

INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE

Cyanide Transportation Re-verification Summary Audit Report

of



Chemours, Inc.

Global Ocean Supply Chain

To The

International Cyanide Management Code

December 2016 Transportation Verification Protocol

Environmental Technology & Management

SUMMARY AUDIT REPORT

Name of Cyanide Transportation Operation: **Chemours Global Ocean Supply Chain**
Name of Operation Owner: **Chemours, Inc.**
Name of Operation Operator: **Chemours, Inc.**
Name of Responsible Manager: **Mr. Brian R. Morris, Global Product Stewardship Manager**
Address: **2571 Fite Road**
City: **Memphis** State/Province: **TN** Country: **USA**
Telephone: **(901) 353-7420**

Location detail and description of operations:


On January 23-24, 2017 Environmental Technology & Management conducted a re-verification audit of Chemours Global Ocean Supply Chain to the Transport Practices of the International Cyanide Management Code. This ocean supply chain was originally certified to the ICMI Cyanide Code in 2010 and recertified in 2014. Chemours (formerly E.I. DuPont de Nemours) was one of the original Cyanide Code signatory companies obtaining Cyanide Code certification for its Memphis Solid Cyanide Plant and its packaging operations in June 2006.

Chemours contracts with Ocean Carriers to transport cyanide briquettes from the Memphis Manufacturing and Packaging Plants to ports throughout the world. The Ocean Carriers determine the U.S. ports of departure and the sea lanes, and control all aspects of the rail movements from Memphis to the U.S. ports. As a condition of their contracts with Chemours, the Ocean Carriers must select rail carriers that comply with applicable environmental, health, safety, and security regulations which align closely with ICMI Cyanide Code requirements. Chemours determines through Due Diligence evaluations of the Ocean Carriers that they are indeed complying with Chemours' requirements for rail carrier selection and performance evaluation.

Chemours Product Stewards also perform Due Diligence evaluations on the U.S. ports of departure and the international ports used in the supply chain. A sampling of these Due Diligence reports was audited as part of this re-verification to confirm that Due Diligence evaluations were including International Cyanide Management Code criteria. Chemours Product Stewards go further to evaluate transportation between the international ports and consignees as part of Chemours' First Order Process, and re-evaluates these supply chain legs during periodic visits to consignees. A sampling of First Order Evaluations and Trip Reports from the last 3 years was reviewed as part of this audit.

Detailed Description of the Global Ocean Supply Chain:

Chemours Global Ocean Supply Chain begins at the Memphis Manufacturing Plant and at the LSI Terminal adjacent to the plant, where solid sodium cyanide briquettes are manufactured and packaged. The Global Ocean Supply Chain includes transportation from the Memphis Plant by rail to U.S. and Canadian ports, then by ocean carriers to international ports. From there, sodium cyanide shipments interface with other supply chains, e.g. the Chemours Guatemala Supply Chain or Chile Supply Chain, or

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are evaluated and monitored by Chemours Product Stewards as part of the First Order Process and regular consignee visits. A sampling of First Order Evaluations and Trip Reports from the last 3 years was also reviewed as part of this audit.

This scope of this re-verification audit includes the following:

- All ocean transport of sodium cyanide that originates in the United States and at the Port of Antwerp (as part of the Chemours Europe Supply Chain)
- Chemours' processes used to manage the ocean transport of its products and to evaluate and manage the transportation beyond the international ports, including the First Order Process
- Due diligence evaluations of U.S., and international ports, and
- Due diligence evaluations of six (6) ocean carriers


The six ocean carriers for which due diligence investigations were performed are:

1. Sealand (replacing American President Lines since the last recertification)
2. Hamburg Sud
3. Maersk Line Agency (Now owns Sealand and submitted one survey covering both)
4. Mediterranean Shipping Co. (MSC)
5. Seaboard Marine
6. Hapag Lloyd

Conduct of the Re-verification Audit

The re-verification audit of Chemours' Global Ocean Supply Chain took place on January 23 and 24, 2017 in Chemours' Wilmington, DE offices. Chemours internal standards, policies, procedures and records regarding the management of the supply chain were reviewed during discussions and interviews with company employees in key functional roles. The auditor concluded that Chemours operations continued to meet all requirements of the ICMI Transportation Code over the three year certification cycle. The auditor also reviewed due diligence evaluations of ocean carriers and ports within the supply chain, following the on-site portion of the re-verification. Reviews confirmed 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. Due diligence reports for ocean carriers were produced from surveys sent out to and completed by the ocean carriers covering all relevant requirements of the Transportation Protocol.

