



APPROVED FOR TRANSPORT  
UNDER CUSTOMS SEAL

TR / 50078

TYPE

MU 20-2001-T

MANUFACTURER'S SERIAL NO

MU 92-D-0067

OWNED OR MANAGED BY  
CRONOS CONTAINERS LTD.  
UNITED KINGDOM

TIMBER COMPONENT TREATMENT  
IM / CHLORDANE / 92

CSC SAFETY APPROVAL

F / BV / 4008 / 92

DATE MANUFACTURED

09 / 1992

IDENTIFICATION NO

USAU 0484340

MAXIMUM GROSS MASS

24000 KG 52910 LBS

ALLOW. STACK. WT. FOR 1.8G

192000 KG 423290 LBS

RACKING TEST LOAD VALUE

15240 KG 33600 LBS

MANUFACTURED BY

MED UNION CONTAINERS A.S.  
IZMIR / TÜRKİYE

**IMDG**  
**2013**  
 INSPECTION SHALL BE BEFORE THE MONTH FINISHED OF THE YEAR SHOWN ON THIS DECAL  
**CSC**  
 DO FORM 2282 JAN 2010  
**NON-IMDG**

MIL DO4

# Securing Certain Dangerous Cargoes

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The transit, transfer, and storage of certain dangerous cargoes (CDCs) along our nation's waterways present particular security challenges for those charged with ensuring no harm comes to adjacent populations and critical infrastructure. Such cargo has chemical characteristics that can result in significant health or infrastructure impact in an uncontrolled release.

As such, the Coast Guard identifies bulk CDC transits, transfers, and storage as one of the highest daily security risks on U.S. waterways and has embarked on a risk-based approach to CDC security. This strategic and tactical approach considers the reality of limited federal resources against the significant consequences of a successful terrorist to ultimately establish and manage an acceptable CDC security risk. Primary to this approach is developing a national certain dangerous cargoes security strategy and implementation plan that spans the security spectrum from awareness, prevention, and protection to response and recovery.

## Security in Action

The national CDC security strategy focuses on intentional attacks to the portion of the U.S. marine transportation system (MTS) that supports bulk CDC vessel transits, vessel/facility transfers, and facility storage. It integrates the elements of the security spectrum with the elements of the risk equation (risk = threat × vulnerability × consequence) through operational and internal management goals.

Goals include:

**AWARENESS:** Provide real-time awareness of the risk of intentional attacks on CDCs to stakeholders. This is the principal driver for resource allocation decisions and envisions integrating maritime domain awareness input with risk modeling to facilitate captain of the port resource management and other operational decision making.

## CDCs Defined

Certain dangerous cargoes are defined in 33 CFR 160.204 as products having chemical properties such as toxicity, flammability, and reactivity that, if released, could produce devastating consequences on surrounding cities/towns, and/or critical infrastructure and key resources.

While the regulation includes more commodities than the ones specifically noted below, the following are considered the most hazardous (generally when carried in bulk), and are the ones on which the Coast Guard currently focuses to reduce their vulnerability to attack:

anhydrous ammonia  
ammonium nitrate  
chlorine  
liquefied natural gas  
liquefied petroleum gas

# Coast Guard CDC Security

The Coast Guard has been studying the CDC security issue since September of 2009, when it hosted, along with the National Maritime Security Advisory Committee, a cargo security symposium in Reston, Va. As a result, the Coast Guard chartered a more focused CDC risk reduction workgroup, including public and private stakeholder representatives. The workgroup met from December 2009 to October 2010, producing an internal report in April 2011. The chartered study areas, along with the symposium results, are informing development of the national CDC security strategy.

There is concern that one CDC (liquefied natural gas) has received attention to the detriment of other equally or more dangerous cargoes. That, and the scope of coverage necessary under current operational risk-reduction guidance, were the principal drivers to analyze how the Coast Guard manages CDC security and what might be done to tightly manage the risk of a CDC attack, which was the impetus for developing the national CDC security strategy. Coincident to this was the requirement in the Coast Guard's 2010/2011 Authorization Act to produce the same strategy and a study that describes current and planned actions.



