

ICMI Cyanide Code Consigner Supply Chain Summary Audit Report

DuPont U.S. / Canada Rail & Barge Transportation Supply Chain Certification Audit

Submitted to: International Cyanide Management Institute 1400 I Street, NW, Suite 550 Washington, DC 20005 USA

2013 Audit Cycle





Table of Contents

U.S. / Canada Rail & Barge Supply Chain Summary	2
Consignor Name & Contact Information	
Operational and Audit Information – U.S. / Canada Rail & Barge Supply Chain	
Description of the U.S. / Canada Rail & Barge Supply Chain:	
U.S. / Canada Rail & Barge Supply Chain - Auditor's finding and attestation	5
Consignor Summary	7
Operational & Audit Information for Consignor	7
Compliance finding for Consignor's activities	9
Description of Consignor's role in ensuring compliance of its carriers	9
Rail Carriers, Rail Yards, Barge Operator, and Ports – Summary of Due Diligence Investiga	
Description of Due Diligence Information Reviewed for Rail Carriers, Rail Yards, Barge	17
Operator and Ports	22



U.S. / Canada Rail & Barge Supply Chain Summary

Consignor Name & Contact Information

E.I. DuPont de Nemours and Company

Name of 2571 Fite Road

Operation: Memphis, TN 38127 USA

Name and contact Donald Jeffery

information for Cyanide Business Global Product Stewardship Manager

DuPont Contact: Email: <u>Donald.W.Jeffery@dupont.com</u>

Tel. (949) 502-4586

Operational and Audit Information – U.S. / Canada Rail & Barge Supply Chain

E.I. duPont de Nemours and Company, Inc. (DuPont) is a science-based company operating in more than 70 countries. DuPont 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, which is part of the DuPont Cyanides Business and Chemicals & Fluoroproducts Strategic Business Unit. The plant is located just outside of Memphis in Woodstock, Tennessee.

DuPont was one of the original 14 Cyanide Code signatory companies announced on November 3, 2005. As such, DuPont made the commitment to obtain Cyanide Code certification for its Memphis Solid Cyanide Plant and its packaging operations. DuPont was the first Cyanide Producer to achieve certification in June 2006. The operation was re-certified in 2009 and again in 2012. This rail & barge 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.

DuPont contracts with rail & barge carriers directly to transport their products between cyanide production locations in the United States and warehouses, production facilities, and customers in the United States, Mexico, and Canada. DuPont also contracts with ocean carriers to transport

DuPont US/Canada Rail & Barge Supply Chain / Novem Novem

Name of Operation Signature of Lead Auditor



the product using intermodal services, namely rail transportation from rail heads near the DuPont production facilities to U.S. ports. The rail movements controlled by the ocean carriers are addressed in the DuPont Global Ocean Supply Chain Re-Certification Audit Report. The Alaska-bound interim storage and barge shipments using Sea-Pac Transportation Services and Alaska Marine Lines are contracted indirectly through the Alaska Railroad.

Road transportation between the Seattle rail head to the Sea-Pac interim storage location is achieved using an ICMI-certified Signatory trucking company, Alaska West Express.

Rail movements after crossing the U.S./Mexico border are addressed in the DuPont Mexico Supply Chain Re-Certification Audit Report.

The rail & barge carriers manage and control all aspects of the rail and barge movements. Pursuant to their agreements with DuPont, the carriers identified in this report operate in a manner that complies with applicable environmental, health, safety, and security regulations. These operations were determined, through Due Diligence evaluations, to be aligned with ICMI Cyanide Code requirements.

Description of the U.S. / Canada Rail & Barge Supply Chain:

DuPont has been producing and shipping sodium cyanide since 1953. In the United States, the solid sodium cyanide briquettes are packaged at the Memphis Plant in Tennessee, at the LSI Terminal directly adjacent to the plant, and at the DuPont packaging terminal in Carlin, Nevada, USA. The Memphis Plant ships sodium cyanide in railroad hopper cars, bulk and semi-bulk packages. The bulk and semi-bulk packages are shipped from Memphis and its packaging terminals via rail and truck. Domestic shipments go coast to coast. International shipments go by rail to U.S. ports and to the U.S./Canadian and U.S./Mexican borders.

This evaluation included all rail and barge movements of sodium cyanide in the United States and Canada. The nine transportation partners and two ports included in this DuPont recertification audit and due diligence investigation are listed below.

- 1) Union Pacific Railroad (UP) contracted by DuPont
- 2) Canadian National Railway (CN) contracted by DuPont
- 3) Alaska Railroad Company (ARRC) contracted by DuPont
- 4) Alaska Marine Lines (AML) (Contracted by ARRC for barge movement)
- 5) BNSF Railway (BNSF) contracted by ocean carriers for international shipments
- 6) Norfolk Southern (NS) contracted by ocean carriers for international shipments
- 7) CSX Corporation– contracted by ocean carriers for international shipments
- 8) Sea-Pac Transportation Services, LLC Interim Storage Change in Mode

DuPont US/Canada Rail & Barge Supply Chain Wind June Movember 24, 2013

Name of Operation Signature of Lead Auditor Date

Page 3 of 30



- 9) Alaska West Express ICMI Certified Signatory Trucking operation Seattle rail head to Seattle Port (certified December 27, 2012)
- 10) Harbor Island (Seattle) Port, Washington USA
- 11) Port of Whittier, Alaska USA

All transportation in the United States and to Canada using the transportation partners noted above is within scope of this review. The sampling of specific information and records was done using the primary routes being used at the time of the audit. These were the routes from the DuPont Memphis Plant to the DuPont Carlin facility in Nevada, the Fairbanks rail yard in Alaska (via the Port of Seattle, the Port of Whittier, and the Alaska Marine Lines (AML) barge movement), the Laredo rail yard at the Texas/Mexican border, the Nogales rail yard at the Arizona/Mexican Border, and the Pointe Claire Distribution Center in Greater Montreal, Quebec, Canada.

