

ICMI Cyanide Code Consigner Supply Chain Summary Audit Report

Chemours Global Ocean Supply Chain Re-Certification Audit

Submitted to:

The International Cyanide Management Institute 1400 I Street, NW – Suite 550 Washington, DC 20005 USA

2013 Audit Cycle

2016 Report Revision:
Expansion of Supply Chain Scope:
Addition of Manzanillo and Veracruz Ports - Mexico





Table of Contents

Global Ocean Supply Chain Summary	3
Consignor Name & Contact Information	
Operational and Audit Information – Global Ocean Supply Chain	
Description of the Global Ocean Supply Chain	
Global Ocean Supply Chain - Auditor's finding and attestation	7
Consignor Summary	
Operational & Audit Information for Consignor	9
Description of Consignor's role in ensuring compliance of its carriers	
Ocean Carriers and Ports – Summary of Due Diligence Investigations	22
Operational and Audit Information for Ocean Carriers and Ports	
Description of Due Diligence Information Reviewed for Ocean Carriers and Ports	24

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com

Page 2 of 34



Global Ocean Supply Chain Summary

Consignor Name & Contact Information

Name of The Chemours Company – Ocean Supply Chain

Wilmington, Delaware **Operation:**

USA

Name and contact

information for **Brian Morris**

Chemours Cyanide Business Global Product Stewardship Manager

Contact: Email: Brian.R.Morris@chemours.com

Operational and Audit Information – Global Ocean Supply Chain

The Chemours Company (formerly DuPont) is a science-based company operating in more than 70 countries. Chemours offers a wide range of products and services for markets including agriculture, nutrition, electronics, communications, safety and protection, home and construction, transportation and apparel. Solid sodium cyanide for use in the gold mining sector is manufactured at the Memphis, Tennessee plant. The plant is located just outside of Memphis in Woodstock, Tennessee.

Chemours (under the former name DuPont) was one of the original 14 Cyanide Code signatory companies announced on November 3, 2005. As such, Chemours made the commitment to obtain Cyanide Code certification for its Memphis Solid Cyanide Plant and its packaging operations. Chemours was the first Cyanide Producer to achieve certification in June 2006. The operation was re-certified in 2009 and again in 2012. This ocean supply chain was originally certified to the ICMI Cyanide Code in 2010. This report includes the results from the three-year re-certification audit and Due Diligence evaluations.

Chemours contracts with Ocean Carriers to transport their products from the Memphis Plant to international ports. The Ocean Carriers determine the U.S. ports of departure, and manage and control all aspects of the rail movements from Memphis to the U.S. ports. Pursuant to their agreements with Chemours, the Ocean Carriers identified in this report select rail carriers that comply with applicable environmental, health, safety, and security regulations which were determined through Due Diligence evaluation to be equivalent to ICMI Cyanide Code requirements. The rail segments between Memphis and U.S. ports were included in the scope of this re-certification audit. U.S./Canada rail segments used by Chemours for routes other than

Chemours Global Ocean Supply Chain Wirol 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 3 of 34



those from its Memphis plant to U.S. ports are contracted and controlled directly by Chemours and are included in a separate supply chain and certification audit report.

The re-certification audit of Chemours (DuPont) ocean supply chain management was held on July 8 and 12, 2013. The due diligence reviews of all entities within the supply chain were conducted after the on-site portion of the evaluation.

Description of the Global Ocean Supply Chain:

Chemours has been producing and shipping sodium cyanide since 1953. In the United States, the solid sodium cyanide briquettes are packaged at the Memphis Plant, at the LSI Terminal directly adjacent to the plant and at the Chemours packaging terminal in Carlin, Nevada, USA. The Global Ocean Supply Chain is used for shipments from the Memphis Plant that go by rail and then by ocean carrier. The results of the rail and barge audit and due diligence evaluations are contained in a separate report. This re-certification audit included the following components:

Global Ocean Supply Chain - All global ocean moves of sodium cyanide that originate in the United States and those that originate at the Port of Antwerp as part of the Chemours Europe Supply Chain are within the scope of this re-certification audit. Chemours' processes used to manage the ocean transport of its products were evaluated through interview, a review of process descriptions, company standards, policies, shipping records, and due diligence records. The results of the due diligence evaluations of six (6) ocean carriers are also contained within this report. The six ocean carriers for which due diligence investigations were performed are:

- 1. American President Lines (APL)
- 2. Hamburg Sued
- 3. Maersk Line Agency
- 4. Mediterranean Shipping Co. (MSC)
- 5. Seaboard Marine
- 6. Hapag Lloyd

The Due Diligence Investigations were also conducted for U.S. and international ports in use at the time of the audit. Records were sampled to confirm that Chemours had either evaluated the ports specifically for cyanide safety handling practices, or that the port had been previously approved and used by Chemours for hazardous material shipments. The ports listed on the following page are used by Chemours for sodium cyanide shipments to gold mine customers and were included in this re-certification audit.

2014 Report Revision: Chemours completed the Due Diligence evaluation of the Port of Everglades in Ft. Lauderdale, Florida (USA) in July 2014. Rail shipments started being delivered directly to the port in 2014. A Chemours Cyanides Product Steward performed an on-site

Chemours Global Ocean Supply Chain Wirol 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

Page 4 of 34

www.mss-team.com



assessment of the Port of Everglades in July 2014 and concluded that port operations and rail head operations are in alignment with ICMI Cyanide Code requirements. Security, handling practices, emergency response, and hazardous material handling capabilities were deemed to be appropriate and acceptable. The Chemours Due Diligence assessment report was used as a basis for the addition of the Port of Everglades to this certified Global Ocean Supply Chain.

2016 Report Revision: A Chemours Cyanides Product Steward completed the on-site Due Diligence assessments of the Port of Manzanillo (Mexico) in September 2015. The Port of Veracruz was assessed by the Product Steward in October 2015. Both ports were found to have safe and acceptable operations that are in alignment with ICMI Cyanide Code requirements. Security, handling practices, emergency response, and hazardous material handling capabilities were deemed to be appropriate and acceptable. Cyanide safety training was provided to both ports. The Chemours Due Diligence assessment reports were used as a basis for the addition of these ports to the certified Global Ocean Supply Chain.

