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USCG-2003-16688-5

Chemical Transportation Advisory Committee (CTAC)

Final Report

Potential Addition of Ammonium Nitrate and Ammonium Nitrate Fertilizers that are Classified as Oxidizers to the Certain Dangerous Cargo (CDC) Definition

28 January 2004

1. Final Report (Cover Letter)
2. Working Group Minutes
3. USCG E-mail Regarding Special Permits
4. CTAC Hazardous Cargo Transportation Security Subcommittee Task Statement

To: CDR Robert Hennessy, CTAC Executive Director
From: Paul Book, CTAC Chairperson
Subject: Recommendation from CTAC on Behalf of the Hazardous Cargoes Security
Transportation Sub-Committee and Their Ammonium Nitrate Workgroup
Date: Wednesday, January 28, 2004

The CTAC Hazardous Cargoes Security Transportation Sub-Committee was assigned to review issues concerning ammonium nitrate waterborne transportation and its relation to the MTSA regulations. From this Sub-Committee, a workgroup was formed to focus on this particular task which consisted of existing sub-committee personnel with an expertise in this area along with representatives from the ammonium nitrate industry and regulatory agencies (ATF, ONI, USCG, USACE, etc.). Specifically, an investigation was undertaken to understand the chemical characteristics of this product, the validity of the hazard class assigned, the impact of adding this product to the CDC list, and security precautions necessary while transferring and transporting this material under today's "new normalcy".

Since the U. S. Coast Guard TSAC was also tasked with a review of ammonium nitrate, the two committees joined and worked through all the issues together. Joint Co-Chairs from TSAC were Ms. Jennifer K. Carpenter and Mr. Rex Woodward while CTAC Co-Chairs were Ms. Alice Johnson and Mr. Paul Book. Members of the ammonium nitrate industry (manufacturers, shippers, fleeters, transporters, and trade organizations) were also invited to the meetings so that all parties with an interest could work through the various issues. The **final minutes** of the Sub-Committee's Workgroup investigation is **attached** to this letter for reference of specific points. These minutes will reflect the in-depth study and comments on the issues that led us to our final recommendations.

Basically, the SSI information supplied by the ATF and ONI gave the workgroup a quick understanding of the product and its effects. Unfortunately, none of the testing was specific to barges in waterborne transportation. These analytical questions remain unanswered and led us to ask more questions of product stability, design of equipment, security precautions, and so forth.

The anticipated impact of adding ammonium nitrate or ammonium nitrate fertilizers in bulk to the CDC list is discussed in the referenced minutes. It appears the approximate impact could affect 8000-9000 **additional** barges; 30-40 fleet operators; 60-80 fleet boats; and 160 line haul boats. Should this product be added to the CDC list, many more VSP's and FSP's would have to be written (cannot be sure of approximate number since numbers listed above could possibly already have been required to submit plans). This magnitude of additional plans may require revising the economic impact studies presently provided in the MTSA by the Coast Guard.

While security impacts are strongly recognized for this product, it is not in the Coast Guard's nor marine industry's best interest if this product is merely moved off the waterside to the highway or rail transportation system which is already overburdened with capacity.

The quantity of ammonium nitrate and ammonium nitrate fertilizers carried by barge each year is approximately 900,000 tons. The large majority of this is **imported** by vessel and loaded into barges and shipped to various facilities on the inland waterway system. Additionally, most **coastal** shipments are offloaded from ships but moved by non-waterborne carriers (i.e. highway, rail).

