Supply Chain Security along the Columbia River: An Analysis of Maritime Supply Chain Security with Respect to Communication between Security Experts

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Submitted to the Department of Ocean Engineering in Partial Fulfillment of the Requirements for the Degree of

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ABSTRACT

The amount of cargo that enters the US border is at an all time high. Cargo containers and vessel shipments enter the US from all over the world. Tracking these shipments from their origin to destination requires professional expertise. Security organizations, such as the Regional Maritime Security Coalition of the Columbia River, realize the potential of these professionals, who track and coordinate cargo containers as they move through a supply chain, to enhance security of maritime cargo.

In order to utilize these supply chain logistic professionals in a security coalition, proper training and certification would be required to comply with the US Federal Code on Liability Protection. This study examines the requirements that are necessary to certify supply chain logistic professionals as certified volunteers in an information sharing, security communication network to prevent terrorist activity, smuggling, theft, and to assist in general crisis mitigation. The thesis studies how the RMSC is currently developing its security communication system around supply chain logistic professionals, and the requirements and training that would be necessary to certify them under the US Federal Code.

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Introduction: Importance of Communication for Port Security

Tracking cargo containers from origin to destination is a daunting task. A supply chain can have multiple nodes, which are points in the supply chain that a container will be stored, warehoused, transferred, or even re-stuffed. Supply chains also have multiple modes of travel, including truck, plane, train, and ship. Along with these multiple nodes and modes that are involved in a supply chain, are further complications arising when the container must cross through international borders. In today's global economy, where manufacturing is commonly outsourced, and raw materials and products are shipped internationally, supply chains have become more complex, and having an efficient supply chain is essential for a successful importer and exporter of products.

Experienced logistic professionals are necessary for tracking shipping containers as they travel through supply chains. The difficulty in coordinating shipping containers from one node to another, and through multiple modes of transportation, in a timely fashion, necessitates the need for these professionals. Many of these professionals have worked in the shipping container logistics industry for many years. They have amassed numerous amounts of associates to contact, in order to assist them in locating containers, and have learned through their experiences the different intricacies that are involved when tracking containers. They must also be familiar with federal and state regulations, Customs procedures, and the operations of distribution centers.

The knowledge of these logistics professionals is essential to many in private industry to coordinate their cargo containers, but security officials are now realizing the benefit that they can bring to national security. Harnessing the knowledge of supply

chain logistic experts, and creating a security communication network for the purpose of national security is now the focus of security organizations such as Customs and Border Protection (CBP) and the Regional Maritime Security Collation of the Columbia River (RMSC-CR). These security organizations recognize that supply chain logistics experts can decipher pertinent information from seemingly superfluous data. This ability, along with their years of experience, can help in creating greater security for cargo containers and supply chains that enter through the United States' borders.

A security information communications network is being developed by the RMSC to increase security in the Columbia River region. It is a virtual center where logistic experts can pass along discrepancies in data that accompany cargo that they feel illustrates a possible security threat. The network will also act as a coordination network to mitigate any crises that occur on the river. The RMSC is trying to unify security within private and public industry along the Columbia River by tying them together through this communications network to create a more secure and safer region.

Government regulations require the supply chain professionals, which would constitute the security communications network, to strictly be volunteers. These regulations prevent the security organizations from hiring or paying the supply chain experts to find and hand over information. Under US Code Title 42 Chapter 39, Limitation on Liability for Volunteers states,

- (a) Liability protection for volunteers Except as provided in subsections (b) and (d) of this section, no volunteer of a nonprofit organization or governmental entity shall be liable for harm caused by an act or omission of the volunteer on behalf of the organization or entity if—
 - (1) the volunteer was acting within the scope of the volunteer's responsibilities in the nonprofit organization or governmental entity at the time of the act or omission;

- (2) if appropriate or required, the volunteer was properly licensed, certified, or authorized by the appropriate authorities for the activities or practice in the State in which the harm occurred, where the activities were or practice was undertaken within the scope of the volunteer's responsibilities in the nonprofit organization or governmental entity;
- (3) the harm was not caused by willful or criminal misconduct, gross negligence, reckless misconduct, or a conscious, flagrant indifference to the rights or safety of the individual harmed by the volunteer; and
- (4) the harm was not caused by the volunteer operating a motor vehicle, vessel, aircraft, or other vehicle for which the State requires the operator or the owner of the vehicle, craft, or vessel to—
 - (A) possess an operator's license; or
 - (B) maintain insurance.1

The code continues to further explain the responsibility of economic loss due to the volunteer's action. This liability code protects volunteers that work for a nonprofit organization if the volunteers are working within the area of their expertise, and are properly trained and certified. The following chapter will deal with the structure of the RMSC, the logistic experts around whom the system will operate, and the requirements and training that are necessary for a logistic professional to become a security expert for the RMSC. Note that Nick Petrakakos has also done research for a thesis related to port security. His analysis focused on organizations that attempt to collect and manage cargo movement data in contrast to the communications approach taken by the RMSC.

The first chapter will summarize what the Regional Maritime Security Coalition is, the purpose for creating a security communications network, and the future objectives for the RMSC. This chapter will also illustrate the importance of creating a communications network around the people involved in the supply chain of the region.

The next chapter will illustrate, through real life examples, the difficulty of tracking cargo containers and shipments of grain, which is a major commodity shipped through the Northwest region where the RMSC is located. It will also show why the supply chain logistic professionals are necessary for tracking cargo, and the importance of their ability to deduce the pertinent from the redundant information for improving security.

The following chapter will identify the specific skills and requirements that public and private industry personnel, of the Columbia River, feel are necessary for the supply chain logistic experts to possess in order to become a security expert for the RMSC. This section is a compilation of requirements that were commonly viewed among the different organizations that work along the Columbia River as the most important traits to have in order to certify a professional to volunteer as a supply chain security expert for the RMSC. The reason for a structure and certified list of training requirements is to protect the supply chain logistic experts under the US Liability Code. The security organizations must be able to train and certify these supply chain logistics processionals as security experts in order for them to be recognized and protected under the US Liability Code. A hierarchy of security experts will develop and operate together as a team within their specified roles.

The final chapter is a description of how supply chain security experts are already being trained and used in the Customs and Borders Protection supply chain security initiative, Customs-Trade Partnership Against Terror (C-TPAT), which could be used as a benchmark for the RMSC and other regional security coalitions. The chapter will also

give examples of security training programs that can be used to certify personnel in order for them to be considered security experts and protected under the US Liability Code.

"Everyone needs information- before it happens!"

USCG Captain Paul Jewell, on the idea of security

II) Columbia River: General Overview of RMSC from the Proof-of-Concept Report²

The Columbia River is one of the most important waterways in America. The river carries container cargo, bulk cargo such as grain, and generates one-third of the US hydroelectric potential. The Columbia River is the fourth largest river in North America. The 1,214 miles stretch from Columbia Lake in British Columbia to the Pacific Ocean. It forms a large natural border between Oregon and Washington. Its discharge flows directly to the Pacific Ocean. The longest tributary is the 1,038 miles long Snake River, which flows between Idaho, Washington, and Oregon and joins the Columbia River at Tri-Cities, Washington, approximately 350 miles from the Pacific Ocean.

The Columbia River includes 465 miles of navigable waters that allow ocean carriers deep into the river to support local commerce. The River supports 36 ports, eight hydroelectric generating dams with locks. Both the Burlington Northern Santa Fe and Union Pacific Railroads work in conjunction with the Columbia River for coordinated cargo movement. Highways 82 and 84 allow for truck pickup and delivery directly at the river's ports.

The Snake River moves \$15 billion of cargo annually amongst the three state, multi-port system. Each year, 40% of all US grain is exported through the port river.

The grain travels from as far as Nebraska, Kansas, and the Dakotas through the intermodal transportation system to Oregon. The Port of Portland ranks third amongst all

US ports for auto imports with 400,000 annually.³ The amount and dispersion of imports has increased within the last few years because of increased congestion at the L.A./Long Beach port. The West Coast lockout caused alternative ports to be utilized since shippers no longer wanted to rely on one single port of entry. The Port of Portland has been impacted by the L.A./Long Beach rerouting.

The Columbia River has experienced a number of natural and manmade disasters over a twenty year period. The eruption of Mt. Saint Helen caused a large economic loss due to many ships being trapped in the river and re-routed away from the river. A flood in 1996 almost caused the river to be shutdown for two weeks, because of navigation buoys being swept away. The Columbia River Steamship Operators Association (CROSA) and other private and public organizations presented a plan that allowed the River to be reopened only 36 hours after the shutdown. A grounding in 1999 received high media publicity from oil leakage. To counteract the negative press and to prove to the public and the Coast Guard that action was being taken, every measure was performed to prevent an extensive oil leak. In 2000, a drought caused a limit to the drafts of the vessels on the River. A worldwide notification was sent out in order for shippers to allow for longer lead times for their cargo, due to the smaller amount of cargo that vessels could carry.

It was not until after the events of 9/11 that the CRSOA concluded that a lack of a coordination system connecting the many public and private entities involved with the Columbia River was the single greatest vulnerability to the Columbia River. An emergency communication system was setup using VHF in order for the FBI or Coast Guard to gain ship information in the event of a failure in traditional communication

methods. The region had some experience in coordinating communication from the previous incidents, but had realized their action plans were lacking. They needed a permanent system to link the individual entities of the Columbia River system.

II. A) Regional Maritime Security Coalition: Columbia River

The Regional Maritime Security Coalition (RMSC) was a project created from the tri-state area of Washington, Oregon, and Idaho. A grant from the Transportation Security Administration allowed the organization to conduct a study and publish a "proof of concept" report. It should also be noted that on July 23, 2004, the RMSC was granted \$1.62 million to implement a prototype security system for the Columbia River region. The information and excerpts in this chapter are from the RMSC *Proof-of-Concept Final Grant Report*. The report describes the exhaustive analysis that the RMSC performed to develop the best possible communication security system. It includes a description of the technology and computer programs that will be utilized for security and communication purposes. More importantly, the report describes how the RMSC will use the technology to create a seamless, unified, communication system among the different entities involved in the Columbia River including, vendors, shippers, and law enforcement.

The RMSC saw an opportunity to acquire a government grant for the Columbia River to create a security communication system that will be an integral part of national security. The RMSC did not create this maritime security system for the sole purpose of the Columbia River, but intended to use it as a model for other regions that require enhanced maritime and supply chain security.

A decision was made that the RMSC was to develop the security model based on a "cargo-centric" approach. This refers to the cargo itself as the focal point of the security analysis and evaluation. Cargo refers to items such as containers, cars, and grain shipments. Other approaches could have centered on the port terminals or the vessels. A security report for the Port of Portland found three critical port security vulnerabilities: facility access, cargo access, and vessel access. Having a cargo-centric approach allows for the tracking of the cargo from its source to delivery point, across all points of the supply chain. It focuses on the virtual security that can be created by the paper trail that follows cargo rather than physical security created by fences around the port facilities.

The following will summarize the significant topics of the "proof of concept" report. The main points of the report are first to overcome the apathy towards security among the stakeholders of the Columbia River, second, to establish a communication security system from input of volunteer experts throughout the entire River system, and third, to allow the security system to perpetually develop. It is clear from the report that the success of the security system depends on the recruitment of security personnel overseeing the system and the industry experts developing the system.

II. B) Exercise Philosophy

The RMSC had gained safety and security knowledge from the work they had done with earlier transportation security exercises. The private sector knowledge, skill, and experience were found to be crucial to detecting and preventing terrorist and illegal activity. When creating any joint industry security plan, utilizing private sector skills and personnel must be the focal point. To gain access to the private sector information and

expertise, the RMSC is creating communication linkages through a web-based communication and information sharing network. The system was to provide flexibility and adaptability, and allow for continuous maritime security improvements by coordinating:

- 1. Communication
- 2. Threat and vulnerability assessment
- 3. Education, training, audition, and testing
- 4. Drills and exercises for the managers and operators of the regional maritime trade and transportation network

II. C) Vulnerability and Risk

RMSC Security Assessment

A Security Assessment Team found many deficiencies among the Columbia River stakeholders, which included,

- Security was an important issue to the public and private stakeholders in the region, but was not a personal concern to them.
- 2) There was a lack of surveillance around the major structures along with no physical barriers to prevent a breach of the area.
- 3) There was no formal or effective communications system, information technology, or even a procedure to connect the supply chain stakeholders, nearby facilities, law enforcement, state or federal agencies to any type of local regional transportation security system.

The Security Assessment Team concluded that there was a high potential for terrorist activity to be conducted undetected in the Columbia River.

Cost Effectiveness

The business and government leaders agreed that a new security program must include the economic consequence of the program when being developed. The security system must be cost effective, especially for the high number of relatively small vendors and shippers along the river that would be involved. As the *Final Report* states, "Operating cost and adverse cost incurred due to unnecessary trade disruptions and unplanned impacts on transportation productivity and efficiency" would play into the hands of the terrorist and give them a victory. Minimizing economic impact is a major component to defeating the terrorist plots."

Eventually, when the security system will be running in an effective manner, vendors and shippers would be able to see a profit being gained from the cargo-centric security system.

"'Cargo-centric information systems,' are seen as an opportunity to make security contribute to profitability by increasing productivity as well as improving security. Dean Kothmann of BV Solutions envisions a worldwide data sharing system creating more accurate and timely data leading to increased productivity." (Proof-Of-Concept, pg. 29)

Dean Kothmann believes just as barcodes and the Standard Industry Codes were placed into industry use, which greatly increased effectiveness and speed of movements, data transfers, and thus productivity, so will a cargo-centric information communication system. There is a lack of uniform regional standards for physical security protection

devices such as cameras and communication devices, and also methods for developing a regional security plan. There is a need for private-sector information and talent to be available and readily accessible to law enforcement, intelligence, and emergency agencies. Unifying all of these organizations across the entire Columbia River network will be time consuming and expensive.

Agriculture and Bulk Cargo Supply Chain

The difficulty in improving security in the agriculture and bulk cargo supply chain is the low profit margin involved with these cargos. The cost of enhancing security along these vast and complicated supply chains, inherent to these cargos, is high. Unfortunately, these supply chains are the most susceptible to sabotage and contamination, and could have the greatest impact on the public. The ease of access to the modes and nodes make for inviting targets to terrorists. The cargo is not secured in sealed containers. What could truly make the grain trade appealing to terrorists are the multiple intermodal transfers of shipments into larger consolidated holds. Grain moves from the fields in trucks, to silos, then to barges, and finally to oceangoing vessels that will travel internationally. The contamination rate rises exponentially as the shipments are combined into the larger holds. Large scale panic could occur if information was made public that a large amount of grain had been contaminated. Large amounts of shipments would be required to be destroyed, in the same way mad cow disease crippled many farms by having to destroy all the cows found in the same herd with an infected cow.

Low Tech Information Sharing

A surprise finding of the Assessment Team was the use and dependency of low-tech, open, non-secure, sporadically linked communication and information sharing amongst the constituents of the Columbia River. Fax, telephone, and note pads were the method of choice to link ports to the supply chain. Hand written notes along the margins of federal, state, and business forms were used to pass cargo status information. Even with these archaic methods of information sharing, there still remains a major concern on how to protect proprietary information and prevent sharing of classified information.

II. D) RMSC Survey Findings

A survey was conducted among the maritime cargo stakeholders. Some of the relevant findings to communication and security are as follows;

- 1. There is a general consensus of apathy towards maritime security.
- 2. A large concern was felt about increased cost due to additional regulations, ports slowdown/shutdown. No excess profit was seen in implementing such a program
- 3. Cargo stakeholders were unwilling to share information that they considered to be proprietary, which might give them a competitive advantage.
- 4. There were legal concerns over liability, anti-trust actions, and Freedom of Information Act requirements.
- 5. Old habits are difficult to break as can be seen in the way data tracking is conducted with low-tech information, which makes sharing data difficult.
- 6. Over-the-counter technologies exist to rapidly obtain information in a database.

- 7. At this point, there are currently no "best practices" that can be incorporated into a global Columbia River maritime security system.
- 8. Maritime industry practices develop out of need, rather than industry initiatives.
- 9. There needs to be a centralized organization to obtain critical information.

A copy of the survey that was distributed by the RMSC is included in the appendix.

Analysis of Survey Findings

technology" was noted to having a lot of support.

A need was discovered through the survey for a "new level of cooperation." A feeling of "Community rather than competition," had to be created, "private sector data sharing through a trusted agent," and the need for "public and private partnership," were all specific information sharing needs that were frequently cited in the survey.

Resolution of the Freedom of Information Act was also acknowledged to be a major point that had to be overcome to create an effective private/public partnership. Also, "applying

The survey separated the respondents into 4 different sub-groups, maritime associates, private/public entities, vendors, and operators. The conclusion to the analysis found that all four groups agreed on the need for a higher level of information sharing and cooperation.

- -Maritime associates favored more cooperation, but still supported use of existing entities and overcoming apathy.
- -Private/Public entities favored easing the FOIA and anti-trust rules for information sharing, in addition to supporting cooperation and information sharing. They also agreed that overcoming apathy, cargo-centric information systems, manufacturer

- to consumer shipping accountability, increasing physical security, and applying technology were also high in priority.
- -Vendors favored private sector vendor sharing with trusted agent, cargo-centric information system, and applying technology. They also saw business opportunities in serving as trusted agent; in developing, selling, and/or supporting cargo-centric information systems; and in selling technology product.
- -Operators were focused on new levels of cooperation, and in community rather than competition. They also strongly supported increased physical security.

 The two entrepreneurial based sub groups, private/public entities and vendors, aligned in

their ideas of an opportunity oriented view of the security system alternative. They would like to use the security system as a competitive advantage over their competition.

Clearly, the different entities had different agendas when filling out the surveys, but there was a significant amount of overlapping of ideas for security needs. The RMSC approved a Special Evaluation Unit (SEU) approach to security from the survey, which would be a coalition of public and private personnel working together to improve security. The review also looked at the potential extension and expansion of the communication and information technology capabilities of the Regional Alliances for Infrastructure and Network Security (RAINS) into a secure, web-based application linking transportation security initiatives throughout our region. Details about RAINS will follow.

II. E) National Review

The RMSC also conducted a national review of ports and possible partners that could provide information for "best practices" for port security. Experts from the Delaware River Maritime Enterprise Council (DRMEC), Volpe Center, MIT, and Sandia National Labs were a few of the major organizations that took part in the review. It was found that natural tension has now developed between the need for homeland security and the need to allow trade to continue to grow in volume and efficiency.

DRMEC's RISK Alert is an off-the-shelf, commercially available technology developed by Union Pacific's commercial software company to create a "risk alert" similar to the technology that advises shippers when a shipment goes off its plan or inventory flow may be interrupted. Many of the obstacles that the RMSC is facing are mirrored by DRMEC. They are also implementing a communication based, information-sharing solution to maritime security, not a "technology demonstration," for the Delaware River.

Jim Rice is an MIT director of Integrated Supply Chain Management Program who is assisting the RMSC in developing the security system. He believes supply chain management is critical to business success because of its direct economic impact that can reduce cost of business by 15-20%.

Integrating the supply chain- that is, managing the flow of goods from supplier to customer- decreases mistakes and business losses and increases speed to market. To ensure the security of cargo in transit, managing the entire supply chain- and not just a single point- is a main deterrent of terrorist attacks, as well as providing resiliency against disruptions due to natural disasters or other emergencies. (Proof-of-Concept, pg.33)

II. F) Project Components

The RMSC's "best practices report" reviews of security plans, vulnerability assessment updates, modeling efforts with Sandia National Labs, and discussions with stakeholders led to the conclusion that a system for assessing, evaluating, and providing a way to facilitate, what Admiral Loy referred to as "connecting the dots," was essential if terrorist incidents were to be deterred and/or prevented in the Columbia River region.

The cargo-centric flows shown in the flow chart accompanying the *Final Report* helped identify possible points for security weakness in each supply chain, in addition to illustrating the complication of the different supply chains. The three major supply chains that use the Columbia River for shipping are containers, grain, and liquid petroleum/hazmat. The creation of these maps constituted the first step in surfacing the "trust relationship" actually at play within the three different supply chains explored in the project. The different blocks represent a function or activity in the supply chain that is supported by documents and forms required by the supply chain stakeholders. The different levels of importance of the shipping documents will be explained in a later chapter. Information contained in the documents range from cargo location, status, ownership, possession, and other pertinent and non-pertinent data. A copy of the supply chain maps is included in the appendix.

CARE (Cargo-centric Analysis and Risk Evaluation)

The Cargo-centric Analysis and Risk Evaluation (CARE) model was developed to understand the current industry risks and strengths in the field of security and to be able to evaluate strategies for decreasing this risk. The CARE model has two major

components, Maritime Cargo Movement Management System (MCMMS) and Cargo Tracking and Verification System (CTVS). MCMMS uses a computer system to track and illustrate vessel movement along the Columbia River and to provide vessel information. CTVS is a diagram that shows the vital steps in the transfer of cargo from supplier to customer. The information tracked by CTVS is as follows,

- -Physical flow: "chain of custody," including nodes and modes
- -Information flow: paper trail, processes, relationships, scheduling
- -Decision flow: Key questions, decision process, management practice
- -Financial flow: analysis, contracts, purchase orders, how funds are released
- -Risk analysis: profiling vulnerability, risks, consequences, and economic impact throughout the supply chain

Integrating these two systems is important in order to know how to allocate financial and personnel resources to where they can be most effective. First, the vulnerabilities must be traced along the supply chain. Then the risk can be assessed, and action can be taken to lessen the risk.

NISAC (Sandia) Model Efforts

The NISAC developed a version of their InSIST (Indication and Warning System and Information Sharing Tool) model for the Columbia River. The instructions given to Sandia were to utilize 60 days of vessel movements to create an animation of the vessel movement along the Columbia River. Vessels would have links to vessel particulars, and cargo information when double clicked on the computer tracking system.

Region Alliance for Infrastructure and Network Security (RAINS)

The Region Alliance for Infrastructure and Network Security (RAINS) is a technology initiative created by a coalition of high tech companies and public organizations. It is a platform to share sensitive data from 50 different organizations in Oregon and Washington in one unified computer system. RAINS has the capability to connect, inform, alert, and mobilize the required agencies in real time.

RAINS is a web based program that uses existing technology that is affordable and available for use today. It has already been implemented in a national anti-terrorism exercise. In 2003, RAIN started distributing incident alerts from the Portland 911 center, on-line and automatically, to local and federal agencies, state and local government, first responders, businesses, and even schools. RAINS is a simple and effective use of available technology that has been adapted for maritime and national security. It is a secure virtual database that can be used to effectively mitigate terrorist and smuggling activity when combined with trusted professionals who can govern the system.

II. G) Evolution of the Cargo Information Action Center

The information that is necessary to prevent or respond to a potential terrorist incident already resides within the existing maritime supply chain system in one form or another. Additional cargo reporting requirements would do little to increase security, and only continue to slow the supply chains. But, there is no current process in place to insure the accuracy of current information other than the extremely small percentage of physical inspections by US Customs to include checking the contents of the container against the computer data manifest. Even then, major discrepancies could exist between

the documents and the physical cargo. A number of information sources need to be checked and a responsive tracking system needs to be in place to follow changes in cargo location and status at any point.

The RMSC recommends a cost-effective, bottoms-ups approach led by the private sector. Required input information from shippers will be sifted through and separated by knowledgeable professionals that are well versed with the rules, content, and context of the transportation industry. These knowledgeable professionals, who will work together in the Cargo Information Action Center (CIAC) to utilize existing cargo information systems and trust one another from their years of experience, will be strategic to minimizing the unnecessary slowdown of cargo and mitigate any economic impact that it could cause. Government agencies, in high risk, low information situations tend to stop all movements of cargo until the risk is lowered and/or the needed information is found. To prevent such a devastating economic event from happening, the RMSC will provide a centralized location for focusing talents and resources of cargo movement professionals into a real-time, problem solving team. A centralized location refers to a virtual meeting place for the CIAC. The RMSC believes this program will create quality information for use by enforcement and intelligence officials, and create an information trail for auditing and improving the system. The RMSC describes the CIAC as follows,

Information is handled like evidence in a criminal case. Cargo information is collected, recorded, archived, retrieved, and disseminated as if it were evidence to be used in a criminal investigation. Established procedures create information chain of custody that is managed and protected by the front line transportation and cargo-handling people that manage and move cargo on a daily basis. This is done to assure the timeliness, accuracy, and security of the cargo information being processed. (Proof-of-Concept, pg.39)

The entire system must be managed from "source to sink." The complex transportation process requires more than just focus on the one link in the chain, but the entire flow process in order to assess what has happened and where the weak links are. This process is complicated by the numerous activities that occur, such as consolidation, split shipments, mixing of cargo, diversions, and storage, between the time the cargo is shipped to its final destination. To accurately trace and track cargo requires "people intervention," as most key information today is in manual document form, not electronic.