The following ports were in use by Chemours for sodium cyanide shipments to gold mine customers, at the time of this audit:

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Ports of Departure
Antwerp, Belgium
Becancour, Quebec Canada
Everglades – Ft. Lauderdale USA
Long Beach, CA United States
Los Angeles, CA United States
Miami, FL United States
Montreal Canada
New Orleans, LA United States
Seattle, WA United States
San Pedro, CA United States
Savannah, GA United States

International Ports	
Angamos (Mejilliones), Chile	Antofagasta, Chile
Arica, Chile	Balboa, Panama
Belem (Vila do Conde), Brazil	Buenos Aires, Argentina
Callao, Peru	Caucedo, Dominican Republic
Chacabuco, Chile	Colon, Panama
Corinto, Nicaragua	Cortes, Honduras
Deseado, Argentina	Iquique, Chile
Kingston, Jamaica	Manzanillo, Mexico
Punta Arenas, Chile	Quetzal, Guatemala
Rio De Janeiro, Brazil	Rio Haina, Dominican Republic
Salvador, Brazil	San Antonio, Chile
Santos, Brazil	Santo Tomas, Guatemala
Valparaiso, Chile	Veracruz, Mexico
Vitoria, Brazil	

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SUMMARY AUDIT REPORT

Auditor's Finding

This operation is

- in full compliance
- in substantial compliance with the International Cyanide Management Code.
- not in compliance

Furthermore, the auditor verified that there have been no significant changes to processes, policies and procedures for the management of cyanide, no significant releases or exposures and no compliance issues over the past three years associated with this supply chain.

Audit Company: **Environmental Technology & Management**

Audit Team Leader: **John B. (Jack) McVaugh, PE, RCMS/EMS-LA**


E-mail: **jbkm.etm@att.net**


Names and Signatures of Other Auditors: **NA**

Date(s) of Audit: **January 23-24, 2017**

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 this Summary Audit Report accurately describes 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.

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<u>Chemours Global Ocean Supply Chain</u>		<u>January 23-24, 2017</u>
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1. TRANSPORT: *Transport cyanide in a manner that minimizes the potential for accidents and releases.*

Transport Practice 1.1: *Select cyanide transport routes to minimize the potential for accidents and releases.*

The operation is in full compliance with
 in substantial compliance with Transport Practice 1.1
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Chemours, Inc. is in full compliance with Transport Practice 1.1. Chemours ensures use of transport routes that minimize potential for accidents and releases by selecting ocean carriers that have extensive experience and an excellent record for handling highly hazardous materials. The ocean carriers select rail carriers with this same expertise and record. The Chemours Global Ocean “Containerized” Desk Manual requires transportation buyers to give significant priority to carriers that use routes that minimize the need for trans-shipment, as every trans-shipment carries a greater risk of accidents and releases. The auditor verified that Chemours Product Stewards inspect and evaluate the U.S. and international ports, and any short-line rail carriers serving those ports, to ensure their ability to handle cyanide safely and securely. Chemours Product Stewards evaluate routes to all potential consignees using the Cyanide First Order Database Procedure and the Cyanides First Order Process Procedure. The auditor verified implementation of these procedures over the three year cycle and that these procedures consider population density, infrastructure construction and condition, pitch and grade and prevalence and proximity of water bodies and fog in the selection of transport routes. The supply chain has not experienced any incidents over the past 3 years.

The ocean carriers selected by Chemours, and the rail carriers in turn selected by the ocean carriers have processes to evaluate transport routes for hazardous materials and take measures necessary to manage these risks. Chemours personnel demonstrated the ability to track rail and ocean shipments to prevent loss, and use of seals to prevent tampering. Chemours Product Stewards evaluate risks associated with each route as part of the Cyanide First Order Process (FOP). The auditor reviewed several examples of these evaluations from the last three years that resulted in approvals, and one (Customer Visit, Oct 26, 2015 for FOP) that resulted in rejection of the prospective consignee because of the high risk associated with the route. Chemours also prohibits trucks carrying cyanide from operating between 10 PM and 5 AM, when most fatigue-related accidents occur. Chemours Due Diligence Reports verify that its ocean carriers and associated rail carriers periodically reevaluate routes used for cyanide transportation. The Cyanide First Order Database Procedure and other Chemours policies and procedures ensure periodic reevaluation of truck transportation routes. Truck transporters evaluate primary & alternate routes to consignees and use driver feedback and periodic driving of routes to evaluate changes, in accordance with the ICMI Transportation Code. Chemours Product Stewards re-evaluate routes each time they visit a customer site. Each customer site visit generates a report including a completed checklist, which covers



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all applicable requirements of the ICMI Transportation Code. Chemours Product Stewards review and approve any proposed changes to truck transport routes due to changes in conditions or other reasons. An updated First Order Process (FOP) is required if no product is supplied to a consignee for 2 years.