In final review, the workgroup requested Coast Guard review utilization of the special permit process outlined in 46 CFR 148 vs adding the product to the CDC which would require security plans under 33 CFR Subchapter H—Maritime Security. LT Michael McKean was tasked with this assignment. The main outcome of this review revealed the following: special permits are designed for **safety** issues; Coast Guard promulgated security regulations and would not want to add security requirements to another section of regulations (46 CFR 148); and ammonium nitrate containing more than 80% ammonium nitrate is shipped in packaged form as well as in bulk which will be highly scrutinized and may require changes to both packaged and bulk while special permits **do not cover** packaged materials. (See Attachment)

Recommendation

The work group **unanimously agreed** that **security steps** were **needed** for the carriage of ammonium nitrate cargo in bulk. Vessel position reporting should be mandatory and other security measures (i.e. notifications, detections, etc.) should be known by vessel owner/operators, fleeters, and facility personnel. The work group fell short of unanimously agreeing to a CDC classification, but realizes this may become the end output. Should the Coast Guard decide to make this product a CDC, they should work closely with CTAC, TSAC, and industry in the implementation aspects (such as the development of an ASP for each impacted segment of industry that provides CDC protection while minimizing adverse impact on industry). [**Note: Regulations required submission of plans by Dec. 30, 2003 and implementation by July 1, 2004.**]

Conclusion

The Chemical Transportation Advisory Committee held a teleconference this morning (1/28/04) and included members from the public (see Federal Register Notice of 1/13/04). Lt. McKean provided all participants with the rules of an advisory committee and then a roll call was taken with 14 CTAC members; 4 USCG personnel; and some eight additional public representatives. Ms. Johnson briefly reviewed the results of the workgroup and the details of this letter. After much discussion, a vote was then taken to accept the recommendation with all 14 of the 24 members of CTAC unanimously agreeing. This vote is to include the documents (final minutes and special permits comments).

Respectfully submitted,

Paul Book
CTAC Chairperson

Updated AN Workgroup Minutes Based on Teleconference of Tues., Dec. 9, 2003

Questions for TSAC/CTAC Working Group on Ammonium Nitrate

- What physical or operational characteristics of barges (if any) might serve to alleviate – or, conversely, exacerbate – the destructive potential of AN as demonstrated in the ONI and ATF presentations? Include hull/covers/etc.
Assigned: Rex Woodward, Paul Book

All inland carriers of AN use covered barges. These barges have either steel or fiberglass lift or roll-top covers and are typical of covered barges used in the inland barge industry. The cargo is carried in the hopper of the barge, which serves as an independent storage area within the barge separated from the outer hull by voids, thus giving it something of a double-skin effect. Conversations with several marine surveyors and engineers suggest that there is not much that could be done to alter the physical design of the barge that would exacerbate the destructive potential of AN. Barges normally load to 1500 tons. 90% of these covered barges have “doors” on top of covers that cannot be locked and allow entry/access to the product. Using a hydraulic jack, you can roll the cover back to gain access. Presently in the dry cargo industry, inspection procedures are not standard practice for seals, but rather for integrity of the hull/barge.

- About how much AN is moved in the U.S. each year by water and in what form?
Assigned: Paul Book

Looking at the number of companies that move AN, 28 companies were identified on the inland river system. Based on information provided by the U.S. Army Corps of Engineers' Waterborne Commerce Statistics Center and industry sources. (Thus far, we have not identified any carriers who move AN in the domestic coastal barge trade, but we have raised the question with knowledgeable coastal carriers and will forward any additional information we receive from them to the group ASAP.) The 28 companies are shown in the attachment and include barge and towing vessel operators and fleet operators. Of these companies, we estimate that 19 are not currently subject to the vessel security plan regulations because they do not operate tank barges. However, we believe that the number of affected companies may be much greater than these numbers suggest because many fleeting facilities that handle dry cargo barges would be subject to the facility security plan regulations if AN were listed as a CDC.

November 20, 2003

Ammonium Nitrate Carriers and Fleeters
Prepared by Doug Scheffler

The table below gives the fleet size of the carriers of ammonium nitrate identified by Lynn Muench and Rex Woodward. The data are from the 2001 edition of the "Waterborne Transportation Lines of the United States", U.S. Army Corps of Engineers. Inland Marine was on the list, but it is not in the file.