The CIAC, which is part of the coalition of all private-sector stakeholders in the region, provides the platform for increased awareness of security and the focus on fixing the weakest links in the chain. In a system like the Columbia River region, all nodes in the system are affected by one another. The cargo information approach is led by the private sector and unifies the area stakeholders into a cohesive coalition. The RMSC believes that it can serve as a platform for obtaining other security enhancements required for the region. It also hopes that CIAC gives the Columbia River region recognition and a place at the national policy table to influence future actions, for themselves and other regions. Additionally, there is an economic payoff, as it controls costs, mitigates potential economic impacts, and creates the reputation of a security-conscious, customer friendly environment.

Vessel Traffic Information System

Vessel Traffic Information System (VTIS) uses a transponder located on the vessels to track their movements throughout the Columbia River. This technology is

commonly referred to as Automatic Identification Systems. Other than the obvious navigation benefits that VTIS would bring to the Columbia River, Maritime Domain Awareness (MDA) can also benefit from it. MDA commonly refers to information such as the name, flag, estimated time of arrival, and other information of vessels operating in or destined for navigable water of the United States. This information can be sent, via relays towers, to shore based facilities that can further pass it along to any federal and state authorities. This would only be used in emergency situations, because any vessel that poses a threat would hopefully be intercepted prior to entering US waters.

Development of the CIAC and SEU

Three initiatives were developed in order to enhance security in the shortest time possible. The three initiatives are as follow;

- Extend domain awareness by partnering the CIAC and SEU with other invested
 parties of the region, such as the Coast Guard, Oregon Emergency Management,
 IT industry, and transportation industry stakeholders,
- Connect public and private sector stakeholder plans, procedures, and physical systems into a single standardized and uniform surveillance, alerting, communicating, and information sharing regional system,
- Develop and deploy communication systems and risk assessment models that could be implemented nationwide

For the CIAC and the SEU to succeed, and to extend domain awareness, private-sector knowledge, skill, and experience are essential in any effort to detect and prevent a terrorist incident regionally or extending nationally. The CIAC was specifically designed

with this idea in mind, with the additional benefit of helping to increase general supply chain security and efficiency.

Comparing the CIAC and SEU

The CIAC purpose is to rapidly obtain and verify information on the status of modes and nodes throughout the supply chain to prevent and/or mitigate a potential terrorist attack. The focus of the strategy is to use the existing trust relationships within the supply chain whenever possible between the private sector experts. The CIAC will be staffed by private-sector volunteers, each highly knowledgeable in his or her respective areas of transportation expertise.

The SEU would be made up of private and public sector representatives who are trained and certified for planning, conducting, and evaluating transportation security exercises, and in making recommendations for improvement to participating stakeholders. Selected members from a pool of SEU candidates would meet regularly to evaluate and suggest improvements to security plans, resource requirements, training and certification, and procedures.

While the SEU takes a secondary role to assess the current security situation in the Columbia River region and to improve the different segments that could be lacking, the CIAC takes an active role that will serve the Columbia River coalition in real time to prevent attacks and to keep the Columbia River running safely, securely, and economically.

Admiral Paul Pluta (USCG Ret.) explains the important aspects of information sharing are the speed of communication, the security of communication, the comments of

the communication, and the access to communication. The keys to success of the RMSC communication system are coordination with the partners that trust one another, commitment and sustainability, flexibility, investment in personnel, and the use of technology.

II. H) Implementing CIAC and the Security Communication Network

For many years, the RMSC has been developing a unified security network to pass along information, but the terrorist attacks of 9/11 intensified development of the network, which has earned funding from the federal government. The main objective of the RMSC is to develop the communication security network as a benchmark for other maritime and multimodal transportation regions. The RMSC hopes that other regions will duplicate the fundamental aspects of the RMSC and CIAC, but adapt the particulars to the specific region.

There is still a significant amount of development needed until the RMSC can place the security network into operation. The following list is a compilation of what the RMSC must accomplish before the RMSC implements a successful security communications network:

-Cost must be low, benefit must be high, and stakeholders must be required to participate in order for the companies to invest capital and personnel into the security program.

-Full commitment from all members, private and public, to train personnel to effectively use the technology that will be incorporated into the CIAC. The more constructive criticism of the system there is, the more the CIAC can improve the

effectiveness of the available information and information sharing network, and better train their personnel.

-Along with a "virtual" data center, a physical center devoted to the security for the Columbia River stakeholders and computer system is also important. It will give more credibility and focus to the RMSC.

-The security system must not interfere with daily business conduct of the shippers or cause any effective shipping delays. The security network must not conflict with daily business, or remove personnel from their responsibilities within a company for an extended period of time.

-The technology must be user friendly. The industry experts, for whom the computer system is developed, have been using low-tech equipment for many years. Any system that overwhelms them will be resented, not used, and therefore ineffective.

-The information and data inputted must be pertinent, accessible to the required people, accurate, and organized to be useful to enhance security.

-Once the communication infrastructure is built, an "action plan" must be developed to complement it. When information is obtained and a problem does arise, the next logical step is how to stop an attack or prevent any further disturbance to the Columbia River. Many scenarios must be planned for and drills should be performed.

-RMSC is mainly concerned about terrorist actions and activities on the Columbia River or terrorist activity being deployed from the Columbia River. Their main selling point to the government grant committee is to set the benchmark for an integrated security communications system that other regional, interconnected, transportation systems can use to create secure supply chains. On a daily basis, a more effective use of

the system could be to prevent smuggling, or to more effectively time shipments for when they are needed by vendors by seeing the transparency of the supply chain from source to destination. Gaining commercial advantage by creating a more efficient river network would be a productive way to use the communication system in non-crisis situations.

III) Container and Grain Documents

III. A) Container Land Supply Chain⁵

The following study is a breakdown of the paper trail of a single container shipped from Japan. It is a trying task to find the entity responsible for the container at any given time, being in the warehouse located Seattle, or the Distribution Center in Cleveland. Colleen Johansen is the only person throughout the entire process who knows the whereabouts of this container at any given time.

This narrative shows how complicated it is to understand documentation and track containers. Consider a real life example of a container being moved from Japan to Ohio. Shipper of container is Shini-Etsu Chemical Co. Ltd. of Tokyo, which uses Mitsubishi Logistics (MSK) as its agent.

MSK in turn is using Colleen of Yokota International of Portland as an intermediary to track and coordinate the movements of the container. The container arrived on the MV Kuala Lumpur Express in Seattle. Colleen's job is to move the containers from Macmillan-Piper warehouse in Seattle (incorrectly called MacPiper Seattle in many documents) to Amware Distribution in Cleveland.

III. B) Container Documentation

MSK has sent the following documents to Colleen. (Numbers refer to page numbers of materials that follow in the appendix. NI means that the document is not included in this package.)

- 1) Delivery Order
- 2) Through Bill of ladings

- 3) Dangerous Goods Certificate
- 4) Packing list
- 5) Breakdown of Packing list by lot number
- 6-12) Material Safety Data sheets for this hazardous cargo (MSD's)
- NI) Secure Cargo Log, Security Composite, Temperature maintenance logs

Colleen considers different trip routes and produces trip leg breakdowns as well as a more detailed map and driving directions.

13A-14) Trip Leg Breakdown as well as Map and Driving directions

Macmillian Piper, who put the business out to bid for truckers, but was unsuccessful, used the following document

15) Related Macmillian Piper document

Colleen/Yokota generates work order.

- 16-17) Work order for truckers
- 18) Trucking dispatcher confirms receipt of work order
- 19) Colleen signs agreement with Gulick Freight Service Logistics to move container 19A-31) Contacts and gives full instructions to the Trucking company. Extra copies

Gulick Freight Service Logistics sends internal memo to Gulick Trucking with,

are for dispatcher driver and Chemtrec since this was a hazardous load.

32)Transload instructions and temperature requirements

32A) Shipping order shows conversation with driver and dispatcher on load requirements, driver is Bill Shere.

Container status updates include,

- 33) Update between Colleen and MSK with first day log
- 34) Shipper provides contact phone number to Colleen
- 35-50) Series of documents which are daily logs between stakeholders

When the truck driver arrives at location, he is told that he must go to a different location for cargo delivery. Colleen sends update and must get approval for payment of diversion.

- 51-54) Diversion Notice and related emails between Colleen and stakeholders.
- 55-57) Documents related to Proof of Delivery (POD).
- 58) Signed delivery receipt with Bill of Lading.

III. C) Importance of Individual Documents

The parties involved in the transportation of this cargo have rated all the documents into three categories of importance. A rating of "red" was given to documents of highest importance. A rating of "orange" was given to documents with a mid range importance level. And a rating of "yellow" was given to documents with a low level of importance. In documents with a rating of yellow, there could be one or two pieces of relevant information. But for the most part, the information contained in the document is superfluous. The numbers correspond to the numbers of the above list.

Documents of Highest Importance (Red Documents)

- 1) Delivery Order
- 2) Through Bill of lading- These document contains accurate information of the cargo being shipped, which is provided by the shipper or shipping agent. The information contained in the documents is prepared from the Ocean Bill of Lading
- 3) Dangerous Goods Certificate
 - MSDS- Material Safety Data Sheet Any hazardous material must be accompanied by the following documents. These documents explain what the cargo is, how much quantity present, and any other pertinent information that would be necessary for anyone handling the substance. The MSDS sheet gives emergency procedures in case an emergency arises, for instance leakage, fire, or physical contact.
- NI) Seal Number- This verifies continuous use, origin to destination
- 55-57) Proof of Ultimate Delivery

Documents of Mid level Importance (Orange Documents)

- 4) Packing List- An itemization of all pieces of cargo that includes, but is not limited to, size weight, and generic ID.
- NI) Container Type- A number is given that describes what the details are of the container, i.e. temperature control, flat racks, etc.
- 51-54) Diversion Notice- This document indicates a change in ultimate destination that differs from the original described on the Ocean Bill of Lading/ Delivery Order/ Inland Bill of Lading.

Document of Low level Importance (Yellow Documents)

- 5) Breakdown of Packing List by Lot Number- This information does not apply if one party does not know ultimate intended use.
- NI) Secure Cargo Log, Security Composite, Temperature and Maintenance Logs- All information held in this document is found in other documents with more pertinent information.

III. D) Importance of Understanding the Documents

This case study illustrates the difficulty in tracking and coordinating a single container shipment. There is significant amount of documentation that goes along with one single container, and container logistic professionals are necessary to track the container movements.

It is easy to lose track of the container and difficult to find the person responsible for it. Colleen Johansen is the only person who has all the information about the container from origin to destination. Contact information for Colleen Johansen should accompany all the paperwork (electronic paperwork included) that follows the container as it travels. She has or can easily obtain information on the container ranging from where it was stuffed, where it was warehoused, its contents, and its ultimate destination. If there is a problem with the container or pertinent information about the cargo that needs to be found, she is the contact person. An important note is that government agencies do not have possession of the documents that track the inland movement of this container.

In the RMSC approach to cargo tracking, the shippers of the containers would be able to find Colleen and track the container as appropriate. Colleen is the focal point of all the movements of the container. She understands the different movements the container makes, and can quickly decipher the information that accompanies the container in order for the cargo to arrive safely at its final destination.

III. F) Grain Land Supply Chain⁶

Consider an instance where grain that has been harvested in Chapel, Nebraska is now sailing out of the port on the Columbia River on the M/V Cynthia Crown. Federal agencies have been informed that this grain was contaminated in the field in Nebraska.

A key question is whether and how the government can determine which trucks, silos, railcars, barges, and ships have been contaminated. The following discussion will trace the grain from the exporting vessel back to its source.

III. G) Grain Documentation Accompanying Exporting Vessel

The following attached documents, found in the appendix, would exist in relation to the M/V Cynthia Crown.

- Vessel Arrival Information- This document has been filed by the ship's agent,
 Transmarine Navigation Corporation.
- 2. Delivery Certificate- This document shows the delivery of fuel to the vessel.
- 2B. Letter of Authorization- This document from the master of the M/V Cynthia Crown authorizes the ships agent, Tranmarine Navigation Corporation, to act on the owner's behalf.
- 3. Certificate of Readiness- This document from the National Cargo Bureau Inc. certifies that the vessel is ready for loading and specifies which holds will be loaded.
- Notice of Readiness- Document serves notice that the vessel has arrived at the Columbia River Pilot station.

- Stowage Examination Worksheet- This document from the US Department of
 Agriculture shows that the stowing holds have been inspected and are suitable for
 holding grain.
- Official Grain Weight Certificate- The US Department of Agriculture certifies the weight of grain loaded.
- Official Export Grain Inspection Certificate- US Department of Agriculture certifies
 the inspection of the grain. However, this inspection does not cover chemical or
 biological contaminates.
- 8. Berth Term Grain Bill of Lading- This is the bill of lading that will accompany the shipment on the M/V Cynthia Crown.
- Shipper's Export Declaration- This document is filled out by the shipper for the US
 Census Bureau.
- 10. Certificate of Origin-This document certifies the origin of the grain shipment.
- 11. Phytosanitary Certificate- This document certifies that the cargo has been inspected.

 However, it appears that no physical inspection is done.
- 12. Cargo Declaration- This provides a description of the cargo for the US Customs Service.
- 13-15B. Statement of Facts- This document provides a summary of events and can be used to facilitate bank financing.

Inland Movement of Cargo

The following attached thirteen slides in the appendix show how the grain movement can be tracked back to its source with documentation of barge movement,

silos used, and truck and rail cars used. Note that if the tug/barge was using satellite communication (BOATTRACS), one could theoretically pinpoint the location of the tug/barge at any time during its sailing.

III. H) Importance of Individual Documents

The level of importance was evaluated by persons involved in the shipping and documentation process. Three categories of importance are used:

- Documents of the Highest Importance (Red Documents)
- Documents of Mid level Importance (Orange Documents)
- Documents of Low level Importance but might have one or two pieces of relevant information. Do not spend time examining them. (Yellow Documents)

The numbers correspond to the numbers of the above list. A "NI" in front of a document refers to that document not being included in the package.

Documents of Highest Importance (Red Documents)

- 1. Vessel Arrival Information- In the form of a USCG message from the ship detailing arrival times, cargoes, crewmember nationalities, last port of call.
- 6. Official Grain Weight Certificate- This document gives the exact weight of the cargo as certified by the USDA, along with the grades and stowage compartment it is in. Grains are blended at the elevator, and the USDA keeps a logbook of the grains that were loaded at specific times. This document could direct an investigation as to which silos the cargo was pulled from and at what time.
- Official Export Grain Inspection Certificate- This is an extremely important document. Not only is it the document that all the financial transactions are based on,

- but it will also show the money trail indicating the buyer of the cargo. The weights are then taken directly from the USDA Grain Weight Certificate, but it also shows shipper, receiver, carrier, date loaded, and contact number.
- 8. Berth Term Grain Bill of Lading- Same document as the Official Export Grain
 Inspection Certificate, but in a different form. Baltimore form C is the most common one used in the United States. All forms are similar, but with different boilerplates.
- 9. Shipper's Export Declaration- The submission of this document is required within 48 hours of vessel sailing. It has the shipper of record, marks, weight, country of discharge, and other pertinent information. The Commerce Department also uses it for statistics.
- 13-15B. Statement of Facts- A very important document that has the entire port call of the vessel logged, from the time the vessel shifted to berth, when the longshoremen were working, and where the cargo was being loaded or unloaded.
- NI- Stowage Plan- Used in conjunction with the USDA grain loading document, it gives a detailed map of where the cargo is loaded in each hold and how much is onboard.
- NI- Mates Receipt- The receipt is given by the elevator at the completion of loading. It has the bare minimum information, grain type and weight in pounds. All other information on weight in other documents is based on this one.
- NI- Stevedore Daily Reports- This is a record of cargo operations. It gives a minute by minute account of what occurred and at the time it happened. It is kept by the longshoremen union, which means it could be rounded or adjusted to meet labor contracts. Even so, except for the ship's log, it is the best kept record of the vessel's port call.

Documents of Mid level Importance (Orange Documents)

- NI- Cargo Declaration- This is a form that gives the information of what the cargo is, the stowage, and shipper.
- Delivery Certificate- For commercial use only, this gives the lay time between the charterer and the ship owner to show who is in possession of the cargo at a given time.
- 5. Stowage Examination Worksheet- USDA is required to perform a visual inspection of the holds after they have been washed down to check for grease and dirt. The worksheet is a subjective cleanliness inspection of the holds performed by the USDA inspectors.

Documents of Low level Importance (Yellow Documents)

- 10, Certificate of Origin- This shows the country of origin. The shipper pays for the Chamber of Commerce to stamp the document. It is required in countries such as Saudi Arabia to prevent forgery of the grain to gain government subsidies.
- 11. Phytosanitary Certificate- The document is simply a stamped piece of paper from the USDA FGIS inspector.
- 3. Certificate of Readiness- A commercial document that is not very detailed. It explains at what point the charter changes hand. The times are based on the ship's log, and the actual calculating point varies between charters.
- 4. Notice of Readiness- Another commercial document that gives charges to the times for ship loading or rental time. The information from the Notice of Readiness is obtained from the USDA in the Stowage Examination Worksheet (#5).

III. I) Importance of Understanding the Documents

Many documents accompany both the activities of the export ship and the inland grain shipment. The shipment of grain is also very difficult to track due to the continual consolidation and mixing of shipments. If a shipment was found to be contaminated, the amount of contaminated cargo grows exponentially during the trip as it goes from the field to the ship. The importance in tracking a shipment back to its source could prevent further shipments from being contaminated by isolating the grain that came in contact with the contamination. The paper trail can give this necessary information, if collected properly. At the current time, if the government needed to track the inland portion of this shipment of cargo, it would have none of the documentation that goes along with it.

It would take a highly coordinated effort among all the stakeholders to isolate all contaminated cargos and equipment in a timely manner. An objective of the RMSC is to perform this function if necessary in order to prevent shutting down all traffic on the entire river. Accurate and accessible data would be required to isolate the contaminated grain.

IV) Requirements for Certification of CIAC Members⁷

The main focus of the RMSC in developing a security system for the Columbia River is to tap into the human resources that are available in the private and public sectors along the river. The case studies illustrated that experienced professionals are necessary to coordinate cargo movements. After meeting with the RMSC and private sector members of the Columbia River system who support the security coalition, there is agreement that all the technology being installed and efforts put forth to bring industries together is geared to extract the knowledge of the personnel that work with the river to create a more secure environment. Many members have decades of experience working on the Columbia River ranging from warehousing, container movements, third party logistics, and shipping. Not only do they know the physical layout of the river and the surrounding area, but they also know how the intricate supply chains and multimodal transportation systems tie into one another, and the driving forces behind the local commerce.

IV. A) CIAC Criteria

The RMSC is currently developing requirements for membership into the CIAC. A documented, structured, list of criteria is necessary to validate the personnel who will make up the CIAC. The requirements will be a tangible list that can be shown to government organizations and private companies. Internally, it is necessary so members trust one another and can work together efficiently. Externally, it is necessary to have a structured list of criteria in order to validate the CIAC to higher authorities and be protected under the liability regulations.

The overwhelming consensus between the RMSC and the private sector personnel was that experience working with supply chains and multimodal transportation in the Columbia River region was the single most important criterion in becoming a member of the CIAC. Knowledge of the region and the intricacies of the local commerce can only be gained from experience of working in the region for an extended amount of time. The difficulty about knowing supply chain movement is that there is no standard or typical method in which cargo moves. One private sector member explained how, in supply chains and cargo movement, that "the exceptions are the rules, and mistakes are the norm." All cargo movement differs between industries, companies, and even individual shipments.

There are many reasons that private sector experience is important to a security network. First, the contacts that they have made throughout the years and the access that they have to the different sectors of the region are important to have in a crisis situation, especially when time is of the essence. If pertinent information needs to be dispersed or acquired, the members of the CIAC should know exactly who and where they can obtain the information and how they can access it. Searching for names and tracking unfamiliar supply chains can hamper a response to a situation. For example, if a container is holding hazardous material, and it has been breached or is leaking, the CIAC members should have a general, working knowledge of where the container is from, where is it going, the different parties involved with its transportation, and whom to contact in case of such an emergency.

The second important reason that private sector experience one of the key criteria to CIAC membership is the familiarity gained of the local commerce. The importance of

knowing local commerce is to prevent a crisis event from causing a large economic burden. If a crisis event occurs, allowing for continual functionality of the river is the second most important objective behind safety. The CIAC, by knowing the local commerce, would assist in directing commercial transportation safely around the crisis location. One example of this would be the grain trade. The grain trade is vital to the regional economy. In a crisis situation that occurs on the river, grain movement would take priority over most other commercial goods. This is due to the possible detrimental economic impact that could arise if the grain movement were to be halted for an extended period of time. CIAC would decide how grain movement would continue once the river was clear for restricted commercial traffic to flow. Decisions on the mode of transportation, diversion around the crisis area, and priority of movement would have to be made by the CIAC. Medical supplies are another example of critical items that would take priority during a crisis situation. If a shipment of medical supplies is halted, but is in immediate need, the CIAC needs to recognize where the cargo is and how it can be delivered.

There are other criteria, besides experience, that CIAC members would need to qualify for the position. This would include the number of different transportation modes with which an individual has worked. This requirement becomes especially necessary as the person rises within the CIAC hierarchy. The hierarchy system will be explained later. An in depth knowledge of one certain mode of transportation or cargo qualifies that individual to represent that mode of transportation or cargo, i.e. containers, barges, tankers, trains, or grain. But a working knowledge of the other modes of transportation and cargo that use the Columbia River is also necessary. Virtually all supply chains

involve many modes of transportation. CIAC members must understand how each mode interconnects to one another and the importance of each mode to the region.

These are the two main criteria that would enable someone to become a CIAC member. There are other requirements that have been deemed necessary, but they do not demand nearly the same experience or breadth of knowledge of the local region that comes from time spent working in the transportation industry of the Columbia River.

Some of the qualifying standards would include

- 1. Experience with the different Government and Coast Guard Regulations
- Familiarity with the different cultures, countries, and flags that vessels are registered.
- 3. Understanding of Customs operations, cargo operations, and inspections.
- 4. Comprehension of the vast paperwork involved in the transfer of cargo.
- 5. Experience in security management, risk assessment, and crisis mitigation.

These criteria are more quantifiable and can be taught in a classroom setting. The class can be a mix of lectures, guest speakers from the Coast Guard, and fieldtrips to see actual inspections and cargo operations.

An interview process was also suggested to gain membership to the CIAC. There are certain personality traits that are desirable to have on such a coalition. Members must be willing to speak up and take action, but at the same time understand their role and put the greater good of the Columbia River system ahead of their economic gain or loss that could result during a crisis situation. It is viewed as a privilege to be a part of the CIAC, and its members must be more willing to help and not be inclined to take advantage of their positions.

IV. B) Three Tiered CIAC System

The structure of the CIAC is essential for it to be effective. The preliminary structure of the CIAC involves a three tiered system. The three levels represent the different levels of qualifications that the members have earned. As members rise within the hierarchy, their decisions and assessments will have more bearing on the actions taken and encompass a wider range of modes and nodes that would be affected.

Each level in the hierarchy will have more stringent and comprehensive qualifications. Primarily, experience will qualify a member to raise his or her status. The entry level tier would require time spent working on the Columbia River to range between 2 to 5 years, up until the top level, which would require 15 to 20 years. Also, members must show that they are knowledgeable in the various modes of transportation in order to be promoted to a higher tier. The first tier would only require knowledge within one or two modes, while the top tier would require knowledge from all the different modes of transportation that use the Columbia River. Classroom lectures, onsite training, and other written examinations are also being considered as requirements for promotions to a subsequent tier.

Being a part of the CIAC is a privilege, and earning the right to be a member should be taken seriously. Acknowledgment and merit should be given to those willing to take the responsibility. Prestige and recognition, that should be given to members who complete the training and are promoted into the CIAC, will create a stronger and more alert unit willing to put forth the effort to create a secure environment. Qualifying for CIAC membership would not only make someone eligible to join the CIAC, but it would also enhance the individual's resume. Having a CIAC qualification would make

someone more desirable in the transportation and security industry than someone without it.

It is inevitable that politics will be involved in creating and developing the CIAC. Private sector personnel are representing their industry as a part of the CIAC. They will inevitably feel that their industry, be it containers, oil, barges, or grain, is the most important and should have representation in the CIAC. A weighted distribution of qualified members from all the different sectors of the Columbia River should have representation. An autonomous voting process should be carried out to promote people who have qualified for the next tier. A rotation of top level CIAC members would allow qualified members to accept different positions, and relieve those who have been in a position for an extended period of time. This will further enhance personal resumes, give different perspectives on security, and bring new ideas to the CIAC.