Several other routes were also in use, but no additional rail/barge transportation companies other than the ones mentioned here were in use for sodium cyanide shipments. Rail transportation to U.S. Ports for international ocean carrier shipments is controlled and managed by DuPont's ocean carrier partners. Rail transport of the cyanide starting at the U.S./Mexican border crossings and within Mexico is addressed in separate DuPont Mexico due diligence and recertification audit reports. The due diligence review of the ocean ports used by DuPont is addressed in the DuPont Global Ocean Supply Chain certification audit report.

At the time of the 2013 DuPont Re-Certification Audit / Due Diligence Investigations, the following rail yards (start and end locations) and ports were being used by DuPont in the United States and Canada:

Rail Terminals – Origin Loading	Destination / Interim Storage / Unloading
Location	Locations
Marion, AR	Fairbanks, Alaska - USA
Memphis, TN	Laredo, Texas - USA
Woodstock, TN (rail sidings within	Nogales, Arizona - USA
DuPont and LSI facilities)	Seattle, WA - USA
	Vivian, NV (Carlin Terminal Siding) – USA
	U.S. and Canadian Ports, as listed in the DuPont
	Global Ocean Supply Chain Re-certification Audit
	Report
	Pointe Claire Distribution Center in Greater Montreal,
	Quebec, Canada
	Seattle Rail head
	Harbor Island (Seattle) Port
	Port of Whittier

Ninds Jung No Signature of Lead Auditor DuPont US/Canada Rail & Barge Supply Chain Name of Operation



U.S. / Canada Rail & Barge Supply Chain - Auditor's finding and attestation

The certification audit was performed at the DuPont Sourcing and Logistics office 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 certification audit of DuPont US/Canada Rail & Barge Supply Chain management operations was conducted on-site on July 8 and 12, 2013 with additional reviews of due diligence information following the on-site audit activity through August 30, 2013. The supply chain management processes and the due diligence investigations of rail carriers and rail yards were conducted in accordance with the agreed upon audit plan and due diligence documentation requirements.

The DuPont cyanide transportation management practices using rail carriers (including rail yards) and the AML Barge Operator (including ports) were evaluated against the ICMI Cyanide Code requirements. DuPont 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 DuPont. Additionally, records regarding carrier selection, ongoing carrier performance evaluations, incident tracking, equipment maintenance, security measures, shipment tracking, cargo labeling practices, shipping documentation, community involvement, and emergency response records were randomly sampled and found to be acceptable.

The results of this certification audit and the related due diligence investigations indicate that DuPont and all portions of its U.S. / Canada Rail & Barge Supply Chain are in FULL COMPLIANCE with ICMI Cyanide Code requirements.

DuPont US/Canada Rail & Barge Supply Chain Nov Nov

Signature of Lead Auditor

Date

Name of Operation



DuPont U.S. / Canada Rail & Barge Supply Chain - Auditor's Finding

The DuPont U.S. / Canada Rail & Barge Supply Chain is:

☑ in full compliance in substantial compliance not in 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 ICMI 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 and 12 with Due Diligence Evaluations through August
	30, 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.

DuPont US/Canada Rail & Barge Supply Chain

Name of Operation

November 24, 2013

Signature of Lead Auditor

Date

DuPont US/Canada Rail & Barge Supply Chain

November 24, 2013

Name of Operation

Signature of Lead Auditor

Date

Page 6 of 30



Consignor Summary

Operational & Audit Information for Consignor

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

Cyanide Product Stewards within the DuPont 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, rail yard evaluations, customer evaluations, and package & label reviews. Corporate Emergency Response Specialists work together with the DuPont Cyanides Business to coordinate emergency response planning procedures, preparation and maintenance of emergency equipment, training of DuPont emergency response personnel, and evaluation of plans and procedures through periodic emergency response drills.

DuPont maintains formal standards, policies, guidelines, and procedures for ensuring Distribution Safety. DuPont 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.

DuPont US/Canada Rail & Barge Supply Chain November 24, 20

Name of Operation Signature of Lead Auditor



Personnel interviewed during the July-August, 2013 DuPont Certification Audit and Due Diligence Investigations included:

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 N/A	1.6 Tracking of shipments	2.1 Interim Storage	3.1-3.5 Emergency Response	Supply Chain Management - General Discussions	Rail/Barge Operations - General Discussions
Senior Buyer (Rail Transport)	X	X	X	X	-	X		X	X	X
Product Stewardship Manager, North America Cyanides	X				-		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	X
Regional Rail Services Coordinator, DC&F				X	-	X				X
Emergency Response Specialist/Site Fire Chief DuPont Memphis Plant					-			X		
Rail Fleet Manager			X	X	-					X
Safety, Health & Environmental Manager – Sourcing & Logistics					-			X	X	

DuPont US/Canada Rail & Barge Supply Chain

Name of Operation

November 24, 2013

Signature of Lead Auditor

Date

Page 8 of 30



Compliance finding for Consignor's activities

The DuPont cyanide transportation management practices using rail carriers (including rail yards) and the Alaska Marine Lines barge (including ports) were evaluated against the ICMI Cyanide Code requirements. DuPont 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 crossfunctional roles at DuPont. Additionally, records regarding carrier selection, ongoing carrier performance evaluations, incident tracking, security measures, shipment tracking, cargo labeling practices, shipping documentation, community involvement, and emergency response records were randomly sampled and found to be acceptable.

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.

<u>Transport Practice 1.1:</u> Select cyanide transport routes to minimize the potential for

accidents and releases.