Company Name	Tugboat/ Towboat	Total Barges	Tank Barges	Dry Covered Barges
ALTER BARGE LINE, INC.	15	508	0	366
AMERICAN COMMERCIAL LINES	144	4,803	483	3,856
AMERICAN RIVER TRANSPORTATION CO.	55	2,209	87	2,065
B&H TOWING, INC.	2	0	0	0
CAMPBELL TRANSPORTATION CO.	35	444	0	10
CANAL BARGE COMPANY, INC.	17	538	109	70
CARGILL MARINE & TERMINAL, INC.	3	718	6	655
CHOCTAW TRANSPORTATION CO., INC.	8	29	0	6
EVANSVILLE MARINE SERVICE, INC.	10	0	0	0
INGRAM BARGE CO.	61	2,047	180	452
J B MARINE SERVICE, INC.	12	0	0	0
JEFFERSON MARINE TOWING, INC.	6	0	0	0
JOHNSON TOWING CORP.	3	0	0	0
KIRBY INLAND MARINE, INC.	177	770	765	4
MAGNOLIA MARINE TRANSPORT CO.	26	75	72	0
MARQUETTE TRANSPORTATION CO.	25	269	0	240
MCKINNEY TOWING	18	0	0	0
MCNATIONAL, INC. (1)	33	13	7	0
MEMCO BARGE LINE, INC.	36	1,668	0	727
MISSOURI BARGE LINE COMPANY	9	58	0	53
NORTHSTAR NAVIGATION	6	1	0	1
OWENSBORO RIVERPORT AUTHORITY (2)	1	0	0	0
RIVERWAY CO.	14	515	0	500
ROBERT MILLER & ASSOC.	0	225	0	189
SOUTHERN TOWING CO.	13	39	39	0
TENNESSEE VALLEY TOWING, INC.	3	0	0	0
UPPER RIVER SERVICES, INC.	15	1	0	0
WESTERN KENTUCKY NAVIGATION, INC.	1	0	0	0
Total	748	14,930	1,748	9,194

Notes:

- (1) Parent company of Excell Marine and McGinnis Marine
- (2) Assumed this is same company as Owensboro Harbor

Below is estimated annual AN tonnage shipments collected by Paul Book. Data provided by The Fertilizer Institute, Don Carroll (MT Maritime), Peter Vozzo (Mississippi Chemical)

Blue water shipments:

12 month annual average **import** shipments from 1998 to 2003 is approximately 950,000 short tons. This represents imports to all of U.S. i.e. East, West and Gulf Coasts. Typical ship quantity is 30,000 tons per vessel, or approximately 31 vessels imported to U.S. a year. Ammonium nitrate %content believed to be high, 95 % to 100%.

12 month annual average **export** shipments from 1998 to 2003 is 40,000 short tons. Approximately 1 to 2 ships loading a year. Ammonium nitrate %content believed to be high, 95% to 100%.

Brown water shipments:

Approximately 600 barges loading (facility to barge, ship to barge) a year or approximately 900,000 tons. Ammonium nitrate % content is high (95% to 100%) when shipped by barge and unloaded. Blending is not done until the end user (agricultural or industrial user). Density of water borne ammonium nitrate shipments typically is high .90 grams per cubic centimeter which is agricultural grade. Industrial use density is .80 grams per cubic centimeter. The greater the density the less the detonation propagation, an automotive analogy, the greater the density the more it acts like a muffler.

Attention Jennifer and Rex:

This is ACBL's annual AN loading/discharging patterns. Bottom line, the whole inland waterway system.

Origin:

Lower Miss mile 132 to 173	64 loadings
Tennessee River mile 256	1
Upper Miss mile 181	1
Yazoo River mile 075	116

Destinations:

Arkansas River mile 000 to 446	45 unloadings
East Canal mile 15	10
Cumberland River mile 175	10
Lower Miss River mile 163 to 850	39
Ohio River mile 038 to 981	26
Upper Miss River mile 000 to 830	20
West Canal mile 000 to 518	11
Tennessee River mile 000 to 305	21

Data provided by Ford West of Fertilizer Institute; all figures are in short tons.