The Chemours Global Ocean “Containerized” Desk Manual requires transportation buyers to give significant priority to carriers that use routes that minimize the need for trans-shipment, as every trans-shipment carries a greater risk of accidents and releases. Review of several Route Risk Analyses accompanying First Order Processes (FOP’s) verified documentation of mitigation measures to address identified risks. As an example, Chemours restricted transport to a mine during winter because of a significant downhill grade before a bridge. Review of Customer Site Visit Reports verified that these were also used to document measures taken to address identified risks over the last three years. Chemours secures all necessary governmental approvals including export / import licenses for international shipments. The auditor reviewed examples of these licenses during this audit. Evidence also indicated that Chemours trained community responders and hospitals at manufacturing and warehouse locations, and offered to conduct training at international ports and customer sites and communities. Records of training sessions were reviewed to verify such interaction.

Chemours employs safety and security measures for rail and ocean shipments that include extensive blocking and bracing techniques for securing packaged product in containers, sophisticated container tracking systems and uniquely numbered container seals. For truck shipments, Chemours Product Stewards determine the need for a convoy or escort during the Route Assessment portion of the First Order Process. Because of Chemours’ strong product stewardship ethic and its expertise in the area, Chemours takes a leading role in advising and training external responders, medical facilities and communities. The auditor verified that Product Stewards have conducted local emergency responder training and HAZWOPER technician level training with representatives of community, emergency response teams, government and mine personnel. Records confirmed that training covered the use of amyl nitrate and roles and capabilities in emergency response. Chemours uses contract carriers, or transportation partners, for all its cyanide transportation by sea, rail and truck. Chemours’ policies and procedures require all contracts with these transportation partners to contain safety, health, environmental and security terms and conditions to ensure that its transportation partners meet the requirements of the ICMI Transportation Code. The auditor reviewed several contracts to verify communication of these requirements. Chemours ensures that these measures are followed by conducting due diligence audits.

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 operation is in full compliance with in substantial compliance with not in compliance with Transport Practice 1.2

Summarize the basis for this Finding/Deficiencies Identified:



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Chemours, Inc. is in full compliance with Transport Practice 1.2. Chemours does not have any cyanide transport vehicles or drivers of its own. Therefore, requirements for training, qualification and licensing of operating personnel are not applicable.

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

The operation is in full compliance with
 in substantial compliance with Transport Practice 1.3
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Chemours, Inc. is in full compliance with Transport Practice 1.3. Chemours only uses equipment designed and maintained to operate within the loads it will be handling. Sea containers are provided by the ocean carrier. Gross (packaged) product weight, container tare weight and dunnage on shipping papers audited were far below Maximum Payload weights of Sea Containers specified by the ocean carrier. Maintenance of Sea Containers is carried out by the ocean carrier, and is verified by inspections performed by Chemours manufacturing site personnel. Checklists are used for these inspections. ISO containers each have a data plate stamped with Maximum Payload and Tare Weight. Chemours manufacturing site personnel use a checklist to ensure that Maximum Payload is not exceeded. ISO containers are leased by Chemours and are maintained by shops under contract with Chemours Corporate Logistics. These activities were verified under the Chemours Memphis Production Plant Reverification in 2016. Chemours has procedures to verify the adequacy of the equipment for the load it must bear and to prevent overloading of the transport vehicle being used for handling cyanide. Chemours adheres to the Safety of Life at Sea Verified Gross Mass (SOLAS-VGM) process for containerized exports from the US to verify the gross weights of packaged cyanide.