☑ in full compliance with

The operation is in substantial compliance with Transport Practice 1.1

not in compliance with

Summarize the basis for this Finding:

DuPont maintains formal standards, policies, guidelines, and procedures for ensuring Distribution Safety. DuPont 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 DuPont 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 DuPont 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,

DuPont US/Canada Rail & Barge Supply Chain

November 24, 2013

Name of Operation

Signature of Lead Auditor



and barges, when applicable. The risks associated with the route used to bring cyanide from DuPont 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 DuPont Cyanides Business. Any necessary risk-mitigation measures are identified and defined during this First Order Process. Examples of risk mitigation measures were evaluated during the audit and were found to be acceptable.

Routes are re-evaluated periodically, usually during customer visits. Additionally, DuPont 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. DuPont trains community responders and hospitals in Memphis, Tennessee, Carlin, Nevada, Fairbanks, Alaska, and Greater Montreal, Canada. Records of community interactions / training sessions were reviewed and found to be acceptable.

The primary safety / security issue with the movement of cyanide by rail is that the rail cars are to be moving at essentially all times, and are not to be stored anywhere along the route. DuPont uses a secure web-based rail car tracking system to track the movement of its rail cars. Interviews and a review of records showed that the movement of cyanide rail cars is tracked on a daily basis. Procedures and records were available to demonstrate that DuPont maintains effective oversight regarding the movement of its rail cars.

DuPont 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.

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:

DuPont is the consignor in this supply chain and, as such, does not physically handle or transport cyanide in the supply chain. This requirement therefore does not apply to DuPont within the scope of this supply chain audit or audit report.

DuPont US/Canada Rail & Barge Supply Chain

Ninol June No Signature of Lead Auditor Name of Operation

Page 10 of 30



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:

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

DuPont maintains a fleet of rail equipment to transport cyanide that includes: hopper cars, box cars, ISO tanks, and sea containers. The equipment is designed and maintained to operate within the loads it will be handling. DuPont maintains specific specifications for each type of equipment that it owns or leases. A database of equipment specifications, maintenance requirements, inspections requirements, and records that planned activities took place was evaluated during the audit. The team involved with tracking rail equipment and ensuring that appropriate maintenance Rail equipment is maintained according to maintenance is performed was interviewed. requirements that are defined by U.S. Federal law.

A sample of loading checklists was reviewed in which the adequacy of the transportation equipment is confirmed prior to each shipment. The Memphis Plant maintains detailed cyanide loading procedures for loading boxcars, hopper cars, and ISO tanks. LSI (DuPont packaging facility adjacent to the production facility) maintains procedures for loading intermodal containers. Safety interlocks are used to prevent overfilling of equipment. The shipments of bulk and semi-bulk packages in railcars and inter-modal containers are standard weights and standard blocking and bracing configurations are used. Shipping paperwork was reviewed 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

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

not in compliance with

Summarize the basis for this Finding:

The shipments of bulk and semi-bulk packages in railcars and inter-modal containers are standard weights and standard blocking and bracing configurations are used. LSI maintains a procedure for the loading of boxcars and intermodal containers. Procedures are detailed and

DuPont US/Canada Rail & Barge Supply Chain

Name of Operation

Signature of Lead Auditor

Page 11 of 30



explain how the material is to be properly loaded into boxcars and intermodal containers for weight loading considerations, and how the packages are to be blocked and braced. Several completed checklists used for the inspection of the railcars before and after loading were reviewed and were found to be appropriate.

The DuPont Memphis Plant also maintains loading procedures for boxcar, hopper, and ISO tank loading. The procedures specifically call for the inspection of the equipment before and after loading and for the blocking and bracing of FLO-BINS® in boxcars. Several checklists are also part of the procedures to ensure that packages (FLO-BINS®) are in proper condition, clean, and properly blocked and braced and that all equipment is suitable for transport.

Appropriate placards are displayed on all four sides of the transport vehicles. Intermodal containers, boxcars, and hopper cars were observed as having proper placards during the due diligence evaluations. Additionally, the International Maritime Organization (IMO) requirement for the marine pollutant signage to be posted on the containers was also observed as being properly placed on the inter-modal containers that were being shipped to Alaska via Alaska Marine Lines barge.

All documentation (procedures and checklists) require proper placards (all 4 sides) to be confirmed prior to the railcar being released. Similar procedures exist for the loading, placard placement, and inspection of intermodal sea containers.

Loading procedures reviewed during the audit require that railcars be inspected for safety appurtenances, braking systems, and connection mechanisms prior to being released. According to procedures reviewed during the audit, rail cars must be thoroughly inspected on at least 35 different parameters prior to being released. Repairs are either done by the certified mini-shops or by the certified full service repair facilities. Registrations for mini-shops were reviewed during the audit and were all current with the appropriate authorizations for the equipment used by DuPont.

DuPont maintains an extensive database of equipment maintenance requirements, inspections requirements, and records that planned activities took place. This database was evaluated during the audit and Fleet Management personnel involved with tracking rail equipment and ensuring that appropriate maintenance is performed were interviewed. Preventive maintenance and equipment inspection requirements are regulated by U.S. Federal law. Records were sampled for equipment used to transport cyanide in 2010 through 2013. Records showed that all required maintenance and inspection actions have occurred in a timely manner.

Limitations on worker hours in the U.S. rail industry are strictly regulated and enforced by the U.S. Government. DuPont contracts require transportation partners to adhere to all applicable regulations. There is therefore no need for DuPont to impose additional worker hour limitations in its contractual agreements. Detailed procedures, blocking and bracing diagrams, and

DuPont US/Canada Rail & Barge Supply Chain

November 24, 2013

Name of Operation

Signature of Lead Auditor



checklists are used by DuPont and the LSI packaging operation during the loading of rail cars and inter-modal sea containers. U.S. Federal regulations require that railroads conduct random drug and alcohol testing and that drug abuse prevention programs are maintained. DuPont also has these requirements are part of its contractual standard terms and conditions. Records were available to demonstrate that the applicable ICMI Cyanide Safety Program requirements had been fulfilled.