Based on June to July	<u>2001/2002</u>	<u>2002/2003</u>
Canadian	552,023	495,783
Brazil	175,000	270,000
Norway	34,451	27,863
Denmark	331,000	
Russia	59,552	176,668
Netherlands	152,936	193,833
United States	938,098	1,117,221

- How many companies (count both barge, towing, and any coastal/bluewater companies) are involved in the movement of AN by water? Of these, how many are not currently covered by the Coast Guard's vessel security plan rules (i.e., because they carry no other CDCs, D, or O cargoes, or have towing vessels that move such barges)?

Assigned: Rex Woodward, Jennifer Carpenter

24% of 27,000 dry hopper barges IRVMC recorded through voluntary tracking since April '03 and at peak in Nov. was 40 AN (20 moving/20 fleeting)—need more work to get the avg. daily number of movements. IRVMC numbers are based on each movement, not on a single barge going through the river systems. 3M tons produced in US plus 1M tons imported. 4M (2.1M used in agriculture and 1.9 in industrial applications).

- How many additional barges and towing vessels would be subject to the vessel security plan rules if AN were added to the CDC list?

Assigned: Rex Woodward, Jennifer Carpenter

Estimated maximum of 8,000-9,000 additional barges, 30-40 fleet operators, 60-80 fleet boats and 160 line haul boats could be subject to the vessel security plan rules if AN were added to the CDC list, though we caution that this estimate probably overstates the population of affected vessels since many of the companies representing both barges and towboats may already have to submit VSPs. Also, need better stats and economics involved

- How many of these companies/barges/towing vessels could not be covered by the AWO Alternative Security Program (thus necessitating the submission of a stand-alone vessel security plan to the Coast Guard requiring agency review)?

Assigned: Rex Woodward, Jennifer Carpenter

Of the 28 companies on the attachment, five (5) are not AWO members and thus not eligible to use the AWO's Alternative Security Plan Model. These companies together operate 195 covered hopper barges and 34 towboats.

- Are there approaches other than adding AN to the CDC list that should be considered to improve the security of AN movements by barge?

Assigned: Alice Johnson, Ron Corigliano, James Prazak, John Temperilli

1. *List AN as a CDC but not all security provisions, e.g. security plans physically on each vessel. Would make location tracking mandatory and require fleeting areas to designate a restricted area as part of the permit (currently, AN shipments are voluntarily being tracked and reported although it is not a CDC).*
2. *Amend the vessel special permit for AN under 46 CFR 148.01-9 (safety requirements). Recommended by Fertilizer Institute is to add security requirements to special permit (amend RNA requirements).*
3. *Classify bulk AN and AN fertilizers classified as 5.1 Oxidizers as a CDC with all security requirements.*
4. *No further security requirements (status quo) for AN as existing requirements in the permit process 46 CFR 148.01-9 and RSPA requirements 49 CFR 146.415. Work group's opinion is this not viable option.*
5. *Do not permit shipment of AN via vessel (Canadian plan). Work group's opinion is this not viable option.*

Options 4 and 5 were deemed as unacceptable and no further discussion of those was needed. Of the remaining three options, the majority of the work group recommended Option 1 as the most viable, followed by Option 2, and Option 3 as the least viable.

- If AN were to be added to the CDC list, what kind of industry outreach would be necessary to ensure that operators were prepared to comply with the newly applicable regulations?

Assigned: Alice Johnson, Ron Corigliano, James Prazak, John Temperilli

A major change on the dry cargo industry which would require outreach for fleeting facilities and vessel owner/operators. Industry groups, e.g. AWO, Fertilizer Institute, USCG Web Site, COTP, and Army Corp.

- What other factors should the Coast Guard be aware of as it considers whether to add AN to the CDC list?