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

The operation is in full compliance with
 in substantial compliance with Transport Practice 1.4
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Chemours, Inc. is in full compliance with Transport Practice 1.4. Chemours has procedures to ensure that the cyanide is transported in a manner that maintains the integrity of its packaging. Chemours loads sodium cyanide briquettes into its specially designed Intermediate Bulk Containers (IBC's), loading those

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into Sea Containers and sealing the Sea Containers after loading. Chemours has procedures in place to ensure packaging integrity during transport, including pre-loading inspection of empty containers and blocking and bracing techniques. Chemours manufacturing personnel inspect the exteriors of Sea Containers for any sign of damage or leaking product before leaving the plant. Furthermore, Chemours contract language requires its ocean carriers to have an Organized Safety Program, which may include subscribing to the Chemical Distribution Institute – Marine Packed Cargo (CDI-MPC) program to prevent shifting cargoes. Placards are installed by Chemours manufacturing personnel and are checked by drivers for shipments by truck. Sea containers and ISO Containers are marked with proper DOT placards and other signage identifying the DOT Hazard Class 6.1. The number UN1689 is displayed in lieu of the words “Toxic” or “Poison”.

Chemours has language in contracts with truck carriers within its supply chains that drivers perform routine pre-trip inspections on tractors, chassis and containers and the carriers have a preventive maintenance (PM) program on that equipment. The PM program must be documented and records maintained on file and open for audit by Chemours. Chemours also has language in contracts with truck carriers that requires them to comply with all applicable transportation regulations. This includes any regulation of driver hours of service. Chemours’ contracts with truck carriers also requires them to maintain records of all training conducted by the carrier and Chemours, accidents and incidents, driver hours of service, where applicable, equipment inspections and preventive maintenance. Chemours policies and procedures call for the suspension of shipments that could be impacted by severe weather, such as a hurricane or typhoon or by civil unrest. If a shipment is already on the water, Chemours will divert it to a safe destination. Chemours has language in contracts with transportation partners that requires them to have a documented Drug and Alcohol abuse prevention and test program.

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

The operation is in full compliance with
 in substantial compliance with Transport Practice 1.5
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Chemours, Inc. is in full compliance with Transport Practice 1.5. Chemours is committed to transport shipments of cyanide by sea in compliance with the Dangerous Goods Code, Safety of Life at Sea (SOLAS) of the International Maritime Organization and subscribing to the Chemical Distribution Institute – Marine Packed Cargo (CDI-MPC) program to prevent shifting cargoes. Since Chemours does not transport cyanide by air, the Technical Instructions for the Transport of Dangerous Goods by Air of the International Civil Aviation Organization are not applicable.



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

The operation is in full compliance with
 in substantial compliance with Transport Practice 1.6
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Chemours, Inc. is in full compliance with Transport Practice 1.6. Due Diligence reports reviewed for this audit indicated that all ocean carriers and their associated rail carriers have the means to communicate with Chemours in transit, if necessary, test their communication devices on a regular basis, identify any blackout areas and have procedures for dealing with them and offer shipment tracking systems. Chemours, however demonstrated their use of a tracking system from their freight forwarder, which has provided acceptable information over the past certification period. Truck carriers are required by Chemours to address this Transport Practice, and Chemours verifies implementation through the First Order Process and site visit reports, both of which were reviewed during this audit.

The auditor verified that Shipping Documentation including the Bill of Lading and Intermodal Equipment Receipt (IER) satisfies the inventory control and chain of custody requirements of this transportation practice. The auditor sampled shipping documentation packages from 2014 through 2016 and found them all to indicate the amount of cyanide in transit plus include an MSDS and emergency notification sheet. Due Diligence reports reviewed for this audit indicated that all ocean carriers and their associate rail carriers have MSDS's for every product they transport, in a database. Truck carriers are required by Chemours to pass along the paperwork received to the consignee, as appropriate, and Chemours verifies implementation through the First Order Process and site visit reports, both of which were reviewed during this audit.

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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 operation is in full compliance with
 in substantial compliance with Transport Practice 2.1
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

While Chemours does not design, construct or operate cyanide trans-shipping depots, the domestic and international ports forming critical junctions in this supply chain are trans-shipping depots, according to ICMI guidance information. Due Diligence Reports on domestic and international ports leads this auditor to the conclusion that Chemours, Inc. is in full compliance with Transport Practice 2.1. According to the Due Diligence Reports, all domestic and most international ports in current use have some type of warning signs posted to alert their workers to the presence of dangerous goods. Many of the Central and South American ports warn about the presence of "IMO 6.1" goods. Domestic ports must comply with strict US Coast Guard and Department of Homeland Security rules to prevent unauthorized access to the port. Due Diligence Reports of the international ports indicate tight security measures to prevent unauthorized access to areas where dangerous goods are staged. Due Diligence Reports generally state that dangerous goods, or IMO 6.1 materials are stored separately from other materials, which may be incompatible. In all cases, packaged or bulk cyanide product remains in its original Sea Container or ISO Container, inspected for integrity, loaded and sealed by Chemours personnel, so that the potential for contact with water at the port is negligible. In all cases, any interim storage of containers at the ports occurs outside, not in any building or enclosure. Thus, there is adequate ventilation to prevent build-up of hydrogen cyanide gas. Due Diligence Reports indicate that the domestic ports store dangerous goods in containment areas. International ports store materials on paved areas and some state that these drain to a holding pit. Domestic and international ports alike describe some type of spill response capability by port personnel or local emergency responders.