IV. C) CIAC and National Incident Management System (NIMS)

Once in operation, the CIAC will work within the National Incident Management System (NIMS) if a crisis situation were to occur on the Columbia River region. NIMS is the national standardization of actions taken in response to an incident, be it terrorist, environmental, or natural disaster. Homeland Security created this system in order to,

Integrate effective practices in emergency preparedness and response into a comprehensive national framework for incident management. The NIMS will enable responders at all levels to work together more effectively to manage domestic incidents no matter what the cause, size or complexity. (NIMS Website)⁸

NIMS sets broad guidelines in order for responders of an incident to react effectively and efficiently. This standardization of crisis response is important in order that all parties involved in an incident know their particular roles, and the actions to be taken. The CIAC is expecting its role in incident situations to report to the NIMS command staff chief. Their expert knowledge would be used, as stated previously, to continue safe multimodal movement along the river or to help to mitigate the crisis situation. The command staff chief would ultimately have the final say in any situation. But it is expected that the recommendations from the trained and certified CIAC members would be taken seriously and be called upon to make official and final decisions.

The importance of communication is paramount to assist the NIMS command staff. Once a crisis situation is observed, the CIAC can be immediately called upon through the interconnected communication system. Once a situation is reported, the tiered membership system, combined with an effective communication system, would facilitate fast information sharing and data transfers that would reach the upper tiered CIAC members, who can then relay the pertinent information to the NIMS command staff chief.

It is common for the command staff of NIMS to frequently change hands as the crisis develops. The first responders, usually the fire department, will act as the command staff. As more information is gathered and other organizations report to the scene, the command staff could change. The fire department will relinquish command to focus on fire safety, while another organization, such as the Coast Guard, or the FBI, depending on the circumstances, will assume command staff control. CIAC information

would help make these decisions. There could also be a chance that the CIAC would take command as the command staff during a crisis.

An understanding of NIMS is critical to assist in any response. Training and certification would be required for any CIAC member in basic NIMS operations.

Information on training and required courses can be found on the NIMS website under:

NIMS National Standard Curriculum: Training Development Guidance.9

V) Training and Educational Programs

The need to secure private companies' international supply chains has become a major issue in international security. Having a safe and secure supply chain can be used as a competitive advantage along with securing our nation's borders. Supply chain training programs combine government training requirements along with techniques for gaining a competitive advantage to having a secure supply chain. This chapter will give examples of how security personnel are being trained, and the requirements that are directing the training.

Training and certification programs are generally organized to educate private, government, military, and law enforcement personnel to the standards set forth by the International Maritime Organization's (IMO) International Shipping & Port Security (ISPS) Code and the Maritime Transportation Security Act 2002 (MTSA).

Transportation security course curriculums are often geared so that they comply with the required instructions described by the ISPS and the MTSA.

V. A) International Shipping & Port Security (ISPS)

The International Maritime Organization has adopted, in conjunction with the United States Coast Guard, the ISPS Code. The code, which went into effect in July 2004,

Contains detailed security-related requirements for Governments, port authorities and shipping companies in a mandatory section (Part A), together with a series of guidelines about how to meet these requirements in a second, non-mandatory section (Part B). (MTSA-ISPS)¹⁰

The Coast Guard is the leading government organization in charge of maritime security.

They will set the standards for personnel, port authorities, and shipping companies and enforce the requirements of the ISPS Code amongst these three.

The object of the ISPS Code is to standardize risk assessment. This will allow the government to offset changes in threat with changes in vulnerability to ships and port facilities. A port facility risk assessment will be performed by the contracting government of the port. First, they will identify critical assets and infrastructures within the port along with structures, if damaged, would create loss of life, or severely impact the economics, or environment of the port. Then, actual threats will be assessed to the different structures in order to prioritize security measures. The final step of the risk assessment will be to identify weakness in the physical security, structural integrity, protection systems, policies, communication systems, transportation infrastructure, and utilities.¹¹

V. B) Training Standards

The Coast Guard and the ISPS have amended the Safety of Life at Sea (SOLAS) codes to include basic guidelines for the newly required positions of Company Security Officer (CSO), Vessel Security Officer (VSO), Ship Security Officer (SSO), and Port Facility Security Officer (PFSO). The Coast Guard has not yet required specific training, or has certified any programs. The additions are only guidelines for the type of training that these different personnel should have and areas with which they should be familiar, if they are going to represent one of these security positions in their respective companies.

The following is a list, which was included in a report by the McGowan Group, ¹² of areas that the CSO, and the SSO should have knowledge of, and receive training.

- 1. Security administration
- 2. Relevant international conventions, codes, and recommendations
- 3. Relevant government legislation and regulations
- 4. Responsibilities and functions of other security organization
- 5. Methodology of ship security assessment
- 6. Methods of ship security surveys and inspections
- 7. Ship and port operations and conditions
- 8. Ship and port facility security measures
- 9. Emergency preparedness and response and contingency planning
- Instruction techniques for security training and education, including security measures and procedures
- 11. Handling sensitive security related information and security related communication
- 12. Knowledge of current security threat patterns
- 13. Recognition and detection of weapons, dangerous substances and devices
- 14. Recognition, on a non discriminatory basis, of characteristics and behavioral patterns of persons who are likely to threaten security
- 15. Techniques used to circumvent security measures
- 16. Security equipment and systems and their operational [L]imitation
- 17. Methods of conducting audits, inspections, control, and monitoring
- 18. Methods of physical searches and non-intrusive inspections

- 19. Security drills and exercises, including drills and exercises with port facilities
- 20. Assessment of security drills and exercises

The SSO should also have additional training in the following areas,

- 1. The layout of the ship
- 2. The ship security plan and related procedures (including scenario-based training on how to respond)
- 3. Crowds management and control techniques
- 4. Operations of security equipment and systems
- Testing, calibration and whilst at sea maintenance of security equipment and systems

Shipboard personnel having specific security duties should have the following sufficient knowledge and training in the following,

- 1. Knowledge of current security threats and patterns
- 2. Recognition and detection of weapons, dangerous substance and devices
- Recognition of characteristics and behavioral patterns of person who are likely to threaten security
- 4. Techniques used to circumvent security measures
- 5. Crowd management and control techniques
- 6. Security related communications
- 7. Knowledge of emergency procedures and contingency plans
- 8. Operations of security equipment and systems
- Testing, calibration, and whilst at sea maintenance of security equipment and systems

- 10. Inspections, control, and monitoring techniques
- 11. Methods of physical searches of person, personal effects, baggage, cargo, and ship's stores

All shipboard personnel should have sufficient knowledge in the following areas,

- 1. Knowledge of current security threats and patterns
- 2. Recognition and detection of weapons, dangerous substances and devices
- Recognition of characteristics and behavioral patterns of persons who are likely to threaten security
- 4. Techniques used to circumvent security measures
- 5. Crowds management and control techniques
- 6. Security related communications
- 7. Knowledge of emergency procedures and contingency plan
- 8. Operation of security equipment and systems
- Testing, calibration, and whilst at sea maintenance of security equipment and systems
- 10. Inspection, control, and monitoring techniques
- 11. Methods of physical searches of persons, personal effects, baggage, cargo, and ship's stores

The PFSO is required to have knowledge, and have received training in the same areas as the CSO. Port facility personnel should also have equivalent training as the shipboard personnel.

Although the Coast Guard does not require specific courses or training, the people who will fill the different security personnel roles in an organization will be required to

have formal, classroom training courses. The following is a list of courses that concentrate their curriculum to the preceding guidelines in order for shipping companies, or port managers to be able to designate a security officer after an employee completes these courses.

V. C) Training Courses

Maritime Security Institute: MSI¹³

Located in Fort Lauderdale Florida, MSI is a not-for-profit educational institute that began offering training to non-government personnel following a grant from SeaSecure, LLC. MSI's goal is to meet and exceed the training standards set forth by the ISPS Code and the MTSA. The instructors come from a wide array of backgrounds including military, government agencies such as the CIA, and private sector shipping experts. The courses range from 1.5 to 3.5 days in length. The cost of each courses ranges from \$400 to \$1000. The courses that MSI offers are as follows,

Security Officer (Port Facility Security Officer/Company Security Officer)

Certification Course: This course satisfies all the instruction necessary for certification as a "Security Officer" for IMO and MTSA standards, as well as the ISPS requirements for "Port Facility Security Officer" and "Company Security Officer." The course is intended for all port operations personnel, law enforcement personnel within a port facility, ship operations and security officer, and security and corporate managers. This course is given multiple times throughout the year.

Maritime Threat and Intelligence Collection: This course focuses on information and intelligence collection from a number of sources including government, private, and confidential sources. Developing a local network of informants and information data collection in order to assess the threat and possible terrorist activity associated around the port facility is a core requirement for port security officials. This course is intended for port authority and corporate security officers responsible for port security.

Maritime Threat and Intelligence Collection (Law Enforcement): An additional day is added to the Maritime Threat and Intelligence Collection course specifically for law enforcement personnel. The supplementary day will cover information and intelligence from law enforcement sensitive databases. This course is specifically for law enforcement personnel whose duties include supervision and planning of law enforcement function within a seaport.

Legal Implications of the ISPS Code and MTSA: This course covers the necessary material to understand and comply with the recent security regulations that have come into effect. Basic understanding of the complex networks, laws, and treaties is important for anyone involved in maritime commerce. The course also covers liabilities and sanctions that can occur if one were not to comply with the regulations. The course is intended for attorneys, operations, and risk managers who require the knowledge of the regulations and laws that govern maritime commerce.

Weapons of Mass Destructions- Ports and Ships: A basic overview of the different categories of WMD. The course also covers how a WMD can be used against a shipping vessel or a port facility. It includes risk reduction and measures that can be taken to increase detection of WMDs. This course is directed toward port managers, port and ship security personnel.

Managing the Port Facility Guard Force: This course covers the organizations, training, equipment, and employment of the security guard team of a port. Policies, procedures, and best practices of security guard companies are covered along with the how the unique environment of a port plays into different procedures. This course is for port authority and corporate personnel involved in the security force of the port and its facilities.

Maritime Physical Security Management: This course gives an overview of the different methods and technology that can be implemented by a port to protect its borders and goods from unauthorized access. The different methods include fences and barriers, locks, safes, keys, security lighting, sensors, alarm systems, Closed-Circuit Television systems, night observation techniques and equipment, access control systems, credentialing and background checks, and guard force operations. The focus of the course is to have the student bring the information learned to his or her facility to implement different physical security measures for short term and long term protection. This course is intended for engineers and security operations personnel who are involved in design, construction, and implementing port security systems.

C-TPAT / CSI / BASC -- Program Management Course: This course gives a general overview of the different US Customs programs directed at supply chain security, and protecting global trade from the threat of terrorism. For Customs-Trade Partnership Against Terror, the course will cover how to improve security throughout the supply chain. It will also cover how to analyze supply chain security within a company and its suppliers. Further instruction will be given on submitting compliance reports to US Customs for C-TPAT. The Container Security Initiative section of the course is devoted to the 24 hour rules, inspection, and pre-screening of containers prior to entering US ports. It will also cover smart containers. The Business Anti-Smuggling Coalition will describe the standards and tactics set forth to prevent smuggling of contraband and terrorist goods by means of industry supply chains. This course is for corporate, port authority, and Customs Officers involved in anti-smuggling and cargo security.

Waterborne Security Operations- Management Course: This course covers the tactics and organization of a waterborne security team. It prepares port security managers for management and deployment of the waterborne security team and how it will integrate into the overall facility security plan. This course is for port authority security managers and law enforcement personnel.

Global Maritime and Transportation School (GMATS)

GMATS, located on the grounds of the United States Merchant Marine Academy in Kings Point, New York, is a facility that provides training for the maritime professional. The mission of GMATS is to educate leaders of private, government, and

military organizations in international trade and shipping. Courses range from technical engineering and ship construction to business logistics management. There are four divisions of GMATS,

- 1. Nautical science and military affairs
- 2. Marine engineering
- 3. Transportation, logistics, and management
- 4. Research and special project.

The transportation, logistics, and management course curriculum aligns with the required instruction described by the ISPS Code and MTSA. Many of the courses are very similar to the courses given by the Maritime Security Institute. The courses, though, are longer and cover more depth than the MSI courses. The courses range from 4 to 10 days and will cost \$1000 to \$2000. Tuition, meals, and lodging are paid for by the Maritime Administration. ¹⁴ The following are the courses offered by GMATS, ¹⁵

Supply Chain Integrity Program: This certification program describes methods, common practices, and technical aspects of cargo loss and theft prevention. Key features of the course are best practices for minimizing cargo theft, vulnerability of freight transportation systems, and key government cargo anti-theft networks. This course is intended for all public and private personnel involved in cargo security, including port authority personnel, shippers, law enforcement personnel, government agencies, and lawyers.

Facility and Vessel Security Program: This course complies with the IMO model courses for port facility security officer, company security officer, and vessel security officer. The course covers topics dealing with ship and facility security, and safety management. This course is for public and private professionals involved in cargo transportation and seaport security.

Facility Security Officer Program: Designed to meet the requirements for MTSA and ISPS Code necessary for a facility security officer. It will analyze the new maritime security regulations, along with best practice risk management policy and procedures.

This course is intended for anyone attaining the facility security officer positions.

Company and Vessel Security Officer Program: A similar program to the facility security officer program, the company and vessel security program is designed to meet the security training requirements for the company and vessel security officer.

Crisis Management in Transportation: This course is geared for the mid to upper level management and government leaders involved in the transportation industry. Anyone who expects to be involved in operations along with media relations will gain from this course. Topics covered include crisis management, creating media contacts, knowing how to use the media, and when information can be provided.

V. D) Seminars

Many training facilities offer two day seminar that give an overview of topics in supply chain security. The lectures in the seminars discuss the many subjects from the different courses summarized earlier. The lectures give a brief overview of the issues covered by the classes.

Trade Security Institute (TSI) - TSI offers supply chain security seminars aimed at making supply chain security a competitive advantage and incorporating it into the operations of a company. Along with classroom discussions, lectures are augmented through online "webinars." The seminar is given throughout the country and cost \$1100.

The objectives of the course are to define supply chain security, identify risk in a supply chain, and new procedures and technologies that can be implemented to improve supply chain security. Also, the seminar discusses the government supply chain initiatives and the ones that apply to the individual's company. TSI will do on-site training specifically geared to instruct the needs of the company or port authority. ¹⁶

Supply Chain Integrity Program- This GMATS seminar is given in conjunction with the International Cargo Security Council. The seminar takes place at the United States Merchant Marine Academy. It covers all the government security initiatives, customs compliance, risk management, and other topics for applying cargo security to a supply chain.¹⁷

VI) Customs Trade Partnership Against Terror (C-PAT): How Supply Chain Security Experts are Currently being Trained

C-TPAT is a private sector-government partnership created by Customs and Border Protection after the attacks of September 11. The C-TPAT initiative program is governed by the Customs and Border Patrol. Nearly 10,000 companies to date have enrolled to be a part of C-TPAT. The principles of C-TPAT are to develop security criteria, best practices, and procedures to secure and protect physical supply chain that enter US borders. The two overall themes of C-TPAT are to increase supply chain security, while facilitating commerce and trade that travels through US borders.

Many parallels can be made between the development of C-TPAT and the RMSC. Knowledge of security coalitions between public and private sector companies can be learned by the way C-TPAT has built their criteria of security standards, industry best practices, and membership into C-TPAT. C-TPAT is also involved in cooperation amongst many entities (foreign and domestic) to accept the standards of C-TPAT and to further enhance supply chain security.

For basic membership into C-TPAT, shippers and importers perform an evaluation of their own supply chain security. Some of the topics that the evaluation covers are physical security assessment, product points of origin, and if trade partners are currently C-TPAT members. The information from the evaluation is compiled in a document called *Supply Chain Security Profile*, and sent in to C-TPAT. This internal audit is reviewed by C-TPAT officers and compared to the industries established "best practices." Based on the profile, the company will be admitted into C-TPAT or denied. The theory of C-TPAT is that private sector will continue to improve supply chain

security as the criteria for membership into C-TPAT become stricter. The criteria for members are evolving as more security profiles are reviewed. The industry's "best practices" are based on these reports that companies send into CBP for review. If a new "best practice" is discovered in a *Security Profile*, it could be incorporated into the requirements for membership.

An additional validation process may also be performed after a C-TPAT member is certified. The validation will be done within three years of C-TPAT membership, if any anomalies are found in the *Security Profile*, any security threats or risks are detected, or a relatively high volume of trade is carried out by the shipper. Incentives are being used to encourage shippers to join C-TPAT, and for current members to continue to improve security standards. The main incentive for shippers to join C-TPAT is fewer total container inspections for registered members, and no container inspections for members using electronic devices that detect an unauthorized opening of the container, such as active Radio Frequency Identification (RFID).

VI. A) RMSC and C-TPAT: Common Goals

There are five formal goals of C-TPAT, which are as follow,

- Ensure that C-TPAT partners improve the security of their supply chains pursuant to C-TPAT security criteria
- Provide incentives and benefits to include expedited processing of C-TPAT shipments to C-TPAT partners
- 3. Internationalize the core principles of C-TPAT cooperation with the international community

- 4. Support other CBP security and facilitation initiatives
- 5. Improve administration of C-TPAT program¹⁸

To reiterate, these five goals of C-TPAT support two themes of C-TPAT, to facilitate trade while increasing the national and international security web. These themes run parallel to the themes of the RMSC, creating an integrated security system that will increase security, while allowing trade to continue to flow.

Goal five addresses the need for continued internal growth in the C-TPAT organization. The three key objectives to expand C-TPAT, which are identical to the current objectives of the RMSC in developing their CIAC program, are to implement the C-TPAT human capital plan, expand the structured training program for C-TPAT supply chain specialists, and to coordinate with the CBP modernization office to enhance C-TPAT's data collection and information management capabilities. While these objectives of C-TPAT are parallel to the objectives of the RMSC, there is a fundamental difference between the ways that each organization is developing. C-TPAT wants to train supply chain security experts to evaluate the established security standards of private industry, while the RMSC is developing a security network from the bottom up based on the knowledge of supply chain logistic professionals.

C-TPAT realizes that an extremely important asset to the program is the personnel. The executive summary explains,

Finally, the vast knowledge and experience of C-TPAT personnel, and the access to information not previously available to CBP, were seen as program strength.

Opportunities include the ability to enhance internal and external communication with stakeholder, to provide continuing education for supply chain specialists and to hire additional highly qualified people into the C-TPAT program.

This quotation emphasizes how C-TPAT values the private sector knowledge, and looks to enhance itself by including more supply chain experts into the program.

To gain membership into C-TPAT, some of the requirements include proper procedural security, education, training and awareness, and threat awareness. Any company or organization must prove that its personnel have completed security training, and awareness. This means that they must utilize the different training courses and seminars. As of March 2005, the initial defined criteria for importers were made available. The list acknowledges the need for training in the following areas:

Security Training and Threat Awareness

A threat awareness program should be established and maintained by security personnel to recognize and foster awareness of the threat posed by terrorists at each point in the supply chain. Employees must be made aware of the procedures the company has in place to address a situation and how to report it. Additional training should be provided to employees in the shipping and receiving areas, as well as those receiving and opening mail.

Furthermore, specific training should be offered to assist employees in maintaining cargo integrity, recognizing internal conspiracies, and protecting access controls. These programs should offer incentives for active employee participation.²⁰

Information Technology Security

Password Protection

Automated systems must use individually assigned accounts that require a periodic change of password. IT security policies, procedures and standards must be in place and provided to employees in the form of training.

C-TPAT requires shippers to conduct training and awareness programs for personnel in order to become certified members. A significant amount of the requirements for membership involves only the physical security of the facility. Also, computer security training is required, which could also be required for CIAC members with access to the RAINS communication network.²¹

VI. B) Training Supply Chain Experts

An essential part of C-TPAT is the supply chain experts involved in the security analysis. The need for qualified "human capital" has increased since the demand for membership into C-TPAT has greatly increased. The Supply Chain Specialist (SCS) position was created for the C-TPAT organization to assist with the key C-TPAT program requirements and to institutionalize supply chain security expertise throughout the agency. SCS primary duty is to analyze the security profile and to conduct the validation process. They also serve as the point of contact and advisor for certified C-TPAT partners

SCS are located in four field locations nationally New York, Los Angeles,
Washington, and Miami. Training is conducted at the Customs and Border Patrol
training facilities. The CBP Field Office of Operations and the Office of Training and

Development created the SCS training program. The program is two weeks long with industry specialist, instructors, and manuals. The training also involves insight learning at different locations to gain working knowledge of the environment within which they will be operating.

C-TPAT is working with the Office of Training and Development to create a college-level curriculum to train supply chain specialists. The focus of the courses consists of a multi-disciplinary approach to logistics management and supply chain security.

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VII)

Conclusion: How the RMSC can certify Supply Chain Experts

The first chapter of the report described how the RMSC was developing a communications security network throughout the Columbia River. The RMSC recognized the need for a communications network that would connect the many stakeholders of on the river. They felt that a "cargo-centric" approach was the best technique for creating the security system framework. The professionals who tracked the containers and coordinated their movement would be the focal point of the communication network. By combining the RAINS computer system, which allows pertinent safety information to quickly be transmitted to the Columbia River stakeholders, with trained members of the CIAC security team, the RMSC felt that they had the best combination of technology and personnel to protect the supply chains that use the Columbia River.

RMSC recognized that the greatest asset of security was the experience of the logistic professionals. As chapter three showed, the difficulty of tracking and coordinating only a single container and one shipment of grain was difficult and necessitated the need for logistic professionals. The technology used for the computer network was secondary to the knowledge that the professionals had acquired over the years of working along the Columbia River and with the commerce of the region. But for these logistics professionals to be protected under the US Federal Liability protection Code, they must be properly trained and certified.

The RMSC is required to have documentation that the volunteer members of the CIAC security team are certified with the proper training. Chapter four dealt with

defining the different traits required of a security expert, the requirements to qualify a transportation professional to become a CIAC member, and quantifying these requirements for certification, such as number of years experience working on the RMSC. Subsequently, chapter five gave multiple examples of courses that are currently given, which properly train security personnel to qualify them to hold security officer positions. The RMSC could use these courses or create similar courses to give the proper security training to CIAC members, which federal agencies, such as the Coat Guard, would recognize as sufficient for security personnel training.

The description of C-TPAT in chapter six was used to compare how supply chain security experts are currently being trained. CBP needs to employ personnel who can work with private industry to improve supply chain security. While C-TPAT is trying to recruit supply chain experts into its network, the RMSC is using personnel already within the Columbia River network to build the system around them.

The Coast Guard, ISPS, C-TPAT, and other regulatory bodies have not yet made definitive requirements that could be used to clearly define a supply chain security expert who is protected under the Federal Liability Code. Another alternative would be to change the Federal Liability Code to make it easier for RMSC and similar organizations to operate. The literature only cites that they do not expect to make a formal mandate of training courses.²³ It only provides suggestions of training and prior knowledge that would be necessary for personnel looking to hold the different security positions within a company or port facility. It is still important to have a defined list of requirements and training for certifying the supply chain logistic professionals for the CIAC, but the RMSC has a large amount of flexibility in defining these requirements. As long as the security

organizations recognize the validity of the supply chain logistic professionals as security personnel, the CIAC will become an effective security team.

VIII) Work Cited

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- ³Ibid
- ⁴Chabrow, Eric. (2004), TSA Issues Grant For Cargo Information Network. July 23 informationweek.com/story/showArticle.jhtml?articleID=25600096
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- ⁷Discussion with John Kuypers, Colleen Johansen, Buzz Chandler, and memerbs of the RMSC)\
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- ¹⁰Maritime Transportation Security Act International Ship & Port Facility Security Code www.uscg.mil/hq/g-m/mp/mtsa.shtml
- 11Ibid
- ¹²The McGowan Group. (2003), "ISPS Code Requirements & Pending USCG Regulations For Security Training and Exercise" Presentation, May 13
- ¹³Maritime Security Institute: www.maritimesecurityinstitute.org/academic.html
- ¹⁴GMATS: gmats.usmma.edu/info/aboutus.aspx
- ¹⁵GMATS Executive Course Summary- For additional information contact GMATS Transportation, Logistics and Management department at (516) 773-5165
- ¹⁶Trade Security Institute: www.tradesecinstitute.com
- ¹⁷GMATS Supply Chain Integrity Program (Seminar)- For additional information contact GMATS at (516) 773-5165

¹⁸ Customs-Trade Partnership Against Terrorism (C-TPAT) Strategic Plan: Securing the Global Supply Chain www.customs.gov/linkhandler/cgov/import/commercial_enforcement/ctpat/ctpat_strategicplan.ctt/ctpat_strategicplan.pdf

19Ibid

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²¹Ibid

²² Customs-Trade Partnership Against Terrorism (C-TPAT) Strategic Plan: Securing the Global Supply Chain

²³The McGowan Group

Appendices

Appendix A: RMSC Survey

Appendix B: RMSC Survey to Representative Stakeholders

Company Name:							
Street Address:	***************************************				,		
P.O. Box:							
City:			State:			_Zip:	
Office:			Cell:			_24/7 Phone:	
Fax:			Email:				
Facility:				_	Vessel:		
Cargo Type:		Inbound		Outbound		SIC	
	Grain:						
	Containers:						
	Petroleum:						
	Hazardous Materials	:					
	ls the cargo through	put?		YES NO			
	How frequently?		DAILY	WEEKLY MO	ONTHLY	OTHER	
	Is the cargo stored?			YES NO			
If YES, the averag	ge volume at any one tin	ne? (tons, galle	ons etc.)				
How is it stored?							
					····	V-V-	
What is the maxin	num amount of cargo or	your facility/	vessel at an	y one time?			
How often does th	nis occur?		DAILY	WEEKLY MO	ONTHLY (OTHER	
What causes the a	verage volume of storag	ge to increase t	o maximun	n volume of sto	rage?		