<u>Transport Practice 1.5:</u> 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:

In order to confirm that the barge shipments to Alaska are compliant to ICMI Cyanide Code requirements, DuPont Product Stewards performed an on-site Due Diligence investigation of Alaska Rail (ARCC), Alaska Marine Lines (AML), Sea-Pac (intermodal movement at the Seattle port), and of the Port of Seattle in 2013. The Port of Whittier (destination port in Alaska) was evaluated through a Due Diligence review for ICMI Cyanide Code by ARCC. ARCC is contractually responsible for the barge move and the subsequent offloading of the railcars in Whittier, Alaska. DuPont concluded that ARRC, AML, Sea-Pac, and port operations are conducted in compliance with all ICMI, international, and U.S. Department of Transportation (DOT) requirements.

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 DuPont packaging specifications were reviewed as part of the re-certification audit and were found to be conformant to the packaging requirements of the IMDG Code.
- b) Packaging was 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 was 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.

DuPont US/Canada Rail & Barge Supply Chain Number 24, 2013

Name of Operation Signature of Lead Auditor Date

Page 13 of 30



- e) Shipping documents were reviewed for a sample of cyanide shipments for shipments to Alaska. All information required by the IMDG Code is required as standard practice on DuPont shipping paperwork.
- f) The container packing certificates from 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) DuPont maintains records which show that the ocean transport is conducted in compliance with all international and U.S. Department of Transportation (DOT) requirements. AML confirmed to DuPont that they have cyanide emergency response information available on board each vessel.
- h) DuPont 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.

✓ in full compliance with

The operation is in substantial compliance with

substantial compliance with Transport Practice 1.6

not in compliance with

Summarize the basis for this Finding:

DuPont uses a secure web-based rail car tracking system to track the movement of its rail cars. The movement of cyanide rail cars is tracked continuously. Interviews were conducted and personnel stated that appropriate actions are taken to ensure that cyanide shipments keep moving, stay on pre-designated routes, and that location can always be confirmed. The database was reviewed during the audit and confirmation was made that rail cars are being tracked continuously and that DuPont has access to "real-time" information regarding the location and status of its rail shipments of cyanide. Shipping paperwork was reviewed and was found to be conformant to 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. Rail companies maintain databases with MSDS information for the products they carry. This aspect of rail transportation is regulated and inspected by the U.S. Federal government.

DuPont US/Canada Rail & Barge Supply Chain / Not full No

Signature of Lead Auditor



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

interim storage sites to prevent releases and exposures.

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

accidental releases.

☑ in full compliance with

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

not in compliance with

Summarize the basis for this Finding:

The only interim storage activities associated with this supply chain are the Sea-Pac Transportation operations in Seattle, Washington. Although the intermodal containers are not generally stored at Sea-Pac, they are transferred from truck to railcar to barge at this point. The operation is therefore categorized as "interim storage" under ICMI guidelines. The operation is directly at the Harbor Island Port (referred to as the Seattle Port) and was therefore evaluated through a Due Diligence evaluation performed by DuPont Product Stewards.

Intermodal containers from DuPont production and packaging facilities bound for Alaska arrive into Seattle on the Union Pacific (UP) railroad into the UP rail yard. A certified Signatory trucking operation, Alaska West Express, brings the intermodal containers several miles to the Sea-Pac. Upon arrival at the port, Sea-Pac lifts the intermodal containers off the trucks and loads them onto specially designed 60-foot railcars that are used to transport the cyanide onto the AML barge and to their final rail destination, Fairbanks, Alaska. DuPont conducted an on-site due diligence evaluation of the UP rail head, Sea-Pac operations, AML operations, and the Harbor Island (Seattle) Port.

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

DuPont US/Canada Rail & Barge Supply Chain

Signature of Lead Auditor

Name of Operation

Page 15 of 30



Summarize the basis for this Finding:

DuPont has several key documents that were reviewed as part of this certification 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 DuPont Solid (Sodium or Potassium) Cyanide. Together, the documents provide extensively detailed plans, procedures and information to address all ICMI Cyanide Code emergency response requirements. DuPont's emergency response plans are appropriate for all modes of transportation used by DuPont 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 DuPont ICMI 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.

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

<u>Transport Practice 3.2:</u> Designate appropriate response personnel and commit necessary resources for emergency response.

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

Transport Practice 3.2

Summarize the basis for this Finding:

The operation is

DuPont US/Canada Rail & Barge Supply Chain

November 24, 2013

Name of Operation

Signature of Lead Auditor

Date

Page 16 of 30



Training requirements for the emergency response team members 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. DuPont also offers cyanide safety training to all of its transportation partners and customers. DuPont 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 DuPont transportation partners. The roles and responsibilities of relevant internal and external personnel are clearly described in the Transportation Emergency Information sheet, DuPont 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 2012 ICMI Cyanide Code Production audit.

<u>Transport Practice 3.3:</u> Develop procedures for internal and external emergency

notification and reporting.

☑ in full compliance with

in substantial compliance with Transport Practice 3.3

not in compliance with

Summarize the basis for this Finding:

Name of Operation

The operation is

The notification procedures, including telephone numbers, are described in the Emergency Response plans, procedures, and Transportation Emergency Information sheet. The two response plans have DuPont 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 was last been updated in 2013 and the U.S. Integrated Emergency Response plan was last updated in 2012.

