Flares, Smoke Detectors, large volumes of Mercury and significant volumes of any other non routine waste.

The onshore regulatory authority is the Scottish Environment Agency and they operate in order to regulate the Specil Waste Regulations, the Environmental Protection Act and the Duty of Care.

Remember use the waste helpline if you are unsure

Special and Non-Special Waste Reference Lists

Special Waste Reference Sheet Pick List

Enviroco have developed waste reference lists for Non-Special and Special wastes. These have been created to assist you in identifying your waste and therefore completing the associated documentation correctly.
















The lists contain comprehensive information including the detail required for the "Description of the Waste" (see page 9) section on Special Waste Documentation. The Special Waste Reference Sheet Pick List has columns included for waste weight, unit size, quantity and container number so that the list can be used as an attachment to a consignment note where there are several items to be consigned. (cut & paste to suit waste streams being sent ashore)

These lists are reviewed frequently to ensure they are up to date and are available from the Environmental Business Advisor (EBA) and on the Enviroco website.

"What Waste Where" Guide – Special Wastes













The following is a guide as to how to contain your Special wastes. If in doubt please ask your Materials Controller / Deck Foreman or use the NNS waste helpline.

The Carriage of Dangerous Goods Regulations (IMDG) will dictate the packaging classification and labelling.

Waste	Place In	Hazard Info	Limits
Aerosols		Flammable Harmful Toxic	No pesticide aerosols.
Batteries, Alkaline Dry & Batteries Ni-Cad Dry		Corrosive	"Household" type batteries only. Keep different batteries in separate marked containers. Tape terminals.
Batteries, Lead Acid, or Ni-Cad Batteries		Corrosive	Ensure any leaking batteries are held separately. Keep lead acid batteries away from Ni-Cad batteries.
Oil		Potentially Carcinogenic	No oils containing PCBs. Use the helpline if you have PCB contamination.
Paint and Thinners Slaps		Flammable Harmful	Drained paint and thinners only. No hardeners, activators or Isocyanates. It is preferable to collect waste paint & thinners separately.
Paint Tins, Drained & Empty		Flammable Harmful	Ensure that a liner bag is used or please bag your tins.
Rags Contaminated with Oil		Potentially Carcinogenic	No free liquids. Ensure that a liner bag is used or please bag. Specify on paperwork if they are recyclable trial rags.
Medical Waste – Sharps		Infectious Substance	Used sharps only.
Medical Waste – Swabs / Dressings		Infectious Substance	Use a rigid clinical waste container.
Gaskets – Asbestos		Potentially Carcinogenic	Gaskets are not accepted as scrap. Assume all gaskets contain asbestos. Gaskets must be double bagged and then drummed.
Hazardous Liquids		Flammable Corrosive Toxic	Ensure that materials are not mixed together and a detailed description/ MSDS is added to the paperwork.
Hazardous Solids		Flammable Corrosive Toxic	Ensure that materials are not mixed together and a detailed description/ MSDS is added to the paperwork.
Gas Cylinders		Flammable Corrosive Toxic	Ensure a detailed description is added to the paperwork. Specify if your cylinder is de-gassed and tag accordingly. Do not put in scrap metal skip.
Fluorescent Tubes		Mercury Vapours	Return complete. Do not break.
Fridges & Freezers, TV's & Electrical Compliances		Toxic Gases	Return as itemised WEEE.





“What Waste Where” Guide – Non-Special Wastes

The following is a guide as to how to contain your Non-Special wastes. If in doubt please ask your Materials Controller/Deck Forman or use the NNS waste helpline.

Waste	Place In	Limits
Galley Waste		Non recyclable and bagged waste only.
Scrap Metal		No gas cylinders. No general waste. No gaskets. No aerosols. No hazardous/special waste. No pallets or wood.
Paper & Cardboard		Paper & card can be placed in these containers. Wheelie bins are available for loose paper/card. (Do not include contaminated wood)
Timber		Timber of all sorts can be recycled. Remove potential safety hazards if possible.
Plastics		Plastic bottles can be recycled. Good quality shrink-wrap/ bubblewrap/polythene* (soft plastics) can be recycled. These must not be packaged together. All plastic must be clean and free of contamination.
General Waste		Remember to bag as much as possible with clear bin bags and place them in waste skips.
Plastic Cups		Ensure all liquids are removed from the cups. Use the Becco Bins provided and bag the stacks of cups into clear plastic bags.
Glass		All glass can be recycled. Use wheelie bins or clip-top drums to contain the material. Rinse out bottles and jars first (Do not include crockery). Segregate by colour where possible.
Empty Drums		Make sure all contents are removed. If residue remains then consign as hazardous/special waste. Specify on paperwork whether plastic or metal.
Cooking Oil		Cooking oil can be recycled and should not be mixed with mineral oils.
Water Based Drilling Mud's / Brine		Make sure that the description used reflects the type of mud being carried. Oil based mud is hazardous/special waste, so will require a consignment note.
WEEE (Non-Special)		Electrical components can be recycled and need to be packaged separately from general wastes/scrap metal skips. Check reference lists, as some are hazardous/special waste eg. fridges

“What Waste Where” Guide – Key

Container Types

Container Type	Description	Container Type	Description
	200 litre Clip-top (Open Head) Drum		10x8 Offshore Specification Open Half-height Container
	25 litre Clip-top (Open Head) Pail		Half-height Container or Cargo Basket with Access Gate
	Battery Safe / Box		6.1 Cu. M Recycle Unit Waste Cube (Also in Red / Blue)
	25-200 litre Bung-top Drum		1100 litre Wheelie Bin
	800 litre Waste Safe Note: No lifting points fork lift pockets only		Clear Refuse Sack
	9 litre Sharps Bin		2.5 Metre Fluorescent Tube Box
	Rigid Clinical Waste Container		Gas Cylinder Rack
	25 litre Asbestos Sack		500 Gallon (2200 litre) IMO Tote Tank

APPENDIX 7 – DOCUMENT EXAMPLES

Examples of documents used in these guidelines are listed below:

- 7.1 Oil & Gas UK Cargo Summary Ticket for Outbound Cargo
- 7.2 Oil & Gas UK Inbound Pocket Checklist
- 7.3 Oil & Gas UK Inbound Pocket Checklist – Tanks
- 7.4 Oil & Gas UK Cargo Summary Ticket for Outbound Tanks
- 7.5 Cargo Safety and Security Tag
- 7.6 Dangerous Goods and Marine Pollutants Declaration
- 7.7 Dangerous Goods by Air Declaration
- 7.8 Instructions in Writing according to ADR
- 7.9 Oil & Gas UK Cargo Rejection Note – Sea
- 7.10 Oil & Gas UK Cargo Rejection Note – Air

7.1 Oil & Gas UK Cargo Summary Ticket for Outbound Cargo

OIL AND GAS UK CARGO SUMMARY TICKET FOR OUTBOUND CARGO (Use Specialist Cargo Summary Tickets for Tanks and Gas Racks)

To – OPERATIONS DEPARTMENT/BUSINESS UNIT

COLLECT FROM (SUPPLIER ADDRESS)

DATE

TELEPHONE NUMBER

Daytime:

Out of Hours:

OFFSHORE LOCATION TO BE SHIPPED TO

SAILING DATE

VESSEL NAME

ITEM NO	DESCRIPTION/TYPE OF UNIT OR No/TYPE OF JOINTS	UNIT ID OR No OF BUNDLES	UNIT DIMENSIONS (L x W x H) (FEET)	ACTUAL WEIGHT OF LIFT	MAX GROSS WEIGHT	IMDG CLASS/ & UN No	LAST TEST DATE
1							
2							
3							
4							
5							
6							
7							
8							
9							

CARGO CHECKLIST							Yes/No/NA
1	Does the inspection plate show at least 30 days full remaining before statutory examination is due?						
2	Are the units free from excessive corrosion or holes?						
3	Are all drainage holes clear on open CCUs?						
4	Are all lifting sets properly fitted and configured, e.g. not twisted?						
5	Have slings been visually inspected for damage & split pins on shackles checked to see they are correctly fitted?						
6	Have you removed all potential dropped objects, e.g. Tools, debris on the lift or items strapped to lift?						
7	Has the destination label been added						
8	Are items packed and secured to prevent movement/damage in "Worst Weather" conditions?						
9	Where Dangerous Goods are being shipped, have they been pre-notified and the container correctly labelled on all four sides (Refer IMDG code)? – Chemical Tanks must have a product label attached to the tank.						
10	Is the cargo retaining net secure and positioned to prevent goods falling out?						
11	Have adequate precautions been taken to prevent Snag Hazards? (e.g.. Removal or covering of hazards)						
12	Have you checked that the doors and locking mechanisms are secure, with Secondary Securing Device attached e.g. tie-wraps?						
13	Have you checked that the load lifts horizontally? (See Oil & Gas Guidelines for parameters)						
14	Have you confirmed that the Actual Gross Weight is less than or equal to Maximum Gross Weight?						
15	If Actual Weight is seven (7) tonnes or above, has a Heavy Lift pennant been attached?						
16	Have all tubulars been slung & secured correctly and checked for potential dropped objects externally and internally?						
16	Have you fulfilled the Operator's requirements if the cargo is classified as 'Hired and Portable Equipment'?						

PRINT NAME

SIGNATURE

POSITION IN COMPANY

All checklist items must be completed prior to despatch.

This document, which stipulates the minimum checks to be completed, must accompany goods to the ultimate destination in order to ensure the correct identification of goods. Where there are multiple truckloads, one copy is to accompany each truck with the relevant items highlighted. For hazardous cargo, a copy of the dangerous goods declaration must be faxed / emailed along with this form. **Hazardous goods arriving without notification WILL NOT be shipped.**

7.2 Oil & Gas UK Inbound Pocket Checklist

Oil & Gas UK Inbound Pocket Checklist

CCU Number (Container/Basket, etc.)

Cargo Checks	Yes	No
Have any potential dropped objects been removed or secured? (Please check on top of units, all horizontal and vertical structures including grating floors e.g. gas racks, and inside forklift pockets.)		
Are the deck lifts basket/container still within certification?		
Are all items detailed on the Consignment Note in the basket/container?		
Has all material within the basket/container been adequately secured for sea transportation?		
Are the container door locking mechanisms fully engaged?		
Have all container doors been tie wrapped?		
Is container in good condition? Any defects to be reported and appropriate action taken.		
Is the lifting bridle in good condition and shackles secure with split pins in place?		
Is load over 7t? If so, attach "Heavy Lift Flag" to rigging.		
Does the load lift horizontally in both axes? (<0.5' in 20')		
Are there any fuels, oils or potential pollutants being transported within the equipment? (Oil in reservoir or sumps, fuel in fuel tanks, etc.)		
Are there any hazardous goods in the consignment?		
If there are hazardous goods, are there the necessary numbers of hazard labels attached to the CCU.		
Have you included SEPA notes/Material Safety Data Sheets with the consignment note?		
If there are no hazardous goods, have all hazard labels from outward shipment been removed?		
Have any hired or portable equipment has been disconnected?		

Name: (please print clearly)

.....

Company:

.....

Date: / /

Signed copy to be retained offshore for 3 months.

November 2008

7.3 Oil & Gas UK Inbound Pocket Checklist - Tanks

Oil & Gas UK Inbound Pocket Checklist - Tanks		
CCU Number (Tank Specific)		
Cargo Checks	Yes	No
Is the tank and associated sling still within certification or complimented with a letter of acceptance to travel ashore?		
Have you checked that there are no obvious signs of damage to lift points and slings?		
Have any potential dropped objects been removed or secured? (Please check on top of tanks and inside forklift pockets)		
Is all dip and vent valves closed?		
Are all man-lids securely fastened?		
Are all caps and couplings present and secure and has a check for tampering and cross-threading been made?		
Is framework, structure, gratings, walkways and ladders in good condition?		
Are all fill / discharge valves closed including any kick rods?		
If there are hazardous goods, are there the necessary numbers of hazard labels attached on all four sides (as per IMDG code).		
If there are no hazardous goods, have all hazard labels from outward shipment been removed?		
Does the load lift horizontally in both axes? (<0.5' in 20')		
Is load over 7t? If so, attach "Heavy Lift Flag" to rigging.		
Have gross weights been checked against actual SWL?		
Has destination label been attached?		
Name: (please print clearly) Company: Date: / / Signed copy to be retained offshore for 3 months. October 2011		

7.4 Oil & Gas UK Cargo Summary Ticket for Outbound/Inbound Tanks

OIL & GAS UK CARGO SUMMARY TICKET FOR OUTBOUND AND INBOUND TANKS

TO – OPERATIONS DEPARTMENT/BUSINESS UNIT

COLLECT FROM (SUPPLIER ADDRESS)

DATE

TELEPHONE NUMBER

Daytime:

Out of Hours:

OFFSHORE LOCATION TO BE SHIPPED TO

SAILING DATE

VESSEL NAME

ITEM NO	TANK NO	TANK SIZE	TARE & PAYLOAD	MAX GROSS WEIGHT	IMDG CLASS	UN No	PRODUCT	LAST TEST DATE
1								
2								
3								
4								
5								
6								
7								
8								
9								

	TANK CHECKLIST	Y/N/NA
1	Does the inspection plate show at least 30 days full remaining before statutory examination is due for tank vessel, frame, slings and lifting points?	
2	Where Dangerous Goods are being shipped, have they been pre-notified and the tank correctly labelled on all four sides (as per IMDG code)?	
3	Are all fill/discharge valves closed, including any kick rods?	
4	Are all dip and vent valves closed and blanking caps fitted and secured?	
5	Are all man lids securely fastened with no obvious leakage?	
6	Are all caps and couplings present and secure?	
7	Is the Tank, crash frame & roof lid free from damage and/or severe corrosion?	
8	Have you checked for and removed any Potential Dropped Objects, E.G. Tools, Debris on the tank or in the forklift pockets? (N.B. No items to be strapped to external surfaces)	
9	Have copies of all relevant certificates, dangerous goods notes, material safety data sheets and Instructions in Writing, despatched with tanks?	
10	Have you checked that there are no obvious signs of damage to pad eyes, shackles and slings and that the split pins are fitted correctly?	
11	Have the gross weights been checked to ensure that they are no greater than the SWL?	
12	Has the destination label been added?	
13	If Actual Weight is seven (7) tonnes or above, has Heavy Lift pennant been attached?	
14	Have you fulfilled the Operator's requirements if the cargo is classified as 'Hired and Portable Equipment'?	

Note: Any "NO" could result in the non-shipment of the tank.