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Continue and the contin

Do you handle any haz	ardous cargo/materials?		YES NO	
Is this related or unrela	ted to your cargo business?		RELATED U	NRELATED
If related, what is the ty	pe, volume and method of st	orage'?		
Would you be willing purposes? YES NO IF		ys of cargo or ship	oping information for w	rith us for computer modeling
What kinds of systems	are in place to prevent unauth	norized access?		
What types of security	are around the barges or vess	eis?		
What types of security	are around the facility or grou	unds?		
What process' is in place	e to inspect empty containers	, silos, vessels and	or barges?	
				· · · · · · · · · · · · · · · · · · ·
What kind of security is Break-in'sSmugglingOTHERS	Please explain:	he past?TheftTerrorism	Vandalism Harassment	
RMSC Grant Report				
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	Weckly	Monthly	Yearly	
Break-in's	,	,		
Smuggling				
Theft				
Terrorism				
Vandalism				
Harassment				
OTHER				
OTHER				
What security issues do you anticipate in the future	e?			
From where?			**************************************	
What is your worst-case scenario?				
Does your vessel/facility have a security plan?			YES NO	
Would you be willing to share a copy of your secu	rity plan?		YES NO	
Average number of personnel employed?				
Are pre-employment screening or background chee	cks completed?		YES NO	
What types?		SSN verification		in
· -	····	education verification		
-				
_		employment verification		
· -		professional license certificati	on	dr
C	Other (please describe)			

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From what mode o	of transport do you receive	e your cargo?	
What kind of infor	mation do you receive on	your cargo?	
From where is the	information received?		
How is the informa	ation transmitted? (Select	all that apply) FAX EMAIL T	ELEPHONE
US MAIL	WIRELESS COMPL	TER INMARSAT A/B	FM RADIO
OTHERS			
Is the information	stored in central electroni	c file database that can be acce	essed by relevant parties?
	YES	NO	
If yes, how?	INTERNALLY:		
	EXTERNALLY:		
What is the level o	f quality, reliability and ti	meliness of the information?	
QUALITY	RELIABILITY	TIMELINESS	
Very High	_Very High	_Very High	
High	_High	_ High	
Above Average	_Above Average	_Above Average	
Average	Average	_Average	
Below Average	_Below Average	_Below Average	
Poor	Poor	_Poor	
Very Poor	_Very Poor	_Very Poor	
OTHER COMME	NTS:		
RMSC Grant Report			
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Appendix B: RMSC Survey to Representative Stakeholders

What information do you have ab	out an inbound vessel?	What information do you have about an inbound vessel?
Where do you receive this inform	ation from?	
When do you receive this informs	ition?	
What information do you record?		
How is it recorded?		
What information do you pass on	? To who and in what form?	?
What information do you receive/	require on truck drivers and TRUCK DR	•
	TRAIN OPE	ERATOR:
Which government agencies do your second with the second s	ou interact with?	HOW: WHY: HOW:
INS:		WHY: HOW: WHY:
CUSTOMS: OTHERS:		HOW: WHY: WHO:
		HOW: WHY:

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Do you see advantage in having improved communications and reliability of data	a? YES NO
If yes, why?	
If yes, how would you prefer to receive the information?	
If no, why not?	
Do you use an ISO, ISM or other quality process?	YES NO
If yes, what kind?	
Do you have any additional questions, concerns or comments?	
VESSEL OWNER SPECIFIC INFORMATION: Number of vessels:	Number of barges:
How do you communicate with them: FAX EMAIL PHONE EMAIL Other:	
How often? DAILY WEEKLY MONTHLY OTHER	
How do you know their location at any given time?	
Where and under what conditions do your vessels pool and why?	
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Vhat anchorage, storage or tie-up areas do you usc?
Vhat are the average numbers of vessels/cargo in these areas at any one time?
What kind of access is available to the cargo at these locations?
to you have any additional questions, concerns or comments?

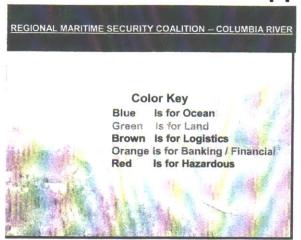
RMSC Grant Report

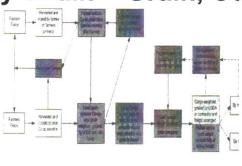
Page 69

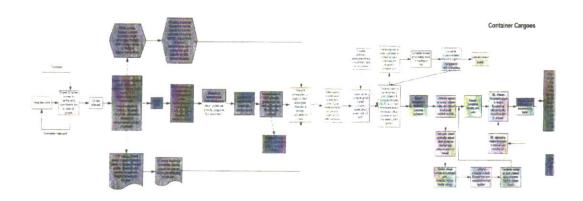
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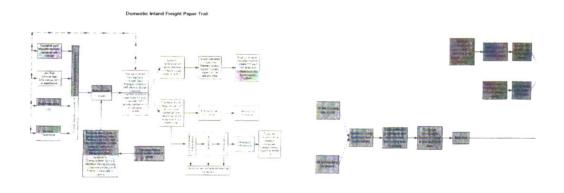
Appendix B: RMSC Supply Chain Diagram

Supply Chain - Grain, Co











Appendix C: RMSC Grain Scenario Exercise

Exercise Summary

- Demonstrate following capabilities
 - CIAC operation
 - Secure linkages
 - Secure information transfer
 - Surgical information processing
- Importance of Upper Columbia Snake Rivers regions
 - 40% of all US grain shipped through region
 - Close proximity of trucks, trains, marine transport
 - 32 ports along 465 miles of river

Exercise Participants



US Coast Guard

Cargo Information Access Center



Port of Morrow



Port of Clarkston

LCTI

Lewis-Clark Terminal Inc.

TIDEWATER

Tidewater Barge



Foss



Gulick Trucking

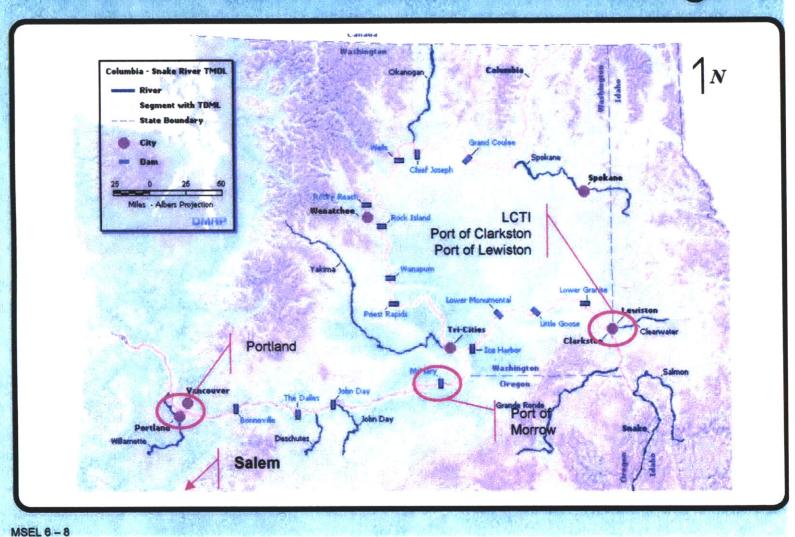


BUILDING AMERICAT Union Pacific

Technology Providers

- RAINS
 - Swan Island Networks
 - Tripwire
 - Fortix
 - Centerlogic
- Qualcomm
 - Boatracs
 - OMNITracs

Columbia and Snake River Region



Exercise Scenario Summary

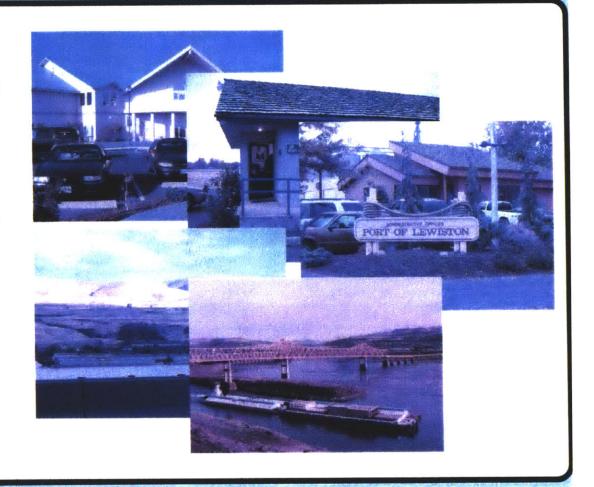
USCG learns of potentially contaminated grain shipment requiring verification and possible interdiction

- CIAC called upon to collect and report regional shipping information to USCG
- Initial reports drive additional targeted trace, track and verification
- 3. Shipment is found, all contamination is identified for disposition, further contamination prevented

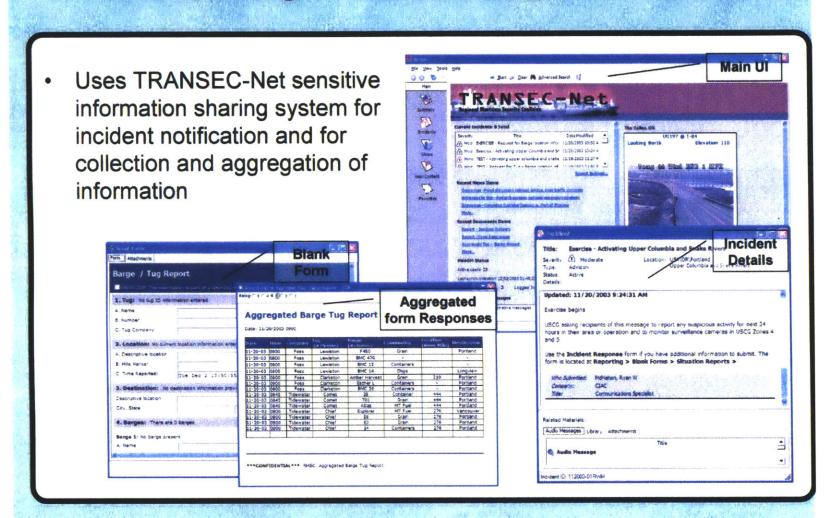
1. CIAC Begins Collecting Information

Responses from

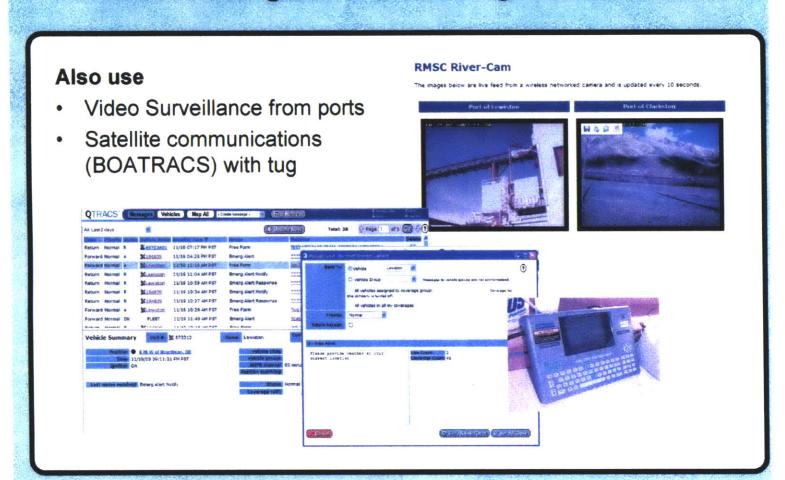
- Port of Clarkston
- LCTI
- Port of Morrow
- Foss Maritime
- Tidewater Barge



1. CIAC Begins Collecting Information



1. CIAC Begins Collecting Information



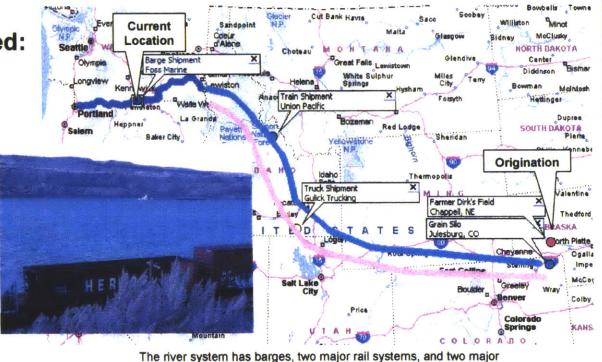
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2. Track, Trace, and Verify

Subject Matter Expert deployed for information analysis and shipment tracking

Shipment impacted:

- Grain Silos
- Rail Cars
- Trucks
- Barges



highway systems within the span of the river

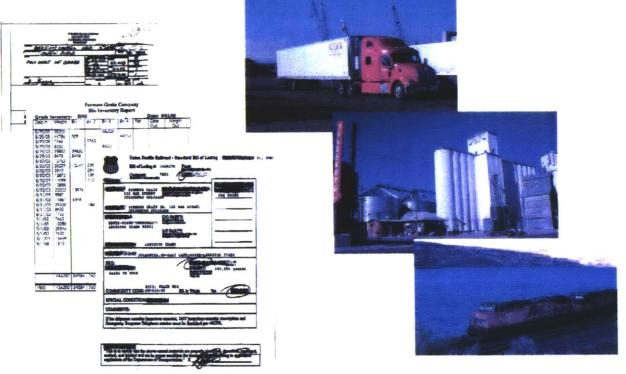
2. Track, Trace, and Verify

Subject Matter Expert analysis uses all available tools to communicate with field and complete analysis

Loading receipt

 Silo Inventory

· Railcar B/L



3. Identify and Prevent Further Contamination

Subject Matter Expert analysis uses all available tools to complete analysis

Initial shipment	39200	lbs
Blended at Julesburg silo	199934	lbs
Railcar contaminated	0	
Truck contaminated	0	
Blended at LCTI silo	946774	lbs
Two barges contaminated	0	



All shipments and contaminated transports sequestered

Summary of Demonstrated Exercise Capabilities

- CIAC operation
 - How the organization would stand up and operate
- Secure linkages
 - communications capabilities throughout the upper Columbia and Snake River system
- Secure information transfer
 - sensitive information sharing across organizations including public and private
 - Demonstrated sophisticated cross-organization and cross-jurisdictional communications
- Surgical information processing
 - track, trace and validation of potentially compromised cargo, transports, and storage

Appendix D: Container Documentation

🛂 **0**01

AS FOLLOWS

650 SUPREME DRIVE

BENSENVILLE

IL 60106-3812

KUALA LUMPUR EXPR 14E13

NYKS991403139

4/14/03

STEVEDORING SERVICE AMERICA (SSA)

DELIVER TO

PICK - UP BY

AMWARE DISTRIBUTION 19000 HOLLAND ROAD

iaminiale.

NO. OF PKGS.		ESCRIPTION OF ARTICLES, SPECIA	WEIGHT	DO NO
Millian Continue of the Contin	mammadegpping, go			
TEL:				
CLEVELAND)	OH 44142		
		<u> </u>		
PHONE 440	234 4099	ROSEMARY/DEBBIE		
TACOU HOL	THUN COND			

NO. OF PKGS.	DESCRIPTION OF ARTICLES, SPECIAL MARKS & EXCEPTIONS	WEIGHT	DO NOT
374 PK G 9	SILICONE RUBBER & FLUID Required Temp: SDA-5718 DO+ C.	11,316 KGS	1 21
	CARGO LOCATION:	18.720 M3	1 141
	CONTACT TIM ROSE 206 340 2854 GWAGENCY: CHE	MTREC	
	Pickup#: Pickup Date : 4/21/03 Container Return Place: Bill to: MITSUBISHI LOGISTICS AMERICA CORP. T.B/L #: MA304397	800 494	-9800
 Containe NYKU7003	Importer: SHIN-ETSU SILICONES OF AMERICA r No. 443	AXE)
		APR 212	30
*** COPY	OF THIS DELIVERY ORDER MUST ACCOMPANY YOUR BILLING RMODAL CERTIFICATE ***	***	

PAERAID/COLLECT

MITSUBISHI LOGISTICS AMERICA CORPORATION



VI**TS**UBISHI LOGISTICS AMERICA CORPORATION

THROUGH BILL OF LADING COMBINED TRANSPORT BILL OF LADING BILL OF LADING FOR PORT TO PORT SHIPMENT

SHIPPENEXPORTER (Complete Name and Address)

SHIN-ETSU CHEMICAL CO., LTD.

TOKYO. JAPAN

6-1, ORTEMACHI 2-CHOME, CHIYODA-KU,

TOKYO, JAPAN

DOCUMENT NO.

M.L.A.C

BLE NO NA304397

EXPORT REPERIDICES

2104061

FORWARDING AGENT - REFERENCES

CONSIGHES (Complete Harne and Address)

SHIN-ETSU SILICONES OF AMERICA, INC.

HEAD OFFICE 1150 DAWAR DRIVE

AKRON OH 44305, U.S.A.

TEL:1-330-630-9860

FAX:1-330-630-9855ATTN: WR. JIN TOBER

FOIRT AND COUNTRY OF ORIGIN

NOTIFY PARTY (Complete Name and Address) 1) SAME AS CONSIGNEB

2) ANVARE DISTRIBUTION WAREHOUSE

19000 HOLLAND ROAD

CLEVELAND, OH 44142, U.S.A.

DOMESTIC ROUTING/EDGORT INSTRUCTIONS

MITSUBISHI LOGISTICS AMERICA CORP.

CHICAGO BRANCH

650 SUPREME DRIVE BENSERVILLE.

IL 80106-3812 U.S.A.

PLACE OF RECEIPT

RECARRIAGE BY

TOKYO CY

VESSEL 14 LI FORT OF LOADING

KUALA LUMPUR EXPRESS

LACE OF DELIVERY

TOKYO, JAPAN

CHIVARO INLAND PIOUTING

DATE

FORT OF DISCHARGE SEATTLE

CLEVELAND. OH DOOR

PARTICULARS FUNNISHED BY SHIPPER

PREGMEN ON SYRAN	NO, OF PKGS.	DEECRIPTION OF PACKAGES AND GOODS	GROSS WEIGHT	MEASUREMENT
- AS PER ATTACHED		"SHIPPER'S LOAD & COUNT"	K G S	ИЗ
SHEET -		SILICONE RUBBER & FLUID	11.316	18.720
** MARK NO. KSG-17	‡	(H.S.CODE: 3910.00) INVOICE NO.SDA-5718 BMERGENCY		
FLANMABLE Ł UN1993	TAUID, N.O	.S. 1 CONTAINER CHENTREC	(24 HRS) 800-	424-9300
CLASS:3 F/P: 55 DEG	REES C	10 DRUMS	-	
P/G:III H/W:1900 KG	5	13 PALLETS (SP CANS & 340 BAGS)		
10 D/N NYKU 7003443	23 P/G RH	23 PACKAGES (374 PACKAGES) 032 (40R)		
"FREIGHT PRE	PAID" Y ONE (1)	CONTAINER ONLY	ORIGI	NAL

PREIGHT AND CHARGES:

FREIGHT AS ARRANGED

COPPOBATION,

SHIPPED ON BOARD ON APR. - 6, 2003 MITBURISH LOGISTICS

NOTICE: THE TERMS AND CONDITIONS ON THE REVENUE SIDE HERROF LIMIT THE CHANGETS LIMILITY TO MUDICAL SIZE PER PACKAGE OR CUSTOMARY PRISONT UNIT BY INCORPORATION OF THE U.S. CURNAGE O GOODS BY SEA ACT. YES, UNLESS THE IMPROMENT DECLARES A HIGHER CHANGO VALUE BELOW AND PAYS THE CHANGE OR PRISONT CHANGE.

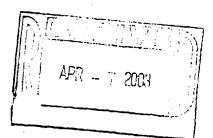
DECLARED CHANG VALUE U.S. S.

F. MENCHANT SHTEMS A YMLER CARRIEN'S LIMITATION OF LABILITY SHALL HER APPLY MED THEAD VALUE BY AND THE ADVALUE BY A PROCESS.

D-2

AS AGENT

MITSUBISHI LOGISTICS CORPORATION



DAY

YEAR

TOVVA *****

2003

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ケイヒンナイカ イフォクーディング

定院告明相害

DECLARATION OF BANGEROLLS COODS FOR MELTIMODAL

コンテナ党独物項重音 DECLARATION OF DAMESBUE COOLS IN CONTAINER & CONTAINER

	•.	I KARSET	 PACE THE CERTIFICATE POR MUCTIMENT TRANSPORT
MES	S	DAI-A .	 Date (BAD)
Lis B			

es el BOLAS 74, chequer VII, regularica S-MARPOL 7978. Annes III, regularica anal the DelDO Code, chequari A. ACCEPTANTE STATE OF THE PARTY CONTRACT STATE 1 ブッキングライ: 3 71175789 Per 1 1 4 REALES : Sappers II SHIN-ETSU CHEMICAL CO., LITE 6-1. OHTEMACHI 2-CHOMB. CHIYODA-KU. TORYO JAPAN TEL: (03)-3: ELACUMA LIBERTHEM: COMPANIENT INC. SHIR-ETSE SILICOMES OF AMERICA, INC. HEAD OFFICE 1150 DAMAR DRIVE ARBON, Total State : Bains pression mineral TEL: (03)-8246-5171 A CHOOLINGS : Carrier Jack Will, in becompled 7 be described OH 44306 U.S.A. NIPPON YUSEN 以下の行動物の場合のは、他に上の元代は「対象的がはこうなどが動物的 に当まし、か 「もと人の形と ME RE : Name / mana company / commission of income B つ、まての配こはいて目に出したの金であることを見るします。 KEIHIMMAIGAI PORVARDING CO. LTD. SHIPPERS DECLARATION MASATCHT SEUL I bessely dealers than the ensemble of this expelyment are fully and meantaly described by the proper shipping more, and one absolute, gadeaged, meeted and labelled / 基色的运用及C旧符:Framanicals YOKOHAHA. JAPAK Apr. 01, 2008 and and are in all separa is proper audition for manual sounding to the MEADES : Senters on bulaifor ligger opposite telephone from land services government streets This ship mast is within the limits incur presented for Delate managelisable PASSEDIGER AND CARGO ADICKATT | CARGO ADICKATT ONLY 新发生是, 是意见, 安全在证据者 : 370 原化、 **同200** 与及CFE的有子定身: Wanted / State May No. and date 10 swimmer. Em.S. No. Marked Phot Aid or MELC whis No. KUALA LUMPUR EXPRESS V/14E18 MANUAL PROPERTY COMPANY COMPAN 和图像: Port/place of institut 11 CHEMTREC (24 HES) TEL:800-434-9300 APR. 6. 2003 MEFE : Additional beneding information 13 19 Description SPATTLE CLEVELAND TO 25 4: TERROTE: Description of dangerous ground The basic description should be in order to proper. 金楼、包装印度还是工程的、数据是又地区 14 display name along UN number and packing group, GARGEREL BG. 992, 8249. BC TO Make and the dis Supplet made & Consumity Namedy Odelal AND CONTRACTOR OF STEIN) 10 D/K ES9-17 FLAMMABLE LIQUID, H.O.S. PROPER EMPPING NAME (E.C.) ORCANOSILOYARE 40008345 こんな グラス N/Y: 1900 KGS CLEVELAND WINDOWS COM C/S NO. 11-12 BACKING GROUP WESTER 2. 134 KGS **DITIONS** G/T: 2. 688 M3 55 % HET VI. 1. SOOK POLIUTANT (FLANMABLE LIQUID) SIXE MATERIAL SPECIOLOGIC NOT HARINE POLLUTANT 1800C X 10 LOT FO. -IS FINE : South IL REE DOLLER ALLerina : Carrier 19 16 3000 (Carrier) 17 2000) : white size & wife Green tare (in) Ten Gunder RH 032 **EYKU 7003443** LESS AND CHARGE DELESS CONTROL OF RECEIPT 2 別に出さしかつ会での配において選択ではした状態である学を意思します。 Received the above number of prolupps / emeriment/tention in experient paradicine, unless secured harvest RECEIVING ORGANIZATION REMAINS CONTAINER/VERICLE BACKING CERTIFICATE entry designs that the guest described above how into puriod /in the cognition / which identified above in assuments with not with the applicable pro-labor."
MUST BE COMPLETED AND SIGNED FOR ALL COMPANIES / VERGUE - DANGELOUS GOODED : Having's Dame LOADS BY PERSON RESPONSIBLE FOR PLANING / LOADING 品名(原品名不和、分配、和II、大阪駅と辿って仕かうス 近江南町大分、町内が出る。 正正音号、 東田町 3大小 SEAD THE STATE OF THE PARTY OF Which my No. PREMIUM TOURSESTEEN SEL REIHINNAIGAI FORWARDING CO. LID. THE PERSON DODG Color BEARES / BE: New / serve distance Van meet speciff people shipping menne, kennel chan, UN Ma, Parickay group: belook maniganel district. Ma, Stitutifing known class Maxim pullsametrani channe ha mark days KASAICEL SHOJI SECTION OF THE CALL income where spiritely record and NY B YOKOHAMA, JAPAN APT. 01. 2003 increational processed regulation. For the purpose EXECUTABLE COST : Tomand of science DEIVERSONATURE of the DADG Code and Congrey 5.6.1.
DADG Code page months should not appeared this face. Ter the mirrors of the DeDG Orders Chapter \$42

PACKING LIST



Shin-Etsu Chemical Co.Ltd. Silicone Division

6-1,Ohternachi 2-chome,Chiyoda-ku,Tokyo,i40 TEL:(03)3246-5171 FAX:(03)3246-5363

INVOICE NO.:

SDA-5718

Commodity: SHIN-ETSU SILICONE

Date: Mar. 25, 2003 Shipping Mark & Nos.