Assigned: Alice Johnson, Ron Corigliano, James Prazak, John Temperilli

1. Classify bulk AN and AN fertilizers classified as 5.1 Oxidizers as a CDC with all security requirements:

- Economic hardships (training, drills, exercise, plans, etc.);*
- Simplest solution to promulgate, institute and enforce secure AN shipments;*
- Additional security for AN shipments;*
- Recognition of the threat potential;*
- Listing allows for lesser degree for interpretations and inconsistencies, and allows for public comment.*

2. Amend the vessel special permit for AN under 46 CFR 148.01-9 (safety requirements). Recommended by Fertilizer Institute is to add security requirements to special permit (amend R&A requirements). Making AN a CDC would remove the COTP special requirements (consistency from port to port). However, that would take the current chain of command away from the COTP.

- AN facilities currently are covered by security requirements. There are additional requirements in addition to part 105 for AN facilities in that they must post a guard if a loaded barge is to be moored overnight;*
- Lesser economic impact;*
- More difficult to promulgate, institute and enforce secure AN Shipments (who is held accountable for the vessel security at all times, i.e. fleeting);*
- Additional security for AN shipments but not as encompassing as if it was a CDC, e.g. vulnerability assessment;*
- Recognition of the threat potential;*
- Permit process can allow for greater degree of interpretations, inconsistencies, and no public comment.*

3. *AN be listed as CDC but not all security provisions, e.g. security plans physically on each vessel. Would make location tracking mandatory and require fleeting areas to designate a restricted area as part of the permit (currently, AN shipments are voluntarily being tracked and reported although it is not a CDC).*
 - ❑ *May act as an alternate security plan for AN;*
 - ❑ *Economic hardships (training, drills, exercise, plans, etc.) but not as great as the full requirements of a CDC;*
 - ❑ *Not the simplest solution as with CDC to promulgate, institute and enforce secure AN shipments but can be managed;*
 - ❑ *Additional security for AN shipments;*
 - ❑ *Recognition of the threat potential;*
 - ❑ *Listing allows for lesser degree for interpretations and inconsistencies, and allows for public comment.*
4. *If bulk barge shipments were not permitted (Canadian requirements), alternate methods of shipping AN is that for 500 barges would require 31,500 cargo tanks or 7,500 railcar for the same amount of AN. Work group feels that this may be detrimental to safety, security and economics.*
5. *Non-bulk AN (packaged) is on the CDC list. Not listing bulk AN would not be consistent.*
6. *Incorporate Part I, subchapter N to 104.105 Applicability (a)(8) Barge subject to 46 CFR chapter I, subchapter D or O. This would make consistency between facility and vessel security.*

[Note: Suggested that Don Carroll and John Salvesen could assist Paul Book on blue water concerns with AN.]

Follow-up Discussions to Further Review of the Vessel and Facility Requirements

On September 9th, a conference call was held to conduct further follow-up discussions to further review the analysis of the 3 options selected by the working group. Members attending included:

Vessel Regulations (Part 104) Report

104.115 – Compliance dates:

Because this is a new offering, it was suggested that the deadlines be delayed by a year. LCDR Teubner indicated that due to the MTSA requirements, it might not be possible to delay for a full year. The Coast Guard will take this suggestion under advisement, and will have to further review the situation.

104.230 – Drill and Exercise Requirements:

Recommend that the drill requirements be extended from once per 3 months to once every 6 months. This is due to the number of smaller companies that will be impacted, and the fact that they only carry a limited amount of AN. LCDR Teubner pointed out that the regulations specify a performance standard, and it might be worthwhile to consult the AWO to determine how they have integrated the drills into their Alternative Security Program. For example, if unmanned vessels such as barges with like characteristics are grouped under one VSO, it is possible to rotate the drill requirements and only conduct a single drill each set time period (once per quarter in the regulations, or once every 6 months as suggested by the group). In addition, towing vessels involved in fleeting areas are already exempted from Part 104 [see 104.105(a)(11)(i) through (iv)]. Also see the preamble to the final rules (USCG-2003-14749), page 60486, 3rd column for further explanation], so they would not be required to have a security plan or conduct the drills/exercises. Ultimately, the vessels would be linked to a bigger plan, most likely the fleet plan (i.e. if a fleeting vessel is tied to the fleeting facility, the security plan for the fleeting facility would incorporate any security issues related to the vessel).