SIGNATURE (PRINT NAME BELOW)

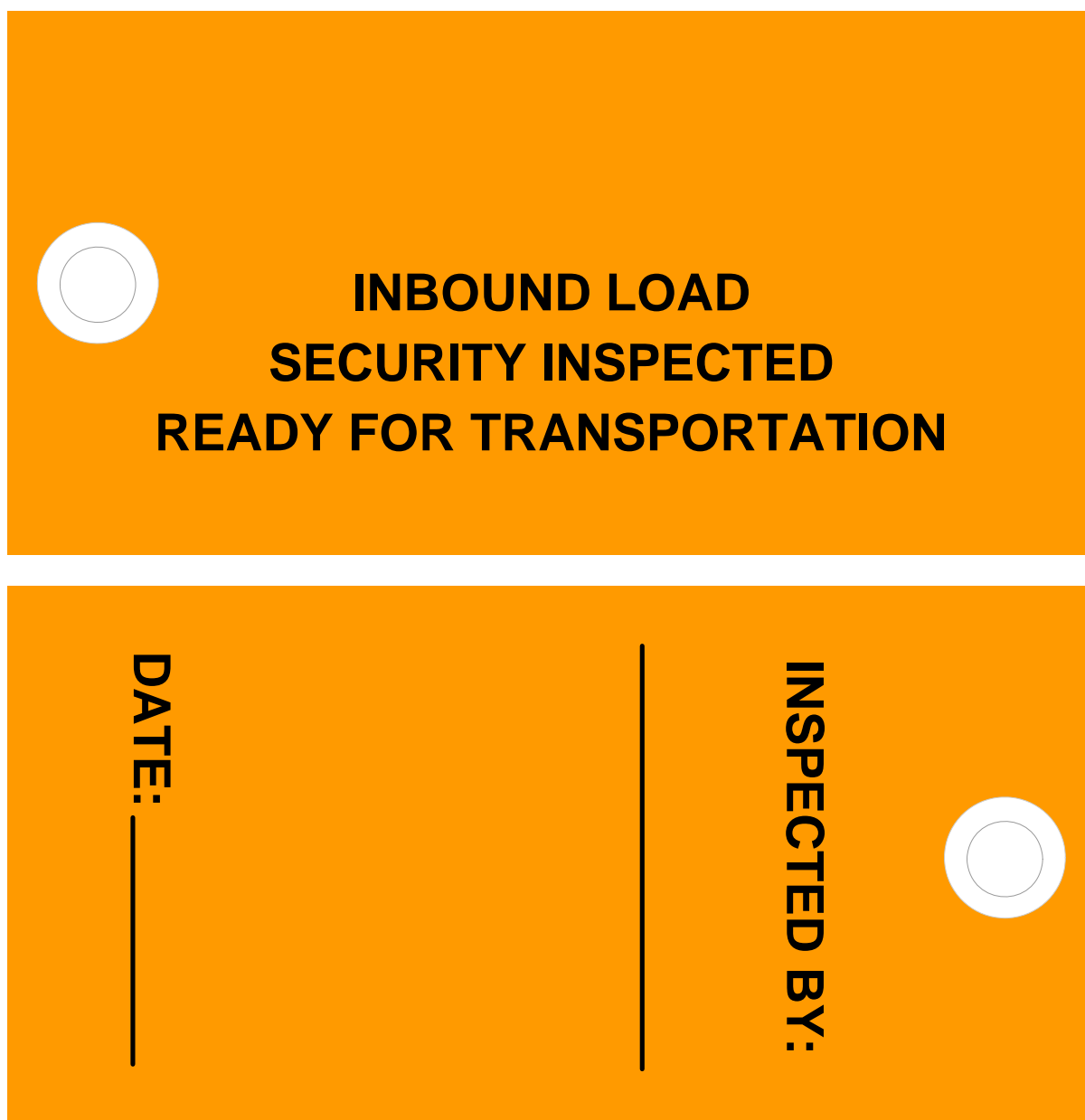
POSITION IN COMPANY

DATE

This document must accompany goods to the shipping port in order to ensure the correct identification of goods. Where there are multiple truckloads, one copy is to accompany each truck with the relevant items highlighted. For hazardous cargo, a copy of the dangerous goods declaration must be faxed / emailed along with this form.

Hazardous goods arriving without notification WILL NOT be shipped.

7.5 Cargo Safety and Security Tag



Specification:

Size	180mm x 90mm
Stock	105gsm Tyvek
Printed	Colour 2 sides
Drilled	1 hole and fitted with plastic eyelet

7.6 Dangerous Goods and Marine Pollutants Declaration

Dangerous Goods Declaration and Certificate of Packing In compliance with the Merchant Shipping (Dangerous Goods & Marine Pollutants) Regulations 1997 SI 2367										Certificate No: _____ Page _____ of _____		
Shipper: Addressee: 1.					To the Master of MV _____ In accordance with Part II, Reg 10(2-6) & 12(1) of the above legislation, you are hereby advised of the following classified dangerous good are being loaded aboard onto vessel. 2. Shipper's Reference Number (Optional): 3. 24-Hour Contact Number: 4.					Destination: 5. Place of Departure: 6. Voyage Ref: 7. Departure Date: 8.		
UN No	Proper Shipping Name	Class or Division	Sub-Risk	Packing Group	Schedule No for Class 7	Flash Point ≤ 60 °C	Number and Type of Packages	Ltd Qty	Gross Quantity (Mass or Volume)	Marine Pollutant Yes/No	EmS Code	Tank or Container ID Number
9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.
Declaration: "I hereby declare that the contents of this consignment are fully and accurately described above by the Proper Shipping Name and are classified, marked, labelled or placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations." Name and Status of Declarant: Date: Signature: 22.									Container/Vehicle Packing Certificate: It is declared that the packing of the goods into the container/vehicle has been carried out in accordance with the provisions shown overleaf. Name of Company: Signature: _____ Date: _____ 23.			

Copies: White – Shipper; Pink – Vessel; Yellow – Carrier; Green – Consignee

April 2007: Rev 1

Dangerous Goods and Marine Pollutants Declaration Completion Guide

1. Shipper's name and address.
2. Name of vessel.
3. Originator's reference (optional).
4. Emergency telephone number.
5. Name of location goods are destined for.
6. Port or name of installation of departure.
7. Voyage reference (for Shipping Department use only).
8. Vessel departure date.
9. The United Nations number shown for the Dangerous Goods in the IMDG Code.
10. The proper shipping name is considered to be that portion of the entry most accurately describing the goods that is shown in capital letters in the individual schedules or in the general index of the IMDG Regulations; Trade Names alone shall not be used. Dangerous Goods or Marine Pollutants transported under one of the NOS (not otherwise specified) or generic entries require a recognised chemical name in parenthesis after the NOS or generic entry. The words **MARINE POLLUTANT** should follow the recognised chemical name where appropriate.