Quentity:

10,584 kg

/ 10 dr & 13 pp

Attached Sheet

Sipped in good order & condition per: KUALA LUMPUR EXPRESS

Te:

Frem :

CLEVELAND
Shipping on or about :

Tokyo Ets:

0	C/no	Description .		No. of	Quentity	Weight		Meas't	Lotna.	
				Peckege		Net Our	Green (ke)	(Em)		
		SHIN-ETSU SELCOME								
1)	11-20	KSG-17	190 kg	(190 kg X 1)	10 dr	1,900 kg	1,900	2,134	2.668	212780: 190 kg
										302765: 950 kg
							1			302788: 760 kg
2)	1	KSG-33	384 kg	(18 kg X 24)	1 pp	384 kg	384	447.44	0.8825	303004: 384 kg
					_					
3)	2-6	WHITON-SSB	800 kg	(25 kg X 32)	5 pp	4,000 kg	4,000	4,182.50	6.534	310228: 300 kg
1	7	WHITON-SSB	E00 i	(25 kg X 20)		500 kg	500	531.40	0.8784	310308: 3,700 kg
	,	MILLION-33B	300 Kg	(23 Kg A 20)	1 pp	SOO RE	300	331.40	U.B/84	310 306 : 500 kg
	1	ZNCO3-S	800 kg	(20 kg X 40)	1 pp	800 kg	800	838.90	1,3068	18122: 260 kg
1				-						20122: 540 kg
5)	8-11	HAKUENKA-U	825 kg	(25 kg X 25)	4 pp	2.500 kg	2,500	2,647.60	5.2272	2J70: 2,500 kg
	12	HAKUENKA-U	-	(25 kg X 20)	1	500 kg	500	534.10	1.1228	2J70: 500 kg
				Tot	al: 10 dr	10,584 kg	10,584	11,315.94	18.7197	
					& 13 pp		kes	kgs	m3	1

SHIN-ETSU CHEMICAL CO.,LTD.

Silicone Division

** ATTACHED SHEET **

1 KSQ-17 40003345 CLEVELAND C/S NO. 11 - 20 MADE IN JAPAN SESA NET WT. 1,800KG 190KG × 10 LOT NO.

2 KSG-33 40003927 CLEVELAND C/S NO. 1 MADE IN JAPAN SESA NET WT. 384KG 16KG × 24 LOT NO.

3 WHITON-SSB 40003972 CLEVELAND C/S NO. 2 - 7 MADE IN JAPAN SESA NET WT. 4,500KG 25KG × 180 LOT NO.

4 ZNCO3-S 40003972 CLEVELAND C/S NO. 1 MADE IN JAPAN SESA NET WT. 800KG 20KG × 40 LOT NO.

5 HAKUENKA-U 40093972 CLEVELAND C/S NO. 8 - 12 MADE IN JAPAN SESA NET WT. 3,000KG 25KG × 120 LOT NO.

1/7



Shin Etsu

MEDS NO: NU-06-05300856

PRODUCT NAME: KSG-17

MATERIAL SAFETY DATA SHEET

SECTION 1. COMPANY IDENTIFICATION

COMPANY IDENTIFICATION

MANUFACTURER'S NAME: Shin-Etsu Chemical Co., Ltd.

ADDRESS: 6-1, 2-Chome, Ohtemachi, Chiyodaku, Tokyo, JAPAN

EMERGENCY TELEPHONE NUMBER:

330-630-9860 (Shin-Etsu Silicones of America, Inc.) 800-424-9300 (CHEMTREC) (24hrs) (Washington, D.C. USA)

036-5326380(Shin-Etsu Silicones Burope B.V., THE NETHERLANDS)

TELEPHONE NUMBER FOR INFORMATION:

03-3246-5121 (Tokyo, JAPAN)

330-630-9860 (Shin-Etsu Silicones of America, Inc.)

036-5326380(Shin-Etsu Silicones Europe B.V., THE NETHERLANDS)

DATA PREPARED
LAST REVISION

: 04/21/1994 : 02/15/2000

DATA ISSUED

: 02/04/2003

ISSUE NO 200302000144

BASE NO 7

PRODUCT NAME :

XBG-17

PRODUCT CLASSIFICATION:

Silicone Gel

SECTION 2. COMPOSITION

SINGLE OR MIXTURE:

Mixture

CHEMICAL IDENTIFICATION:

Organopolysiloxane mixture

HAZARDOUS COMPONENT(S)/(CAS No.):

Octamethylcyclotetrasiloxane/

(556-67-2) [Flammable Liquid] : ca.95 %

(See Section 8 of this MSDS for Exposure Guideline)
(See Section 11 of this MSDS for Subacute toxicity and

Reproductive effect.}

SECTION 3. HAZARDS IDENTIFICATION

HAZARDS CLASSIFICATION:

Flammable Liquids (based on IMO)

Planmable Liquid (based on DOT)

FIRE AND EXPLOSION:

Flammable and explosive hazard

3

Shiretsu

MEDS NO: NU-06-05300856

PRODUCT NAME: KSG-17

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POTENTIAL HEALTH EFFECT:

IMHALATION : 1 No significant irritation expected from a

single exposure. Overexposure may cause

reproductive effect.

SKIN contact ; May cause slight skin irritation.

Causes drying of skin.

EYES contact; May cause slight eyes irritation.

INGESTION ; No information is available.

SECTION 4. FIRST AID MEASURES

INHALATION ; Remove to fresh air.

SKIN contact; Remove product from skin with dry cloth or

towel, and wash exposed area with detergent.

EYES contact; Immediately flush with water for at least

15 minutes.

INGESTION ; Wash out mouth with water provided person is

conscious. Never give anything by mouth to an

unconscious person. Call a physician

immediately.

SECTION 5. FIRE FIGHTING MEASURES

FLASH POINT (method used):

55 degrees C (Closed cup)

FLAMMABLE LIMITS:

[Octamethylcyclotetrasiloxane] LOWER: 0.75% UPPER: 7.4%

EXTINGUISHING MEDIA:

Foam, dry chemical or carbon dioxide

SPECIAL FIRE FIGHTING PROCEDURE:

None

UNUSUAL FIRE AND EXPLOSION HAZARD:

None

SECTION 6. ACCIDENTAL RELEASE MEASURES

STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Shut off all ignition sources.

Contain the spill or leak.

Scrape up with cardboard or rag and place in container.

SECTION 7. MANDLING AND STORAGE

PRECAUTION TO BE TAKEN IN HANDLING AND STORING:

Keep container closed when not in use.

Store in a cool place.

Keep away from heat, sparks and flame.

The state of the state of





MEDS NO: EU-06-05300856

PRODUCT NAME: KSG-17

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Do not lay the container on its side.

Use with adequate ventilation.

Avoid prolonged breathing vapor.

Avoid contact with eyes and prolonged or repeated skin

Keep out of reach of children.

* * * * * Information about the emptied container * * * * *

Do not re-use this container.

This container will be very hazardous when emptied.

Residues will be explosive or flammable.

Reep away from heat, sparks and flame.

Do not puncture or cut this container, and do not weld on or near this container.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

ACGIH TLV-TWA : Not established,

OSHA PEL: Not established [Octamethylcyclotetrasiloxane]

RESPIRATORY PROTECTION (specify type):

Use respiratory protection unless adequate local exhaust

ventilation is provided. (Organic vapor type)

VENTILATION:

LOCAL EXHAUST: Recommended

MECHANICAL (general): Adequate ventilation system

SPECIAL: Unknown
OTHER: Unknown

PROTECTIVE GLOVES:

Plastic film or rubber gloves

EYE PROTECTION:

Safety glasses

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Eyewash equipment

WORK/HYGIENIC PRACTICES:

Keep away from heat, sparks and flame.

Avoid prolonged breathing vapor.

Avoid contact with eyes and prolonged or repeated skin contact.

Wash hands and gargle after handling.

SECTION 9. PEYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:

175 degrees C [Octamethylcyclotetrasiloxane]

VAPOR PRESSURE:

0.75mmHg (20 degrees C) [Octamethylcyclotetrasiloxane]

VAPOR DENSITY (air=1):



Shin Etsu

MEDS NO: EU-06-05300856

PRODUCT NAME: KSG-17

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>1 [Octamethylcyclotetrasiloxane]

SPECIFIC GRAVITY:

0.95

(25 degrees C)

MELTING POINT:

Not applicable

EVAPORATION RATE:

<1 (Butyl Acetate=1) [Octamethylcyclotetrasiloxane]</pre>

SOLUBILITY IN WATER:

Not soluble

APPEARANCE (color):

Colorless, transparent

APPEARANCE (form):

Paste

ODOR:

Odorless

SECTION 10. STABILITY AND REACTIVITY

STABILITY:

Stable

CONDITION TO AVOID:

None

INCOMPATIBILITY (material to avoid):

None

HAZARDOUS DECOMPOSITION OR BY-PRODUCT:

Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide.

Formaldehyde.

HAZARDOUS POLYMERIZATION:

Will not occur

CONDITION TO AVOID:

None

SECTION 11. TOXICOLOGICAL INFORMATION

SKIN IRRITATION:

SKIN-RABBIT : 500mg/24Hr MILD [Octamethylcyclotetrasiloxane]

BYE IRRITATION:

EYE-RABBIT : 500mg/24Hr MILD [Octamethylcyclotetrasiloxane]

SENSITIZATION:

No evidence of sensitization [Octamethylcyclotetrasiloxane]

ACUTE TOXICITY(LD50):

LD50(Oral/Rat) : >5g/kg [Octamethylcyclotetrasiloxane]

ACUTE TOXICITY (LC50):

LC50(Inhalation/Rat) : >5g/m3/Hr



ShinEtsu

MEDS NO: 2U-06-05300856

PRODUCT NAME: KSG-17

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[Octamethylcyclotetrasiloxane]

SUBACUTE TOXICITY:

Repeated inhalation or oral exposure of mice and rats to octamethylcyclotetrasiloxane and decamethylcyclopentasiloxane produced an increase in liver size. No gross histopathological or significant clinical chemistry effects were observed. An increase in liver metabolizing enzymes, as well as a transient increase in the number of normal cells (hyperplasia) followed by an increase in cell size (hypertrophy) were determined to be the underlying causes of the liver enlargement. The biochemical mechanisms producing these effects are highly sensitive in rodents, while similar mechanisms in humans are insensitive.

CARCINOGENICITY:

NTP:Not listed, IARC:Not listed, OSHA REGULATED:Not listed MUTAGENICITY:

Negative (Bacteria) [Octamethylcyclotetrasiloxane] REPRODUCTIVE EFFECT:

Octamethylcyclotetrasiloxane administered to rats by whole body inhalation at concentrations of 500 and 700 ppm for 70 days prior to mating, through mating, gestation and lactation resulted in decreases in live litter size. Additionally, increases in the incidence of deliveries of offspring extending over an unusually long time period (dystocia) were observed at these concentrations. Statistically significant alterations in these parameters were not observed in the lower concentrations evaluated (300 and 70 ppm). In a previous range-finding study, rats exposed to vapor concentrations of 700 ppm had decreases in the number of implantation sites and live litter size. The significance of these findings to humans is not known.

TERATOGENIC EFFECT:

No teratogenic effects in the rats and rabbits [Octamethylcyclotetrasiloxane].

OTHER INFORMATION:

None

SECTION 12. SCOLOGICAL INFORMATION

BIODEGRADATION:

No information is available.

BIOACCUMULATION:

Bioconcentration Factor(BCF) / (Fathead minnows) : 12400 [Octamethylcyclotetrasiloxane].

AQUATIC TOXICITY:

No apparent toxicity for fish [Octamethylcyclotetrasiloxane] OTHER INFORMATION:

Vapor undergoes indirectly photolysis in the troposphere.





MEDE NO: NU-06-05300856

PRODUCT NAME: KSG-17

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SECTION 13. DISPOSAL COMSIDERATIONS

Can be burned in chemical incinerator equipped with afterburner and scrubber but exert extra care in igniting as this product is very flammable. Do not dispose of the emptied container unless the contents have been completely removed and container has been flushed

with a clean neutral solvent and then dried up. Do not dispose the emptied container unlawfully.

Observe all federal, state, and local laws.

EECTION 14. TRANSPORT INFORMATION

< IMO INFORMATION>

ID No.:

UN 1993

CLASSIFICATION AND CLASS:

Flammable Liquids / Class 3.3

PACKAGING GROUP:

III

PROPER SHIPPING NAME:

Flammable Liquids, N.O.S.

TECHNICAL SHIPPING NAME:

Organosiloxane

MARINE POLLUTANT:

None

<DOT INFORMATION>

ID No. (49CFR 172.101):

UN 1993

HAZARD CLASS (49CFR 172.101):

3, Flammable Liquid

PACKING GROUP (49CFR 172.101):

III

PROPER SHIPPING NAME (49CFR 172,101):

Flammable Liquids, N.O.S.

TECHNICAL SHIPPING NAME:

Organosiloxane

DOT REPORTABLE QUANTITY (49CFR 172.101, APP.) :

HAZARD SUBSTANCE(S) NAME / (CAS No.), CONTENTS AND RQ

Not applicable

SECTION 15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TSCA) STATUS:

Listed on the TSCA Inventory.



ShinEtsu

PRODUCT NAME: KSG-17

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EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES

(EINECS) STATUS:

Listed on the BINECS.

LABELING ACCORDING TO EC-REGULATIONS REQUIRED:

SYMBOL : Xn

R-PHRASE: (R-10) Flammable

(R-62) Possible risk of impaired fertility.

S-PHRASE : (S-51) Use only in well-ventilated areas.

CONTAINS : Octamethylcyclotetrasiloxane ca. 95%

SUPERFUND AMENDMENTS AND REAUTHORIZAITION ACT OF 1986 (SARA)

TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the emergency planning and community Right-To-Know Act of 1986 and 40 CFR 372.

This information must be included in all MSDS's that are copied and distributed for the material.

The toxic chemical(s) contained in this product are:

CHEMICAL NAME/ (CAS No.) AND CONTENTS

** None **

CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 Chemical(s) under the statute.

The California Proposition 65 Chemical(s) contained in this product are: CHEMICAL NAME/(CAS No.) AND CONTENTS

** None **

SECTION 15. OTHER INFORMATION

For Industrial Use Only

This materials safety data sheat is offered solely for your information, consideration and investigation.

The data described in this MSDS consist of data on literature, our acquisitional data and analogical inference by data of similar chemical substance or product.

Shin-Etsu Chemical Co., Ltd. provides no warranties, either express or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein.



98060 Seattle, WA, King to 44101 Cleveland, OH, Cuyahoga: 1 Stop

Summary:

Miles: 2586.4 Time: 52:42 Cost: 2845.04

Shortest Route, Borders Open

		Leg	Total	Leg	Total	Leg	Total
Stop		Miles	Miles	Cost	Cost	Hours	Hours
98060	Seattle, WA, King	0.0	0.0	0.00	0.00	0:00	0:00
97208	Portland, OR, Multnomah	174.3	174.3	191.73	191.73	3:51	3:51
44101	Cleveland, OH, Cuyahoga	2412.1	2586.4	2653.31	2845.04	48:51	52:42
		na na ana ana ana ana ana ana ana ana a	Contraction and Company of September 1			easers tuice:	or fryder a

98108 Seattle, WA, King to 44142 Brookpark, OH, Cuyahoga: 3 Stops

Summary:

Miles: 2615.6 Time: 41:08 Cost: 2877.16

Practical Route, Borders Open

	Leg	Total	Leg	Total	Leg	Total
Stop	Miles	Miles	Cost	Cost	Hours	Hours
98108 Seattle, WA, King	0.0	0.0	0.00	0.00	0:00	0:00
98661 Vancouver, WA, Clark	169.2	169.2	186.12	186.12	3:14	3:14
84337 Tremonton, UT, Box Elder	691.7	860.9	760.87	946.99	11:12	14:26
69122 Big Springs, NE, Deuel	620.7	1481.6	682.77	1629.76	8:25	22:50
44142 Brookpark, OH, Cuyahoga	1134.0	2615.6	1247.40	2877.16	18:17	41:08

seattle, WA, King to 44142 Brookpark, OH, Cuyahoga: 3 Stops

Summary:

Miles: 2615.6 Time: 41:08 Cost: 2877.16

Practical Route, Borders Open

					Leg	rea	rotai	rotai
State/Country	Route	Miles	Hours	Interchange	Miles	Hours	Miles	Hours
Dest: 44142 Brookpa	ark, OH, Cuyahoga		0:00 (On-duty) 0.00	1134.0	18:17	2615.6	41:08

98108 Seattle, WA, King to 44142 Brookpark, OH, Cuyahoga: 3 Stops

Summary:

Miles: 2615.6 Time: 41:08 Cost: 2877.16

Practical Route, Borders Open

State/Country			Route	Miles	Hours	Interchange	Leg Miles	Leg Hours	Total Miles	Total Hours
Origin: 98108	Sea	ttle, \	WA, King		0:00 (On-duty) 0.00				
WA			Local	0.3	0:01	I 405 X7, WA	0.3	0:01	0.3	0:01
WA	WA S 1-405		1-405	7.6	0:08	+1.5.1.405S, WA	7.9	0:08	7.9	0:08
WA		S	1-5	157.0	2:54	I 5 X1AB, WA	164.9	3:02	164.9	3:02
WA		Ε	WA-14	2.9	0:09	+WA 14 Lewis and Clark Hwy	167.8	3:11	167.8	3:11
WA			Local	1.4	0:03	Vancouver, WA	169.2	3:14	169.2	3:14
Arrive Loaded	t									
Stop 1: 98661	Van	cou	ver, WA, Clark		0:00 (On-duty) 0.00	169.2	3:14	169.2	3:14
WA			Local	0.8	0:02	+WA 14 S Lieser Rd, WA	0.8	0:02	170.0	3:15
WA		Ε	WA-14	37.5	0:47	+WA 14 Bridge of The Gods,	38.3	0:49	207.5	4:03
WA	\$	Ε	Bridge of Th	0.2	0:00	WA/OR State Line	38.5	0:49	207.7	4:03
OR	\$	Ε	Bridge of Th	0.2	0:00	Cascade Locks, OR	38.7	0:49	207.9	4:03
OR		W	US-30	0.2	0:00	l 84 X46, OR	38.9	0:50	208.1	4:03
OR		Ε	1-84	334.4	6:06	OR/ID State Line	373.3	6:56	542.5	10:10
ID		E	1-84	275.6	3:40	ID/UT State Line	648.9	10:36	818.1	13:50
UΤ		E	1-84	40.8	0:33	I 84 X39, UT	689.7	11:09	858.9	14:23
UΤ		Ε	UT-102	2.0	0:03	Tremonton, UT	691.7	11:12	860.9	14:26
Arrive Loaded	d									
Stop 2: 84337	Tre	mon	ton, UT, Box Ele	der	0:00 (On-duty) 0.00	691.7	11:12	860.9	14:26
UT		E	UT-102	1.2	0:02	+UT 13 UT102, UT	1.2	0:02	862.1	14:28
UT		S	UT-13	2.3	0:03	I 15 X379, UT	3.5	0:05	864.4	14:31
UΤ		S	1-15	36.4	0:34	+l 15 l 84S, UT	39.9	0:39	900.8	15:05
UT		Ε	I-84	39.1	0:31	+I 80 84, UT	79.0	1:11	939.9	15:36
UT		Ε	1-80	29.9	0:24	UT/WY State Line	108.9	1:34	969.8	16:00
WY		Ε	1-80	403.3	5:23	WY/NE State Line	512.2	6:57	1373.1	21:23
NE		Ε	1-80	107.5	1:26	1 80 X107, NE	619.7	8:23	1480.6	22:49
NE		Ν	Nebraska 2:	1.0	0:02	Big Springs, NE	620.7	8:25	1481.6	22:50
Arrive Loade	d									
Stop 3: 69122	2 Big	Spr	ings, NE, Deuel		0:00 (On-duty) 0.00	620.7	8:25	1481.6	22:50
NE		s	Nebraska 2!	1.0	0:02	I 80 X107, NE	1.0	0:02	1482.6	22:52
NE		Ε	1-80	348.2	4:54	NE/IA State Line	349.2	4:56	1830.8	27:46
		Ε	1-80	306.7	4:46	IA/IL State Line	655.9	9:42	2137.5	32:32
IA		E	1-80	155.4	2:54	I 80 X155, IL	811.3	12:36	2292.9	35:26
					0:05	I 80 X160AB, IL	816.3	12:41	2297.9	35:32
IL	\$		1-80	5.0						
IL IL	\$	· E	1-80 1-80	5.0 3.1	0:03	IL/IN State Line	819.4	12:45	2301.0	35:35
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IL IL IN		E E E	1-80 1-80	3.1 15.6	0:03 0:16	IL/IN State Line +I 80 I 94, IN	835.0	13:00	2316.6	35:51
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MAPS & DRIVING DIRECTIONS

Home → Yellow Pages → Phone Search → Listings → Map



ENCONTRAR NEGOCIOS DONDE SE HABLE ESPAÑOL

Maps

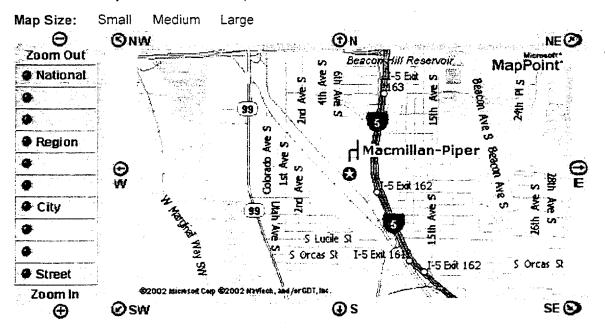
Macmillan-Piper

655 South Edmunds Street, Seattle, WA 98108 (206) 340-2854 map | driving directions | add to My Directory

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From: Colleen Johansen

Sent: Tuesday, April 22, 2003 10:42 AM To: 'Lee Johansen@3606954787'

Cc: Colleen Johansen Subject: B056-0001-511

THANK YOU VERY MUCH......THERE ARE MORE OF THESE ON A CONSISTENT BASIS.......YOU CAN HAVE THEM ALL IF YOU WANT

YOKOTA INTERNATIONAL, INC

April 22, 2003

Please sign and return to Yokota

To: Gulick Int'l a signed rate contract on Attn:

Lee this load. Include reference,

Tel: 503-274-1040 contract number. This load is FAX: 360-695-4787 subject to an individually

determined rate.

Pick up Delivery Instructions

Yokota Reference Number: B056-0001-511

Pick up : Macmillan-Piper

655 South Edmunds Street

Seattle, WA 98108

Tim Rose @ 206-340-2854

Cargo from: Container NYKU7003443

374 packages Silicone Rubber and Fluid 24,951 pounds

UN 1993 Class 3

MUST BE KEPT AT 20C

PLEASE SEE DELIVERY ORDER

Deliver to: Amware Distribution

19000 Holland Road Cleveland, OH 44142

POC : Rosemary or Debbie

440-234-4099

DELIVER AS SOON AS POSSIBLE ... MONDAY APRIL 28, 2003

Rate for service: \$3600.00

Translated by WordPort from First Choice document 333-PU.DOC

(1)

Page 2 of 2

Bill To:

Yokota International, Inc.

3556 NW Front Ave., Ste. 380

Portland, OR 97210 Phone: 503-295-0852 FAX: 503-248-0048

Please sign and return this document.