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

☑ in full compliance with

DuPont US/Canada Rail & Barge Supply Chain / Nove Nove

Signature of Lead Auditor



The operation is

in substantial compliance with not in compliance with

Transport Practice 3.4

Summarize the basis for this Finding:

Specific details regarding the remediation, neutralization, decontamination, and disposal of clean-up debris are contained within the DuPont Emergency Response Procedures. Extensive descriptions of necessary action steps depending on the incident scenario are clearly outlined in the document. Interviews with DuPont 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. 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.

<u>Transport Practice 3.5:</u> 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 DuPont 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.

DuPont US/Canada Rail & Barge Supply Chain

Name of Operation

November 24, 2013

Signature of Lead Auditor



Rail Carriers, Rail Yards, Barge Operator, and Ports – Summary of Due Diligence Investigations

The Due Diligence portion of this evaluation included a review of information available for the U.S. / Canada Rail & Barge Supply Chain. The details regarding specific partners and rail yards were evaluated in order to confirm that DuPont's actual supply chain management practices are aligned with internal requirements and that they fulfill ICMI Cyanide Code requirements. The rail carriers, rail yards, barge operator (AML), and ports were evaluated during this due diligence review as a way to validate the DuPont Supply Chain management processes.

Due diligence information was available for the operations, rail yards, and ports listed below and in the subsequent table in the following section. Due diligence information was found to be sufficient to conclude that the DuPont U.S./Canada Rail and Barge Supply Chain, as described in this report is compliant with ICMI Cyanide Code requirements.

- 1) Union Pacific Railroad (UP) contracted by DuPont
- 2) Canadian National Railway (CN) contracted by DuPont
- 3) Alaska Railroad Company (ARRC) contracted by DuPont
- 4) Alaska Marine Lines (AML) (Contracted by ARRC for barge movement)
- 5) BNSF Railway (BNSF) contracted by ocean carriers for international shipments
- 6) Norfolk Southern (NS) contracted by ocean carriers for international shipments
- 7) CSX Corporation– contracted by ocean carriers for international shipments
- 8) Sea-Pac Transportation Services, LLC Interim Storage Change in Mode
- 9) Alaska West Express ICMI Certified Signatory Trucking operation Seattle rail head to Seattle Port (certified December 27, 2012)
- 10) Harbor Island (Seattle) Port, Washington USA
- 11) Port of Whittier, Alaska USA

DuPont US/Canada Rail & Barge Supply Chain

Name of Operation

November 24, 2013

Signature of Lead Auditor

Date

Page 19 of 30



Rail Terminals - Origin Loading	Destination / Interim Storage / Unloading
Location	Locations
Marion, AR	Fairbanks, Alaska - USA
Memphis, TN	Laredo, Texas - USA
Woodstock, TN (rail sidings within	Nogales, Arizona - USA
DuPont and LSI facilities)	Seattle, WA - USA
	Vivian, NV (Carlin Terminal Siding) – USA
	U.S. and Canadian Ports, as listed in the DuPont
	Global Ocean Supply Chain Re-certification Audit
	Report
	Pointe Claire Distribution Center in Greater Montreal,
	Quebec, Canada
	Seattle Rail head
	Harbor Island (Seattle) Port
	Port of Whittier

The CN, UP, and ARCC railroads are directly contracted by DuPont for rail shipments in the U.S. and Canada. The BNSF, NS, and CSX railroads are contracted and controlled by the ocean carriers used by DuPont for international ocean shipments. Information was available for all rail carriers to demonstrate that they have formal environmental, health, and safety programs that are aligned with ICMI Cyanide Code requirements.

The CN, UP, BNSF, and NS railroads have continued to be certified Responsible Care® Partner companies for more than four years. As such, their rail management system, including rail yards and interchange point safety and security, has been audited by a 3rd – party auditing firm and has been found to be suitable and effective. According to interviews, DuPont maintains close relationships with their rail partners on topics of safety. Information available for CSX shows that this rail partner also maintains a formal Public Safety and Environmental management system that includes the performance of frequent auditing and inspections.

The CN, UP, BNSF, NS and the Alaska Railroad Corporation are all part of the TRANSCAER® (<u>Transportation Community Awareness and Emergency Response</u>) organization. Records regarding safety performance and the commitment to safe transportation through communities were reviewed and found to be consistent with ICMI Cyanide Code requirements. Rail transport is generally understood to be safer than truck transport. For this, and other reasons, DuPont ships via rail rather than truck when possible.

For cyanide transport to destinations in Alaska, DuPont contracts the Union Pacific Railroad (UP) to move cyanide in intermodal containers to the Seattle railhead. The containers are picked

DuPont US/Canada Rail & Barge Supply Chain Wirol June 124, 201

Name of Operation Signature of Lead Auditor

Page 20 of 30



up by an ICMI Cyanide Code certified trucking company (Alaska West Express) and brought to the Harbor Island (Seattle) Port where the Alaska Railroad Corporation (ARRC) takes possession of the cargo. Sea-Pac, under contract to ARCC loads the intermodal containers onto special railcars used for rail-barge shipments to Whittier Alaska by Alaska Marine Lines (AML). In Whittier, the railcars are rolled back onto the rails and are brought to the Alaska West Express (AWE) yard in Fairbanks by ARCC. AWE stores the containers and then transports them to mines in Alaska. The on-site audit and ICMI certification (December 2012) of Alaska West Express operations in Seattle and Fairbanks is the subject of a separate audit and report and is not discussed further here.

The Alaska Railroad Corporation (ARRC) is owned by the State of Alaska, but it is incorporated and run like a private business. The railroad operates year-round passenger service and freight train service from Seward to Fairbanks-North Pole. DuPont conducted a Due Diligence review of ARRC using a customized ICMI Cyanide Code protocol. According to information provided by ARRC and information available on the company web-site, ARRC has a strong safety, security and environmental program. Formalized policy statements for safety and environmental stewardship are in alignment with Code requirements. ARRC has consistently received environmental stewardship-related awards since 1993 and they are committed to continual improvement through significant capital projects that are listed on the company web-site.