Note— empty packages (including portable tanks and bulk packaging) containing residues shall be indicated by placing the words **EMPTY, UNCLEANED** or **RESIDUE – LAST CONTAINED** before or after the proper shipping name. If Waste Dangerous Goods (other than radioactive waste) are being transported for disposal, the proper shipping name should be preceded by the word **WASTE**.
11. Class/Division including compatibility groups if Explosive, as found in IMDG Regulations.
12. Indicate the class number(s) of any subsidiary risks.
13. The packing group for a substance carried under a NOS entry or other generic entry which includes the possibility of the assignment of more than one Packaging Group.
14. For Class 7 Radioactive Materials only, the Class Schedule Number, as found in IMDG Regulations.
15. Minimum flashpoint of 60°C or below.
16. The number and kind of packages including UN Identification if applicable, i.e. "1 x 4G Fireboard Box".
17. Indicate whether material is being shipped under limited quantity provisions.
18. The Total Quantity of Dangerous Goods covered by the description (by volume or mass, as in the case of goods of Class 1 by the Net Explosive Mass of the contents).
19. Indicate if the goods are a Marine Pollutant or not (Yes or No).
20. Emergency Schedule Number as found in Regulations.
21. Container or Tank Identification Number.
22. Name, Status and Signature of person responsible for packaging the goods and completing the declaration.
23. Name, Company Name and Signature of person responsible for packing Container.

7.6.2 Container/Vehicle Packing Certificate

Container/Vehicle Packing Certificate

It is certified that:

Those responsible for the packing of Dangerous Goods into a freight container should provide a "Container Packing Certificate" certifying that this has been properly carried out and embodying the following provisions:

- The cargo transport unit was clean, dry and apparently fit to receive the goods.
- If the consignments include goods of Class 1, other than Division 1.4, the freight container is structurally serviceable in conformity with Chapter 7.4.6 of the IMDG Code.
- Goods which should be segregated have not been packed together onto or in the cargo transport unit (unless approved by the competent authority concerned in accordance with 7.2.2.3).
- All packages have been externally inspected for damage, leakage or sifting, and that only sound packages have been loaded.
- Drums have been stowed in an upright position, unless otherwise authorised by the competent authority.
- All packages have been properly packaged onto or in the cargo transport unit and secured.
- When Dangerous Goods are transported in bulk packagings, the cargo has been evenly distributed.
- The cargo transport unit and the packages therein are properly marked, labelled and placarded.
- When solid carbon dioxide (dry ice) is used for cooling purposes, the cargo transport unit is externally marked or labelled in a conspicuous place such as the door end, with the words "DANGEROUS CO₂ GAS (DRY ICE) INSIDE, VENTILATE THOROUGHLY BEFORE ENTERING".
- The Dangerous Goods Transport Document required in 5.4.1 of the General Introduction to the International Maritime Dangerous Goods Code (IMDG Code) has been received for each Dangerous Goods consignment packed onto or in the cargo transport unit.

THE SIGNATURE GIVEN OVERLEAF MUST BE THAT OF THE PERSON CONTROLLING THE CONTAINER LOADING OPERATION. AFTER THE CONTAINER/VEHICLE HAS BEEN PACKED, THE CERTIFICATE MUST BE GIVEN TO THE DRIVER ON COLLECTION AND PRESENTED TO THE CONTAINER VEHICLE OPERATOR UPON DELIVERY.

DECLARATION

The company preparing this note declares that to the best of their belief the goods have been accurately described, their quantities, weights and measurements are correct and at the time of dispatch they were in good order and good condition.

DANGEROUS GOODS DECLARATION

I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name(s), and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national government regulations.

7.7 Dangerous Goods by Air Declaration

SHIPPER'S DECLARATION FOR DANGEROUS GOODS

Shipper		Air Waybill No		Page of Pages		Shipper's Reference Number (Optional)			
Consignee		For optional use for Company logo name and address							
Two completed and signed copies of this Declaration must be handed to the operator.		WARNING Failure to comply in all respects with the applicable Dangerous Goods Regulations may be in breach of the applicable law, subject to legal penalties.							
TRANSPORT DETAILS This shipment is within the limitations prescribed for: (delete non-applicable)									
<table border="1"> <tr> <td>PASSENGER AND CARGO AIRCRAFT</td> <td>CARGO AIRCRAFT ONLY</td> </tr> </table>		PASSENGER AND CARGO AIRCRAFT	CARGO AIRCRAFT ONLY	Airport of Departure:					
PASSENGER AND CARGO AIRCRAFT	CARGO AIRCRAFT ONLY								
Airport of Destination:		Shipment type (delete non-applicable): <table border="1"> <tr> <td>NON-RADIOACTIVE</td> <td>RADIOACTIVE</td> </tr> </table>						NON-RADIOACTIVE	RADIOACTIVE
NON-RADIOACTIVE	RADIOACTIVE								
NATURE AND QUANTITY OF DANGEROUS GOODS									
Dangerous Goods Identification									
UN or ID No	Proper Shipping Name	Class or Division (Subsidiary Risk)	Pack- ing Group	Quantity and type of packing	Packing Instructions	Authorisation			
Additional Handling Information									
I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labelled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. I declare that all of the applicable air transport requirements have been met.				Name/Title of Signatory					
				Place and Date					
				Signature (see warning above)					

7.8 Instructions in Writing

INSTRUCTIONS IN WRITING ACCORDING TO ADR




INSTRUCTIONS IN WRITING ACCORDING TO ADR






Actions in the event of an accident or emergency.




In the event of an accident or emergency that may occur or arise during carriage, the members of the vehicle crew shall take the following actions where safe and practicable to do so:

- Apply the breaking system, stop the engine and isolate the battery by activating the master switch where available;
- Avoid sources of ignition, in particular, do not smoke or switch on any electrical equipment;
- Inform the appropriate emergency services, giving as much information about the incident or accident and substances involved as possible;
- Put on the warning vest and place the self-standing warning signs as appropriate;
- Keep the transport documents readily available for responders on arrival;
- Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind;
- Where appropriate and safe to do so, use the fire extinguishers to put out small/initial fires in tyres, brakes and engine compartments;
- Fires in load compartments shall not be tackled by members of the vehicle crew;
- Where appropriate and safe to do so, use on-board equipment to prevent leakages into the aquatic environment or the sewage system and to contain spillages;
- Move away from the vicinity of the accident or the emergency, advise other persons to move away and follow the advice of the emergency services;
- Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

Additional guidance to members of the vehicle crew on the hazard characteristics of dangerous goods by class and on actions subject to prevailing circumstances

Danger labels and placards (1)	Hazard characteristics (2)	Additional Guidance (3)
 <p>Explosive substances and articles</p>	<p>May have a range of properties and effects such as mass detonation; projection of fragments; intense fire/heat flux; formation of bright light, loud noise or smoke.</p> <p>Sensitive to shocks and/or impacts and/or heat.</p>	<p>Take cover but stay away from windows.</p>
 <p>Explosive substances and articles</p>	<p>Slight risk of explosion and fire.</p>	<p>Take cover.</p>
 <p>Flammable gases</p>	<p>Risk of fire. Risk of explosion. May be under pressure. Risk of asphyxiation. May cause burns and/or frostbite. Containments may explode when heated.</p>	<p>Take cover. Keep out of low areas.</p>



 <p>Non-flammable, non-toxic gases</p>	<p>Risk of asphyxiation. May be under pressure. May cause frostbite. Containments may explode when heated.</p>	<p>Take cover. Keep out of low areas.</p>
 <p>Flammable solids, self-reactive substances and solid desensitized explosives</p>	<p>Risk of fire. Flammable or combustible, may be ignited by heat, sparks or flames. May contain self-reactive substances that are liable to exothermic decomposition in the case of heat supply, contact with other substances (such as acids, heavy-metal compounds or amines), friction or shock. This may result in the evolution of harmful and flammable gases or vapours or self-ignition. Containments may explode when heated. Risk of explosion of desensitized explosives after loss of desensitizer.</p>	
 <p>Substances which, in contact with water, emit flammable gases</p>	<p>Risk of fire and explosion in contact with water.</p>	<p>Spilled substances should be kept dry by covering the spillages.</p>
 <p>Toxic substances</p>	<p>Risk of intoxication by inhalation, skin contact or ingestion. Risk to the aquatic environment or the sewerage system.</p>	<p>Use emergency escape mask.</p>
 <p>Infectious substance</p>	<p>Risk of infection. May cause serious disease in humans or animals. Risk to the aquatic and sewerage system.</p>	

 <p>Radioactive material</p>	<p>Risk of intake and external radiation.</p>	<p>Limit time of exposure.</p>
 <p>Fissile material</p>	<p>Risk of nuclear chain reaction.</p>	
 <p>Corrosive substances</p>	<p>Risk of burns by corrosion. May react vigorously with each other, with water and with other substances. Spilled substance may evolve corrosive vapours. Risk to the aquatic and sewerage system.</p>	

NOTE 1: For dangerous goods with multiple risks and for mixed loads, each applicable entry shall be observed.