The following ports are used by Chemours for sodium cyanide shipments to gold mine customers:

Name of Port	Country				
Angamos (Mejilliones)	Chile				
Antofagasta	Chile				
Antwerp	Belgium				
Arica	Chile				
Balboa	Panama				
Becancour, Quebec	Canada				
Belem (Vila do Conde)	Brazil				
Buenos Aires	Argentina				
Callao	Peru				
Caucedo	Dom Republic				
Chacabuco	Chile				
Colon	Panama				
Corinto	Nicaragua				
Cortes	Honduras				
Deseado	Argentina				
Everglades – Ft. Lauderdale	USA				
Iquique	Chile				
Kingston	Jamaica				
Long Beach, CA	United States				
Los Angeles, CA	CA United States				
Manzanillo	Mexico				

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 5 of 34



Name of Port	Country
Miami, FL	United States
Montreal	Canada
New Orleans, LA	United States
Quetzal	Guatemala
Rio De Janeiro	Brazil
Rio Haina	Dominican Republic
Salvador	Brazil
San Antonio	Chile
Santos	Brazil
Santo Tomas	Guatemala
Seattle, WA	United States
San Pedro, CA	United States
Savannah, GA	United States
Valparaiso	Chile
Veracruz	Mexico
Vitoria	Brazil

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com

Page 6 of 34



Global Ocean Supply Chain - Auditor's finding and attestation

The on-site portion of the audit was performed at the Chemours Sourcing and Logistics building in Wilmington, Delaware – USA. The audit was performed by an independent third-party auditor who was pre-approved by the ICMI as a Lead Auditor for all types of Code audits and as a technical expert for Code audits of cyanide transportation and production operations.

The re-certification audit of Chemours Global Ocean supply chain management operations was conducted on-site with additional reviews of due diligence information following the on-site audit activity. The supply chain management processes and the due diligence reviews of ocean carriers, ports, and rail partners utilized by the ocean carriers were conducted in accordance with the agreed audit plan and due diligence documentation requirements.

Cyanide transportation management practices for the Chemours ocean carrier and rail management organizations were evaluated against the Cyanide Code requirements documented in the ICMI Cyanide Code, ICMI Cyanide Code Transportation Protocol, and the ICMI Auditor Guidance for Use of the Cyanide Transportation Verification Protocol. Chemours internal Standards, Policies, Practices, and Procedures regarding the management of the Cyanide Transportation Supply Chain were reviewed. The audit was conducted through discussions and interviews with multiple individuals in cross-functional roles at Chemours. Additionally, records regarding carrier selection, ongoing carrier performance evaluations, incident tracking, equipment maintenance, security measures, port evaluations, shipment tracking, cargo labeling practices, shipping documentation, community involvement, and emergency response records were randomly sampled and found to be acceptable. Confirmation was made that each port included in this report underwent an on-site due diligence evaluation.

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates www.mss-team.com

Page 7 of 34



Global Ocean Supply Chain - Auditor's Finding

The Chemours Global Ocean Supply Chain is in **FULL COMPLIANCE** with the International Cyanide Management Code.

This supply chain has not experienced any significant cyanide incidents, releases, exposures since the previous ICMI Cyanide Code audit in 2010. The supply chain was found to have been in compliance with the Cyanide Code since the previous certification audit.

Audit Company:	MSS Code Certification Service, a Division of
	Management System Solutions, Inc.
	www.mss-team.com
Lead / Technical Auditor:	Nicole Jurczyk
	E-mail: CodeAudits@mss-team.com
Date(s) of Audit:	July 8, 12, and August 19, 2013

I attest that I meet the criteria for knowledge, experience and conflict of interest for Code Verification Audit Team Leader, established by the International Cyanide Management Institute and that all members of the audit team meet the applicable criteria established by the International Cyanide Management Institute for Code Verification Auditors.

I attest that the Audit Reports accurately describe the findings of the verification audit. I further attest that the verification audit was conducted in a professional manner in accordance with the International Cyanide Management Code Verification Protocol for Cyanide Transportation Operations and using standard and accepted practices for health, safety and environmental audits.

Chemours Global Ocean Supply Chain Wirst June 211/13/2013 & 8/7/2014 & 5/30/2016

Name of Facility Signature of Lead Auditor Date

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 8 of 34



Consignor Summary

Operational & Audit Information for Consignor

The Chemours Corporate Sourcing & Logistics group located in Wilmington, Delaware manages the domestic and international transportation of sodium cyanide. The Ocean Transport Procurement Group has overall responsibility and authority for coordinating ocean carrier selection, safety, security, and quality performance tracking, ocean carrier contracts, route selection, booking of shipments, shipment tracking, and incident investigation.

Cyanide Product Stewards within the Chemours Cyanides Business coordinate activities associated with route risk evaluation when customers are originally established and again at established frequencies. The Product Stewards also coordinate community communications, training sessions, port evaluations, customer evaluations, and package & label reviews. Corporate Emergency Response Specialists work together with the Chemours Cyanides Business to coordinate emergency response planning procedures, preparation and maintenance of emergency equipment, training of Chemours emergency response personnel, and evaluation of plans and procedures through periodic emergency response drills.

Chemours maintains formal standards, policies, guidelines, and procedures for ensuring Distribution Safety. Chemours Corporate standards exist for Incident Prevention, Emergency Response, Transportation Risk Assessment, Distribution Regulatory Compliance, and Training, and Distribution Handling & Storage. In addition, the Sourcing & Logistics Groups maintain desk manuals with specific procedures for the procurement of transportation services and the management of carriers.

Chemours Global Ocean Supply Chain Wirol 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com

Page 9 of 34



Personnel interviewed during the 2013 on-site audit and Global Ocean Transport Due Diligence Investigations:

Transport Practice Discussed → Audit Participants	1.1 Route selection Risk Assessment	1.2 Driver / Operator Training & Qualifications	1.3 Equipment Suitability	1.4 Safety Program & Preventive Maintenance	1.5 Ocean Transport	1.6 Tracking of shipments	2.1 Interim Storage	3.1-3.5 Emergency Response	Supply Chain Management - General Discussions
International Transportation Procurement Manager (Ocean Transport)	X				X	X		X	X
Marine Procurement (Ocean Transport)	X				X	X		X	X
Product Stewardship Manager, North America Cyanides	X						X	X	
Cyanide Business Global Product Stewardship Manager	X	X	X	X		X	X	X	X
Logistics Leader, Cyanides Business			X	X		X		X	X
Emergency Response Specialist								X	
Safety, Health & Environmental Manager – Sourcing & Logistics								X	X
Internal Chemours Hazmat Consultant		X			X				

Chemours Global Ocean Supply Chain Wird June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 10 of 34



Description of Consignor's role in ensuring compliance of its carriers

1. TRANSPORT: Transport cyanide in a manner that minimizes the potential for accidents and releases.

Select cyanide transport routes to minimize the potential for *Transport Practice 1.1:*

accidents and releases.