Alaska Marine Lines (AML) is part of the Lynden family of companies; with Corporate headquarter offices in Anchorage, Alaska and Seattle, Washington. The Lynden companies received the EPA Green Star award for having strong environmental programs in 2009. A formalized policy statement for environmental stewardship posted on the company web-site is in alignment with Code requirements. The DuPont due diligence review of ARRC included a review of the Sea-Pac interim storage and AML barge portion of the transportation. DuPont tracks all accidents and incidents involving their product shipments and no accidents or incidents have been reported for either ARRC or AML since DuPont started using these companies in 1996.

DuPont visits its Alaska transportation partners at least every three years, generally at the same time as the Alaskan mining customers. DuPont has confirmed through its interactions and due diligence reviews that its Alaska transportation partners operate in a manner that is consistent with ICMI Cyanide Code requirements.

DuPont US/Canada Rail & Barge Supply Chain November 24, 201

Name of Operation Signature of Lead Auditor



Description of Due Diligence Information Reviewed for Rail Carriers, Rail Yards, Barge Operator, and Ports

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

accidents and releases.

<u>Transport Practice 1.1:</u> Select cyanide transport routes to minimize the potential for

accidents and releases.

U.S. / Canada Rail & Barge Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

DuPont started transporting Sodium Cyanide via rail in the 1980s. Transportation studies have shown that rail transportation of hazardous materials is significantly safer than truck transportation. The railway that services DuPont out of the Woodstock, TN location is the Canadian National Railway (CN), which is privately owned. The rail cars are interchanged to the Union Pacific Railroad (UP) at the Memphis, TN interchange yard. UP is also privately owned. There are no other choices of rail partners for the moves out of Woodstock, TN due to the fact that the railroads own the track that is used.

The point of loading rail boxcars, hopper cars, and ISO tanks into the rail system is within the DuPont plant site. The facility was evaluated during the 2012 ICMI Production Certification Audit. The rail sidings are within the secure fence-line of the facility and there is no storage of loaded rail cars outside the secure point of loading. The railroads maintain control over routing and employ specific safety measures to ensure the safest transit of hazardous materials possible.

The points of loading cargo in intermodal containers are Marion, Arkansas and Memphis, Tennessee. The intermodal containers are trucked to the Union Pacific or BNSF rail heads, at which point they are loaded onto a rail car. According to interviews, the security at all rail yards is very high. Truck drivers must be registered for each individual rail yard and entry into rail yards, including the ones used in this Supply Chain, is strictly controlled.

The current route of transporting sodium cyanide to Alaska was originally evaluated and chosen in 1996. Although a remote and very extensive routing over highways could be used to reach customers in Alaska, the more direct and safer routing that was chosen to transport cyanide to the Fairbanks, Alaska area is a combination of rail to the UP railhead in Seattle, the use of a certified Signatory trucking partner (Alaska West Express) from the railhead to Harbor Island (Seattle)

DuPont US/Canada Rail & Barge Supply Chain

November 24, 201:

Name of Operation Signature of Lead Auditor



Port, ocean barge (AML), Alaska Railroad (ARCC) to Whittier Port, and ARCC rail to Fairbanks (to interim storage), and highway to the mine. Alaska West Express, an ICMI Signatory company, operates its certified interim storage and truck transport operations in Fairbanks.

According to the United States Code of Federal Regulations (CFR) Part 172.820, each railroad operating in the United States must perform an extensive risk assessment and route analysis each calendar year. The safety and security risks present along the routes must be analyzed for the rails and railroad facilities. According to the regulation, railroad facilities are railroad property including, but not limited to, classification and switching yards, and storage facilities. In performing the analysis required by the regulation, the rail carrier must seek relevant information from state, local, and tribal officials, as appropriate, regarding security risks to high-consequence targets along or in proximity to the route(s) utilized. If a rail carrier is unable to acquire relevant information from state, local, or tribal officials, then it must document that in its analysis.

DuPont received confirmation from each rail carrier partners used in this supply chain that they are in compliance with CFR 172.820 requirements and that a full risk assessment is conducted each calendar year. This risk assessment practice was found to be well aligned with ICMI rout risk assessment requirements.

<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.

U.S. / Canada Rail & Barge Transport is: substantially consistent not consistent

Summary of the basis for this finding:

Confirmation was made that all railroads have formal environmental, health, and safety (EHS) programs in place that include internal and/or external auditing programs. The CN, UP, BNSF, and NS railroads have continued to be certified Responsible Care® Partner companies for more than four years. As such, their training programs and employee qualification processes have been audited by a 3rd – party auditing firm and have been found to be suitable and effective. The fulfillment of required training is a specific requirement of the Responsible Care Management System (RCMS). Although no railroad training files are maintained by DuPont, information regarding the safety practices of the railroads is maintained on file and was reviewed during the audit.

As part of DuPont's due diligence review of ARRC and AML in 2013 it was confirmed that employees are trained annually in the transportation of hazardous materials. According to

DuPont US/Canada Rail & Barge Supply Chain November 24, 2013

Name of Operation Signature of Lead Auditor



information provided by ARRC, it regularly trains its employees in the safe handling of hazardous materials and conducts regular emergency response drills – including drills involving NaCN.

Information publically available for CSX (a rail carrier used by DuPont-contracted ocean carriers) shows that the railroad has a very good safety performance and formal Public Safety and Environmental management system in place. The railroad confirmed that it is in compliance with U.S. Federal requirements for rail operations and that a formal risk assessment of all routes and rail facilities was performed within the past calendar years, as required by regulations.