NOTE 2: Additional guidance shown above may be adapted to reflect the classes of dangerous goods to be carried and their means of transport.

Additional guidance to members of the vehicle crew on the hazard characteristics of dangerous goods, indicated by marks, and on actions subject to prevailing circumstances

 <p>Environmentally hazardous substances</p>	<p>Risk to the aquatic and sewerage system.</p>	
 <p>Elevated temperature substances</p>	<p>Risks of burns by heat.</p>	<p>Avoid contact with hot parts of the transport unit and the spilled substance.</p>

Equipment for personal and general protection to carry out general actions and hazard specific emergency actions to be carried on board the vehicle in accordance with section 8.1.5 of ADR.

The following equipment shall be carried on board the transport unit:

- for each vehicle a wheel clock of a size suited to the maximum mass of the vehicle and to the diameter of the wheel
- two self-standing warning signs
- eye rinsing liquid¹

for each member of the vehicle crew:

- a warning vest (e.g. as described in the EN 471 standard)
- portable lighting apparatus
- a pair of protective gloves
- eye protection (e.g. protective goggles).

Additional equipment required for certain classes:

- an emergency escape mask² for each member of the vehicle crew shall be carried
- on board the vehicle for danger label numbers 2.3 or 6.1
- a shovel³
- a drain seal
- a collecting container

¹ Not required for danger label numbers 1, 1.4, 1.5, 1.6, 2.1, 2.2 and 2.3

² For example an emergency escape mask with a combined gas/dust filter of the A1B1E1K1-P1 or A2B2E2K2-P2 type which is similar to that described in the EN141 standard.

³ Only required for solids and liquids with danger label numbers 3, 4.1, 4.3, 8 or 9.

7.9 Oil & Gas UK Cargo Rejection Note – Sea

OIL & GAS UK CARGO REJECTION NOTE – SEA

This form is issued in accordance with the “Oil & Gas UK Guidelines for Safe Packing and Handling of Cargo to and from Offshore Locations”.

To (CONSIGNOR)

FROM (PRINT NAME) OPERATIONS MANAGER

BASE

CC (OPERATOR)

MATERIALS DETAILS

DESTINATION

You are advised that your freight has been rejected for onward transportation to the destination noted above for the following reason(s):

REASON(S) FOR REJECTION – PLEASE CHECK ALL THAT APPLY

No ID, gross or tare weight on CCU.	<input type="checkbox"/>	Tie wraps/split pins missing.	<input type="checkbox"/>
CCU in poor condition.	<input type="checkbox"/>	CCU overweight.	<input type="checkbox"/>
CCU out of date/certification.	<input type="checkbox"/>	Labelling incorrect/old placards still on CCU.	<input type="checkbox"/>
Potential Dropped Object.	<input type="checkbox"/>	Container doors not sealed.	<input type="checkbox"/>
Equipment loaded over the height of the CCU.	<input type="checkbox"/>	Incorrect colour code used.	<input type="checkbox"/>
No MSDN or TREM Card with goods.	<input type="checkbox"/>	Signs of wear or damage to sling set.	<input type="checkbox"/>
Incorrectly packaged material.	<input type="checkbox"/>	Incorrect documentation.	<input type="checkbox"/>
Weight of freight not indicated on package.	<input type="checkbox"/>	Freight poorly packaged in respect of Manual Handling issues.	<input type="checkbox"/>
Freight consists of undeclared Dangerous Goods.	<input type="checkbox"/>	Freight has not been packaged in accordance with current IMDG Dangerous Goods Regulations.	<input type="checkbox"/>
Labelling is not in accordance with IMDG Dangerous Goods Regulations.	<input type="checkbox"/>	Incorrectly completed IMDG declaration.	<input type="checkbox"/>
Twisted lifting equipment.	<input type="checkbox"/>	Trapped slings and snagged equipment.	<input type="checkbox"/>
Incorrect slings used for goods.	<input type="checkbox"/>	No Certification received with goods.	<input type="checkbox"/>
Liquid leaking from CCU.	<input type="checkbox"/>	Liquid leaking from package.	<input type="checkbox"/>

FURTHER INFORMATION (INCLUDE NON CONFORMANCE CODE IF APPLICABLE)

SIGNATURE

DATE

7.10 Oil & Gas UK Cargo Rejection Note – Air**OIL & GAS UK CARGO REJECTION NOTE – AIR**

This form is issued in accordance with the “Oil & Gas UK Guidelines for Safe Packing and Handling of Cargo to and from Offshore Locations”.

To (CONSIGNOR)**FROM (PRINT NAME) FREIGHT SHED SUPERVISOR****BASE****CC (FREIGHT FORWARDER)****FREIGHT DETAILS****DESTINATION**

You are advised that your freight has been rejected for onward transportation to the destination noted above for the following reason(s).

Please contact this office at your earliest convenience to arrange collection of the rejected freight/discuss future transportation.

REASON(S) FOR REJECTION – PLEASE CHECK ALL THAT APPLY

Delivered less than one hour prior to scheduled departure time (shall be transferred to next available flight).	<input type="checkbox"/>	Warning/Orientation labels etc. are missing/poor.	<input type="checkbox"/>
Final (full) destination not indicated on freight.	<input type="checkbox"/>	Final (full) destination not indicated on manifest.	<input type="checkbox"/>
Consignor's name not indicated on freight.	<input type="checkbox"/>	Consignor's name not indicated on manifest.	<input type="checkbox"/>
Consignee's name not indicated on freight.	<input type="checkbox"/>	Consignee's name not indicated on manifest.	<input type="checkbox"/>
Full and accurate description of freight not indicated on freight.	<input type="checkbox"/>	Full and accurate description of freight not indicated on manifest.	<input type="checkbox"/>
Weight of freight not indicated on freight.	<input type="checkbox"/>	Weight of freight not indicated on manifest.	<input type="checkbox"/>
Freight poorly packaged to endure flight safely.	<input type="checkbox"/>	Freight poorly packaged in respect of Manual Handling issues.	<input type="checkbox"/>
Total freight for this flight exceeds aircraft weight limit.	<input type="checkbox"/>	Individual weight of this piece exceeds limits set for Manual Handling.	<input type="checkbox"/>
Freight has been packed using banned materials.	<input type="checkbox"/>	Freight consists of undeclared Dangerous Goods.	<input type="checkbox"/>
Freight has not been packaged in accordance with current IATA Dangerous Goods Regulations.	<input type="checkbox"/>	Manifest has not been completed in accordance with current IATA Dangerous Goods Regulations.	<input type="checkbox"/>
Labelling is not in accordance with IATA Dangerous Goods Regulations.	<input type="checkbox"/>	Labelling is inadequate for duration of flight.	<input type="checkbox"/>