☑ in full compliance with

in substantial compliance with The operation is Transport Practice 1.1

not in compliance with

Summarize the basis for this Finding:

Chemours maintains formal standards, policies, guidelines, and procedures for ensuring Distribution Safety. Chemours Corporate standards exist for Incident Prevention, Emergency Response, Transportation Risk Assessment, Distribution Regulatory Compliance, and Training, and Distribution Handling & Storage.

Interviews were conducted to confirm that before Chemours initially qualifies a new customer for sodium cyanide, they follow a standard practice which is called the "First Order Process". Regional Cyanide Product Stewards evaluate the new customer for their ability to safely use and store material. They also evaluate the possible routes that can be used to transport the cyanide from Chemours to the customer site. This evaluation of the route includes consideration of population densities, infrastructure issues, pitch and grade of roads, and prevalence and proximity of water bodies. The route evaluation includes an evaluation of all portions of the route including rail transport, origination and destination rail yards, ocean carrier transport, ports, and barges, when applicable. The risks associated with the route used to bring cyanide from Chemours to a customer are evaluated as part of the First Order Process when the initial contract with the customer is established. The route assessment is performed by the Product Stewardship function within the Chemours Cyanides Business. Any necessary risk-mitigation measures are identified and defined during this First Order Process. Examples of risk mitigation measures were evaluated and found to be acceptable during the audit.

Routes are re-evaluated periodically, usually during customer visits. A review of records and the results of interviews show that routes are re-evaluated at least every three years, or more frequently if necessary. Additionally, Chemours has a very formal Product Stewardship Review process in which all aspects of cyanide product stewardship (labeling, product trail, use or transportation incidents, MSDS, etc.) are reviewed at least every three years.

Chemours Global Ocean Supply Chain Wirol Truy 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 11 of 34



Chemours trains community responders and hospitals in Memphis, Tennessee, at international ports, and at customer sites. Records of community interactions / training sessions were reviewed and found to be acceptable. Each port and each ocean carrier within the scope of this report underwent a due diligence evaluation to confirm compliance with ICMI Cyanide Code requirements. Site evaluation reports were available for each of the ports used by Chemours for the global ocean transport of cyanide. Mainline and short-line railroads used by the ocean carriers were also included in the Due Diligence evaluations.

The primary risks with the ocean transportation supply chain relate to the possibility of losing track of a shipment due to a trans-shipment or other factors, or the risk of having a container opened enroute by a person who has not been trained in cyanide safety. Chemours' overall selection of the routing for shipments gives very strong preference to routing that does not involve a transshipment step (transferring the shipment from one carrier to another en-route). In addition to the care taken to avoid trans-shipment situations in the routing process, Chemours contracts with a freight forwarding company to arrange and then track shipments closely. Information regarding Chemours' ability to track ocean shipments was reviewed during the audit and was found to be suitable for mitigating the risk of losing track of a specific shipment. In order to reduce the chance that an unauthorized or untrained person may open an inter-modal container, the containers are sealed. Records that included the information on container seals were reviewed for each of the ocean carriers for the time period 2011 through 2013. Information on the shipping records was appropriate and no problems were evident.

Chemours uses its formal standards, policies, guidelines, formal contracts with safety, health, environmental, and security terms and conditions to ensure that cyanide is appropriately handled and transported by its transportation partners.

<u>Transport Practice 1.2</u> Ensure that personnel operating cyanide handling and transport equipment can perform their jobs with minimum risk to communities and the environment.

The operation is

☑ in full compliance with in substantial compliance with not in compliance with

Transport Practice 1.2

Summarize the basis for this Finding:

This requirement does not apply to Chemours for this supply chain.

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 12 of 34



Transport Practice 1.3: Ensure that transport equipment is suitable for the cyanide

shipment.

☑ in full compliance with

The operation is in substantial compliance with Transport Practice 1.3

not in compliance with

Summarize the basis for this Finding:

Chemours ensures authorized packages are used for solid sodium cyanide. Package specifications were reviewed during the 2013 audit and were found to be compliant.

The Chemours packaging operation (LSI) was audited and certified to the ICMI Cyanide Code using the ICMI Cyanide Code Production Protocol in 2006, 2009, and again in 2012. Checklists and procedures used to load inter-modal containers require an inspection of the cargo and containers to ensure that all equipment is deemed to be safe for transport. LSI maintains procedures for loading intermodal containers. The shipments of bulk and semi-bulk packages in inter-modal containers are standard weights and standard blocking and bracing configurations are used. Shipping paperwork and packing checklists were reviewed during this 2013 audit to confirm that shipment weights were consistent and acceptable.

Transport Practice 1.4: Develop and implement a safety program for transport of cyanide.

☑ in full compliance with

in substantial compliance with The operation is **Transport Practice 1.4**

not in compliance with

Summarize the basis for this Finding:

Appropriate placards are displayed on all four sides of the inter-modal containers. Intermodal containers were available for review during the due diligence evaluations. Additionally, the International Maritime Organization (IMO) requirement for the marine pollutant signage to be posted on the container was also observed as being properly placed on the inter-modal container. All documentation (procedures and checklists) require for proper placarding (all 4 sides) to be confirmed prior to the inter-modal container being released. These procedures and practices were audited when the LSI shipping methods were observed during the re-certification audit in 2012 and again during 2013 supply chain auditing activities.

Intermodal Cartage employees at the LSI packaging facility transport inter-modal containers from Memphis, TN to the local railheads where the ocean carriers take over responsibility of the cargo. Railhead operations were evaluated as part of the Chemours Rail Supply Chain certification audit.

Chemours Global Ocean Supply Chain Wirol Truy 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 13 of 34



All railroads used in this supply chain by the ocean carriers were also evaluated through a Due Diligence evaluation and confirmation was made that operations are in alignment with ICMI Cyanide Code requirements. Details regarding the individual railroads are contained within the Chemours US/Canada Rail & Barge Supply Chain report.

Transport Practice 1.5: Follow international standards for transportation of cyanide by sea

and air.