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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.

The operation is in full compliance with
 in substantial compliance with Transport Practice 3.1
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Chemours, Inc. is in full compliance with Transport Practice 3.1. Chemours main emergency response document, Chemours Cyanides Global Response Plan for Off-site Incidents adequately addresses all the requirements in Section 3 of the ICMI Transportation Protocol. A Response Flowchart in the Plan explains notification pathways, including circumstances where Chemtrec will notify the Chemours Cyanide Hotline which triggers implementation of the Cyanide Global Response Plan. Chemours manages emergency response for the entire supply chain utilizing this plan. The 2016 Cyanide Code Due Diligence Survey of Ocean Carriers verified that these transportation partners also have Emergency response plans which include interactions with intermodal carriers. The Chemours Cyanides Global Response Plan for Off-site Incidents addresses emergency response over all transportation routes, emergency response for liquid and solid sodium and potassium cyanide, emergency response for truck, ocean and rail transportation, emergency response for all aspects of the transport infrastructure including condition of the road, railway, port, etc. and emergency response considering the design of transport vehicles. The Chemours Cyanides Global Response Plan for Off-site Incidents includes descriptions of response actions, as appropriate for the anticipated emergency situation, and identifies the roles of outside responders, medical facilities or communities, in emergency response.

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

The operation is in full compliance with
 in substantial compliance with Transport Practice 3.2
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Chemours, Inc. is in full compliance with Transport Practice 3.2. Chemours and/or its transportation partners have provided initial and refresher emergency response training to the personnel selected for transportation of cyanide, particularly with regard to its Emergency Response Notification procedures. Annual refresher training may be carried out using the on-line Chemours E-Learning Suite. The

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Chemours Cyanides Global Response Plan for Off-site Incidents and a carrier specific document entitled Cyanide Transportation Policy & Procedures describe the specific emergency response duties and responsibilities of personnel. The Plan includes a list of all emergency response equipment that should be available during transport or along the transportation route. This Basic Equipment List for the Emergency Response Team includes necessary emergency response and health and safety equipment, including personal protective equipment during transport. The Chemours Cyanides Global Response Plan for Off-site Incidents requires monthly inspection of emergency response equipment at all locations. Chemours uses contract carriers, or transportation partners, for all its cyanide transportation by sea, rail and truck. Chemours' policies and procedures require clear delineation of roles and responsibilities of transportation partners during an emergency response. Chemours ensures these that measures are received and understood during training sessions and by conduct of due diligence audits.

Transport Practice 3.3: Develop procedures for internal and external emergency notification and reporting.

The operation is in full compliance with
 in substantial compliance with Transport Practice 3.3
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Chemours, Inc. is in full compliance with Transport Practice 3.3. The Chemours Cyanides Global Response Plan for Off-site Incidents and carrier specific Cyanide Transportation Policy & Procedures specify contact information and notification procedures meeting the requirements of this Transport Practice. In addition, a Transportation Emergency Information Sheet is attached to the Bill of Lading on every shipment. The Plan requires review of emergency response plans and procedures, and revision as necessary, following emergency drills and incidents in which the procedures were deployed, but in the absence of these, no less than annually.

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

The operation is in full compliance with
 in substantial compliance with Transport Practice 3.4
 not in compliance with

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Chemours, Inc. is in full compliance with Transport Practice 3.4. The Chemours Cyanides Global Response Plan for Off-site Incidents and carrier specific Cyanide Transportation Policy & Procedures include procedures for remediation, such as recovery or neutralization of solutions or solids, decontamination of soils or other contaminated media and management and/or disposal of spill clean-up debris. These documents include procedures that prohibit the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide that comes in contact with surface water.

Transport Practice 3.5: Periodically evaluate response procedures and capabilities and revise them as needed.