FURTHER INFORMATION (INCLUDE NON CONFORMANCE CODE IF APPLICABLE)**SIGNATURE****DATE**

APPENDIX 8 – LIFTING OPERATIONS CATEGORISATION AND CONTROLS TABLE

Lifting operations controls table

- Responsible person identifies operation to take place.
- Competent person identifies lift category and implements control measures as detailed below:

	Categories of Lift	Control Measures
Routine	Routine Lifting Operations <ul style="list-style-type: none"> • Uncomplicated lifts that are performed on a regular basis which involve basic slinging practices 	<ul style="list-style-type: none"> • Risk Assessment is undertaken • A written procedure exists and is reviewed for this lifting operation • Toolbox Talk Held • Individual responsibilities allocated • Carried out by competent personnel • Supervised by Competent Person
Non routine	Simple or Basic Lifting Operation <ul style="list-style-type: none"> • Standard single line of rigging used directly above load • Only certified lifting points are used out with sensitive, difficult or restricted area 	<ul style="list-style-type: none"> • Risk Assessment is undertaken • A written procedure exists and is reviewed for this lifting operation / the method is documented in Rigging and Lifting Handbook • Toolbox Talk Held • Individual responsibilities allocated • Carried out by competent personnel • Supervised by Competent Person
	Complicated Lifting Operation <ul style="list-style-type: none"> • For example awkward shape or high C.O.G • Extended duration, e.g. more than one shift • Use of two or more lifting appliances i.e. tandem lifts or cross hauling required • Within sensitive, difficult or restricted area 	<ul style="list-style-type: none"> • Risk Assessment is undertaken • A procedure is written and approved by the LOLER Competent Person or Appointed Authority • Toolbox Talk Held • Individual responsibilities allocated • Carried out by competent personnel • Supervised by Competent Person
	Complex or Specialised Lifting Operation <ul style="list-style-type: none"> • Lifts that involve additional hazards due to the nature of the surrounding environment e.g. over live plant, within a confined space • Lifts requiring additional engineering input • Lifts where personnel are the load 	<ul style="list-style-type: none"> • Impact/Hazard Study undertaken • Risk Assessment is undertaken • A procedure is written and approved by the LOLER Competent Person or Appointed Authority with the assistance of onshore engineering • Toolbox Talk Held • Individual responsibilities allocated • Carried out by competent personnel • Supervised by Competent Person

APPENDIX 9 – NON CONFORMANCE CODE CHECKLIST

100 Container Carrying Unit

- 101 Faulty structure, bad condition, corrosion, deformation or doors insecure.
- 102 Overloaded, overweight
- 103 Out of date certification, insufficient rest period remaining
- 104 CCU not empty – contents unknown
- 105 Void
- 106 Drainage holes blocked (open top)
- 107 Restraining nets not in place
- 108 Potential dropped objects (includes dust/powder)
- 109 Faulty door locking mechanism
- 110 Loaded above desired level (open top)
- 111 Liquid leaking / Spill
- 112 Incorrect unit for cargo
- 113 Uncontrolled/unauthorised modifications to container

200 Lifting and Slinging

- 200 Incorrect colour code (where applicable), unclear unique number and SWL
- 201 Signs of wear, corrosion, abrasion and mechanical damage
- 202 Incorrectly slung, incorrectly fitted or unapproved sling set
- 203 Incorrect SWL for load being moved
- 204 Incorrect shackle components ie. Pin size and type
- 205 Inadequate shackle pin security
- 206 Incompatible materials used in shackle, pin or body components
- 207 Incorrect or no Certification
- 208 Trapped lifting set
- 209 Twisted lifting set
- 210 Incorrect/unapproved Slings
- 211 Snag hazards

300 Dangerous/Hazardous Goods

- 300 Incorrect/missing labels, or old labels not removed
- 301 Incorrect or missing documentation
- 302 Incorrect, inadequate or damaged packaging

400 Documentation

- 400 Incorrect or missing Cargo Summary Ticket
- 401 Incorrect or missing Material Safety Data sheet
- 402 Incorrect or missing Transport Emergency Response Card (TREM Card)
- 403 Incorrect or missing Shipping manifest
- 404 Incorrect or missing Consignment Note
- 405 Incorrect or missing Special/Non Special Waste consignment note
- 406 Incorrect or missing Air Transport Documentation

500 Packing

- 501 Incorrectly or unsatisfactory Labelling (Not Dangerous Goods)
- 502 Incorrectly stowed and secured
- 503 Incorrect weight distribution or excessive loading
- 504 Inadequate Packing for transportation/shipping
- 505 Liquid leaking from contents
- 506 Hazardous packing/Content

600 Logistics, Materials and Other

700 Positive Feedback

APPENDIX 10 – ABNORMAL OR WIDE LOAD MATRIX

Typical Example: Abnormal or Wide Loads are subject to the local restrictions

Abnormal Indivisible Loads Will **NOT** be moved during: Hours of darkness, Poor visibility, Rush-hour Traffic 0700 – 0930 & 1600 – 1830 or without Police permission.

Grampian Police

Abnormal Load Chart

NOTIFICATIONS
Escortable Loads: 2: Days
Non-Escortable Loads: 2 Days

Dimensions Exceeding		Notify Police	2nd Man	Days Notice	Self Escort	Relevant Information
(Metric)	Width (Imperial)					
2.9	9' 6"	Yes	No	2	No	
3.5	11' 6"	Yes	Yes	2	No	
4.00	13' 2"	Yes	Yes	2	Yes	Self Escort required through Aberdeen City
4.3	14' 2"	Yes	Yes	2	Yes	Self Escort required All Grampian, Except A90 bet Aberdeen and Tayside / A90 bet Aberdeen and Balmedie / A96 bet Aberdeen and Inverurie. (STGO) Regs apply
4.45	14' 6"	Yes	Yes	2	Yes	Self Escort required All Grampian
5.00	16' 5"	Yes	Yes	14 days	Yes	Self Escort required also VR1 required from Transport Scotland. Movements only at week-end unless agreed otherwise
6.1	20'	Yes	Yes	6-8 wks	Yes	Self Escort and possible Police assistance required, also Special Order required from Transport Scotland. Movements only at week-ends unless agreed otherwise
Length						
18.65	61' 2"	Yes	Yes	2	No	(C & U) Rigid length (if artic, does not include tractor unit unless over 25.9m overall)
18.75	61' 6"	Yes	Yes	2	No	(STGO Regs. apply) Rigid & load or Semi-trailer & load (this does not include Tractor unit)
25.9	85'	Yes	Yes	2	Yes	Self escort required All Grampian, Except A90 bet Aberdeen and Tayside / A90 bet Aberdeen and Balmedie / A96 bet Aberdeen and Inverurie
27.4	89' 11"	Yes	Yes	6-8 wks	Yes	(C & U Regs. apply) Special Order Required
30.00	99' 6"	Yes	Yes	6-8 wks	Yes	(STGO Regs apply) Special Order Required
Weight (Tonnes)		All Loads weighing over 44 Tonnes - Hauliers <i>must</i> inform Local Road Management Units - as marked %				
41 - 44		No	No		No	(C&U Regs. Apply) 4 axle rigid / 5 axle artic combination - G Class Road Tax %
>44 - 46		Yes	No	2	No	(STGO Regs. apply) Category 1 sign boards 6 axle combination %
>46 to 50		Yes	No	2	No	(STGO Regs. apply) Category 1 sign boards - at least 6 axles %
50 – 80#		Yes	No	2	No#	#escort only if exceptionally slow. (STGO Regs. Apply) Category 2 sign boards %
>80# - 150*		Yes+	No	2	Yes*	+ from 80 tonnes / *escort over 100 tonnes only (STGO) Category 3 sign boards %
150				6-8 wks	Yes	At all times. Special Order 0131-244-4363 %
Height		Hauliers to survey route and advise the relevant Utility Service BT – Tel: 08001694886/ Fax: 01332822808/ email: highloadroutes@openreach.co.uk				
5.03	16' 6"		Yes		No	Scottish and Southern Energy – See contact numbers overleaf