Emergency evacuation drill. U.S. Coast Guard photo by Petty Officer Richard Brahm.



Atlantic Strike Team members participate in a Hazmat exercise. U.S. Coast Guard photo by CDR David Haynes.

**PREVENTION AND PROTECTION:** Assess MTS vulnerability to threats of intentional attacks on CDCs and mitigate the vulnerability to an acceptable level. This is the element of the risk equation over which the Coast Guard has the most control. This goal also forces the Coast Guard to define how much risk is acceptable to absorb locally, regionally and nationally and then manage to that security level, potentially blending the abstract with operational reality.

It further envisions dynamic preparedness assessment to blunt or absorb threats and models the assessment results against acceptable risk. This allows captains of the port to determine whether stakeholder measures are sufficient or if Coast Guard operational resources must be deployed to meet acceptable risk levels.

**RESPONSE:** Dynamically assess the potential consequences of intentional attacks and mitigate, through coordinated response, the impact of a successful attack. This goal focuses on the first part of the "consequence" element of the risk equation, allowing the sector commanders to assess USCG and

community response preparedness and appropriately allocate USCG resources.

**RECOVERY:** Develop national, regional, and local resiliency/recovery capability. Resiliency relies on various components within a community to return some acceptable level of functionality—economically and socially. Like the response goal, this focuses on CG readiness and asset allocation. However, recovery aspects are not as fully developed as response; thus the goal also encourages the Coast Guard to lead the effort to recover from a CDC security event through multi-stakeholder planning efforts.

**INTERNAL MANAGEMENT:** Establish internal organization and processes and stakeholder relationships to manage the national maritime CDC security program to an acceptable risk level. Organization, standards and policy promulgation, budget, and stakeholder agreements form the core of the goal's purpose. Key underlying components are the ability to measure CDC program progress and identifying an accountable program manager.

#### Objectives and Key Implementation Components

The national CDC security strategy will help policy makers and operational practitioners to understand the nature of the goals and how they are to be met. As such, each goal contains supporting objectives and each objective contains key implementation components that the national program manager can use in driving toward goal achievement.

From a practical standpoint, managing the objectives will be the program manager's primary goal-achievement method. This will be greatly aided by the strategy's companion document, the implementation plan, which will lay out in detail how objectives

will be met, over what timeline, including necessary resourcing, and responsible parties.

The Coast Guard will regularly review the strategy, focusing on measures of effectiveness, which will allow it to be a model for developing similar mission strategies.

#### Stakeholder Input

As part of the strategy development process, public listening sessions were held and stakeholder feedback incorporated in the draft national CDC strategy. Following in-house briefings, the strategy will be fully developed for submission to Congress and the nucleus for policy for that aspect of the USCG ports, waterways, and coastal security mission.

Security strategy lays out the charted course, but it takes a robust implementation plan to bring the strategy to life. The Coast Guard will draft the implementation plan that will describe in detail how CDC security risk will be managed on a daily basis.

#### About the authors:

*Mr. Bob Reimann has more than 24 years of federal experience as a security specialist with the U.S. Navy and Coast Guard. He serves as the subject matter expert for issues regarding cargo security as related to the Coast Guard's Port Security and Homeland Security missions. Mr. Reimann develops agency-wide policy, initiatives, risk management tools, and procedures for implementation of cargo security activities within the Coast Guard. He holds a B.S. in business administration from Ferrum College.*

*Captain Mark H. Johnson is the senior vice president for C & H Global Security. He is a former deputy assistant administrator for maritime and land security of the Transportation Security Administration, and a former U.S. Coast Guard career officer specializing in safety, security, and environmental protection. Captain Johnson is also a former U.S. Coast Guard captain of the port. He received his B.S. from the U.S. Coast Guard Academy and his M.S. from the University of Southern California.*