104.120 - Documentation:

There are no existing documentation tubes or mailboxes on the bulk of the hopper barges. As such, it will be very difficult to place a copy of the vessel security plan on every vessel in the fleet, when only a small percentage of the vessels might carry the cargo. One possible solution is to only require that the plan be on the barge while it is carrying AN. Because of the special permit requirements, vessel owners are already doing this by placing the permit on the vessel prior to loading AN, so this would simply be another document. Another option would be to segregate facilities and place the plan on the barges they will use on AN, but due to logistical reasons, it is impractical to rely on this option.

Facility Regulations (Part 105) Report

105.115 – Compliance dates:

A similar statement applies to facilities as did for vessels.

All other provisions would remain applicable. It is recommended that the industry beginning working together ASAP to develop and ASP for the industry.

Based on this review, Option 1 essentially turns out to be Option 3 – identifying AN as a CDC.

After further discussion on the use of special permits, the Coast Guard is not sure whether they could even incorporate security requirements into the permit program. The Coast Guard has agreed to research this idea.

Other options – Subchapter N inclusion:

The Coast Guard could choose to add Subchapter N to the Applicability sections in Part 101, Part 104 and Part 105, which would set a lower threshold and therefore capture even more cargoes, some of which are not particularly hazardous.

Final Recommendation:

Based on the information that the group has available today, the group narrowed the recommendation to 2 options – defining AN as a CDC, or utilizing the special permit to stipulate security requirements. Because of questions remaining about the special permit program, the use of the special permit could be a viable option, depending on what comes out of the further review by the Coast Guard.

The key effort that needs to take place as soon as possible is outreach to the vessel owner/operators and the fleeting facilities. Options include working groups with the Coast Guard, the Corps of Engineers, AWO, maritime publications, CTAC's outreach group, The Fertilizer Institute, and any number of other organizations.

Rex will follow-up with AWO to see if they have any further input into the recommendation.

Special Permits—Email from Lt. Mike McKean

Ammonium Nitrate Issues Raised Concerning Adding Security Regs. To Special Permit Process

Paul, Alice, and Rex,

Let me begin by applauding the CTAC / TSAC Working Group on Ammonium Nitrate for examining the issue before you from many different points of view while trying to identify all possible solutions. I urge you to include any and all suggestions that you truly believe are workable in your final report to CTAC and TSAC.

I recently received a request from members of the Working Group to articulate the Coast Guard's views on addressing bulk ammonium nitrate security requirements via our special permit process as outlined in Title 46, Code of Federal Regulations (CFR), part 148. I have conferred with experts here at Coast Guard Headquarters and reviewed historical files, federal register notices, and other information related to the special permit process. Our concerns are three fold:

1. The special permit process, as outlined in 46 CFR 148, serves as a construct that allows the Coast Guard to communicate additional safety provisions, for industry compliance, that are not currently covered in our existing regulations. "Ammonium nitrate containing not more than 80% ammonium nitrate ..." is currently listed in 46 CFR 148. Therefore, it may be carried in bulk without receiving a special permit from the Coast Guard. As you know, ammonium nitrate containing more than 80% ammonium nitrate is not listed in 46 CFR 148. Therefore, it may be carried in bulk only after receiving a special permit from the Coast Guard. 46 CFR 148 is admittedly outdated. We have made unsuccessful attempts in the past 15 years to update this regulation. Unfortunately, such an update has not been a very high priority outside of this office. Nonetheless, this regulation will eventually be updated. When it is, the special permit concept will not disappear. However, cargoes that currently require a special permit will be added to the table and appropriate safety provisions for each additional cargo will be articulated as regulatory text. When this happens, carriers of ammonium nitrate containing more than 80% ammonium nitrate will no longer receive special permits from the Coast Guard and, from a security perspective, we'll be in the same position that we are in today.
2. The Coast Guard recently promulgated security regulations in an entirely separate Title and Subchapter of the CFR. We would rather not attempt to include security provisions in an updated version of 46 CFR 148 when we have consolidated security regulations already in place to address our concerns about ammonium nitrate.
3. Finally, ammonium nitrate containing more than 80% ammonium nitrate is shipped in packaged form as well as in bulk. We anticipate looking at packaged ammonium nitrate in more detail in the near future. Ultimately, we would prefer to address our concerns over ammonium nitrate in such a way that covers both the packaged and bulk modes of

transportation. The special permits that are required by 46 CFR 148 do not cover packaged materials.

