# INTERNATIONAL CYANIDE MANAGEMENT INSTITUTE

# **Cyanide Transportation Summary Audit Report**

Seattle Freight Service, Inc.

**Prepared For** 

E.I. DuPont de Nemours and Company, Inc.

As an addendum to its certified

US/Canada Rail & Barge Supply Chain

By

**Environmental Technology & Management** 

#### SUMMARY AUDIT REPORT

Name of Cyanide Transportation Facility: **DuPont US/Canada Rail & Barge Supply Chain** 

Name of Facility Owner: E.I. DuPont de Nemours and Company, Inc.

Name of Facility Operator: E.I. DuPont de Nemours and Company, Inc.

Name of Responsible Manager: Mr. Donald W. Jeffery, Global Product Stewardship Mgr

Address: 2571 Fite Road

City: Memphis State/Province: TN Country: USA

Telephone: (949) 502-4586

Location detail and description of operations:

On January 9-10, 2014 Environmental Technology & Management conducted an audit of Seattle Freight's cyanide transportation activities against the Transport Practices of the International Cyanide Management Code. Verification activities were performed at the request of E.I. DuPont de Nemours and Company, Inc. (DuPont), the Consignor Signatory to the Code. DuPont contracts with the UP railroad to move its overseas containers of product from railheads near Memphis, TN to a railhead in Seattle, WA. At that point, responsibility is transferred to Alaska Railroad (ARRC) to complete the move of product to Alaska. ARRC contracts Seattle Freight to dray the containers from the UP railhead to the Port of Seattle where they are loaded back onto special rail cars for a barge move to Whittier, AK by Alaska Marine Lines. Alaska Marine Lines then transfers these special rail cars back to ARRC at the port in Whittier, AK.

The original certification of the US/Canada Rail & Barge Supply Chain was completed in 2010 and recertification was achieved in February 2014. Originally, the dray move from the railhead to the port was not singled out to be audited, but more recently the Code has been amended to cover dray carriers, like Seattle Freight. Therefore, Environmental Technology & Management conducted a verification audit of the dray carrier and is hereby submitting the report as an Addendum to the current US/Canada Rail & Barge Supply Chain.

Seattle Freight Service, Inc. has selected and evaluated a primary and an alternate route between the Seattle railhead and the Sea-Pac Interim Storage facility at the Port. Because of the close proximity of railhead and port, both are less than 3 miles in length, these are the only feasible routes. Both routes follow major city streets through commercial and industrial areas in and around the Port District.

Seattle Freight Service, Inc. has provided emergency response training to the drivers selected for transportation of sodium cyanide, particularly with regard to its Emergency Response

Jack Milaugh

Seattle Freight Service, Inc.

Name of Facility Signature of Lead Auditor

January 9-10, 2014

**Audit Date** 

Notification procedures. DuPont manages emergency response for the entire supply chain. DuPont's Global Emergency Response Plan and related procedures adequately address all the requirements in Section 3 Emergency Response of the ICMI Transportation Protocol, as verified in the DuPont U.S. / Canada Rail & Barge Transportation Supply Chain Certification Audit Report dated November 24, 2013.

The remainder of this report provides the summary of findings regarding Seattle Freight Service, Inc.'s conformance to the requirements of the Cyanide Transportation Verification Protocol.

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Goel Milaugh

### **SUMMARY AUDIT REPORT**

## Auditor's Finding

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#### SUMMARY AUDIT REPORT

1. TRANSPORT:		ransport cyanide in a manner tha ccidents and releases.	t minimizes the potential for
Transport Practice	<u>2 1.1</u> :	Select cyanide transport rou accidents and releases.	tes to minimize the potential for
The operation is		in full compliance with in substantial compliance with not in compliance with	Transport Practice 1.1

Summarize the basis for this Finding/Deficiencies Identified:

Seattle Freight Service, Inc. is in full compliance with Transport Practice 1.1, therefore ensuring the DuPont US/Canada Rail & Barge Supply Chain remains in full compliance. A Primary Route and Alternate Route are designated in the Seattle Freight Service, Inc. Dupont Cyanide Transportation Policy & Procedures. These are the only two routes available. Each one is less than three miles in length and follows the same types of major city streets through commercial and industrial areas in and around the Port of Seattle. The same routes have been used since the inception of DuPont Cyanide shipments in 1995. There is virtually no difference between the two routes with respect to population density. The Alternate Route will be used if road construction or condition warrants it. Both routes travel through the flat port area. The only pitch and grade considerations come from bridges, highway overpasses and ramps. Each route crosses the same water body, a river, on a drawbridge since the Sea-Pac Yard and the UP Rail Yard are on opposite sides of a river. Both routes are subject to the same climate and weather conditions, including fog. Seattle Freight Service, Inc. drivers are trained and instructed to report on road conditions to their dispatcher. The procedures require the Dispatcher to be informed if the alternate route must be used for any reason, but the Dispatcher reports that this has never been necessary during his tenure. Both routes follow established hazmat truck routes through commercial and industrial areas in and around the Port of Seattle. The auditor verified that DuPont's Philip Strange conducted local emergency responder training on June 10, 2013, allowing ample opportunity for community input. Seattle Freight Service, Inc. Dupont Cyanide Transportation Policy & Procedures notes no special safety or security concerns with the routes. This fact and the short distance of these routes preclude use of convoys or escorts. Furthermore, cyanide drivers are instructed not to stop along the route, except for traffic compliance. Because of DuPont's strong product stewardship ethic and its expertise in the area, DuPont has taken the lead on advising and training external responders, medical facilities and communities. As stated above, DuPont's Philip Strange has conducted local emergency responder training. Seattle Freight Service, Inc. transports cyanide, but does not otherwise handle it. Seattle Freight Service, Inc. does not broker or subcontract loads to any other transport company. All of Seattle Freight Service Inc.'s drivers are contractors (Owner/Operators), but they are recruited, trained and

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qualified using established procedures and standards, to ensure that all applicable elements of this Transport Practice are met.

Transport Practice	<u>1.2</u> :		erating cyanide handling and transport Fir jobs with minimum risk to Conment.
The operation is	in s	full compliance with ubstantial compliance with in compliance with	Transport Practice 1.2
Summarize the basis	s for this	Finding/Deficiencies Identi	fied:
the DuPont US/Can Service, Inc. uses of its vehicles. Owner performance with re- must meet all apply years of age, posse endorsements, and had Inc.'s Drug and Al- Transportation Wood transporting cyanide including reviewing periodic refresher transporting Policy; Spe Alcohol Policy. Ad	ada Rail only trained //Operator egard to licable Fe ss a validate a go cohol Plarker Idented have attenting in eed & Folditionally curity Tr	& Barge Supply Chain rered, qualified and licensed in research, qualified and licensed in research equipment and activities. DOT safety standards, trained and Motor Carrier Safety of Class A Commercial Drood driving record. All drives an and background investigation Credential (TWA tended DuPont Cyanide Safety videous Seattle Freight Service, Including Distance Policy; Vey, training in Pre-trip inspersioning. Seattle Freight Service.	ransport Practice 1.2, therefore ensuring mains in full compliance. Seattle Freight independent Owner/Operators to operate is are required to meet the standards of ining and job responsibilities. All drivers of (FMCSA) Regulations, be at least 25 evers License with Hazardous Materials ers are subject to Seattle Freight Service, gations, including those required for the IC) identification. Furthermore, drivers fety Awareness for Transporters training All drivers in Cyanide Service receive east Safety Policy; Cell Phone, Texting & ethicle Maintenance Policy and Drugs & ctions of containers at the Rail Yard is vice, Inc. does not broker or subcontract
Transport Practice	1.3:	Ensure that transport equipolity shipment.	pment is suitable for the cyanide
The operation is		ull compliance with	Transport Practice 1.3

Summarize the basis for this Finding/Deficiencies Identified:

not in compliance with

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Seattle Freight Service, Inc. is in full compliance with Transport Practice 1.3, therefore ensuring the DuPont US/Canada Rail & Barge Supply Chain remains in full compliance. Gross (packaged) Product Weight, container tare weight and dunnage weight are conveyed to Seattle freight to ensure weight limits are not exceeded. Seattle Freight Service, Inc. has tractor specifications (3-axle, licensed for 80,000 lbs) and a preventive maintenance program on the chassis that ensures that its transport equipment retains a load-bearing capacity adequate for the anticipated load. This includes periodic inspections and testing as well as appropriate specifications for equipment and parts that may be replaced during maintenance. Tractors owned by Owner/Operators are inspected every 2 months (DOT 396.19) and any necessary repairs must be completed before the next dispatch. DuPont provides Sea Containers and IBC's, and provides verification that equipment for which they are responsible meets appropriate construction and performance standards. Owner/Operators are required to complete a monthly Maintenance Report on their tractors and to provide records of any work performed to Seattle Freight Service, Inc. DuPont performs all cyanide loading according to its own procedures. Product weights are specified on shipping papers, and DuPont uses its own scales to weigh empty and loaded Sea Containers. Seattle Freight Service, Inc. drivers check the weights and verify conformance with D.O.T. requirements before leaving the Rail Yard. Seattle Freight Service, Inc. does not broker or subcontract loads to any other transport company.