DuPont confirmed through Due Diligence evaluations together with ARCC that the barge operation AML and both ports used in this Supply Chain (Harbor Island – Seattle and Whittier) have personnel who are properly trained to handle hazardous materials.

<u>Transport Practice 1.3:</u> Ensure that transport equipment is suitable for the cyanide shipment.

not consistent

Summary of the basis for this finding:

The CN, UP, NS, and BNSF railroads have maintained Responsible Care Management System certifications for more than four years and undergo a full management system audit which includes a review that the preventive maintenance program for transportation equipment is suitable, adequate and effective. Equipment used in the transport route to Alaskan customers was reviewed visually during the due diligence audits in 2013. No problems were noted during onsite review of equipment and operations. The proper maintenance of rail equipment is also heavily regulated and inspected by the U.S. Federal government, which also helps to ensure fulfillment of rail equipment preventive maintenance and inspection requirements by all railroads used in this Supply Chain.

Additionally, DuPont tracks transportation incidents for all transportation modes throughout the world. The incident tracking database was reviewed during the audit. No significant rail transportation incidents involving sodium cyanide shipments have occurred in this supply chain in over 10 years.

DuPont ensures authorized packages are used for solid sodium cyanide. Package specifications were reviewed during this audit and were found to be compliant. Checklists and procedures used by DuPont and its packaging operations require an inspection of the cargo, containers, and rail equipment to ensure that all equipment is deemed to be safe for transport.

DuPont US/Canada Rail & Barge Supply Chain

November 24, 2013

Name of Operation Signature of Lead Auditor



<u>Transport Practice 1.4:</u> Develop and implement a safety program for transport of cyanide.

U.S. / Canada Rail & Barge Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

Limitations on worker hours in the U.S. rail industry are strictly regulated and enforced by the U.S. Government. DuPont contracts require transportation partners to adhere to all applicable regulations. There is therefore no need for DuPont to impose additional worker hour limitations in its contractual agreements. Detailed procedures, blocking and bracing diagrams, and checklists are used by DuPont and the LSI packaging operation during the loading of rail cars and inter-modal sea containers. U.S. Federal regulations require that railroads conduct random drug and alcohol testing and that drug abuse prevention programs are maintained. DuPont also has these requirements are part of its contractual standard terms and conditions. Records were available to demonstrate that the applicable ICMI Cyanide Safety Program requirements had been fulfilled.

Sea-Pac, Port, and Barge operations, including worker safety programs are regulated through a number of U.S. regulatory agencies including the U.S. Occupational Health and Safety Administration and the U.S. Coast Guard. DuPont's Due Diligence evaluations confirmed that controls on worker hours appear to be appropriate.

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

The management of **Gamma** consistent with Transport Practice 1.5

U.S. / Canada Rail & Barge Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

In order to confirm that the barge shipments to Alaska are compliant to ICMI Cyanide Code requirements, DuPont Product Stewards performed an on-site Due Diligence investigation of Alaska Rail (ARCC), Alaska Marine Lines (AML), Sea-Pac (intermodal movement at the Seattle port), and of the Port of Seattle in 2013. The Port of Whittier (destination port in Alaska) was evaluated through a Due Diligence review for ICMI Cyanide Code by ARCC. ARCC is contractually responsible for the barge move and the subsequent offloading of the railcars in Whittier, Alaska. DuPont concluded that ARRC, AML, Sea-Pac, and port operations are

DuPont US/Canada Rail & Barge Supply Chain November 24, 2013

Name of Operation Signature of Lead Auditor



conducted in compliance with all ICMI, international, and U.S. Department of Transportation (DOT) requirements.

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 DuPont packaging specifications were reviewed as part of the re-certification audit and were found to be conformant to the packaging requirements of the IMDG Code.
- b) Packaging was 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
- c) Packaging was 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 for shipments to Alaska. All information required by the IMDG Code is required as standard practice on DuPont shipping paperwork.
- f) The container packing certificates from 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) DuPont maintains records which show that the ocean transport is conducted in compliance with all international and U.S. Department of Transportation (DOT) requirements. AML confirmed to DuPont that they have cyanide emergency response information available on board each vessel.
- h) DuPont maintains records which show that the ocean transport is conducted in compliance with all international and U.S. Department of Transportation (DOT) requirements.

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

The management of U.S. / Canada Rail & Barge Transport is: ☑ consistent with Transport Practice 1.6 substantially consistent not consistent

Summary of the basis for this finding:

DuPont uses a secure web-based rail car tracking system to track the movement of its rail cars. The movement of cyanide rail cars is tracked continuously. Interviews were conducted and personnel stated that appropriate actions are taken to ensure that cyanide shipments keep moving,

DuPont US/Canada Rail & Barge Supply Chain Signature of Lead Auditor Name of Operation



stay on pre-designated routes, and that location can always be confirmed. The database was reviewed during the audit and confirmation was made that rail cars are being tracked continuously and that DuPont has access to "real-time" information regarding the location and status of its rail shipments of cyanide.

Shipping paperwork was reviewed and was found to be conformant to 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. Rail companies maintain databases with MSDS information for the products they carry. This aspect of rail transportation is regulated and inspected by the U.S. Federal government.

Barge movements are managed by ARCC. If there are questions as to the location of a shipment that is under ARCC / AML control, DuPont has ready access to this information through ARCC.

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

interim storage sites to prevent releases and exposures.

<u>Transport Practice 2.1:</u> Store cyanide in a manner that minimizes the potential for

accidental releases.