Sincerely,

Colleen Johansen

Acknowledgement Signature

F-nm:

RightFAX E-mail Gateway

ed At:

Tuesday, April 22, 2003 10:43 AM

Conversation:

Your fax has been successfully sent to Lee Johansen at 3606954787. RE: B056-0001-511

Posted To:

Inbox

Subject:

1.5m 2.6

Your fax has been successfully sent to Lee Johansen at 3606954787. RE: B056-0001-511

Your fax has been successfully sent to Lee Johansen at 3606954787. RE: B056-0001-511

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Time: 4/22/03 10:41:49 AM

Sent to 3606954787 with remote ID "3606954787"

Result: (0/339;0/0) Successful Send

Page record: 1 - 4

Elapsed time: 01:12 on channel 1

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(19)

Sincerely,

Colleen Johansen

Acknowledgement Signature

Rej# 8056-001-511

GULICK FREIGHT SVC

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AMERICA CORPORATION

650 SUPREME DRIVE

TEL: 630-350-1880

BENSENVILLE

IL 60106-3812

FAX: 630-350-2878

AS FOLIONS

KUALA LUMPUR EXPR 14E13

TOKYO, JAPAN

NYKS991403139

4/14/03

STEVEDORING SERVICE AMERICA (SSA)

DELIVER TO



AMWARE DISTRIBUTION 19000 HOLLAND ROAD

PHONE 440 234 4099 ROSEMARY/DEBBIE OH 44142

CLEVELAND

TEL:

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Chargency: CHEMTREC 374 SILICONE RUBBER & FLUID 11,314 SDA-5718 KG\$ PKGS 18.720 CARGO LOCATION: MACPIPER SEATTLE 655 S. EDMUNDS SEATTLE, WA 98108 CONTACT TIM ROSE 206 340 2854 Pickup Date !: Pickup# : Container Return Place : Bill to : MITSUBISHI LOGISTICS AMERICA CORP. T.B/L # : MA304397 Importer: SHIN-ETSU SILICONES OF AMERICA Container No. NYKU7003443 APR 21 213 *** COPY OF THIS DELIVERY ORDER MUST ACCOMPANY YOUR BILLING *** *** INTERMODAL CERTIFICATE ***

DELIVERY CHARGES

PREPAID

MATASHA

MITSUBISHI LOGISTICS AMERICA CORPORATION



itsubishi logistics AMERICA CORPORATION

THROUGH BILL OF LADING COMBINED TRANSPORT BILL OF LADING BILL OF LADING FOR PORT TO PORT SHIPMENT

SHIPPERVEXPORTER Complete Name and Address

SHIN-ETSU CHEMICAL CO., LTD.

TORYO, JAPAN

6-1. ORTENACHI 2-CHOME, CHIYODA-KU.

TOKYO, JAPAN

DOCUMENT NO.

BL NO

EXPORT MEMERIENCES

CONSIGNAE (Complete Name and Add

SHIN-ETSU SILICONES OF AMERICA, INC. HEAD OFFICE 1150 DAMAR DRIVE

AKRON OH 44305, U.S.A.

TEL:1-330-630-9860

FAX: 1-330-630-9855ATTH: WR. JIN TOBER

PEOTIFY PARTY (Complete Name and Address)

19000 HOLLAND ROAD

MA304397

2104061

FORWARDING AGENT - REFERENCES

POINT AND COUNTRY OF ORIGIN

1) SAME AS CONSTGNEE

2) ANNARE DISTRIBUTION VAREHOUSE

CLEVELAND, OH 44142, U.S.A.

DOMESTIC ROUTING/EXPORT INSTRUCTIONS

MITSUBISHI LOGISTICS AMERICA CORP.

CHICAGO BRANCH

650 SUPREME DRIVE BENSENVILLE.

IL 60106-3812 U.S.A.

PLACE OF RECEIPT PRECAPRIAGE BY TÜKYO CY 14 L I BORT OF LOADING KUALA LUMPUR EXPRESS

TOKYO, JAPAN

ONWARD INLAND FIGURING

DATE

FORT OF DISCHARGE PLACE OF DELIVERY SEATTLE CLEVELAND.OH DOOR

PARTICULARS FURNISHED BY SHIPPER

JARKS AND NUMBERS	NO. OF PKGSL	DESCRIPTION OF PACKAGES AND GOODS	GROSS WEIGHT	MEASUREMENT
- AS PER ATTACHED		"SHIPPER'S LOAD & COUNT"	K GS	ИЗ
SHEET -		SILICONE RUBBER & FLUID	11.316	18.720
** HARK NO. KSG-17 FLANMABLE L UN1993 CLASS:3 F/P: 55 DEG P/G:III H/W:1900 KG 10 D/M HYKU 7003443	IAUID, N.O REES C	CHENTREC 1 CONTAINER ############ 10 DRUMS 13 PALLETS CANS & 340 BAGS) 23 PACKAGES (374 PACKAGES)	Y CONTACT (24 HRS) 800-	424-9300
"FREIGHT PRE		CONTAINER ONLY	ORIGI	NAL

PREIGHT AND CHARGES:

FREIGHT AS ARRANGED

SHEPPED ON BOAPD ON APR. - 6, 2003 MITSURSH LOGISTICS

NOTICE THE TERMS AND CONDITIONS ON THE PEVERNE SIDE MERCUF LIMIT THE CHARGES LIMILITY TO MANAGEM OF LEE SECONER PROCESSE OR CUSTOMAY PRESCRIT LINT: BY INCOMPORATION OF THE LLE CAPAGGED GOODS BY SEA ACT. TISK, UNLESS THE MERCHANT DECLARES A HIGHER CARGO VALUE BELOW AND PAYS THE CAPAGGED AVAILABLE PRESCRIT CHARGE.

DECLARD COMOS WATERLES.

FINENCIANT ENTERS AVAILE CARRESTS LIMITATION OF LIMITATY SHALL HOT APTLY AND THE AD VALOREM RATE WALL SE CHARGED.

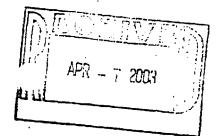
WILL SE CHARGED.

IN ACCEPTING THIS BILL OF LADING ANY LOCAL CLISTOMS ON PRIVELESSES TO THE CONTRARY NOT WITHSTANDING IN ACCEPTING THIS BILL OF LADING MORES TO THE GOODS AND THE HILLDER, OF THIS BILL OF LADING MORES TO SECURIO BY ALL THE STPULATION, ENCOPPTIONS AND COMMITTIONS STATED MERICING METHER WEIGHT FOR HINDER STANDED ON SECONDONATION, ENCOPPTIONS AND COMMITTIONS STATED MERICING METHER WITH STANDING STANDED ON SECONDONATION OF THE PROOFF OR RECEIVED SIDE HERRICOT, AS RILLY AS THE PROOFF OF THE STANDING ALL STANDING METHOD OF THE PROOFF OF THE STANDING ACCOMPLISHED, THE OTHERS TO STANDING VOID.

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MONTH

AS AGENT

MITSUBISKI LOGISTICS CORPORATION

YEAR

COPPOBATION

TOYUG JAPAN D - 24

M.L.A.C

04/21/03 MON 13:13 FAX 630 3502220

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ケイヒンナイガ イフャワーディッグ

定院管明報書 DECLARATION OF BANGENOUS GROODS FOR MELTIMODAL TRANSPORT

コンテナ党論物項語書
DECLARATION OF DAMESMUS GOODS IN: CONTAINER - CONTAINER
PACKING CENTIFICATE FOR MEJIMONE TRANSPORT

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PACKING LIST

Shiretsu

Shin-Etsu Chemical Co.Ltd.

Silicone Division

6-1, Ofstermechi 2-chome, Chiyode-ku, Tokyo, Japan

TEL:(03)3246-5171

FAX(03)3248-5363

INVOICE NO.:

SDA-5718

Comm	vodity: SHIN-E	TSU SILICONE	SHIN-ETSU SILICONE												
	entity: 10,584	kg 10 dr & 13 pp								Attached She					
-	Sipped in g	ood cruber & condition pers													
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1)	11-20	SHIN-ETSU SEICONE KSQ-17 190		190 kg (180 kg X 1)	10 dr	1,900 kg	1,900	2,134	2.668	212780: 190 kg 302785: 950 kg 302788: 760 kg					
2)	1	K2G-33	384 kg	(18 kg X 24)	1 pp	384 kg	384	447.44	0.9825	303004: 384 kg					
3)	2-6	WHITON-SSB	Ţ	(25 kg X 32)	5 pp	4,000 kg	4,000	4,182.50	6.534	310228: 300 kg 310308: 3,700 kg					
	7	WHITON-SSB	500 kg	(25 kg X 20)	1 pp	500 kg	500	531.40	0.8784	310306: 500 kg					
4)	1	ZNC03-S	800 kg	(20 kg X 40)	1 pp	800 kg	800	638.9 O	1.3068	18122: 260 kg 20122: 540 kg					
5)	8-11 12	HAKUENKA-U HAKUENKA-U		(25 kg X 25) (25 kg X 20)	4 pp 1 pp	2,500 kg 500 kg	2,500 500	2,647.60 534.10	5. <u>22</u> 72 1.1228	2J70: 2,500 kg 2J70: 500 kg					
					10 dr & 13 pp	10,584 kg	10,584 kgs	11,315.94 kgs	18.7197 m						

SHIN-ETSU CHEMICAL CO.,LTD.

Silicone Division

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ATTACHED SHEET

1 KSQ-17 40003345 CLEVELAND C/S NO. 11 - 20 MADE IN JAPAN SESA NET WT. 1,800KG 190KG × 10 LOT NO.

2 KSG-33 40003827 CLEVELAND C/S NO. 1 MADE IN JAPAN SESA NET WT. 384KG 18KG × 24 LOT NO.

3-7

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3 WHITON-SSB 40003972 CLEVELAND C/S NO. 2 - 7 MADE IN JAPAN SESA NET WT. 4,500KQ 25KG × 180 LOT NO.

4 ZNCO3-S 40003972 CLEVELAND C/S NO. 1 MADE IN JAPAN SESA NET WT. 800KG 20KG × 40 LOT NO.

5 HAKUENKA-U 40003972 CLEVELAND C/S NO, 8 - 12 MADE IN JAPAN SESA NET WT. 3,000KG 25KG × 120 LOT NO, M.L.A.C

04

04/21/03 MON 15:50 FAX 3105191813

MEDS NO: NU-06-05300856

PRODUCT NAME: KSG-17

1/7

MATERIAL SAFETY DATA SHEET

SECTION 1. COMPANY IDENTIFICATION

COMPANY IDENTIFICATION

MANUFACTURER'S NAME: Shin-Etsu Chemical Co., Ltd.

ADDRESS: 6-1, 2-Chome, Ohtemachi, Chiyodaku, Tokyo, JAPAN

EMERGENCY TELEPHONE NUMBER:

330-630-9860 (Shin-Etsu Silicones of America, Inc.) 800-424-9300 (CHEMTREC) (24hrs) (Washington, D.C. USA)

036-5326380(Shin-Etsu Silicones Europe B.V., THE NETHERLANDS)

TELEPHONE NUMBER FOR INFORMATION:

03-3246-5121 (Tokyo, JAPAN)

330-630-9860(Shin-Etsu Silicones of America, Inc.)

036-5326380 (Shin-Etsu Silicones Europe B.V., THE NETHERLANDS)

DATA PREPARED

: 04/21/1994

LAST REVISION

: 02/15/2000

DATA ISSUED

: 02/04/2003

ISSUE NO 200302000144

BASE NO

PRODUCT NAME :

. KSG-17

PRODUCT CLASSIFICATION:

Silicone Gel

SECTION 2. COMPOSITION

SINGLE OR MIXTURE:

Mixture

CHEMICAL IDENTIFICATION:

Organopolysiloxane mixture

HAZARDOUS COMPONENT (S) / (CAS No.):

Octamethylcyclotetrasiloxane/

(556-67-2) [Flammable Liquid] : ca.95 %

(See Section 8 of this MSDS for Exposure Guideline)

(See Section 11 of this MSDS for Subacute toxicity and

Reproductive effect.)

SECTION 3. HAZARDS IDENTIFICATION

HAZARDS CLASSIFICATION:

Flammable Liquids (based on IMO)

Planmable Liquid (based on DOT)

FIRE AND EXPLOSION:

Flammable and explosive hazard

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ShinElsu

MEDS NO: EU-06-05300856

PRODUCT NAME: KSG-17

2/7

POTENTIAL HEALTH EFFECT:

INHALATION : ; No significant irritation expected from a

single exposure. Overexposure may cause

reproductive effect.

SKIN contact ; May cause slight skin irritation.

Causes drying of skin.

EYES contact ; May cause slight eyes irritation.

INGESTION ; No information is available.

SECTION 4. FIRST AID MEASURES

INHALATION ; Remove to fresh air.

SKIN contact; Remove product from skin with dry cloth or

towel, and wash exposed area with detergent.

EYES contact; Immediately flush with water for at least

15 minutes.

INGESTION ; Wash out mouth with water provided person is

conscious. Never give anything by mouth to an

unconscious person. Call a physician

immediately.

SECTION 5. FIRE PIGHTING MEASURES

FLASH POINT (method used):

55 degrees C (Closed cup)

FLAMMABLE LIMITS:

[Octamethylcyclotetrasiloxane] LOWER: 0.75% UPFER: 7.4%

EXTINGUISHING MEDIA:

Foam, dry chemical or carbon dioxide

SPECIAL FIRE FIGHTING PROCEDURE:

None

UNUSUAL FIRE AND EXPLOSION HAZARD:

None

SECTION 6. ACCIDENTAL RELEASE MEASURES

STEP TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED:

Shut off all ignition sources.

Contain the spill or leak.

Scrape up with cardboard or rag and place in container.

SECTION 7. MANDLING AND STORAGE

PRECAUTION TO BE TAKEN IN HANDLING AND STORING:

Keep container closed when not in use.

Store in a cool place.

Keep away from heat, sparks and flame.

MEDS NO: 20-06-05300856

PRODUCT NAME: KSG-17

3/7

4

Do not lay the container on its side.

Use with adequate ventilation.

Avoid prolonged breathing vapor.

Avoid contact with eyes and prolonged or repeated skin contact.

Keep out of reach of children.

* * * * * Information about the emptied container * * * * *

Do not re-use this container.

This container will be very hazardous when emptied.

Residues will be explosive or flammable.

Reep away from heat, sparks and flame.

Do not puncture or cut this container, and do not wald on or near this container.

SECTION 1. EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE GUIDELINES:

ACGIH TLV-TWA : Not established,

OSHA PEL: Not established [Octamethylcyclotetrasiloxane]

RESPIRATORY PROTECTION(specify type):

Use respiratory protection unless adequate local exhaust

ventilation is provided. (Organic vapor type)

VENTILATION:

LOCAL EXHAUST: Recommended

MECHANICAL (general): Adequate ventilation system

SPECIAL: Unknown OTHER: Unknown

PROTECTIVE GLOVES:

Plastic film or rubber gloves

EYE PROTECTION:

Safety glasses

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

Eyewash equipment

WORK/HYGIENIC PRACTICES:

Keep away from heat, sparks and flame.

Avoid prolonged breathing vapor.

Avoid contact with eyes and prolonged or repeated skin contact.

Wash hands and gargle after handling.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

BOILING POINT:

175 degrees C [Octamethylcyclotetrasiloxane]

VAPOR PRESSURE:

0.75mmHg (20 degrees C) [Octamethylcyclotetrasiloxane]

VAPOR DENSITY (air=1):

M.L.A.C

800

ShinEtsu

MEDE NO: 20-06-05300856

PRODUCT NAME: KSG-17

4/7

>1 [Octamethylcyclotetrasiloxane]

SPECIFIC GRAVITY:

0.95

(25 degrees C)

MELTING POINT:

Not applicable

EVAPORATION RATE:

<1 (Butyl Acetate=1) [Octamethylcyclotetrasiloxane]</pre>

SOLUBILITY IN WATER:

Not soluble

APPEARANCE (color):

Colorless, transparent

APPEARANCE (form):

Paste

ODOR:

Odorless

SECTION 10. STABILITY AND REACTIVITY

STABILITY:

Stable

CONDITION TO AVOID:

None

INCOMPATIBILITY (material to avoid):

None

" HAZARDOUS DECOMPOSITION OR BY-PRODUCT:

Thermal breakdown of this product during fire or very high heat condition may evolve the following hazardous decomposition product: Carbon oxides and traces of incompletely burned carbon compounds. Silicon dioxide.

Formaldehyde.

HAZARDOUS POLYMERIZATION:

Will not occur

CONDITION TO AVOID:

None

SECTION 11. TOXICOLOGICAL INFORMATION

SKIN IRRITATION:

SKIN-RABBIT : 500mg/24Hr MILD [Octamethylcyclotetrasiloxane]

BYE IRRITATION:

EYE-RABBIT : 500mg/24Rr MILD [Octamethylcyclotetrasiloxane]

SENSITIZATION:

No evidence of sensitization [Octamethylcyclotetrasiloxane]

ACUTE TOXICITY(LD50):

LD50(Oral/Rat) : >5g/kg [Octamethylcyclotetrasiloxane]

ACUTE TOXICITY (LC50):

LC50 (Inhalation/Rat) : >5g/m3/Hr

ShinEtsu

MEDS NO: NU-06-05300856

PRODUCT NAME: KSG-17

5/7

[Octamethylcyclotetrasiloxane]

SUBACUTE TOXICITY:

Repeated inhalation or oral exposure of mice and rats to octamethylcyclotetrasiloxane and decamethylcyclopentasiloxane produced an increase in liver size. No gross histopathological or significant clinical chemistry effects were observed. An increase in liver metabolizing enzymes, as well as a transient increase in the number of normal cells (hyperplasia) followed by an increase in cell size (hypertrophy) were determined to be the underlying causes of the liver enlargement. The biochemical mechanisms producing these effects are highly sensitive in rodents, while similar mechanisms in humans are insensitive.

CARCINOGENICITY:

NTP:Not listed, IARC:Not listed, OSHA REGULATED:Not listed MUTAGENICITY:

Negative (Bacteria) [Octamethylcyclotetrasiloxane] REPRODUCTIVE EFFECT:

Octamethylcyclotetrasiloxane administered to rats by whole body inhalation at concentrations of 500 and 700 ppm for 70 days prior to mating, through mating, gestation and lactation resulted in decreases in live litter size. Additionally, increases in the incidence of deliveries of offspring extending over an unusually long time period (dystocia) were observed at these concentrations. Statistically significant alterations in these parameters were not observed in the lower concentrations evaluated (300 and 70 ppm). In a previous range-finding study, rats exposed to vapor concentrations of 700 ppm had decreases in the number of implantation sites and live litter size. The significance of these findings to humans is not known.

TERATOGENIC EFFECT:

No teratogenic effects in the rats and rabbits [Octamethylcyclotetrasiloxane].

OTHER INFORMATION:

None

SECTION 12. ECOLOGICAL INFORMATION

BIODEGRADATION:

No information is available.

BIOACCUMULATION:

Bioconcentration Factor (BCF) / (Fathead minnows) : 12400 [Octamethylcyclotetrasiloxane].

AQUATIC TOXICITY:

No apparent toxicity for fish [Octamethylcyclotetrasiloxane] OTHER INFORMATION:

Vapor undergoes indirectly photolysis in the troposphere.

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ShinEtsu

MEDS NO: EU-06-05300856

PRODUCT NAME: KSG-17

6/7

SECTION 13. DISPOSAL CONSIDERATIONS

Can be burned in chemical incinerator equipped with afterburner and scrubber but exert extra care in igniting as this product is very flammable.

Do not dispose of the emptied container unless the contents have been completely removed and container has been flushed with a clean neutral solvent and then dried up.

Do not dispose the emptied container unlawfully.

Observe all federal, state, and local laws.

SECTION 14. TRANSPORT INFORMATION

<IMO INFORMATION>

ID No.:

UN 1993

CLASSIFICATION AND CLASS:

Flammable Liquids / Class 3.3

PACKAGING GROUP:

III

PROPER SHIPPING NAME:

Flammable Liquids, N.O.S.

TECHNICAL SHIPPING NAME:

Organosiloxane

MARINE POLLUTANT:

None

<DOT INFORMATION>

ID No. (49CFR 172.101):

UN 1993

HAZARD CLASS (49CFR 172.101):

3, Flammable Liquid

PACKING GROUP (49CFR 172.101):

III

PROPER SHIPPING NAME (49CFR 172.101):

Flammable Liquids, N.O.S.

TECHNICAL SHIPPING NAME:

Organosiloxane

DOT REPORTABLE QUANTITY (49CFR 172.101, APP.) :

HAZARD SUBSTANCE(S) NAME / (CAS No.), CONTENTS AND RQ

Not applicable

SECTION 15. REGULATORY INFORMATION

TOXIC SUBSTANCES CONTROL ACT (TECA) STATUS:

Listed on the TSCA Inventory.

ShinEtsu

MEDS NO: NU-06-05300856

PRODUCT NAME: KSG-17

7/7

EUROPEAN INVENTORY OF EXISTING COMMERCIAL CHEMICAL SUBSTANCES (EINECS) STATUS:

Listed on the EINECS.

LABELING ACCORDING TO EC-REGULATIONS REQUIRED:

SYMBOL : Xn

R-PHRASE : (R-10) Flammable

(R-62) Possible risk of impaired fertility.

S-PHRASE: (S-51) Use only in well-ventilated areas.

CONTAINS : Octamethylcyclotetrasiloxane ca. 95%

SUPERFUND AMENDMENTS AND REAUTHORIZALTION ACT OF 1986 (SARA)

TITLE III SECTION 313 SUPPLIER NOTIFICATION:

This regulation requires submission of annual reports of toxic chemical(s) that appear in section 313 of the emergency planning and community Right-To-Know Act of 1986 and 40 CFR 372.

This information must be included in all MSDS's that are copied and distributed for the material.

The toxic chemical(s) contained in this product are:

CHEMICAL NAME/(CAS No.) AND CONTENTS

** None **

CALIFORNIA PROPOSITION 65:

This regulation requires a warning for California Proposition 65 Chemical(s) under the statute.

The California Proposition 65 Chemical(s) contained in this product are: CHEMICAL NAME/(CAS No.) AND CONTENTS

** None **

SECTION 16. OTHER INFORMATION

For Industrial Use Only

This materials safety data sheet is offered solely for your information, consideration and investigation.

The data described in this MSDS consist of data on literature, our acquisitional data and analogical inference by data of similar chemical substance or product.

Shin-Etsu Chemical Co., Ltd. provides no warranties, either express or implied, and assumes no responsibility for the accuracy or completeness of the data contained herein.

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1111111111111 degree Celsius (°C)

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GULICK FREIGHT SERVICE LOGISTICS 3000 SE Hidden Way #40 E Vancouver Wa 98661

Memo

360-693-5131-Local 360-695-4787-Fax

877-470-0971

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CC:	Yoksta
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Re: _	L3c04092
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GULICK FREIGHT SVC

D-37

84/29/2883



Fr m: Colleen Johansen

Wednesday, April 23, 2003 9:32 AM

To: 'Takamas@mlac.com'; 'Natasha Chornomaz'; Tak Shimabukuro

Cc: Colleen Johansen

Subject: HAZ Load from Seattle, WA to Cleveland, OH

Good morning everyone.

This is the first update regarding Yokota Ref: B056-0001-511

The load was successfully transferred yesterday, Tuesday April 22, 2003, at approximately 1:30 pm

The ambient temperature on the dock was 52 degrees F.

The transload took approximately 30 minutes

The Linehaul refer unit was set at 25 degrees C (77 degrees F)

The Refer Trailer with the load was then transported from Seattle, WA to Portland, OR to Gulick Freight's terminal.

The monitoring of the unit is as follows:

The 7 pm reading last night was 78.5 degrees

The 7 am reading this morning Wednesday April 23, 2003 was still 78.5 degrees.

We will update you again later this afternoon.

The driver will be able to be dispatched tomorrow morning, Thursday April 24, 2003.

He will continue, during transport, to record the refer temperature.

Thank you and have a good day.

Sincerely,

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 503-248-0048

email: cjohanse@yokotaintl.com



From:

Tak Shimabukuro

Sent:

Wednesday, April 23, 2003 8:25 AM

To:

Colleen Johansen

Subject:

Seattle-Cleveland, OH/ Mr. Takama

Follow Up Flag: Follow up Flag Status: Flagged

Ms. Colleen,

Please closely monitor and daily update the location of this Urgent Critical Cargo as per strong request of Mr. Takama. His cell phone number is (312) 865-8117; in case of any delay, please advise him of the FACTS on this move. In addition to his e-mail address, please keep above number for your reference.

Thank you for the great coordination to serve this customer!

Tak

Yokota Int'l / SSA Mbl: (310) 418 4721

Fx: (310) 519 0715

From: Lee Johansen [ljohansen@gulicktrucking.com]

Sent: Wednesday, April 23, 2003 12:41 PM

To: Colleen Johansen

Subject: FW: HAZ Load from Seattle, WA to Cleveland, OH

Status update at 1230 PM 4/23: Reefer set at 77 F, reading 77.5 F—Reefer fuel tank 3/4 full. Driver will leave before noon tomorrow 4/24.