Transport Practice 1.4.	Develop and implement a so	afety program for transport of cyanide
The operation is	in full compliance with in substantial compliance with not in compliance with	Transport Practice 1.4

Summarize the basis for this Finding/Deficiencies Identified:

Seattle Freight Service, Inc. is in full compliance with Transport Practice 1.4, therefore ensuring the DuPont US/Canada Rail & Barge Supply Chain remains in full compliance. DuPont loads sodium cyanide briquettes into its specially designed IBC's, loading those into Sea Containers and sealing the Sea Containers after loading. DuPont has procedures in place to ensure packaging integrity during transport, including blocking and bracing techniques. Placards are installed by DuPont personnel and are checked by Seattle Freight Service, Inc. drivers. Seattle Freight Service, Inc. drivers perform routine pre-trip and post-trip inspections on tractors and chassis. Furthermore, they inspect each load as part of the Load Pick-Up Process. This inspection includes looking for any evidence of bulges, dents and holes, powder, unsealed doors and locks on the container. Seattle Freight Service, Inc. employs a preventive maintenance program for the 37 chassis owned by the company. Owner/Operators are required to complete a monthly Maintenance Report and to provide records of the work to Seattle Freight Service, Inc. Seattle Freight Service, Inc. complies with Part 395 of the Motor Carrier Safety Regulations which places strict limitations on driving and on-duty hours. DuPont loads all containers according to

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its time-tested procedures and blocks & braces each load to prevent shifting during transit. Extreme roadway pitch or gradient, excessive speed negotiating roadway curves and highway ramps and hard braking can be factors causing load shift. Extreme roadway pitch or gradient is not an issue between the UP Rail Head and the Port of Seattle. Speed and space management are topics covered by Seattle Freight Service, Inc. with its drivers during Safety Meetings. Procedures require the Dispatcher to be informed if the alternate route must be used for any reason, but the Dispatcher reports that this has never been necessary during his tenure. All drivers are authorized to suspend transportation activities if conditions warrant. Seattle Freight Service, Inc. maintains a Drug and Alcohol Policy (program) through a Third Party Provider, in conformity to FMCSA requirements. The program includes Pre-employment, Random, Post-Accident, Post-Incident and Reasonable Suspicion drug screening. Seattle Freight Service, Inc. retains preventive maintenance records, including histories on each piece of equipment, at the terminal. Records relating to the Drug and Alcohol Policy, including consent forms, are maintained in a file at the Seattle Freight Service headquarters. A copy of the Driver's Vehicle Inspection Report is filed in the headquarters office by day, and discarded after 3 months. Seattle Freight Service, Inc. does not broker or subcontract loads to any other transport company.

Transport Practice 1.5.	Follow international standa sea and air.	ards for transportation of cyanide by
The operation is	in full compliance with in substantial compliance with not in compliance with	Transport Practice 1.5

Summarize the basis for this Finding/Deficiencies Identified:

The DuPont US/Canada Rail & Barge Supply Chain is in full compliance with Transport Practice 1.5 (See DuPont US/Canada Rail & Barge Supply Chain Summary Audit Report). Since Seattle Freight Service, Inc. does not transport cyanide by sea and air, this addendum will have no impact on the supply chain's compliance with this transport practice.

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Transport Practice	<u>1.6</u> :	Track cyanide shipments to p	prevent losses during transport.
The operation is		in full compliance with in substantial compliance with not in compliance with	Transport Practice 1.6

Summarize the basis for this Finding/Deficiencies Identified:

Seattle Freight Service, Inc. is in full compliance with Transport Practice 1.6, therefore ensuring the DuPont US/Canada Rail & Barge Supply Chain remains in full compliance. Seattle Freight Service, Inc's transport vehicles in Cyanide Service have at least two means of communication. Each tractor is equipped with a two-way radio that allows for communication between driver and dispatcher. In addition, each driver carries a cell phone. (Note that cell phone use is subject to the Seattle Freight Service, Inc. Cell Phone, Texting and Driving Policy, which strictly prohibits the use of hand-held cellular devices while the vehicle is under way). Cyanide drivers have been furnished with the phone number for the Director of Safety, who in turn is to notify Chemtrec. Seattle Freight Service, Inc.'s communication devices are in use daily, and if a failure occurs, dispatchers know quickly. According to Seattle Freight Service Inc's DuPont Cyanide Transportation Policy and Procedures, drivers are advised to verify that their two-way radios and cellular phones are functioning prior to departure from the terminal. No blackout areas for either cell phone or radio have been found along the identified routes. Because of the proximity of rail head and Port, and based on identified primary and alternative routes it is not deemed necessary to track the progress of cyanide shipments. Seattle Freight Service, Inc. picks up loaded, sealed containers at the rail head and delivers them to the Port directly, for loading on railcars. Seal numbers are recorded on shipping papers and drivers verify that the seals are intact at the point they take possession at the rail head. The Shipping Documentation serves as a chain of custody document. The amount of cyanide in transit is indicated on the Straight Bill of Lading and Intermodal Equipment Receipt (IER). Drivers in Cyanide Service are required to carry a Transportation Emergency Information Sheet and an Safety Data Sheet for product transported. Furthermore, drivers are required to have the shipping papers and safety information within their reach while their seat belt is fastened. Seattle Freight Service, Inc. does not broker or subcontract loads to any other transport company.

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2. INTERIM STO	RAGE:	Design, construct and opera interim storage sites to preve	te cyanide trans-shipping depots and ent releases and exposures.
Transport Practice	2.1:		
Transport Practice	<u>2.1</u> :	Store cyanide in a manner that accidental releases.	at minimizes the potential for
The operation is	ir	n full compliance with n substantial compliance with ot in compliance with	Transport Practice 2.1

The DuPont US/Canada Rail & Barge Supply Chain is in full compliance with Transport Practice 2.1 (See DuPont US/Canada Rail & Barge Supply Chain Summary Audit Report on the ICMI website). Since Seattle Freight Service, Inc. does not operate any cyanide trans-shipping depots or interim storage sites, this addendum has no impact on the supply chain's compliance with this transport practice.

Summarize the basis for this Finding/Deficiencies Identified:

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3. EMERGENCY RESPONSE:	Protect communities and the environment through the development of emergency response strategies and capabilities
<u>Transport Practice 3.1</u> : Preparelease	re detailed emergency response plans for potential cyanide es.
The operation is in substant	pliance with ial compliance with Transport Practice 3.1 pliance with
Summarize the basis for this Finding	/Deficiencies Identified:
the DuPont US/Canada Rail & Barg Service has written an Emergency Department to notify Chemtrec and incident involving actual or potential Cyanide Hotline which triggers in Response Plan. DuPont manages en plan. The Global Emergency Response	Il compliance with Transport Practice 3.1, therefore ensuring ge Supply Chain remains in full compliance. Seattle Freight Response Notification document, which requires the Safety the DuPont Cyanide Hotline in the event of an accident or al releases of product. Chemtrec will also notify the DuPont mplementation of DuPont's Cyanide Global Emergency mergency response for the entire supply chain utilizing this onse Plan and related procedures adequately address all the MI Transportation Protocol, as verified in the DuPont U.S. / a Supply Chain Certification Audit Report.
	nate appropriate response personnel and commit necessary ces for emergency response.
The operation is in substant	pliance with Transport Practice 3.2 pliance with

Summarize the basis for this Finding/Deficiencies Identified:

Seattle Freight Service, Inc. is in full compliance with Transport Practice 3.2, therefore ensuring the DuPont US/Canada Rail & Barge Supply Chain remains in full compliance. Seattle Freight Service, Inc. has provided emergency response training to the drivers selected for transportation of sodium cyanide, particularly with regard to its Emergency Response Notification procedures. DuPont manages emergency response for the entire supply chain. DuPont's Global Emergency Response Plan and related procedures adequately address all the requirements in Section 3 of the ICMI Transportation Protocol, as verified in the DuPont U.S. / Canada Rail & Barge

