

The Chemical Distribution Institute



Marine packed cargo scheme

We are grateful to Martin Whittle of the CDI for his assistance with this article.

What is the CDI ?

The Chemical Distribution Institute (CDI) is an independent, non-profit making organisation, funded by the chemical industry and incorporated under the law of the Netherlands. Founded in 1994, CDI was created to provide risk assessment systems for the transporting and storage of bulk liquid chemicals.

CDI is managed by a Board of Representatives, all of whom are nominated by participating chemical companies. The Board establishes policy and is responsible for the Institute's general affairs. The Board elects an Executive to oversee and direct a small staff which manages the various programmes on a day-to-day basis.

Why was the CDI set up ?

Chemical companies have a duty to ensure that their products are properly transported, having due regard for worker and public safety, as well as protection of the environment. Because chemical companies mainly use the services of third parties to store, handle and transport products from manufacturing plants to their end-use customers, they need to be assured that these third party Logistic Service Providers (LSP's) are operating to the highest possible standards.

Before the early 1990's, the auditing of LSP's was highly fragmented, with individual chemical companies each using their own schemes. This, inevitably, led to a multiplicity of auditing programmes, with high costs, inefficiency and an unacceptable burden on the distribution industry.

CDI was set up in order to build a unified approach through the development of audit schemes that can be applied universally.

CDI-Marine (Bulk) and CDI-Terminals currently comprise the core of CDI activities. CDI-Marine (Bulk) has been adopted by 41 chemical companies and is now accepted as the 'global' scheme for assessing chemical and gas tankers.

What is CDI-mpc ?

Building on the success of CDI-Marine (Bulk) and CDI-Terminals, the expertise of the Institute has now been applied in the development and implementation of a scheme specifically tailored for the Marine Packed Cargo supply chain. The scheme is known as CDI-mpc and is directed at the following categories of LSP:

- Shipping Companies
- Ships
- Tank Container Operators
- Container Terminals
- Stuffers and strippers
- Freight Forwarders
- Agents

Why the need for CDI-mpc ?

Normally, a bulk cargo is loaded at the manufacturer's terminal, transported across the oceans in specially constructed ships and discharged at the customer's terminal, all under the custody of a single carrier. This is not the case with packed cargo. Whether it be a drum, a flask, a box or an ISO-container, custody and responsibility for the cargo will change several times during the distribution process. As the package progresses around the world, some custodians will be aware of the



hazards and well acquainted with the correct handling, stowage and response procedures; others will not. From the protected environment of the manufacturer's warehouse, the package can soon find itself in a container, buried in the depths of an ocean-going container ship. If it has not been correctly packaged or stowed, it can pose a considerable risk to the ship, its crew and the environment. Ultimately, of course, it may pose a threat to its manufacturer.

13% of packed cargo incidents involve dangerous goods and 64% of these are the result of improper packing or careless handling. This, in turn, can result in either a yard shift or re-stow of the container. Delays can effect the efficient distribution of the cargo and will often result in considerable loss for container terminals and ocean carriers. The re-stow of non-hazardous goods is sometimes more than just a disruptive annoyance; re-stowing dangerous goods can augment costs by a factor of 10, requiring specialist response personnel, emergency services, along with clean-up and the disposal of contaminated residues. These incidents can lead to substantial insurance claims for P&I Clubs.

Additionally, it is worth noting that 7% of dangerous goods cargoes are delayed at borders and terminals due to incorrect documentation, again amounting to loss. Application of a comprehensive risk assessment process can help reduce these losses and so improve safety and quality performance within the supply chain.

The logistics supply chain is huge and the risk is further compounded by the countless numbers of contractors and non-vessel operating companies involved. Chemical companies, shipping companies, truckers

and terminals all need assurance that the cargoes they are transporting will be properly handled and forwarded at all times.

How is CDI-mpc administered ?