----Original Message----

From: Lee Johansen [mailto:ljohansen@gulicktrucking.com]

Sent: Wednesday, April 23, 2003 9:41 AM

To: 'Colleen Johansen'

Subject: RE: HAZ Load from Seattle, WA to Cleveland, OH

FYI—we are setting the Reefer unit on continuous while in the yard. The driver will change it back to cycle once he picks it back up. The reason for that is if the reefer stops for any reason during cycle it won't restart itself. I am not too concerned considering the outside temp but better safe than sorry. Our shop is also monitoring the unit while it is here. Will have another update for you in about an hour.

----Original Message----

From: Colleen Johansen [mailto:CJohanse@yokotaintl.com]

Sent: Wednesday, April 23, 2003 9:32 AM

To: Takamas@mlac.com; Natasha Chornomaz; Tak Shimabukuro

Cc: Colleen Johansen

Subject: HAZ Load from Seattle, WA to Cleveland, OH

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The 7 am reading this morning Wednesday April 23, 2003 was still 78.5 degrees.

We will update you again later this afternoon.

The driver will be able to be dispatched tomorrow morning, Thursday April 24, 2003.

He will continue, during transport, to record the refer temperature.

Thank you and have a good day.

Sincerely,

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852



FAX 503-248-0048

email: cjohanse@yokotaintl.com

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- Allegrand

From:

Colleen Johansen

:

Wednesday, April 23, 2003 4:22 PM

To:

'Takamas@mlac.com'; 'Natasha Chornomaz'; Tak Shimabukuro

Cc: Subject: Colleen Johansen
RE: HAZ Load from Seattle, WA to Cleveland, OH

Good evening!

The condition of the load, as referenced by Yokota B056-0001-511, is as follows:

At 1600 hours (4 PM PDT) The refer trailer registered 77 degrees F. Refer is set at 77 degrees F. We will update you status in the morning and the driver will continue as he heads east.

Thank you all. Sincerely,

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

email: cjohanse@yokotaintl.com

-----Original Message-----

From:

Colleen Johansen

Sent:

Wednesday, April 23, 2003 9:32 AM

To:

'Takamas@mlac.com'; 'Natasha Chornomaz'; Tak Shimabukuro

Cc:

Colleen Johansen

Subject:

HAZ Load from Seattle, WA to Cleveland, OH

Good morning everyone.

This is the first update regarding Yokota Ref: B056-0001-511

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The 7 am reading this morning Wednesday April 23, 2003 was still 78.5 degrees.

We will update you again later this afternoon.

The driver will be able to be dispatched tomorrow morning, Thursday April 24, 2003

He will continue, during transport, to record the refer temperature.

Thank you and have a good day.

Sincerely,

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

email: cjohanse@yokotaintl.com



From: Lee Johansen [ljohansen@gulicktrucking.com]

Sent: Wednesday, April 23, 2003 4:20 PM

To: Colleen Johansen

Subject: FW: HAZ Load from Seattle, WA to Cleveland, OH

-----Original Message-----

From: Lee Johansen [mailto:ljohansen@gulicktrucking.com]

Sent: Wednesday, April 23, 2003 1:10 PM

To: 'Colleen Johansen'

;-:---

Subject: RE: HAZ Load from Seattle, WA to Cleveland, OH

Update: 4/23 at 1600 hours-----temp is 77 F---set at 77 F

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

email: cjohanse@yokotaintl.com

----Original Message-----

From: Lee Johansen [mailto:ljohansen@gulicktrucking.com]

Sent: Wednesday, April 23, 2003 12:41 PM

To: Colleen Johansen

Subject: FW: HAZ Load from Seattle, WA to Cleveland, OH

Status update at 1230 PM 4/23: Reefer set at 77 F, reading 77.5 F—Reefer fuel tank 3/4 full. Driver will leave before noon tomorrow 4/24.

----Original Message----

From: Lee Johansen [mailto:ljohansen@gulicktrucking.com]

Sent: Wednesday, April 23, 2003 9:41 AM

To: 'Colleen Johansen'

Subject: RE: HAZ Load from Seattle, WA to Cleveland, OH

FYI—we are setting the Reefer unit on continuous while in the yard. The driver will change it back to cycle once he picks it back up. The reason for that is if the reefer stops for any reason during cycle it won't restart itself. I am not too concerned considering the outside temp but better safe than sorry. Our shop is also monitoring the unit while it is here. Will have another update for you in about an hour.

----Original Message-----

مدران عربهماني

a distant



From: Colleen Johansen [mailto:CJohanse@yokotaintl.com]

Sent: Wednesday, April 23, 2003 9:32 AM

To: Takamas@miac.com; Natasha Chornomaz; Tak Shimabukuro

Cc: Colleen Johansen

Subject: HAZ Load from Seattle, WA to Cleveland, OH

Good morning everyone.

This is the first update regarding Yokota Ref: B056-0001-511

The load was successfully transferred yesterday, Tuesday April 22, 2003, at approximately 1:30 pm

The ambient temperature on the dock was 52 degrees F.

The transload took approximately 30 minutes

The Linehaul refer unit was set at 25 degrees C (77 degrees F)

The Refer Trailer with the load was then transported from Seattle, WA to Portland, OR to Gulick Freight's terminal.

The monitoring of the unit is as follows:

The 7 pm reading last night was 78.5 degrees

The 7 am reading this morning Wednesday April 23, 2003 was still 78.5 degrees.

We will update you again later this afternoon.

The driver will be able to be dispatched tomorrow morning, Thursday April 24, 2003.

He will continue, during transport, to record the refer temperature.

Thank you and have a good day.

Sincerely,

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

:r-~:

Colleen Johansen

30

Thursday, April 24, 2003 1:14 PM

ō:

'Natasha Chornomaz'; 'Takamas@mlac.com'

c:

Tak Shimabukuro; Colleen Johansen

Subject:

RE: HAZ Load from Seattle, WA to Cleveland, OH

Good afternoon all.

This is the update for the load headed to Cleveland, OH At 0700 today Thursday, April 24, 2003 the refer registered 77 degrees F At the time of dispatch shortly thereafter it still was registering 77 degrees F As the driver checks in we will report time and temperature. Thank You and have a good afternoon.

Colleen Johansen Yokota International Inc. 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

email: cjohanse@yokotaintl.com

----Original Message-----

From:

Natasha Chornomaz [mailto:chornomazn@mlac.com]

Sent:

Thursday, April 24, 2003 12:57 PM

To:

Colleen Johansen

Subject:

RE: HAZ Load from Seattle, WA to Cleveland, OH

Hello Colleen -

Could you please update me with the status? Thanks

Natasha

----Original Message----

From: Colleen Johansen [mailto:Clohanse@yokotaintl.com]

Sent: Wednesday, April 23, 2003 5:22 PM

To: Takamas@mlac.com; Natasha Chornomaz; Tak Shimabukuro

Cc: Colleen Johansen

Subject: RE: HAZ Load from Seattle, WA to Cleveland, OH

Good evening!

The condition of the load, as referenced by Yokota B056-0001-511, is as follows: At 1600 hours (4 PM PDT) The refer trailer registered 77 degrees F. Refer is set at 77 degrees F. We will update you status in the morning and the driver will continue as he heads east. Thank you all. Sincerely,

Colleen Johansen Yokota International Inc. 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

-----Original Message-----

From:

Colleen Johansen

Sent:

Wednesday, April 23, 2003 9:32 AM

To:

Takamas@mlac.com'; 'Natasha Chomomaz'; Tak Shimabukuro

Cc:

Colleen Johansen

Subject:

HAZ Load from Seattle, WA to Cleveland, OH

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This is the first update regarding Yokota Ref: B056-0001-511

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The 7 am reading this morning Wednesday April 23, 2003 was still 78.5 degrees.

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The driver will be able to be dispatched tomorrow morning, Thursday April 24, 2003.

He will continue, during transport, to record the refer temperature.

Thank you and have a good day.

Sincerely,

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048





From: Lee Johansen [ljohansen@gulicktrucking.com]

Sent: Thursday, April 24, 2003 2:02 PM

To: Colleen Johansen

Subject: RE: Temperature monitoring!

Bill Sheer Trc #112 Trlr#112A left the yard at 1355 4/24 headed for Mexico. Reefer set back to cycle at 77 F, reading at 78.5 F.

----Original Message----

From: Colleen Johansen [mailto:CJohanse@yokotaintl.com]

Sent: Tuesday, April 22, 2003 2:14 PM

To: Lee Johansen

Subject: Temperature monitoring!

Thanks for your good help as always. Would you be so kind as to provide me with a temp reading once or twice a day?

As you can see there is great concern on the part of our customer.

Love u

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048



F~¬m:

Colleen Johansen

Ł:

Friday, April 25, 2003 10:04 AM

To:

'Takamas@mlac.com'; 'Natasha Chornomaz'; Tak Shimabukuro

Cc:

Colleen Johansen

Subject:

Yokota Ref: B056-0001-511

Good morning everyone.

Here is the update as of 0915 today Friday April 25, 2003

Everything is looking good!

Have a good day all.

Bill Sheer Tractor # 112 is in Boise Id at 0915 4/25. Reefer set at 77 F Reads at 76F. 2027 miles to destination—on target for Monday delivery.

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048



m· t Natasha Chornomaz [chornomazn@mlac.com]

Friday, April 25, 2003 10:07 AM

Colleen Johansen

ject:

RE: Yokota Ref: B056-0001-511

;olieen -

nks for the info!

₃sha

----Original Message----

From: Colleen Johansen [mailto:CJohanse@yokotaintl.com]

Sent: Friday, April 25, 2003 11:04 AM

To: Takamas@mlac.com; Natasha Chornomaz; Tak Shimabukuro

Cc: Colleen Johansen

Subject: Yokota Ref: B056-0001-511

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Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048



From:

Colleen Johansen

3

Friday, April 25, 2003 1:11 PM

1.

'Natasha Chornomaz'

Cc:

Tak Shimabukuro; Colleen Johansen

Subject:

RE: Yokota Ref: B056-0001-511

Yes. I did today and had to leave a message for Rosemary.

The driver has the number as well and I have asked the dispatcher to verify that a call was or has been made. As soon as I know I will let you know.

Thanks much

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

email: cjohanse@yokotaintl.com

----Original Message----

From:

Natasha Chornomaz [mailto:chornomazn@mlac.com]

Sent:

Friday, April 25, 2003 1:03 PM

To:

Colleen Johansen

Subject:

RE: Yokota Ref: B056-0001-511

Hi Colleen -

This is probably a silly question, but you have contacted Amware Distribution to let them know this is arriving Monday, ight? Also, approximately what time on Monday are we looking at here? Morning? Afternoon?

Thanks

Natasha

----Original Message----

From: Colleen Johansen [mailto:CJohanse@yokotaintl.com]

Sent: Friday, April 25, 2003 11:04 AM

To: Takamas@mlac.com; Natasha Chornomaz; Tak Shimabukuro

Cc: Colleen Johansen

Subject: Yokota Ref: B056-0001-511

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Everything is looking good!

Have a good day all.

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Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210 Phone 503-295-0852 FAX 503-248-0048 email: cjohanse@yokotaintl.com





From:

Colleen Johansen

Sent:

Friday, April 25, 2003 1:59 PM

To:

'Takamas@mlac.com'; 'Natasha Chornomaz'

Cc:

Tak Shimabukuro: Colleen Johansen

Subject: Seattle to Cleveland Yokota Ref: B056-0001-511

Good afternoon again all!

This is the most recent (just received) message from the driver. He is making good time and has done all to complete a smooth transport. He will update me over the weekend and I will email / phone all.

----Original Message-----

As of 1330 hrs 4/25 Bill is in Tremonton, Ut, approx1760 miles from destination. He will shut down for 8 hrs rest in approx 30 minutes. Called and talked to receiving at 1330 hrs. Rcvg is 0800 to 1400 and he expects to fit in that window. He has directions. Reefer set at 77F, reading 78F.

If you haven't given me your cell phones or the phone number at which you would like to be notified over the weekend, please do so. I will follow your directions individually, depending upon what information, when and how you indicate.

Sincerely,

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048



From: Colleen Johansen [c.johansen@attbi.com]

Sent: Saturday, April 26, 2003 6:18 PM

To: chornomazn@mlac.com; takamas@mlac.com; Tak Shimabukuro

Cc: Colleen Johansen

Subject: Seattle WA to Cleveland OH Yokota Ref:B056-0001-511

Good afternoon all!

I have received two update calls today from our driver with the HAZ load to Amware in Cleveland. At 4:15 PDT he was in Big Springs NE. His refer temp was set at 77 and was registering 75 degrees F. ALL IS WELL. His ETA remains Monday April 28, 2003. He will update me again tomorrow and I will do the same for all of you. Sincerely,

Colleen Johansen

Yokota International, Inc.

p.s. Hope you are all having a good weekend.



From: S.Takama [takamas@mlac.com]

Sent: Saturday, April 26, 2003 8:04 PM

To: 'Colleen Johansen'; chornomazn@mlac.com; Tak Shimabukuro

Cc: Colleen Johansen

Subject: RE: Seattle WA to Cleveland OH Yokota Ref. B056-0001-511

Dear Colleen,

Thank you for your update. Have a good night!

Regards S.Takama

----Original Message----

From: Colleen Johansen [mailto:c.johansen@attbi.com]

Sent: Saturday, April 26, 2003 9:18 PM

To: chornomazn@mlac.com; takamas@mlac.com; tshimabu@yokotaintl.com

Cc: cjohanse@yokotaintl.com

Subject: Seattle WA to Cleveland OH Yokota Ref: B056-0001-511

Good afternoon all!

I have received two update calls today from our driver with the HAZ load to Amware in Cleveland . At 4:15 PDT he was in Big Springs NE . His refer temp was set at 77 and was registering 75 degrees F. ALL IS WELL. His ETA remains Monday April 28, 2003. He will update me again tomorrow and I will do the same for all of you.

Sincerely,

Colleen Johansen

Yokota International, Inc.

p.s. Hope you are all having a good weekend.

From:

Colleen Johansen

nt:

Monday, April 28, 2003 8:46 AM

:بر

'Takamas@mlac.com'; 'Natasha Chornomaz'

Cc:

Tak Shimabukuro; Colleen Johansen

Subject:

Update B056-0001-511

Good morning everyone!

At 0810 this morning our driver headed to Cleveland, OH was 20 miles from his exit for delivery. He had already made contact with the consignee and has been given a NOON appointment for delivery. At this time EVERYTHING IS LOOKING VERY GOOD.

Thank you for the opportunity to work with you. We look forward to helping you again in the near future. Sincerely,

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048



From:

Colleen Johansen

Monday, April 28, 2003 11:45 AM

'Lee Johansen'

Cc:

Colleen Johansen; Tak Shimabukuro

Subject: Diversion

This is confirm that the diversion charge for the Cleveland HAZ load will be paid at the rate of \$ 50.00 And I understand that the ambient temperature at the dock in Cleveland is 72 degrees F and the refer is still set at 77 degrees F.

Please extend our THANKS TO BILL SHEER FOR A JOB VERY WELL DONE!

Thank you very much.

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048



From: •

ATOMA

Colleen Johansen

Monday, April 28, 2003 11:53 AM

Cc:

'Takamas@mlac.com', 'Natasha Chomomaz', Tak Shimabukuro

بالأيم للوالي 77,77

Colleen Johansen

Subject:

Diversion for 1056-0001-511

Please be advised that the CHARGE FOR THE DIVERSION IS \$50.00 per our carrier.

This is the minimum amount.

Thank you all. Sincerely,

Colleen Johansen Yokota International Inc. 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048



From:

Colleen Johansen

ent:

Monday, April 28, 2003 11:45 AM

. 0:

'Lee Johansen'

Cc:

Colleen Johansen; Tak Shimabukuro

Subject:

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Thank you very much.

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048



rom:

Natasha Chomomaz [chomomazn@mlac.com]

JI.

Tuesday, April 29, 2003 1:44 PM

ა: ubject: Colleen Johansen RE: Diversion

i Colleen –

es, we will accept the diversion fee.

atasha

----Original Message-----

From: Colleen Johansen [mailto:CJohanse@yokotaintl.com]

Sent: Tuesday, April 29, 2003 2:35 PM

To: Natasha Chornomaz **Subject:** RE: Diversion

P>S> Did you get Mr. Takama's approval on the \$50.00 for the diversion????

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

email: cjohanse@yokotaintl.com

----Original Message----

From: Natasha Chomomaz [mailto:chomomazn@mlac.com]

Sent: Tuesday, April 29, 2003 1:27 PM

To: Colleen Johansen

Subject: RE: Diversion

Helio Colleen -

Thanks for the info and all your help. I hope that this is all I'll need! I'll be looking for the fax.

Best regards

Natasha

----Original Message----

From: Colleen Johansen [mailto:CJohanse@yokotaintl.com]

Sent: Tuesday, April 29, 2003 2:21 PM

To: Natasha Chornomaz **Subject:** RE: Diversion

Good afternoon Natasha.

I am calling the carrier/ dispatcher right now!

I understand that We do have the hard copy. And I will fax it to you shortly. The actual time of unload was approximately

2 pm when the driver got to the diversion address. As we all knew he was at the delivery appointment of NOON originally given by AMWARE but then was directed to a separate facility for ultimate delivery.

Please let me know if I may do more.

Thank you.



From:

Colleen Johansen

t:

Monday, April 28, 2003 10:14 AM

. . .

'Takamas@mlac.com'; 'Natasha Chornomaz'; Tak Shimabukuro

Cc:

Colleen Johansen

Subject:

Diversion

Good morning again everyone.

Our Driver checked in again at 0945 this morning April 28, 2003

At the time of offering the cargo for delivery, the folks at Amware Distribution determined that they did not want the cargo at that location. They have redirected the driver to their other facility located near the airport in Cleveland. This is the opposite side of town. The driver expected that the travel time would be about 30-45 minutes. He will advise when he is empty at the new location.

If you have any questions please feel free to call.

Sincerely,

Colleen Johansen Yokota International Inc 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

TRANSMISSION OK

TX/RX NO.

7641

CONNECTION TEL

16303502878

CONNECTION ID

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3556 NW Front Avenue, # 380 Portland, Oregon 97210

503-295-0852 Phone 503-248-0048 FAX

Yokota International Inc.

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P.S. please Imail your acceptance of the diversion charge.

Short



Colleen Johansen Yokota International Inc. 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

email: cjohanse@yokotaintl.com

----Original Message----

Natasha Chornomaz [mailto:chornomazn@miac.com]

Sent:

Tuesday, April 29, 2003 11:56 AM

To:

Colleen Johansen

Subject:

RE: Diversion

Hello Colleen -

My customer called looking for a POD with an exact time of delivery on it. Do you have one, and if you do could you please fax it to me? My fax is 630 350 2878.

Thanks and best regards

Natasha

----Original Message----

From: Colleen Johansen [mailto:CJohanse@yokotaintl.com]

Sent: Monday, April 28, 2003 11:14 AM

To: Takamas@mlac.com; Natasha Chornomaz; Tak Shimabukuro

Cc: Colleen Johansen Subject: Diversion

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Sincerely,

Colleen Johansen Yokota International Inc. 3556 N W Front Avenue Suite 380 Portland, OR 97210

Phone 503-295-0852 FAX 503-248-0048

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Appendix E: Grain Documentation

VESSEL ARRIVAL INFORMATION

AGENT:	TRANSMARINE NAVIGATION CORPORATION
VESSEL:	#Error
ETA P/S:	
ANCHOR:	
LAUNCH HIRE:	
LAUNCH LOCATION:	
BERTH:	
LAST PORT:	
NEXT PORT:	·
OWNER/OPERATOR:	#Error
VISA CREW LIST:	
CREW NATIONALITY:	
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DELIVERY CERTIFICATE

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LETTER OF AUTHORIZATION

TO WHOM IT MAY CONCERN, I MASTER OF THE M/V CYNTHIA CROWN HEREBY AUTHORIZE MY AGENTS, TRANSMARINE NAVIGATION CORPORATION, TO SIGN NOTICE OF READINESS, BILLS OF LADING AND ANY OTHER RELATED DOCUMENTS FOR ALL CARGO RECEIVED ON BOARD MY VESSEL FOR SHIPMENT TO ALL PORTS OF DESTINATION AND TO USE FOR THAT PURPOSE THEIR USUAL BILL OF LADING FORMS WHICH THEY CURRENTLY USE. SUCH BILLS OF LADING ARE TO BE IN ACCORDANCE WITH THE MATE'S RECEIPT AND ALL OTHER TERMS, EXCEPTIONS AND CONDITIONS OF THE GOVERNING CHARTER PARTY.

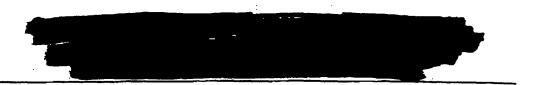
MASTER M/V CYNTHIA CROWN APR 24, 2003

6-3

CERTIFICATE OF READINESS - OF -NATIONAL CARGO BUREAU, INC.

No. Port PORTLAND FR.
This is to Certify, that the
of net tons, built at in
whereof is Master
and now lying at
is passed to load as follows:
GENERAL CARGO - Holds Nos.
BULK GRAIN - (Full Holds) Nos. =
(Part Holds) Nos. / C+ 5
Other BULK CARGOES (Identify Cargo)
HOLDS Nos. #2 44
said holds having been prepared in accordance with the Regulations of the United States Coast Guard and the Code of Federal Regulations so far as applicable, and in accordance with the recommendations of National Cargo Bureau, Inc.
ine.
THIS CERTIFICATE VALID AT PORT OF ISSUANCE ONLY
THIS CERTIFICATE IS NOT A FORM OF INSURANCE, OR GUARANTEE, AND IS ISSUED ON THE FOLLOWING TERM; AND CONDITIONS: This Certificate and performance of services by National Cargo Bureau ("NCS") shall in no way be deemed to be a representation, it determent, or warranty of acameritations, quality or fluxes for a personal size or service, of any vessel, container, range, attracture, here of material, or squiper east. NCB shall not be liable for, and the party to whom this Certificate is issued agrees to incommify and had NCB harmless from and against any and all cainers, demands, actions for demands, including legal fees, to persons and/or property which may be brought against NCB incidental to, arising out of, or in controling with the services to be performed hereunder, except for those claims natural solely by the negligence of NCB. NCB shall be discharged from all liability for negligent performance or non-performances of my services in commenced within one year after performance in discovered prior to and is claimed in writing made to NCB within 180 days and litigation is commenced within one year after performance of nurvey services. THE COMBINED LEABILITY OF NCR, ITS OFFICERS, EMPLOYEES, AGENTS OR SUBCONTRACTORS FOR ANY LOSS, CLAIM, OR DAMAGE ARISING FROM NEGLIGENT PERFORMANCE OR NON-PERFORMANCE OF ANY SERVICES IN CONNECTION WITH THE ISSUANCE OF THIS CERTIFICATE, OR FROM REACH OF ANY DIFFLIED OR EXPLESS WARRANTY OF WORKMANCIAE PERFORMANCE. OR ANY OTHER RIASON, SHALL NOT EXCEED IN THE AGGREGATE SIG,000. IN NO EVENT SHALL NOW HE ILIABLE FOR ANY CONSEQUENTAL DAMAGES. INCLUDING, BUT WITHOUT LIMITATION, DELAY, DETERMITION, LOSS OF USE, OR CUSTOMANY FORT CHARGES TO THE FARTY TO WHOM THIS CERTIFICATE IS ISSUED.
AGENT DATE
OPERATORTime passed
lar, 191

FROM : ALSC U.S. DEPARTMENT OF ACRICULTURE GRAIN INSPECTION, PACKERS AND STOCKYARDS AUMINISTRATION I F DERAL GIVAIN INSPECTION SERVICE X ORIGINAL SUBSEQUENT PREVIOUS LOCATION STOWAGE EXAMINATION WORKSHEET CERTIFICATE NO. DATED NOTE: THIS IS NOT AN OFFICIAL CLATIFICATE OF INSPECTION IDENTIFICATION DATE OF INSPECTION TIME COMPLETED M LOCATION TYPE OF INSPECTION M DEGSA [] AMA STOWAGE SPACE EXAMINED "(Stowage space) examined on the above date and found to be substantially mean, dry, free of insect infestation, and suitable to maintain the quality of the grain." "(Stowage space) examined on the above date and found not suitable to maintain the quality of the grain," because of REMARKS NAME OF APPLICANT TIME TO: FRCM: SIGNATURE OF INSPECTOR(S) STANDBY REMARKS STANDBY HOURS REG BAMIEPM | NON SPMISAM | SATISUNIOT HOLIDAY G213 G216 G214 G215 TRAVEL REMARKS TRAVEL HOURS HOLIDAY S/J/SLIN/OT REG SAMSPM NON SPMIBAM G213 G216 GZ15 TOTAL MILES MILEAGE REMARKS XXXX FGIS FORM 939 (AUG 98)



NOTICE OF READINESS

SUPPLIERS: CHARTERER: LOADPORT:	
This letter will serve notice that the above mentione Columbia River Pilot Station athrs, o	
Vessel has been entered with U.S. Customs and has readiness for loading cargo of wheat as follows:	received certificates of
National Cargo Bureau: hrs, on	
Federal Grain Service:hrs, on	
Laytime to commence as per governing Charter Part	у.
Master	÷
This document and accompanying certificates of reactendered at the offices of the above mentioned Supp	·

6-5



SUPPLIERS: CHARTERER: LOADPORT:	
This letter will serve notice that the above Columbia River Pilot Station at	
Vessel has been entered with U.S. Custom readiness for loading cargo of wheat as fo	•
National Cargo Bureau:	hrs, on
Federal Grain Service:	hrs, on
Laytime to commence as per governing Ch	narter Party.
laster	
This document and accompanying certificatendered at the offices of the above mention hrs, on	•

APPROVED OMB NO. 0580-0015 DIVIDED LOT - ORIGINAL

UNITED STATES DEPARTMENT OF AGRICULTURE FEDERAL GRAIN INSPECTION SERVICE U.S. GRAIN STANDARDS ACT

NOT NEGOTIABLE

OFFICIAL GRAIN WEIGHT CERTIFICATE

DATE OF SERVICE

Identification of Carrier

Kina of Grain

I certify that I am licensed or authorized under the United States Grain Standards Act (7 U.S.C. 71 et sed.) to weigh the kind of grain covered by this certificate and that on the above date the following identified grain was weighed under the Act, with the following results: Location of Grain

WHEAT

Net Weight Divided (pounds)

This grain was officially weighed as an undivided lot of No part of the lot was officially weighed as a separate unit.