☑ in full compliance with

The operation is in substantial compliance with **Transport Practice 1.5**

not in compliance with

Summarize the basis for this Finding:

Chemours ships its sodium cyanide on main line ocean carriers that have demonstrated safety programs and safe performance. The ocean carriers sign standard contractual agreements that require that the carrier adhere to applicable regulations and have "organized safety programs." Contracts were reviewed during the audit and this standard clause appears in the ocean carrier contract. Each carrier was asked for information regarding fulfillment of ICMI Cyanide Code requirements using a customized ICMI transportation protocol. Responses and information provided by all ocean carriers was deemed to be appropriate by the 3rd-party auditor.

The Chemours Ocean Carrier contracts require that all transportation is conducted in accordance with all regulatory requirements. This includes U.S. Department of Transportation and IMDG requirements.

The ocean routes are chosen by the ocean carriers. Destination ports are evaluated by the Chemours Regional Product Steward for Cyanides as part of the First Order Process. This is done prior to the first shipment of product to a new location. The Chemours Cyanides Business Regional and Global Product Stewards were interviewed as part of this evaluation. Records were available to show that port evaluations had been conducted at each of the U.S. and international ports used in this Supply Chain. Short-line railroads used to service the ports in some locations were also included in the port evaluation process. Chemours has also concluded that the Homeland Security and U.S. Coast Guard infrastructure that is available to assist ports with regard to security and emergency response is sufficient to conclude that ICMI Cyanide Code requirements are fulfilled.

The auditor concluded that Chemours has effective processes for ensuring that U.S. and international ports have demonstrated appropriate safety, security, and road infrastructure prior to being approved for hazardous material shipments.

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates www.mss-team.com Page 14 of 34



As recommended by the ICMI *Auditor Guidance for the Use of the Cyanide Transportation Verification Protocol*, specific information regarding this practice is addressed below:

- a) The Chemours packaging specifications were reviewed as part of the verification audit and were found to be conformant to the packaging requirements of the IMDG Code.
- b) Packaging for drums and IBCs reviewed as part of the due diligence evaluation were appropriately marked and were found to be compliant with Chapter 5.2 of the IMDG Code requirements.
- c) Packaging for drums and IBCs reviewed as part of the due diligence evaluation were appropriately labeled and were found to be compliant with Chapter 5.2 of the IMDG Code requirements.
- d) Loaded inter-modal containers were evaluated and were found to be marked and placarded in accordance with the IMDG Code.
- e) Shipping documents were reviewed for a sample of cyanide shipments from 2011 through 2013 for each ocean carrier used in this supply chain. All information required by the IMDG Code is required as standard practice on Chemours shipping paperwork.
- f) The container packing certificates from 2011, 2012, and 2013 shipments were reviewed during the audit as part of the overall evaluation of shipping papers. All information was found to be conformant to IMDG Code requirements.
- g) Chemours maintains records which show that the ocean transport is conducted in compliance with all international and U.S. Department of Transportation (DOT) requirements (records including valid SOLAS certificates). The ocean carriers confirmed to Chemours that they have cyanide emergency response information available on board each vessel.
- h) Chemours maintains records which show that the ocean transport is conducted in compliance with all international and U.S. Department of Transportation (DOT) requirements.

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 15 of 34



Transport Practice 1.6: Track cyanide shipments to prevent losses during transport.

☑ in full compliance with

in substantial compliance with The operation is Transport Practice 1.6

not in compliance with

Summarize the basis for this Finding:

Chemours works together with its freight forwarder to track shipments using a secure web-based shipment tracking system. Appropriate action is taken to ensure that cyanide shipments keep moving, stay on pre-designated routes, and that location can always be confirmed. Email communications containing database tracking information was reviewed during the audit and confirmation was made that shipments are being tracked continuously and that Chemours normally has access to "real-time" information regarding the location and status of its shipments of cyanide. Shipping paperwork from 2011 through 2013 was reviewed and was found to be conformant to ICMI Cyanide Code requirements, including chain of custody requirements. The following documentation is used to track inventory and movement of cyanide: bills of lading and shipping papers indicating the number of packages and amount of material. The abovementioned documents were reviewed during the audit. Ocean carriers reported that they maintain databases with MSDS information for the products they carry.

www.mss-team.com

Page 16 of 34

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates



2. INTERIM STORAGE: Design, construct and operate cyanide trans-shipping depots and

interim storage sites to prevent releases and exposures.

Transport Practice 2.1: Store cyanide in a manner that minimizes the potential for

accidental releases.

☑ in full compliance with

The operation is in substantial compliance with **Transport Practice 2.1**

not in compliance with

Summarize the basis for this Finding:

This requirement does not apply to the Chemours supply chain management activities.

Ocean carriers reported that during transport, the storage of cyanide both on land and on vessels is in accordance with the applicable stowage and segregation requirements in the IMDG and the Coast Guard 33 CFR regulations. The terminal must segregate containers similar to the segregation onboard vessels.

The packaging used for solid cyanide conforms to IMO and US DOT requirements.

Certifications and packaging approvals were reviewed during the audit. As part of the ocean carrier due diligence audit, documentation was reviewed that confirmed that ocean carriers must contractually adhere to regulatory requirements and maintain formal safety programs.

Additionally, safety checklists and seals are used by the Chemours packaging facility after the containers are packed. The seal enables verification that the container was not opened during transit.

Ports are evaluated by the Chemours Global and Regional Product Stewards for Cyanides. Part of the evaluation prior to the first shipment of product is an evaluation of the port. Product Stewards visit the port and observe that personnel are handling materials safely, that the port is secure and the roadway infrastructure into the ports is suitable. Completed checklists showing port evaluations were sampled during the audit and were found to be acceptable. Interviews confirmed that all ports in use at the time of the audit had been evaluated.

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com

Page 17 of 34



3. EMERGENCY RESPONSE: Protect communities and the environment through the

development of emergency response strategies and

capabilities

Transport Practice 3.1: Prepare detailed emergency response plans for potential cyanide

releases.

☑ in full compliance with

in substantial compliance with The operation is **Transport Practice 3.1**

not in compliance with

Summarize the basis for this Finding:

Chemours has several key documents that were reviewed as part of this verification audit: 1) Cyanides Global Response Plan for Off-Site Incidents; 2) U.S. Integrated Emergency Response Team Standard Operating Guidelines; and 3) Sodium Cyanide Emergency Response Procedures; 4) Transportation Emergency Information fact sheet for Chemours Solid (Sodium or Potassium) Cyanide. Together, the documents provide extensively detailed plans, procedures and information to address all ICMI Cyanide Code emergency response requirements. Chemours' emergency response plans are appropriate for all modes of transportation used by Chemours and for interim facilities. The most detailed scenarios with specific action steps to be taken were found in the Emergency Response Procedures. The scenarios and emergency plans address actions to be taken for spills inside buildings, outside, and in inter-modal containers. Plans also include steps to be taken in case of fire or human exposure. The Transportation Emergency Information sheet has quick, but complete information that has been seen in use during transportation activities observed during previous Chemours Cyanide Code audits. The emergency response procedures consider steps to be taken for wet, dry and gaseous cyanide. The Transportation Emergency Information sheet is designed to address solid briquettes. There is another fact sheet also available (for solution), but at the time of the audit only solid sodium cyanide was being transported by ocean carrier.