CDI-mpc operates under the statutes and business ethics of CDI and is fully compliant with European Competition Law and US Anti-trust legislation. The operation of CDI-mpc is governed by a set of operating procedures that are registered with the EU Commission. CDI-mpc is financially independent from CDI-M and CDI-T, with all expenditure subject to the scrutiny of the CDI Financial Committee.

Whilst CDI manages the administration of the scheme, the decisions and the directives come from the various committees all under the watchful eyes of the CDI Executive Board and ultimately the Board of CDI.

How is it structured ?

The Committee Structure of CDI-mpc is as follows:

Management Committee

CDI-mpc is managed by a committee. The Management Committee consists of six individuals nominated by the chemical company participants. The Chairman takes his place on the executive Board of CDI, thus providing full representation of MPC at the highest Executive level of CDI.

Technical Committee

Reporting to the Management Committee, the Technical Committee consists of ten individuals: five nominated by the chemical companies



and five nominated by the distribution industry. CEFIC (the European Chemical Institute) and ACC (the American Chemical Council) retain places on this committee to ensure harmony with other SQAS (Safety and Quality Audits) packages.

Accreditation Committee

The Accreditation Committee operates in two sections to reflect the two distinct areas of accreditation. Part 1 deals with ship operators, ships and terminals, whilst Part 2 deals with the land based sectors. On each part of the Committee there is equal representation from the chemical companies and the distribution industry.

Who conducts the audits ?

Audits are conducted only by accredited auditors. The responsibility of accrediting auditors rests with the CDI-mpc Accreditation Committee. The Warsash Maritime Centre in Southampton, UK conducts training and examination of auditors.

Auditors from other organisations, who meet the CDI criteria, can also gain accreditation, thus allowing the LSP to co-ordinate MPC requirements with their existing SQAS. For ships and shipping companies, it is intended that the IACS member ISM auditors conduct the MPC audits, thus avoiding any additional burden being placed on this particular sector of the distribution industry. CDI also provides a number of accredited auditors available for ship operators unable to collate ISM and MPC audits.

Does the scheme address security issues ?

No, but following the dreadful event of 11 September the protocols have been modified better to address security issues. The protocol for each module now contains a chapter on security and the combined scheme will monitor security precautions across the MPC global supply chain.

Who owns the audits ?

The audit reports are the property of the LSP and propriety rights are protected under agreement with CDI. The LSP retains total control over who can and who cannot access the report. The electronic reports have full template functionality to allow rapid measurement of compliance with the individual's minimum safety and quality criteria.

Who pays for the cost of participation ?

The LSP pays for the cost of the audit, but CDI makes no participation charges to the LSP.



Whom should I contact for further information ?

Chemical Distribution Institute
 St Martins House Business Centre
 Ockham Road South
 East Horsley
 Surrey
 UK KT24 6RX

Telephone: (44) 1483 281 268
 Fax: (44) 1483 285 474
 e-mail: chemdist@aol.com
 web site: www.cdi.org.uk

KEY POINTS

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- The Chemical Distribution Institute (CDI) is an independent, non-profit making organisation, funded by the chemical industry.
- Chemical companies need to be assured that third party Logistic Service Providers (LSP's) are operating to the highest possible standards. CDI was created to provide risk assessment systems (audits) for the transporting and storage of bulk liquid chemicals that can be applied universally.
- CDI-Marine (Bulk) and CDI-Terminals currently comprise the core of CDI activities. CDI-Marine (Bulk) has been adopted by 41 chemical companies and is now accepted as the 'global' scheme for assessing chemical and gas tankers.
- CDI-mpc is an audit scheme specifically tailored for the marine packed cargo supply chain. The scheme is directed at shipping companies, ships, tank container operators, container terminals, stuffers and strippers, freight forwarders and agents.
- CDI-mpc is managed by a committee. An Accreditation Committee deals with issues of accreditation. The audits are conducted by accredited auditors.
- The LSP pays for the cost of the audit.