I hope these thoughts are helpful and answer questions about the Coast Guard's position. By no means am I trying to discourage you from including a recommendation to address ammonium nitrate via the Coast Guard special permit process. If you truly feel that the special permit is the best way to address our concerns about ammonium nitrate, then please reflect that in your report.

Please feel free to share these thoughts with the members or the working group as you see fit.

Very Respectfully,

Michael McKean, LT
U.S. Coast Guard Headquarters (G-MSO-3)
Hazardous Materials Standards Division
ph: (800) 842-8740 ext 7-0087
ph: (202) 267-0087
fax: (202) 267-4570
mmckean@comdt.uscg.mil

CHEMICAL TRANSPORTATION ADVISORY COMMITTEE (CTAC)

TASK STATEMENT ACTION SHEET

TASK TITLE: Assist the Coast Guard in the development of policies and procedures designed to deny terrorists the use of hazardous cargoes as weapons while they are being transported or stored within the U.S. Maritime Transportation System (MTS).

DESCRIPTION OF TASK: As defined in Task Title.

RECOMMENDED ACTION: Through subcommittee meetings, workgroup meetings, and correspondence, provide recommendations to CTAC for the development of security measures aimed at preventing terrorist incidents involving hazardous cargoes in the maritime environment.

RECOMMENDED PRIORITY AND TIME FRAME:

Priority: (highest) 1 2 3 4 5 (lowest)

Date Required: Short Term Tasks: March 2003
Medium Term Tasks: October 2003
Long Term Tasks: October 2004

Other dates/deadlines/milestones: Periodic tasks on an as needed basis over a 4-5 year period.

COAST GUARD TECHNICAL REPRESENTATIVES:

LTC Encinas (202) 267-4131

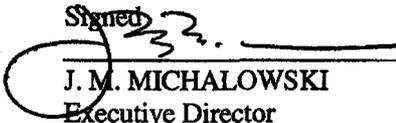
LT Teubner (202) 267-4129

Commandant (G-MPS)
U. S. Coast Guard
2100 Second Street
Washington, DC 20593-0001

Commandant (G-MPS)
U. S. Coast Guard
2100 Second Street
Washington, DC 20593-0001

Forwarded for Committee consideration.

Signed


J. M. MICHALOWSKI
Executive Director

Date forwarded: 12/9/02

Committee Action: Task accepted by the Committee. Committee established a new Subcommittee to address the issue.

Signed


PAUL BOOK
Chairman

CHEMICAL TRANSPORTATION ADVISORY COMMITTEE (CTAC)

HAZARDOUS CARGO TRANSPORTATION SECURITY (HCTS) SUBCOMMITTEE

TASK STATEMENT

1. TASK TITLE

Assist the Coast Guard in the development of policies and procedures designed to deny terrorists the use of hazardous cargoes as weapons while they are being transported or stored within the U.S. Maritime Transportation System (MTS).

2. BACKGROUND

Recent events have revealed security vulnerabilities in our nation's transportation infrastructure. Terrorists have demonstrated that they have both the desire and the capability to use our materials and transportation systems as weapons to disrupt our way of life. The Office of Homeland Security (OHS) and Department of Transportation (DOT) have tasked the Coast Guard with securing the nation's maritime mode of transportation.