The Chemours emergency plans are general and universally applicable to all types of emergencies. The Transportation Emergency Information sheet has details of action steps for transporters. This was deemed appropriate by the auditor. Professional emergency responders together with technical guidance from Chemours would be responsible for addressing issues involving the way in which the structure of a transportation container or vessel should be managed after an emergency. The three response plans describe the different levels of response actions for anticipated emergency situations. The emergency procedures offer descriptions of the tactical steps that need to be taken to contain and clean up a spill or manage an exposure incident. The Integrated Emergency Response Team Guidelines define the action steps to be taken by the responding team and the notifications that need to be made in case of an emergency. The Cyanides Global Response Plan for Off-Site Incidents describes the steps that are to be taken by Cyanide Hot Line and other

Chemours Global Ocean Supply Chain Wirol 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 18 of 34



Cyanides Business personnel. All of the plans and emergency response information clearly outline the roles and responsibilities of internal and external responders.

Transport Practice 3.2: Designate appropriate response personnel and commit

necessary resources for emergency response.

☑ in full compliance with

in substantial compliance with The operation is **Transport Practice 3.2**

not in compliance with

Summarize the basis for this Finding:

Training requirements and are detailed in the U.S. Integrated Emergency Response Team Standard Operating Guidelines. According to Section II of this document, all emergency responders receive initial and then annual re-fresher training. Chemours also offers cyanide safety training to all of its transportation partners and customers. Chemours also offers this type of training to community responders in many strategic locations. Records of the training sessions were reviewed during this and previous Cyanide Code audits of Chemours transportation partners. The roles and responsibilities of relevant internal and external personnel are clearly described in the Transportation Emergency Information sheet, Chemours emergency plans and procedures. Lists of necessary emergency response equipment are contained within each of the emergency plans. Additionally, the emergency response procedures detail the different types of personal protective equipment necessary for the different types of response scenarios. According to interviews, emergency response equipment listed in the different plans is checked during emergency response drills, which occur at least annually. The emergency equipment listed in the Cyanides Business plan is maintained at the Memphis Plant. Availability of the equipment is ensured through Plant processes that were confirmed during the re-certification audit.

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com

Page 19 of 34



Transport Practice 3.3: Develop procedures for internal and external emergency

notification and reporting.

☑ in full compliance with

The operation is in substantial compliance with **Transport Practice 3.3**

not in compliance with

Summarize the basis for this Finding:

The notification procedures, including telephone numbers, are described in the Emergency Response plans, procedures, and Transportation Emergency Information sheet. The two response plans have Chemours internal contact information and the U.S. Integrated Emergency Response plan has external phone numbers (such as governmental contact information, etc.). Emergency contact information is also contained in the Transportation Emergency Information sheet. According to Section 4 of the Cyanides Global Response Plan for Off-Site Incidents, emergency plans including notification numbers are checked at least annually. The Cyanides plan had last been updated in 2013 and the U.S. Integrated Emergency Response plan was last updated in 2012.

Transport Practice 3.4: Develop procedures for remediation of releases that recognize the

additional hazards of cyanide treatment chemicals.

☑ in full compliance with

in substantial compliance with The operation is **Transport Practice 3.4**

not in compliance with

Summarize the basis for this Finding:

Specific details regarding the remediation, neutralization, decontamination, and disposal of cleanup debris are contained within the Emergency Response Procedures. Extensive descriptions of necessary action steps depending on the incident scenario are clearly outlined in the document. Interviews with Chemours personnel during this and previous Cyanide Code audits showed a high level of awareness that the use of treatment chemicals is prohibited if cyanide spills into surface waters. Page 7 of the Emergency Response Procedures specifically prohibits the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide for treating a cyanide spill into surface water.

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 20 of 34



Transport Practice 3.5: Periodically evaluate response procedures and

capabilities and revise them as needed.

☑ in full compliance with

The operation is in substantial compliance with **Transport Practice 3.5**

not in compliance with

Summarize the basis for this Finding:

According to Section 4 of the Cyanides Global Response Plan for Off-Site Incidents, emergency plans including notification numbers are checked at least annually. The Cyanides plan had last been updated in 2013 and the U.S. Integrated Emergency Response plan was last updated in 2012.

Many emergency drills are conducted at Chemours on an on-going basis. Emergency response drills at the Memphis Plant, for example are conducted quarterly. This was evaluated during the re-certification audit. According to the Cyanides Global Response Plan for Off-Site Incidents, the plan is to be tested by conducting drills at least annually.

Records were available to show that the Global Cyanides Business has conducted emergency response drills since the last certification audit. Drills typically involve at least one transportation partner and often one or more customers. Drill critiques were sampled and were found to be appropriate.

www.mss-team.com

Page 21 of 34

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates



Ocean Carriers and Ports – Summary of Due Diligence Investigations

Operational and Audit Information for Ocean Carriers and Ports

All global ocean moves of sodium cyanide that originate in the United States are within the scope of this verification audit of Chemours' processes used to manage the ocean transport of its products. The results of the due diligence evaluations of six (6) ocean carriers are also contained within this report. The six ocean carriers for which due diligence investigations were performed are:

- 1. American President Lines (APL)
- 2. Hamburg Sued
- 3. Maersk Line Agency
- 4. Mediterranean Shipping Co. (MSC)
- 5. Seaboard Marine
- 6. Hapag Lloyd

The Due Diligence Investigations were also conducted for U.S. and international ports in use at the time of the audit. Records were sampled to confirm that Chemours had evaluated the ports for hazardous materials safety handling practices. The ports included in this evaluation are noted in the first section of the report.

2014 Report Revision: Chemours completed the Due Diligence evaluation of the Port of Everglades in Ft. Lauderdale, Florida (USA) in July 2014. Rail shipments started being delivered directly to the port in 2014. A Chemours Cyanides Product Steward performed an on-site assessment of the Port of Everglades in July 2014 and concluded that port operations and rail head operations are in alignment with ICMI Cyanide Code requirements. Security, handling practices, emergency response, and hazardous material handling capabilities were deemed to be appropriate and acceptable. The Chemours Due Diligence assessment report was used as a basis for the addition of the Port of Everglades to this certified Global Ocean Supply Chain.