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Transportation Supply Chain Certification Audit Report. As detailed in Seattle Freight Service, Inc. DuPont Cyanide Transportation Policy & Procedures drivers are responsible for implementing the company's Emergency Response Notification, while seeking an elevated upwind position of safety and, if possible, diverting pedestrian and vehicular traffic. Duties and responsibilities of other personnel are described in DuPont's Global Emergency Response Plan and related procedures. DuPont's Global Emergency Response Plan and related procedures list emergency response equipment that should be available along the transportation route. Seattle Freight Service, Inc. trucks carry flares, triangles and personal protective equipment to allow drivers to safely carry out their limited role in emergency response. Seattle Freight Service, Inc. provides initial driver Cyanide Safety training, and refresher training, which includes training in emergency response procedures, conducted by its Director of Safety (See Transport Practice 1.2, 2). Seattle Freight Service, Inc. drivers will not physically perform emergency containment or cleanup of a release of Sodium Cyanide in the event of a container breech. They will only implement the company's Emergency Response Notification procedures. Therefore, their Emergency Equipment is limited to flares, triangles, their two-way radios and their cellular telephones. The Seattle Freight Service, Inc. Dupont Cyanide Transportation Policy & Procedures requires that radios and cell phones be tested prior to every movement. Seattle Freight Service, Inc. does not broker or subcontract loads to any other transport company.

Transport Practice	<u>3.3</u> :	Develop procedures for internotification and reporting.	rnal and external emergency
The operation is		in full compliance with in substantial compliance with not in compliance with	Transport Practice 3.3

Summarize the basis for this Finding/Deficiencies Identified:

Seattle Freight Service, Inc. is in full compliance with Transport Practice 3.3, therefore ensuring the DuPont US/Canada Rail & Barge Supply Chain remains in full compliance. Seattle Freight Service, Inc. Dupont Cyanide Transportation Policy & Procedures includes an Emergency Response Notification procedure, which requires the Safety Department to notify Chemtrec and the DuPont Cyanide Hotline in the event of an accident or incident involving actual or potential releases of product. Chemtrec will also notify the DuPont Cyanide Hotline which triggers implementation of DuPont's Cyanide Global Emergency Response Plan. DuPont manages emergency response for the entire supply chain utilizing this plan. The Cyanide Global Emergency Response Plan and related procedures adequately address all the requirements in Section 3 of the ICMI Transportation Protocol. Seattle Freight Service, Inc maintains its DuPont Cyanide Transportation Policy & Procedures as part of its policy documents. Policies are dated with the date of their Origination and the date of their next review and potential revision.

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*Transport Practice 3.4:* 

-	additional hazards of cyanide treatment chemicals.
The operation is	<ul> <li>in full compliance with</li> <li>in substantial compliance with</li> <li>□ not in compliance with</li> </ul> Transport Practice 3.4
Summarize the bas	is for this Finding/Deficiencies Identified:
the DuPont US/Ca Service, Inc. drive Cyanide in the eve Response Notificat of solutions or soli spill clean-up det DuPont's Cyanide chemicals such as	vice, Inc. is in full compliance with Transport Practice 3.4, therefore ensuring mada Rail & Barge Supply Chain remains in full compliance. Seattle Freight rs will not physically perform cleanup or remediation of a release of Sodium nt of a container breech. They will only implement the company's Emergency tion procedures. Procedures for remediation, such as recovery or neutralization ds, decontamination of soils or other contaminated media and management of oris are covered in DuPont's Cyanide Global Emergency Response Plan. Global Emergency Response Plan and related procedures prohibit the use of sodium hypochlorite, ferrous sulfate and hydrogen peroxide to treat cyanide sed into surface water.
Transport Practice	Periodically evaluate response procedures and capabilities and revise them as needed.
The operation is	<ul> <li>in full compliance with</li> <li>in substantial compliance with</li> <li>Transport Practice 3.5</li> <li>not in compliance with</li> </ul>
a	

Develop procedures for remediation of releases that recognize the

Summarize the basis for this Finding/Deficiencies Identified:

Seattle Freight Service, Inc. is in full compliance with Transport Practice 3.5, therefore ensuring the DuPont US/Canada Rail & Barge Supply Chain remains in full compliance. Seattle Freight Service, Inc maintains its DuPont Cyanide Transportation Policy & Procedures, which includes the Emergency Response Notification procedure, as part of its policy documents. Policies are dated with the date of their Origination and the date of their next review and potential revision. DuPont plans to conduct a drill with all Seattle area shipping partners in August 2014. Seattle Freight Service, Inc will evaluate the performance of its Emergency Response Notification procedure after its implementation and revise it as needed. Any modifications to the Plan will trigger re-training for all Seattle Freight Service, Inc. personnel affected. As of the date of this audit, it has not been necessary to implement the procedure.

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