In analyzing the inherent risk to specific portions of the MTS, the Coast Guard defines risk as the product of the threat to a target, vulnerability of that target, and consequence of a terrorist incident involving that target.

$$\text{Risk} = \text{Threat} \times \text{Vulnerability} \times \text{Consequence}$$

Threat recognition procedures and consequence management responsibilities are also considered. Specifically, with regard to the MTS, the Coast Guard is currently working toward:

- Identifying ways to improve threat recognition and the subsequent reporting of the identified threats.
- Identifying and evaluating vulnerabilities and countermeasures.
- Managing consequences by identifying responder responsibilities and reporting procedures.
- Improving maritime domain security awareness.
- Maintain positive control over the movement of high interest vessels (HIV).
- Protecting critical infrastructure by establishing effective partnerships with other federal, state, local, and private industry stakeholders.

3. PROBLEM STATEMENT

The MTS, which includes coastal ports and inland rivers, is a target-rich environment for terrorists. Hazardous cargoes are often carried in much larger quantities by water than they are by rail or highway. U.S. navigable waterways frequently intersect with rails and highways. Thus, a successful attack on a marine target may very well adversely impact other modes of transportation. There is a need for the Coast Guard to implement technology, plans, and procedures to deny potential adversaries the opportunity to use waterborne hazardous cargoes against our public, infrastructure, and commerce.

4. TASK

a. Vulnerability Assessment

- (1) Medium Term: Assist the Coast Guard by identifying security vulnerabilities in the chemical transportation industry. Identification of the vulnerabilities will assist the Coast Guard efforts to address corrective measures.
- (2) Medium Term: Assist the Coast Guard with evaluating the feasibility and practicality of tracking hazardous cargoes on the MTS including evaluating all potential tracking methods necessary to achieve maritime domain awareness.
- (3) Long Term: Provide advice and assistance, consistent with multilateral requirements developed at IMO, to the Coast Guard as it formulates and implements vessel, facility, and port security plans with respect to hazardous cargoes.
- (4) Long Term: Provide advice to the Coast Guard on its Inland River Security Campaign by maintaining a working relationship with G-MPS and assisting them with solutions to problems and questions that arise during the Campaign.
- (5) Periodic Tasking: Provide feedback to Commandant (G-MPS) on specific items under development by the Port Security Directorate. G-MPS will coordinate tasking for each specific item to be reviewed for feedback. This periodic tasking will occur on an as needed basis over a 4-5 year period.

b. Security Awareness/Consequence Management

- (1) Short Term: Promote security awareness in the Marine Chemical Transportation Industry. Review current operating procedures. Determine methods of integrating security observations and reporting significant sightings in standard operating procedures and ensuring information is shared appropriately.
- (2) Short Term: Identify and categorize those hazardous cargoes which present the greatest threats to public welfare and safety and make recommendations on what cargoes require enhanced levels of security.

- (3) Medium Term: Develop immediate action operating procedures in the event of a hazardous cargo take over and/or discharge incident. Determine transition procedures from Chemical Transportation Industry to Emergency Responders in both public and private sectors. Determine support requirements to responders.

5. ESTIMATED TIME TO COMPLETE TASK

Short-term tasks should be completed within 6 months. Periodic tasking should be directed from G-MPS on an as needed basis and be completed within the time constraints of short term tasking. The medium term tasks should be completed within 12 months and long-term tasks shall be completed within 24 months.

6. RECOMMENDED PROFESSIONAL QUALIFICATIONS

Interested participants should have at least one year of the following qualifications:

- a. Familiarity with the bulk water transportation of chemicals by either tankships or barges;
 - b. Familiarity with operation of waterfront facilities that handle, store, or transfer chemicals;
 - c. Knowledge of the marine chemical transportation industry management programs in both large and small companies
7. COAST GUARD TECHNICAL REPRESENTATIVE

LTC Encinas, Port Security Directorate (G-MPS)
Phone: (202) 267-4131
Fax: (202) 267-4130
Email: dencinas@comdt.uscg.mil

LT Teubner, Port Security Directorate (G-MPS)
Phone: (202) 267-4129
Fax: (202) 267-4130
Email: rteubner@comdt.uscg.mil