The operation is in full compliance with
 in substantial compliance with Transport Practice 3.5
 not in compliance with

Summarize the basis for this Finding/Deficiencies Identified:

Chemours, Inc. is in full compliance with Transport Practice 3.5. The Chemours Cyanides Global Response Plan for Off-site Incidents requires review of emergency response plans and procedures, and revision as necessary, following emergency drills and incidents in which the procedures were deployed, or periodically in the absence of these events. The auditor verified implementation by reviewing records of drills held during Chemours Cyanide Products Ocean/Rail Seminars and the revision history of the Plan. Records indicate that the Plan was revised in December 2013, August 2015, August 2016 and February 2017. No incidents have occurred within this supply chain in the last three years requiring implementation of these procedures. Chemours Product Stewards verify implementation of drills by truck carriers during site visits. Due Diligence Reports confirm that ocean carriers and ports conduct emergency drills, as well, including hazardous material spill drills.

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Review of Due Diligence Reports of Ocean Carriers and Ports

In order to complete the re-verification of Chemours Global Ocean Supply Chain, the auditor reviewed reports of due diligence investigations carried out by Chemours on each of its ocean carriers and the U.S. and international ports used, over the past three years.

The Chemours Cyanides Business Global and Regional Product Stewards, who conducted most of the U.S. port due diligence investigations, 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. Chemours concluded that regulatory requirements under the Department of Homeland Security and U.S. Coast Guard with regard to security and emergency response provide sufficient evidence that the Cyanide Code requirements are fulfilled at U.S. ports.

A Chemours Product Steward visited each U.S. and international port, sometimes as part of a First Order Process for a new or renewed customer, and completed a Port Evaluation Guidelines for Cyanide Imports form (See below). Also see Transport Practice 2.1 of this report for more details. The auditor concluded that the completed forms demonstrated full compliance with the ICMI Transportation Code.

Port Evaluation Guidelines for Cyanide Imports

- Crane load capacity, condition, safety inspections and preventive maintenance program;
- Access control into port;
- How cyanide is transported inside the port, and if operators are licensed;
- Dangerous Goods training;
- Information on cyanide storage areas including number, signage, operating procedures, segregation of materials, security, protection from water, ventilation, fire fighting equipment, drainage and containment,
- Personnel safety including personal protective equipment and training, including cyanide handling and emergency response, refresher training and emergency drills;
- Emergency Response:
 - Systems to address cyanide emergencies;
 - Availability of First Aid antidotes for cyanide poisoning;
 - Availability of Medical Treatment antidotes for cyanide poisoning;
 - Proximity to medical facilities, and if they can treat a cyanide poisoning case;
 - Emergency Response Plan
 - Emergency Response Kit for chemical emergencies
 - Environmental restrictions in the area
 - Emergency Response Training and Drills

Due diligence investigations of ocean carriers were carried out by sending a survey to each of the six ocean carriers. Five of the six completed the electronic form, Ocean Carrier & Intermodal Due Diligence

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Review - Transport of Dangerous Goods, and the sixth provided sufficient information for the auditor to reach a reasonable conclusion on the carrier's conformance. The subject matter covered by the form is described below. Main line and short line rail carriers are included as intermodal carriers. Once again, the auditor concluded that the completed forms demonstrated full compliance with the ICMI Transportation Code.

Ocean Carrier & Intermodal Due Diligence Review - Transport of Dangerous Goods

- Information on the carrier's Documented Environmental, Health & Safety Management System;
- Information on any 3rd party audits conducted in last 3 years, e.g. for SOLAS, ISO 14001 Hazardous Materials Authorization and C-TPAT;
- Frequency and type of training conducted for personnel to handle Dangerous Good;
- Information on Emergency Plans, the conduct and frequency of On-board Emergency Response Drills and if they include Chemical Spill Response Drills;
- Information on formal Drug & Alcohol Abuse Programs, and if those programs include random testing
- Information on formal Stowage Plans that segregate incompatible Dangerous Goods;
- If a Security Plan is formally documented and maintained on vessels at all times;
- Information on Shipment Tracking via internet offered to customers
- Processes for Intermodal Partner management, including selection, communication pathways and performance evaluation, when combined with ocean shipments:
 - Requirements of the intermodal partner to segregate incompatible hazardous materials during transport or storage;
 - How the Chain of Custody is managed;
 - How shipments are tracked during rail portion of intermodal move;
 - Emergency response plans for an accident or spill during the intermodal portion of a shipment and details of such plans including shipper notification;
 - If drills simulating spills during intermodal portion of shipment are carried out.Additional details of EHS&S Program and performance.

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