U.S. / Canada Rail & Barge Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

The only interim storage activities associated with this supply chain are the Sea-Pac Transportation operations in Seattle, Washington. Although the intermodal containers are not generally stored at Sea-Pac, they are transferred from truck to railcar to barge at this point. The operation is therefore categorized as "interim storage" under ICMI guidelines. The operation is directly at the Harbor Island Port (referred to as the Seattle Port) and was therefore evaluated through a Due Diligence evaluation performed by DuPont Product Stewards.

Intermodal containers from DuPont production and packaging facilities bound for Alaska arrive into Seattle on the Union Pacific (UP) railroad into the UP rail yard. A certified Signatory trucking operation, Alaska West Express, brings the intermodal containers several miles to the Sea-Pac. Upon arrival at the port, Sea-Pac lifts the intermodal containers off the trucks and loads them onto specially designed 60-foot railcars that are used to transport the cyanide onto the AML barge and to their final rail destination, Fairbanks, Alaska.

DuPont US/Canada Rail & Barge Supply Chain Nucle Lung

November 24, 2013

nin Ninol Jung No Signature of Lead Auditor



DuPont conducted an on-site due diligence evaluation of the Sea-Pac operations in July 2013. A completed protocol and photos were available to demonstrate that all relevant ICMI requirements were being fulfilled. Interviews were conducted with the DuPont Product Stewards to confirm the information. Topics such as security, employee training, safe handling practices, and emergency response planning were included in the evaluation and were found to be acceptable.

3. EMERGENCY RESPONSE: Protect communities and the environment through the development of emergency response strategies and capabilities

<u>Transport Practice 3.1:</u> Prepare detailed emergency response plans for potential cyanide releases.

U.S. / Canada Rail & Barge Transport is: substantially consistent

not consistent

Summary of the basis for this finding:

CN, UP, BNSF, and NS have certified Responsible Care ® management systems which include emergency response planning. As such, emergency response plans audited by a third-party auditing company at least once every three years. U.S. Federal regulation CFR 172.820 also requires that each railroad have sufficient risk assessment and emergency plans for routes and rail yards in place. In Canada, emergency plans are filed with the government. This was confirmed during the 2012 DuPont Canada Supply Chain certification audit. CSX reported that it complies with all U.S. Federal requirements, including those for risk assessment and emergency planning.

DuPont confirmed through Due Diligence evaluation that ARCC, AML, and the ports involved in this supply chain maintain sufficient emergency planning information.

DuPont provides shipping papers for different routes showing the emergency contact information which is transferred to the hazardous cargo declarations for each carrier.

<u>Transport Practice 3.2:</u> Designate appropriate response personnel and commit necessary resources for emergency response.

U.S. / Canada Rail & Barge Transport is: substantially consistent

not consistent

DuPont US/Canada Rail & Barge Supply Chain

Name of Operation

November 24, 2013

Ninel June No.
Signature of Lead Auditor



Summary of the basis for this finding:

The transportation partners included in the scope of this report have designated appropriate response personnel and committed necessary resources for emergency response. In the U.S., emergency response planning, resource allocation, and emergency response training requirements for transporters of hazardous materials are governed by the U.S. Code of Federal Regulations (CFR) 172. Additionally, most of the railroads are members of TRANSCAER - a voluntary U.S. national outreach organization of railroads that is dedicated to emergency response planning and community outreach.

The barge operator (AML) and U.S. Ports and emergency plans and resources are governed by the U.S. Coast Guard and U.S. Federal Department of Homeland Security requirements. Records were also available to show that emergency response resources for Alaska Rail, Alaska Marine, Sea-Pac, and the ports of Seattle and Whittier were reviewed through Due Diligence reviews and were found to be acceptable.

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

<u>Transport Practice 3.3:</u> Develop procedures for internal and external emergency notification and reporting.

The management of

U.S. / Canada Rail & Barge Transport is:

□ consistent with Transport Practice 3.3 substantially consistent not consistent

Summary of the basis for this finding:

The CN, UP, BNSF, NS, and ARRC are all part of the TRANSCAER® (<u>Transportation Community Awareness and Emergency Response</u>) organization which helps with notifications requirements. DuPont contracts with CHEMTREC to ensure that appropriate notifications and emergency response is initiated if there is an incident on any rail or barge move.

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

DuPont US/Canada Rail & Barge Supply Chain

Name of Operation

November 24, 2013

Signature of Lead Auditor



Summary of the basis for this finding:

Specific details regarding the remediation, neutralization, decontamination, and disposal of clean-up debris are contained within the DuPont Emergency Response Procedures. Extensive descriptions of necessary action steps depending on the incident scenario are clearly outlined in the document. Interviews with DuPont 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. The Emergency Response Procedures specifically prohibit the use of chemicals such as sodium hypochlorite, ferrous sulfate and hydrogen peroxide for treating a cyanide spill into surface water.

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

The management of ☑ consistent with Transport Practice 3.5 U.S. / Canada Rail & Barge Transport is: substantially consistent not consistent

Summary of the basis for this finding:

DuPont 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.

DuPont cyanide safety meetings provide the forum for the discussion and updating of response procedures and expectations. Records were available to show that an Ocean / Rail Safety Conference including emergency response topics was held in 2011.

As part of the rail carrier safety programs such as TRANSCAER® (Transportation Community Awareness and Emergency Response), drills and exercises (not necessarily cyanide specific) are conducted to test response capabilities.

According to the ARRC due diligence investigation, ARRC and AML perform annual drills, as required by the State of Alaska. DuPont has participated in these drills in the past.

CN, UP, BNSF, and NS are all certified to Responsible Care®. As such each railroad is required to regularly conduct emergency response drills and maintain up-to-date emergency response information. This practice is confirmed at least every three years by a third-party auditing firm.

DuPont US/Canada Rail & Barge Supply Chain Name of Operation

Signature of Lead Auditor