2016 Report Revision: A Chemours Cyanides Product Steward completed the on-site Due Diligence assessments of the Port of Manzanillo (Mexico) in September 2015. The Port of Veracruz was assessed by the Product Steward in October 2015. Both ports were found to have safe and acceptable operations that are in alignment with ICMI Cyanide Code requirements. Security, handling practices, emergency response, and hazardous material handling capabilities were deemed to be appropriate and acceptable. Cyanide safety training was provided to both ports. The Chemours Due Diligence assessment reports were used as a basis for the addition of these ports to the certified Global Ocean Supply Chain.

Chemours Global Ocean Supply Chain Wirol Truy 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 22 of 34



The following ports are used by Chemours for sodium cyanide shipments to gold mine customers:

Name of Port	Country					
Angamos (Mejilliones)	Chile					
Antofagasta	Chile					
Antwerp	Belgium					
Arica	Chile					
Balboa	Panama					
Becancour, Quebec	Canada					
Belem (Vila do Conde)	Brazil					
Buenos Aires	Argentina					
Callao	Peru					
Caucedo	Dom Republic					
Chacabuco	Chile					
Colon	Panama					
Corinto	Nicaragua					
Cortes	Honduras					
Deseado	Argentina					
Everglades – Ft. Lauderdale	USA					
Iquique	Chile					
Kingston	Jamaica					
Long Beach, CA	United States					
Los Angeles, CA	United States					
Manzanillo	Mexico					
Miami, FL	United States					
Montreal	Canada					
New Orleans, LA	United States					
Quetzal	Guatemala					
Rio De Janeiro	Brazil					
Rio Haina	Dominican Republic					
Salvador	Brazil					
San Antonio	Chile					
Santos	Brazil					
Santo Tomas	Guatemala					
Seattle, WA	United States					
San Pedro, CA	United States					

Chemours Global Ocean Supply Chain Wirol June 11/13/2013 & 8/7/2014 & 5/30/2016
Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 23 of 34



Name of Port	Country
Savannah, GA	United States
Valparaiso	Chile
Veracruz	Mexico
Vitoria	Brazil

Chemours Global Ocean Supply Chain

Name of Operation

Signature of Lead Auditor

Dates

www.mss-team.com

Page 24 of 34



Ocean Carriers and Ports - Auditor's finding and attestation

Chemours ships its sodium cyanide on main line ocean carriers that have demonstrated safety programs and safe performance.

Chemours contracts with Ocean Carriers to transport their products from the Memphis Plant to international ports. The Ocean Carriers determine the U.S. ports of departure, and manage and control all aspects of the rail movements from Memphis to the U.S. ports. Pursuant to their agreements with Chemours, the Ocean Carriers identified in this report select rail carriers that comply with applicable environmental, health, safety, and security regulations which were determined through Due Diligence evaluation to be equivalent to ICMI Cyanide Code requirements. The rail segments between Memphis and U.S. ports are therefore also included in the scope of this audit. U.S./Canada rail segments used by Chemours for routes other than those from its Memphis plant to U.S. ports are contracted and controlled directly by Chemours and are included in a separate supply chain and certification audit report.

The ocean carriers sign standard contractual agreements that require that the carrier adhere to applicable regulations and have "organized safety programs." Contracts were reviewed during the audit and this standard clause appears in Article 21 of the ocean carrier contract.

As part of Chemours' due diligence effort, each of the six ocean carriers was asked to perform a self-evaluation against the ICMI Cyanide Code Transportation Protocol requirements using a customized ICMI transportation protocol. The results from these evaluations were reviewed by the auditor and were found to be acceptable. Additionally, the auditor reviewed records on file that showed that each carrier is authorized for hazardous materials and that the United States Department of Transportation Hazmat Certificate Registration is valid.

In addition to Chemours' efforts to ensure that ICMI Cyanide Code requirements are fulfilled, there are many agencies charted with the task of confirming that shipping is conducted in a safe and secure manner. One such organization is the International Maritime Organization (IMO). The IMO was established in Geneva in 1948 and it currently headquartered in London, United Kingdom. The IMO is a specialized agency of the United Nations. The IMO's primary purpose is to develop and maintain a comprehensive regulatory framework for shipping. The IMO regulates practices associated with safety, environmental concerns, legal matters, technical co-operation, maritime security and the efficiency of shipping.

One initiative of the IMO is the International Convention for the Safety of Life at Sea (SOLAS), which was enacted in 1974. Records were available for each of the six ocean carriers noted in this report to show that they had successfully passed a SOLAS audit and that they each maintained According to information reviewed during the due diligence valid SOLAS certificates. investigation, the provisions of SOLAS include: fire protection, life-saving equipment, radio communications, safety of navigation, transportation of dangerous goods, management of safe operations of ships, and maritime security.

Chemours Global Ocean Supply Chain Wirol Truy 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 25 of 34



Additionally, Maersk participates in the voluntary Chemical Distribution Institute - Marine Packed Cargo program (CDI-mpc). Carriers in this program undergo a management systems safety audit using the CDI-mpc protocols that were created in cooperation with the United Stated American Chemical Council under its Responsible Care® initiatives. The CDI-mpc certificates are issues to individual ships. Maersk provided a number of these certificates of examples. All certificates showed that ships had been reviewed for safe operations and adherence to best chemical management practices.

With regard to port safety and security, new amendments to the SOLAS Convention were enacted in 2002. These amendments gave rise to the International Ship and Port Facility Security (ISPS) Code, which went into effect on 1 July 2004. The concept of the code is to provide layered and redundant defenses against smuggling, terrorism, piracy, stowaways, etc. The ISPS Code required most ships and port facilities engaged in international trade to establish and maintain strict security procedures as specified in ship and port specific Ship Security Plans and Port Facility Security Plans. In the United States the Port Facility Security Plans are filed with, and monitored by, the United States Coast Guard (the U.S. authority with jurisdiction over U.S. Ports).