➤ 4.3m (14' 2") wide – 2 x self escort vehicles

APPENDIX 11 – USE OF TAG LINES

11.1 Introduction

In certain circumstances light, soft lines may be used to assist in the handling of long and/or fragile items of cargo. These are often referred to as tag lines.

It must be recognised that, whilst such aids may assist operations, their use does introduce some additional risks, as described below.

11.2 Risks

Additional risks associated with the use of tag lines include the following:

- i. Potential injuries from dropped objects as a result of personnel handling cargo having to work in closer proximity to suspended loads than would normally be the case.
- ii. Potential injuries, resulting from personnel handling cargo being dragged across the handling area, through a heavy load rotating in an uncontrolled manner and the tag line being fouled in limbs or clothing.
- iii. Potential injuries resulting from tag lines being secured to adjacent fixed structures parting and whipping back as a result of a heavy load rotating in an uncontrolled manner.

11.3 Mitigation of Risks

11.3.1 *Make-up of Lines*

Make-up of lines includes the following:

- i. Tag lines must be made up from single, continuous lengths of rope.
- ii. Apart from the knot attaching the line to the cargo, there must be no other joints or knots in the line.
- iii. Tag lines must be of sufficient length to allow personnel handling cargo to work in a safe position well clear of the immediate vicinity of the load. In this regard it is recommended that the length of the line should be not less than one and a half (1.5) times the maximum height above the handling area at which the arrangements will be used.

11.3.2 *In Use*

Whilst in use, precautions should be observed as follows:

- i. Tag lines are an aid to positioning the load when landing, and as such must only be used when weather conditions would permit the lifting of the item without the use of such arrangements. It must not be assumed that, in conditions more severe than this, the use of tag lines will allow the operation to be completed safely.
- ii. At all times personnel handling tag lines must work at a horizontal distance from the load equivalent to its height above the handling area, maintaining an angle between the line and the horizontal of not more than 45°.
- iii. All sections of the line, including slack, must be kept in front of the body, between the handler and the load.
- iv. Where two or more persons are handling the same line, ALL must work on the same side of the line. Any slack must be kept in front of the group.

- v. Tag lines must be held in such a manner that they can be quickly and totally released. They must not be looped around wrists, or other parts of the body.
- vi. Particular care must be taken when using tag lines whilst wearing gloves to ensure that the line does not foul the glove.
- vii. Tag lines must not be secured or attached in any manner to adjacent structures or equipment. This includes the practice of making a “round turn” on stanchions or similar structures and surging the line to control the load.
- viii. Where pre-installed lines are used, consideration should be given to providing personnel with boathooks or similar equipment to retrieve the lines without having to approach the dangerous area in the vicinity of the suspended load. An example of such circumstances would be when lines are attached to a load on the deck of a vessel, the load being then transferred to an offshore installation.

APPENDIX 12 – EXAMPLES OF BAD PRACTICE

12.1 Blocked Drain Holes



12.2 Damaged Equipment



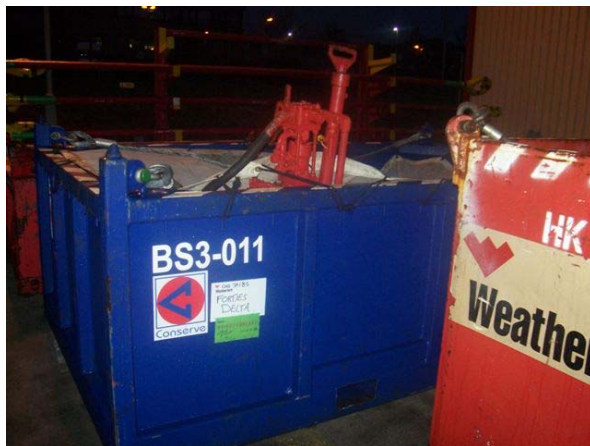
12.3 Potential Dropped Objects



12.4 Poor Packaging



12.5 Snagging Cargo



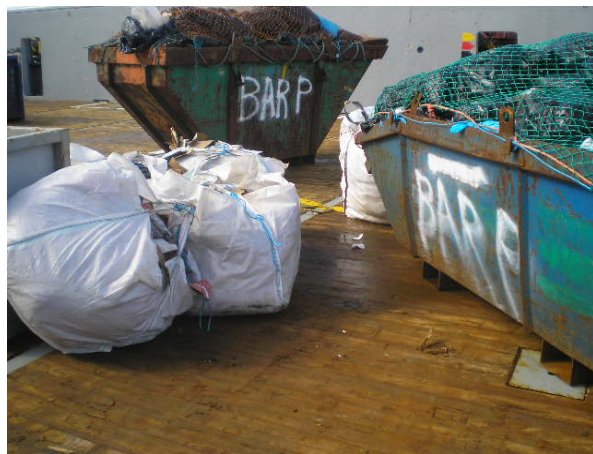
12.6 Stacking



12.7 Uneven Lifts



12.8 Waste



APPENDIX 13 – LIFTING EQUIPMENT INSPECTION CRITERIA

13.1 Introduction

The inspection criteria contained within this appendix is offered as an aid to the lifting equipment Certification Engineer. Normally, the Certification Engineer would have access to his/her own company policies and procedures covering this criterion and should refer to them in the first instance. If however, in exceptional circumstances no access can be gained to their primary source of information these guidelines can be used to aid the engineer in their inspection.

Note: these checks are not designed to be used as pre-use examination criteria by the user of the equipment. They can be found within the main body of this document in Section 8.

13.2 Wire Rope Slings

The thorough examination will comprise of but not limited to the following:

- i. Lay out the wire rope sling and measure the bearing to bearing length; to check for stretch.
- ii. Examine each leg along its entire length for wear, kinks, abrasion, broken wires, core protrusion, insufficient lubrication, crushed, flattened or jammed strands and corrosion.
- iii. Measure the rope diameter at regular intervals for any reduction in the nominal diameter, this could be due to wear on outer wires, stretch due to overloading and collapse of the internal core.
- iv. Examine the ferrule for wear and cracks, ensure that the correct size of ferrule has been fitted and that the rope does not terminate inside the ferrule, it should be slightly protruding, but not more than 1/3 of the diameter of the wire rope.
- v. Examine the thimbles for wear, cracks, elongation, and distortion, ensure that they have been properly fitted.
- vi. Ensure master links/master link assemblies are the correct dimensions for fitting onto the pedestal deck crane hook.
- vii. Shackles (if fitted) must be compatible with the safe working load of the individual sling legs.
- viii. Where slings are fitted onto cargo carrying units, ensure that their safe working load is 1.3 times greater than the gross weight of unit it is fitted to.
- ix. Where end terminations are other than ferrule secured thimble eyes, examine for wear, distortion, cracks corrosion, poor fitment and incorrect application.
- x. The number of broken wires in a length of 10 diameters must not exceed 5% of the total number of wires in the rope.