Remarks and Stowage

Hold Nos. 1, 3, 5.

Name and Signature

This certificate is issued under the authority of the United States Grain Standards Act, as amended (7 U.S.C. 71 et seq.), and the regulations thereunder (7 CFR 800.0 et seq.). It is issued to show the kind, class, grade, quality, condition, or quantity of grain, or the condition of a carrier or container for the storage or transportation of grain, or other facts relating to grain as determined by official personnel. The statements on the certificate are considered true at the time and place the inspection or weighing service was performed. The certificate is not considered representative of the lot if the grain is transshipped or is otherwise transferred, from the identified carrier or container or if grains or other material is added to or

ved from the total lot. If this certificate is not canceled by a superseding certificate, it is receivable by all officers and all courts of the United States as prime facile evidence of the facts stated therein. This certificate does not excuse failure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or other Federal law. ** AING: Any person who shall knowingly falsely make, issue, after, forge, or counterfeit this certificate, or participate in any such actions, or otherwise violate provisions in the U.S. Grain Standards Act, the U.S. Warehouse Act, or related Federal laws is subject to criminal, civil, and administrative penalties.

The conduct of all services and the licensing of personnel under the regulations governing such services shall be accomplished without discrimination as to race, color, religion, sex, national origin, age, or handlasp.

FGIS FORM 961-L MAR 99

EXPORT

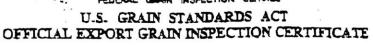
13:34

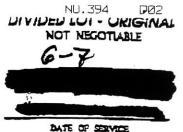
ASEAN PURILAND > 5035258851

UNITED STATES DEPARTMENT OF AUGUCLITURE

FEDERAL GRAIN INSPECTION SERVICE







		ISSUED AT	DATE OF SERVICE
i certify that I am licensed or authorized conflicate and that on the above date th	under the United States Gr e following identified grain	ain Standards Act (7 U.S.C. 71 at was inspected under the Act, with	sea.) to inspect the kind of grain covered by this in the following results:
X Original Inspection	Reinspection	Appeal inspection	Board Appeal Inspection
QUANTITY (This is NOT a Weight Certif	icate)		,
LOCATION		IDENTIFICATION OF CARRIER	
			general SS
GRADE AND KIND IN accordance with the Co.	Micros Grain Standards of the United	Status	
U.S. NO. 2 or better North Test weight per bushel 60 0.0%; Damaged kernels (to broken kernels 1.9%; Defe- of other classes (total)	.4 Pounds; Moistu tal) 0.3%; Foreig cts (total) 2.%%;	re 12.4%; Hear-damage n material 0.2%; Shru Contrasting classes	nken and 0.3%; Wheat
STOWAGE			
Scic Nes. 1, 3, 5.			
	, "	I WSPECTON Do NOT CON	SCOLES.
MARKS This grain was office was officially inspec	cidily inspected as an undivi sched as a separate unit.	Chima up 12-CC	and of the let
Protein 14.4%, 12% moistu of sprout damaged kernels Sublot protein results ra	re basis. Damag nge from 13.8% t	Brock real	CONTRA WARDS
,			
			1
APPEAL NO (1 copiesto)	APPUCANT	NAME	

This conflicate is leaved under the authority of the United States Grain Standards Act. as amended 17 U.S.C. 714 seq.1. and the requisitors thereunder 17 CFR 800.0 et seq.1. It is issued to show the land, class, grade, quality, condition, or quantity of grain, or the condition of a carrier or container for the storage or passportation of grain, or other facts relating to grain as desarrated by official personnel. The statements on the conditions are considered from the inspection or weighing service was performed. The cardinate is not considered representative of the lot I/I the grain is transcripted or is otherwise transferred from the identification or lightly and or other instantial is added to or appropriately form the transferred from the transferred from the transferred of the Continued Grame or relating to the continued of the Continued Grame or relating to the continued of the Continued Grame or relating to th smoved from the total for. If this certificate is not conceled by a supersecting certificate, it is receivable by all officers and all courts of the United States as prime facile evidence of the ust of the faces stated therein. This certificate does not excuse fallure to comply with the provisions of the Federal Food, Drug, and Cosmetic Act, or other Federal law. PLAZIONG: Any person who shall knowingly laterly make, base, after, large, or counterfelf this certificate, or participate in any such actions, or attendes violate provisions in the U.S. Grain Standards Act, the U.S. Warehouse Act, or receipt Receipt love it subject to criminal, civil, and coministrative penalities.

The conduct of all services and the Acording of parameted water the regulations governing such services shall be accomplished without discrimination at to mes, embor, religion, see, necleand drights. and or handless.

1994 York-Antwerp Rules

BERTE FERM GRAIN BILL OF LADING

SIHPPED in apparent good order and condition by vessel called the M/V

flag now lying in the Port of

on board the good ship or motor and bound for

LISAID TO BE: U.S. NO. 2 OR BETTER NORTHERN SPRING WHEAT IN BULK

Being marked and numbered as herein, and to be delivered in like order and condition at the aforesaid Port of DISCHARGE,

NOTIFY:

or his or their Assigns, he or they paying freight for said goods at the rate "

QUANTITY, DESCRIPTION AND STOWAGE:

COMMODITY: SAID TO BE:

U.S. NO. 2 OR BETTER NORTHERN SPRING WHEAT IN BULK

OUANTITY:

SAID TO WEIGH:

EOUIVALENT TO:

STOWAGE:

HOLD NOS. 1, 3, 5.

ORIGINAL

CLEAN ON BOARD: DATE:

M/V

These commodities, technology or software were exported from the United States of America in accordance with the Export Administration Regulations. Diversion contrary to U.S. law prohibited. All terms, conditions, liberties, exceptions, clauses and arbitration clauses of the Charter Party dated January 21. 2002 and addenda thereto to be considered as fully incorporated herein as if fully written.

This Bill of Lading shall have effect subject to the provisions of the Carriage of Goxals by Sea Act of the United States approved April 16, 1936, which shall be deemed to be incorporated herein, and nothing herein contained shall be deemed a surrender by the carrier of any of its rights or immunities or an increase of any of its responsibilities or liabilities under said Act. If any term of this Bill of Lading be repugnant to said Act to any extent, such term shall be void to that extent but no further.

Each Bill of Luding covering the hold or holds enumerated herein to bear its proportion of shortage and/or damage if any incurred.

Shipper's weight, quantity and quality unknown.

It is also mutually agreed that the carrier shall not be liable for loss or damage occasioned by causes beyond his control, by the perils of the seas or other waters, by fire from any cause wheresoever occurring, by barratry of the master or crew, by enemies, pirates or robbers, by arrests and restraint of Princes, rulers or people, by explosion, bursting of boilers, breakage of shafts or any latent defect in hull, machinery or apputersance, by collisions, strawling or other accidents of navigation of whatsoever kind (even when occasioned by the negligence, default or erm in judgment, of the pilot, master, manners, or other servants of the ship owner, not resulting, however, in any case, from want of due deligence by the owners of the ship or any of them, or Ship's Husband or Manager).

5. General Average shall be payable according to the York/Antwerp Rules 1994. Average Bond with values declared therein to be signed, also sufficient security to be given as required by Master or Agents. If the owner shall have exercised due diligence to make the Steamer in all respects seaworthy and to have her properly manual, equipped and supplied, it is hereby agreed that in case of danger, damage or disaster, resulting from faults or enors in navigation, or in the management of the steamer, or from any latent defect in the steamer, her machinery or appartenances, or from unseaworthiness, whether existing at the time of shipment or at the beginning of the voyage (provided the latent defect or the unseaworthiness was not discoverable by the exercise of due diligence), the consignees or owners of the cargo shall, nevertheless pay salvage, and any special charges incurred in respect of the cargo, and shall contribute with the shipowner in General Average to the payment of any sacrifices, losses or expenses of a General Average nature that may be made or incurred for the common benefit, or to relieve the adventure from any common peril, all with the same force and effect, and to the same extent, as if such danger, damage or disaster had not resulted from, or been occasioned by facults or errors in navigation or in the numagement of the vessel, or any latent defect or unseaworthiness.

6. New Jason Clause: Where the adjustment is made in accordance with the law and practice of the United States of America, the following clause shall apply: "In the event of accident, danger, damage or disaster before or after the commercement of the voyage, resulting from any cause whatsoever, whether due to negligence or not, for which, or for the consequence of which, the carrier is not responsible, by statute, contract or otherwise, the goods, shippers, consignees or owners of the goods shall contribute with the carrier in general average to the payment of any sucrifices, losses or expenses of a general average nature that may be made or incurred, and shall pay salvage and special charges incurred in respect of the goods."

"If a salving ship is owned or operated by the carrier, salvage shall be paid for as fully as if the said salving ship or ships belonged to strangers. Such deposit as the carrier or his agents may deem sufficient to cover the estimated contribution of the goods and any salvage and special charges thereon shall, if required, be made by the goods, shipper's, consigness or owners of the goods to the carrier before delivery."

7. Both to Blame Collision Clause: If the liability for any collision in which the vessel is involved while performing this bill of lading fails to be determined in accompany laws of the United States of America, the following clause chall apolice of the challenge

U.S. DEPARTMENT OF COMI FORM 7525-V (7-25-2000)	*	CENSUS BUREAU - E					EAU OF EX	PORT ADMIR	OMB No. 0607-015
14. U.S. PRINCIPAL PARTY IN INTEREST IUS	SPPI) (Complete	name and address)							0.0007-015
		ZIP CODE		2. DATE OF	XPORT	ALION	13.7	PANCECTA	TION REFERENCE NO.
		9720	i i				3.	ional gyrr	THE PERENCE NO.
b. USPPI EIN (IRS) OR ID NO.	1	TO TRANSACTION							
A . HILTIMATE CONCIGNES C.	Relat	<u></u>							
	Re-ING-AGRESS	6600					,		
b. INTERMEDIATE CONSIGNEE (Complete	e name and adi	iressi							
S. FORWARDING AGENT (Complete name	and address)								
				6. POINT (ST	ATE) OF	ORIGIN OR FTZ	NO. 7.5	DUNTRY OF	ULTIMATE DESTINATION
8. LOADING PIER (Vessel aniv)	9. METHOD	OF TRANSPORTATION IS	οεςτίγ)	14. CARRIER	IDENTI	ICATION CODE	15.	SHIPMENT	EFERENCE NO.
O. EXPORTING CARRIER	11.20RT OF	EXPORT		16. ENTRY N	NABER		17.	HAZARDO U	MATERIALS
2. PORT OF UNLOADING (Vessel and air priv)	13. CONTAIN	ERIZED (Vessel only)		18. IN BOND	CODE		19.	ROUTED EX	FORT TRANSACTION
	. '23	. 10					!	3	
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10. SCHEDULE 3 DESCRIPTION OF COMMO	Units iUse co	QUANTITY -	SHIPPI	NG WEIGHT	<u> </u>	/IN/PRODUC	T NUMBER		VALUE (U.S. doilars, omit cents) (Seiling price or cest if not
or All acheades a comes.		SCHEDULE 3 UNITISE		logramsi					soid)
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		ADMIN	ISTRA	TION RES		ons. Divers	Sion con	TRARY	D U.S. LAW
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17. LICENSE NOLLICENSE EKCEPTION SYM	SEDUAU INORI	ZATION ZB. SCCN	When	required)	1			· · · · · · · · · · · · · · · · · · ·	
NLR									
29. Duly authorized officer or employee	· to	he USPPI authorizes the ract as forwarding agenusions our purposes.	OFWERO	per named according	nri				
10. I certify that all statements made and all read and understand the instructions for Fill Out the Shipper's Export Declars forfeiture and sale, may be imposed for the requested information or for motion.	r preparation of ation." I unders maxing (also o on of U.S. laws	this nocument, set forth itang that civil and crime r fraugulent statements	n in the inslown berein, i	*Correct War alties, includir siling to prov	y to				
401; 18 U.S.C. Sec. 1901;;50 U.S.C. App. Signature	. 74101.	ndiduntral – For 1199 seaths for a trefers of Commerce (13 U.S.C.	rifetal gara						
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Date		. AUTHENTICATION IN		uiredl					

This form may be printed by private parties provided it conforms to the official form. For sale by the Superintendent of Documents.

Government Printing Office, Washington, DC 20402, and local Customs District Directors. The "Correct Way to FIR Out the Shaipper's Export Declaration" is available from the U.S. Cansus Bureau, Washington, DC 20233.

CERTIFICATE OF ORIGIN



FOR GENERAL USE AND FOR THE FOLLOWING COUNTRIES

AUSTRIA BRAZIL COLUMBIA EGYPT ERITREA FINLAND GERMANY (WESTERN) GREECE INDIA IRAN ITALY LEBANON MALAYSIA REPUBLIC OF KOREA REPUBLIC OF SIGNAPORE NETHERLANDS SAUDI

e undersigned					
(Owner o	or Agent, or Co)				
or	-				declares
(Name and Address of		MALOVAITUUA ODO			
nat the following mentione Name of Ship)	d goods shipped on	M/V CYNTHIA CRO	WN		
	2003	consigned to			
re the products of the Unit					
e the products of the offi	red States of America				
No. of pkgs.	Weight in Kilos				•
Marks and numbers	Boxes or cases	Gross	Net	Description	
					•
•					
		· · · · · · · · · · · · · · · · · · ·			
ATE OF			·		2
DUNTY OF		-			
vorn to before me		·			
s	day of	2003			
,			(Sign	ature of Owner or Agent	
fore me, rsonally appeare	Not	ary Public,	wn to me on the basis o	of satisfactory evidence to t	oe the person
ersonally appeare ame is subscribed to the withir	n instrument and acknow	•		of satisfactory evidence to to thorized capacity, and that	
signature on the instrument	the person or the entity u	pon behalf of which the pe	erson acted, executed to	ne instrument.	
	WITNESS m	y hand and official seal.			
		Chata af		h	avaminad the
ecognized Chamber of Comm outacturer's invoice of shippe			se and, according to gh		examined the I belief,
at the products named or					- ,
		Secretary			

3 information

13:34

001

See reverse for addition No physician complete can be issued until an application is at 1 (7 OFR 353) UNITED STATES DEPARTMENT OF AGRICULTURE FOR OFFICIAL USE ANDUL AND PLANT HEALTH INSPECTION SERVICE PLACE OF ISSUE PLANT PROTECTION AND QUARANTINE PHYTOSANITARY CERTIFICATE PORTLAND TO: THE PLANT PROTECTION ORGANIZATION(S) OF ORECOM CERTIFICATION This is to certify that the plants, plant product or other regulated articles described herein have been inspected and/or tested according to approx procedures and are considered to be free from the quarantine peaks, apacified by the importing contracting party and to conform with phytosanitary requirements of the importing contracting party including those for regulated non-quarantine pests. DISINFESTATION AND/OR DISINFECTION TREATMENT - TENTUENT DATE 4. CURATION AND TEMPERATURE 1 CHEVICAL (DONG PROCES 8. ACDITIONAL INFORMATION S. CONCENTRATION DESCRIPTION OF THE CONSIGNMENT 3. DECLARED MAKE AND ADDRESS OF THE CONSIGNES T. NAME AND ADDRESS OF THE EXPORTER 10. BOTANICAL NAME OF PLANTS 9. NAME OF PRODUCE AND QUANTITY DECLARED WHEAT: TRITICUM SF. -,4 11. NUMBER AND DESCRIPTION OF PACKAGES IN BULK 13. PLACE OF ORIGIN U.S.A. 34(0)) or pures WARNING: Any afteration, forgery, or unauthorized use of this phytosenitary cert A THE MENT OF THE PARTY IN THE fine of not more than \$10,000, or impresonment of not more than 5 years, or both (18. SIGNATURE OF AUTHORIZED OFFICER 17. HALLE OF AUTHORIZED OFFICER (Type or Print) 16. DATE ISSUED No liability shall attach to the United States Department of Agriculture or to any officer or representative of the Department with respect to this cert

FART : SHIFFER'S C

Previous editions are appeared after 6/30/01

PPO FORM 577 FEB 2001

DO1

1200 NW NAITO PARKWAY, SUITE 390 PORTLAND, OR 97209

PHONE 503 242-3864 503 241-4075

EMAIL portiand @ transmarine.com

STATEMENT OF FACTS

VESSEL: MV CYNTHIA CROWN

VOYAGE:

61

MASTER: NOES. JORIZA

REGISTERED NET TONS: 8,741

REGISTERED GROSS TONS: 14,431

DEADWEIGHT:

23,716

LOA: 150.52

PRINCIPAL: DOWA LINE COMPANY, LTD.

CHARTERERS: VOX TRADING USA

AGENTS:

TRANSMARINE NAVIGATION CORPORATI

LAST PORT: KOBE, Japan NEXT PORT: CHIBA, Japan

Japan

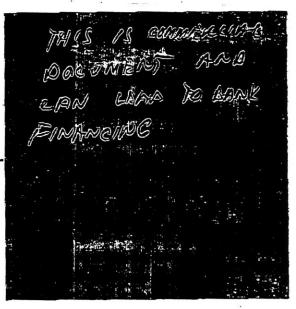
CARGO DESTINATION

BERTH: UNITED HARVEST VANCOUVER

CARGO: US WHEAT IN BULK

PRESENTED: 24 APRIL 2003 1445 HRS

OR ACCEPTED: 24 APRIL 2003 1445 HRS



Page 1

TERMS, CONDITIONS AND EXCEPTIONS OF THE GOVERNING CHARTER PARTY APPLY.

ARRIVAL CONDITIONS			BUNKERS	RECEIVED	DEPARTURE CONDITIONS		
F.O.	224.59	MT	F.O.	MT	F.O.	MT	
D.O.	31.79	MT	D.O.	MT	D.O.	MT	
F.W.	206.00	MT			F.W.	MT	
FWD DRAFT:	3.72	M	sec 8		FWD DRAFT:	М	
AFT DRAFT:	5.91	M			AFT DRAFT:	M	

REMARKS:

EXENO AGENCY

MASTER M/V CYNTHIA CROWN TRANSMARINE NAVIGATION CORPORATION AS AGENTS

1200 NW NAITO PARKWAY, SUITE 390 PORTLAND, OR 97209 PHONE 503 242-3864

FAX 503 241-4075

EMAIL portland@transmarine.com

STATEMENT OF FACTS

M/V CYNTHIA CROWN

VOYAGE 61

PAGE

2

TERMS, CONDITIONS AND EXCEPTIONS OF THE GOVERNING CHARTER PARTY APPLY.

DATE	TIME	REMARKS	
23 APRIL 2003	2105	ARRIVED COLUMBIA RIVER PILOTS/BAF	R PILOT ON BOARD
WEDNESDAY	2229	COLUMBIA RIVER PILOT ON BOARD	4
24 APRIL 2003	0512	ANCHOR DOWN AT VANCOUVER, WA A	NCHORGAGE
THURSDAY	0525	PILOT OFF	
	0845	ALL HOLDS PASSED USDA/NCB INSPEC	CTION
	1445	NOTICE OF READINESS PRESENTED/AG	CCEPTED
	1445-2400	VESSEL IDLE	
25 APRIL 2003	0001-1903	VESSEL IDLE	
FRIDAY	1903	RIVER PILOT ON BOARD FOR SHIFT TO) UHV
NIGHT SHIFT	1912	ANCHOR AWEIGH VANCOUVER ANCHO	OR .
	2000	FIRST LINE ASHORE UHV	
	2015	VESSEL ALL FAST	
	2045	COMMENCED LOADING	
	2015-2030	UNCOVER #3	
	2030-2045	INSPECT HOLDS	
	2045-2345	LOADED DNS #3	
	2345-2400	COVER #3	
	2400-0005	UNCOVER #1 / #4	·
	0005-0130	LOADED DNS #1	
	0130-0245	LOADED DNS #4	
	0245-0300	COVER #4	
		TOTAL CARGO LADEN THIS SHIFT:	6,807.0 MT
		TOTAL CARGO LADEN TO DATE:	6,807.0 MT
	0300-0800	VESSEL IDLE	
26 APRIL 2003	0800-0815	UNCOVER #4	
SATURDAY	0815-0830	CLEAN PECO	

EXENO AGENCY

MASTER M/V CYNTHIA CROWN TRANSMARINE NAVIGATION CORPORATION AS AGENTS

1200 NW NAITO PARKWAY, SUITE 390 PORTLAND, OR 97209

PHONE 503 242-3864

503 241-4075 **EMAIL** portland@transmarine.com

STATEMENT OF FACTS

M/V CYNTHIA CROWN

VOYAGE 61

PAGE

TERMS, CONDITIONS AND EXCEPTIONS OF THE GOVERNING CHARTER PARTY APPLY.

DATE	TIME	REMARKS		
26 APRIL 2003	0830-0900	LOADED DNS #4		
SAT. DAY SHIFT CONT.	0900-0915	UNCOVER #1		
	0915-1000	LOADED DNS #1		
	1000-1145	LOADED DNS #3		
	1145-1200	COVER #3		
	1200-1300	MEAL H OUR		•
	1300-1400	LOADED DNS #4		
	1400-1415	UNCOVER #1		
	1415-1500	LOADED DNS #1		
	1500-1530	STANDBY FOR CARGO		
	1530-1600	LOADED DNS #1		
	1600-1615	STANDBY FOR RAIN		
	1615-1630	LOADED DNS #1		
	1630-1700	COVER #1		
		TOTAL CARGO LADEN THIS SHIFT:	7,965.0 MT	
	·	TOTAL CARGO LADEN TO DATE:	14,772.0 MT	
	1700-2400	VESSEL IDLE, NO WORK ARRANGE		
27 APRIL 2003	0001-2400	VESSEL IDLE		
BUNDAY				
28 APRIL 2003	0001-0800	VESSEL IDLE, NO WORK ARRANGE		٠
MONDAY	0800-0815	UNOCVER & INSPECT # 4		-
	0815-1130	LOADED DNS # 4		
	1130-1200	LOADED DNS # 3		·.
	1200-1300	MEAL HOUR		
	1300-1345	LOADED DNS # 3		
	1345-1430	STANDBY FOR CARGO		
	1430-1445	LOADED DNS # 3		

EXENO AGENCY

MASTER M/V CYNTHIA CROWN TRANSMARINE NAVIGATION CORPORATION AS AGENTS

1200 NW NAITO PARKWAY, SUITE 390 PORTLAND, OR 97209 PHONE 503 242-3864

FAX 503 241-4075

EMAIL portland@transmarine.com

STATEMENT OF FACTS

M/V CYNTHIA CROWN

VOYAGE 61

PAGE 4

TERMS, CONDITIONS AND EXCEPTIONS OF THE GOVERNING CHARTER PARTY APPLY.

DATE	TIME	REMARKS		
CONTINUE:	1445-1545	STANDBY FOR CARGO		
	1545-1630	LOADED DNS # 3		
	1630-1800	LOADED DNS # 2		
	1800	LAST CARGO ON BOARD		
		TOTAL CARGO LADEN THIS SHIFT:	5,828.0 MT	
		TOTAL CARGO LADEN TO DATE:	20,600.0 MT	
	1910	RIVER PILOT ON BOARD FOR DEPART	R DEPARTURE	
· ·	1925	LAST LINE LET GO		
MAY 14, 2003	1100	MASTER ADVISED VESSELS ETA Japan		