The ocean routes are chosen by the ocean carriers. The destination ports are evaluated by the Chemours Regional Product Steward for Cyanides. Part of the evaluation prior to the first shipment of product is an evaluation of the port. The Chemours Cyanides Business Global and Regional Product Stewards were interviewed as part of this evaluation. Each U.S. and international port and each ocean carrier within the scope of this report underwent a due diligence evaluation to confirm compliance with ICMI Cyanide Code requirements. Site evaluation reports were available for each of the ports used by Chemours for the global ocean transport of cyanide. Mainline and short-line railroads used by the ocean carriers were also included in the Due Diligence evaluations.

Reviews and investigations included a review of emergency response capabilities, environmental policies, security practices, and adherence to Maritime Transportation Security Act requirements. Chemours has also concluded that the Homeland Security and U.S. Coast Guard infrastructure that is available to assist U.S. ports with regard to security and emergency response is sufficient to conclude that Cyanide Code requirements are fulfilled.

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com

Page 26 of 34



Description of Due Diligence Information Reviewed for Ocean Carriers and **Ports**

1. TRANSPORT: Transport cyanide in a manner that minimizes the potential for

accidents and releases.

Select cyanide transport routes to minimize the potential for *Transport Practice 1.1:*

accidents and releases.

The management of ☑ consistent with Transport Practice 1.1

Global Ocean Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

Ocean routes are chosen by the ocean carriers and are regulated by a number of international organizations. When Chemours plans a specific shipping route and chooses an ocean carrier, it evaluates safety performance, availability of direct shipping lanes, and authorizations for the transport of hazardous materials. All carriers undergo regular safety performance reviews. Information was reviewed in the Chemours incident tracking database and was found to be acceptable.

According to interviews, Chemours gives strong preference to ocean carriers that have been evaluated as part of a Cyanide Code due diligence investigation. Strong preference is also given to direct shipping lanes that do not involve a transfer of the cargo to a different ship. Ports that have been found to be acceptable are chosen based on proximity to end customer. Only in cases where a closer port has unacceptable infrastructure or security is the shipment routed using a longer over-the-road segment.

Transport Practice 1.2: Ensure that personnel operating cyanide handling and

> transport equipment can perform their jobs with minimum risk to communities and the environment.

The management of ☑ consistent with Transport Practice 1.2

Global Ocean Transport is: substantially consistent

not consistent

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 27 of 34



Summary of the basis for this finding:

All Ocean Carriers

According to the responses to a questionnaire modeled after the Cyanide Code Transportation Protocol, all ocean carriers reported that they comply with IMO requirements and are in compliance with International Maritime Dangerous Goods (IMDG) and U.S. 49 Code of Federal Regulations (CFR) requirements concerning the transportation of the hazardous materials, including the training of employees.

Inter-modal moves once the shipment reaches the port are controlled by the ocean carrier. Ocean carriers self-reported to Chemours that they train their personnel on hazardous materials handling. Information from the carriers also indicated that they have systems in place to ensure that intermodal moves are performed by appropriately licensed and qualified personnel.

Ensure that transport equipment is suitable for the cyanide Transport Practice 1.3:

shipment.

☑ consistent with Transport Practice 1.3 The management of

Global Ocean Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

All Ocean Carriers

Chemours has contractual agreements with all of its ocean carriers that require that they comply with the regulations regarding the safe and appropriate shipping of dangerous goods. Part of the U.S. Department of Transportation Hazardous Materials Registration and Safety of Life at Sea regulatory processes addresses the use of safe and appropriate equipment.

Chemours ensures authorized packages are used for solid sodium cyanide. Package specifications were reviewed during this audit and were found to be compliant. LSI checklists and procedures require an inspection of the cargo and containers to ensure that all equipment is deemed to be safe for transport.

Transport Practice 1.4: Develop and implement a safety program for transport of cyanide.

The management of ☑ consistent with Transport Practice 1.4

Global Ocean Transport is: substantially consistent

not consistent

Chemours Global Ocean Supply Chain Wirol 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 28 of 34



Summary of the basis for this finding:

All Ocean Carriers

Ocean carriers self-reported to Chemours that they train their personnel on hazardous materials handling. Information from the carriers also indicated that they have systems in place to ensure that inter-modal moves are performed by appropriately licensed and qualified personnel.

In their response to the ICMI Cyanide Code due diligence protocol, ocean carriers reported that they have robust safety programs which are mandated by international laws. All safety programs apply to all employees.

Follow international standards for transportation of cyanide by sea **Transport Practice 1.5:**

and air.

The management of ☑ consistent with Transport Practice 1.5

Global Ocean Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

Chemours ships its sodium cyanide on main line ocean carriers that have demonstrated safety programs and safe performance. The ocean carriers sign standard contractual agreements that require that the carrier adhere to applicable regulations and have "organized safety programs." Contracts were reviewed during the audit and this standard clause appears in Article 21 of the ocean carrier contract. Each carrier was asked for information regarding fulfillment of Cyanide Code requirements using a customized ICMI transportation protocol. Responses and information provided by all carriers was deemed to be appropriate by the 3rd-party auditor.

The Chemours Ocean Carrier contracts require that all transportation is conducted in accordance with all regulatory requirements. This includes U.S. Department of Transportation and IMDG requirements.

The ocean routes are chosen by the ocean carriers. The destination ports are evaluated by the Chemours Regional Product Steward for Cyanides. Part of the evaluation prior to the first shipment of product is an evaluation of the port. The Chemours Cyanides Business Global and Regional Product Stewards were interviewed to confirm this practice. Records were also reviewed and were found to be acceptable.

Chemours Global Ocean Supply Chain Wish June 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 29 of 34



As recommended by the ICMI *Auditor Guidance for the Use of the Cyanide Transportation Verification Protocol*, dated October 2009, specific information regarding this practice is addressed below:

- a) The Chemours packaging specifications were reviewed as part of the verification audit and were found to be conformant to the packaging requirements of the IMDG Code.
- b) Packaging for drums and IBCs reviewed as part of the due diligence evaluation were appropriately marked and were found to be compliant with Chapter 5.2 of the IMDG Code requirements.
- c) Packaging for drums and IBCs reviewed as part of the due diligence evaluation were appropriately labeled and were found to be compliant with Chapter 5.2 of the IMDG Code requirements.
- d) Loaded inter-modal containers were evaluated and were found to be marked and placarded in accordance with the IMDG Code.
- e) Shipping documents were reviewed for a sample of cyanide shipments from 2011 through 2013 for each ocean carrier used in this supply chain. All information required by the IMDG Code is required as standard practice on Chemours shipping paperwork.
- f) The container packing certificates from 2011, 2012, and 2013 shipments were reviewed during the audit as part of the overall evaluation of shipping papers. All information was found to be conformant to IMDG Code requirements.
- g) Chemours maintains records which show that the ocean transport is conducted in compliance with all international and U.S. Department of Transportation (DOT) requirements (records including valid SOLAS certificates). The ocean carriers confirmed to Chemours that they have cyanide emergency response information available on board each vessel.
- h) Chemours maintains records which show that the ocean transport is conducted in compliance with all international and U.S. Department of Transportation (DOT) requirements.