Note:

- i. No broken wires are permitted in the area near to an end termination.
- ii. Master links, shackles and hooks fitted to wire rope slings should be examined in accordance with the relevant examination procedures.
- iii. Particular attention should be paid to distortion and wear of links, distortion and wear of shackles, or the closing of the thimbles, all of which are indications that the sling may have been overloaded.

If any faults are found at the time of examination, which affect the safe use of the item, the sling must be withdrawn from service and details recorded on the Inspection Report.

13.3 Chain Slings

The thorough examination will comprise of but not limited to the following:

- i. Lay out the chain sling, remove all twists from the leg and measure bearing length to check for stretch.
- ii. Check for the quality mark on the chain to establish grade of chain, mark should be every 20th link or 1 metre, whichever is the lesser distance.
- iii. Examine all components to ensure that they are compatible.
- iv. Examine each leg of the sling along its entire length for wear, distortion, elongation, stretch, pitting, heat damage, chemical damage and corrosion.
- v. Examine hook safety catches (if fitted) for correct function.
- vi. Ensure security of load and retaining pins.
- vii. Examine connectors for wear and deformation, ensure that they are not seized and can move freely.
- viii. Examine shortening clutches (if fitted) for wear and deformation; ensure that chain seats properly in the chain pockets.
- ix. Examine all hooks, master links and shackles in accordance with the relevant examination procedures.
- x. Wear on chain and components should not exceed 8% of the original diameter.
- xi. Stretch on chain must not exceed 5% of the original length.

If any faults are found at the time of examination, that affect the safe use of the item, the sling must be withdrawn from service and details recorded on the Inspection Report.

13.4 Webbing Slings

The thorough examination will comprise of but not limited to the following:

- i. Check for overheating due to wrong positioning of sling, surface of sling will be polished and easily reflect light.
- ii. Check for cuts, wear, and broken / pulled load bearing threads. The latter must be repaired as the threads can easily catch and break if left unattended.
- iii. Check for damaged stitching particularly in the eye and where the webbing overlaps.
- iv. Check entire length of endless slings for seam damage.
- v. The load bearing point in the eye of the sling shall be checked for cuts, wear, scuffing and any damage to the leather protection.
- vi. In the case of round slings the outer sleeve shall be checked for cuts and general deterioration.
- vii. Chemical attack is very difficult to detect until in an advanced state. Checks should be made for signs of surface powdering and / or possible loss of colouring.

If any faults are found at the time of examination, that would affect the safe use of the item, the sling must be withdrawn from service and details recorded on the Inspection Report.

13.5 Shackles

The thorough examination will comprise of but not limited to the following:






- i. Remove the shackle pin and examine for wear, cracks, deformation, flats on threads and corrosion.
- ii. Ensure that the pin is the correct type for the shackle in which it is fitted.
- iii. Examine the body for wear, cracks, nicks, gouges and corrosion, ensure that shackle pin holes are not worn or elongated, that they are in alignment and that threads in shackle pin hole are not damaged. Screw the pin back into the body and ensure that it fits correctly.
- iv. In the case of safety shackles, the nut must close on the last thread of the pin and not on the body of the shackle, ensure that the nut and cotter pin are correctly fitted and secure.
- v. Wear on the pin and body of the shackle must not exceed 8% of the original diameter.

If any faults are found at the time of examination, that would affect the safe use of the item, the shackle must be withdrawn from service and details recorded on the Inspection Report.

Cross Industry Workgroup

The cross industry workgroup consisted of members from the following companies:

	<p>Euan Simpson & Ken Noble ASCO Group Regent Centre Regent Road Aberdeen AB11 5NS Tel: 01224 371182 / 587044</p>
	<p>John Bedford BP 1 Wellheads Avenue Dyce Aberdeen AB21 7PB Tel: 01224 832000</p>
	<p>Keith McMurray Baker Hughes Stoneywood Park North Dyce Aberdeen AB21 7EA Tel: 01224 720921</p>
	<p>Derek Birse Britannia Operator Ltd Royfold House Hill of Rubislaw Aberdeen AB15 6GZ Tel: 01224 327100</p>
	<p>Anna Marie McGartland ConocoPhillips Rubislaw House Anderson Drive Aberdeen AB15 6FZ Tel: 01224 205000</p>
	<p>Manny Robertson Maersk Oil North Sea UK Ltd Crawpeel Road Altens Industrial Estate Aberdeen AB12 3LG Tel: 01224 242000</p>
	<p>David Morrison Nexen Petroleum U.K. Limited Nexen House Hareness Road Altens Industrial Estate Aberdeen AB12 3LE Tel: 01224 371100</p>

	<p>Mike Close GL Noble Denton No 1 The Exchange, 62 Market Street, Aberdeen AB11 5PJ, Tel: 01224 289100</p>
	<p>Keith Dawson Peterson SBS Nautilus House 35 Waterloo Quay Aberdeen AB11 5BS Tel: 01224 288100</p>
	<p>Sandy Bruce and Kenneth Lawtie Shell UK Exploration and Production 1 Altens Farm Road Nigg Aberdeen AB12 3FY Tel: 01224 882000</p>
	<p>Neil Moir Swire Oilfield Services Swire House Souter Head Road, Altens Aberdeen, Scotland, AB12 3LF Tel: 01224 872707</p>
	<p>Paul Logue Talisman Energy (UK) Ltd Dales Base Dales Industrial Estate Peterhead AB42 3JF Tel: 01224 871267</p>
	<p>Glen Bryant Total E&P UK plc. Crawpeel Road Altens Industrial Estate Aberdeen AB12 3FG Tel: 01224 297000</p>
	<p>Ali Davis Weatherford (UK) Howemoss Terrace Kirkhill Industrial Estate Dyce Aberdeen AB21 0GR Tel: 01224 796900</p>

FEEDBACK

Please give your feedback on the document to enable improvements to be made.

Contact detail for feedback is: info@marinesafetyforum.co.uk

RECOGNITION

Many people were involved in the development and review of this document, however we would particularly like to recognise and acknowledge the contribution of the following people:

Keith Dawson

Ali Davis

Andrew Nicholson

Anna Marie McGartland

David Morrison

Derek Birse

Euan Simpson

Gary Matthews

Geoff Cutler

Glen Bryant

Gordon Reed

John Bedford

Keith McMurray

Ken Noble

Kenneth Lawtie

Manny Robertson

Mike Close

Neil Moir

Paul Logue

Sandy Bruce

Peterson SBS

Weatherford

Ramco

ConocoPhillips

Nexen

Britannia Operator Ltd

ASCO Marine

Enviroco

Dominion Gas

Total E&P UK plc

Dangerous Goods Management

BP

Baker Hughes

ASCO

Shell

Maersk Oil North Sea Ltd

GL Noble Denton

Swire Oilfield Services

Talisman Energy (UK) Ltd

Shell UK Exploration and Production

Chairman