<u>Transport Practice 1.6:</u> Track cyanide shipments to prevent losses during transport.

The management of **☑** consistent with Transport Practice 1.6

Global Ocean Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

All Ocean Carriers

Ocean carriers reported that they have computer systems that are used for the tracking and management of all freight containers within their system. The management systems provide among other items the date, time, location, and carrier involved in the last interchange, transport action,

Chemours Global Ocean Supply Chain Wirol 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 30 of 34



or gate move. Chemours' freight forwarder has access to this information via the internet web sites. Chemours can request this information at any time.

The sodium cyanide shipments for this segment are containerized loads of IBCs and drums. All shipping containers are sealed. Shipping papers were reviewed. Auditors confirmed that seal numbers are recorded on the bills of lading. This enables personnel along any portion of the segment to confirm that the containers have not been opened.

2. INTERIM STORAGE: Design, construct and operate cyanide trans-shipping depots and

interim storage sites to prevent releases and exposures.

Transport Practice 2.1: Store cyanide in a manner that minimizes the potential for

accidental releases.

The management of ☑ consistent with Transport Practice 2.1

Global Ocean Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

All Ocean Carriers

Ocean carriers reported that during transport, the storage of cyanide both on land and on vessels is in accordance with the applicable stowage and segregation requirements in the IMDG and the Coast Guard 33 CFR regulations. The terminal must segregate containers similar to the segregation onboard vessels.

The packaging used for solid cyanide conforms to IMO and US DOT requirements.

Certifications and approvals were reviewed during the audit and confirmation was made through interviews that no packaging changes have occurred since then. As part of the ocean carrier due diligence audit, documentation was reviewed that confirmed that ocean carriers must contractually adhere to regulatory requirements and maintain formal safety programs. Additionally, safety checklists and seals are used by the Chemours packaging facility after the containers are packed. The seal enables verification that the container was not opened during transit.

Each U.S. and international port within the scope of this re-certification audit has been evaluated for its ability handle materials safely. The ports are confirmed to be secure with appropriate roadway or rail infrastructure into the port. Completed checklists showing port evaluations were reviewed during the audit and were found to be acceptable.

Chemours Global Ocean Supply Chain Wirol 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 31 of 34



3. EMERGENCY RESPONSE: Protect communities and the environment through the

development of emergency response strategies and

capabilities

Prepare detailed emergency response plans for potential cyanide *Transport Practice 3.1:*

releases.

☑ consistent with Transport Practice 3.1 The management of

Global Ocean Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

All Ocean Carriers

Ocean carriers reported that they and their affiliates have emergency response plans in place which include the prompt notification of all involved parties. Chemours provides shipping papers showing the emergency contact information which is then transferred to the hazardous cargo declaration.

The due diligence questionnaire responses from the ocean carriers confirmed their understanding of emergency response requirements. Emergency response planning and the performance of frequent emergency drills are required by international laws. All of the ocean carriers provided information demonstrating that they are certified by third-party auditing organizations for environmental, health, and/or safety programs. Ocean carrier responses confirmed that emergency response planning is an integral part of these programs.

Chemours Global Ocean Supply Chain Wirol 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com

Page 32 of 34



Designate appropriate response personnel and commit necessary *Transport Practice 3.2:* resources for emergency response.

The management of ☑ consistent with Transport Practice 3.2

Global Ocean Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

All Ocean Carriers

Ocean carriers responded that they contract with professional emergency response contractors for landside emergencies. Onboard vessels, the emergency response would be conducted by trained crew members with shore side support and guidance.

Chemours offers immediate technical assistance for any cyanide spill, and offers emergency resources for spills that might occur near a Chemours site. Chemours contracts with CHEMTREC to ensure that appropriate notifications and emergency response is initiated if there is an incident.

Develop procedures for internal and external emergency *Transport Practice 3.3:*

notification and reporting.

The management of ☑ consistent with Transport Practice 3.3

Global Ocean Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

All Ocean Carriers

Ocean carriers reported that they and their affiliates have emergency response plans in place which include the prompt notification of all involved parties. Chemours provides shipping papers showing the emergency contact information which is then transferred to the hazardous cargo declaration.

The due diligence questionnaire responses from the ocean carriers confirmed their understanding of emergency response requirements. Emergency response planning and the performance of frequent emergency drills are required by international laws. All of the ocean carriers provided information demonstrating that they are certified by third-party auditing organizations for environmental, health, and/or safety programs. Ocean carrier responses confirmed that emergency response planning is an integral part of these programs.

Chemours Global Ocean Supply Chain Wirol 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 33 of 34



Transport Practice 3.4: Develop procedures for remediation of releases that recognize the additional hazards of cyanide treatment chemicals.

The management of ☑ consistent with Transport Practice 3.4

Global Ocean Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

All Ocean Carriers

Ocean carrier responses confirmed that they coordinate all cyanide incidents with the Chemours cyanide team for the proper handling of the situation.

Transport Practice 3.5: Periodically evaluate response procedures and

capabilities and revise them as needed.

☑ consistent with Transport Practice 3.5 The management of

Global Ocean Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

All Ocean Carriers

Chemours Cyanide Hotline personnel are periodically involved in drills performed by sites and transportation partners. Safety conferences are held with rail and ocean carriers periodically. The adequacy of emergency preparedness plans is one of the topics discussed at these conferences.

The due diligence questionnaire responses from the ocean carriers confirmed their understanding of emergency response requirements. Emergency response planning and the performance of frequent emergency drills are required by international laws. All of the ocean carriers provided information demonstrating that they are certified by third-party auditing organizations for environmental, health, and/or safety programs. Ocean carrier responses confirmed that emergency response planning is an integral part of these programs.

Chemours cyanide safety meetings with its ocean and rail carriers also provide a forum for the discussion and updating of response procedures and expectations. As part of the ocean carrier safety programs, drills and exercises (not necessarily cyanide specific) are conducted to test response capabilities.

Chemours Global Ocean Supply Chain Wirol 11/13/2013 & 8/7/2014 & 5/30/2016

Name of Operation Signature of Lead Auditor Dates

www.mss-team.com Page 34 of 34