



*DUPONT SUPPLY CHAIN IN PERU*

***Cyanide Code Principle 2  
Transportation Audit***

***Summary Audit Report***

*PROJECT NO. 0114697*

*OCTOBER 2010*

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# SUMMARY AUDIT REPORT

## 1 GENERAL SUMMARY

### 1.1 INFORMATION ON THE AUDITED OPERATION

Name of Cyanide Transportation Facility: DuPont Supply Chain in Peru  
Name of Facility Owner: DuPont Chile S. A.  
Name of Facility Operator: DuPont Supply Chain in Peru  
Name of Responsible Manager: Jean Jacques Covos  
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Location detail and description of operation:

E.I. DuPont de Nemours & Co (DuPont) supplies sodium cyanide in solid state (briquettes) in Peru. DuPont's current agent in Peru is DuQuimica. Currently, DuPont supplies cyanide to Compañía Minera Antamina mine located in the Libertad Ancash Region, Peru and as also to Mercantil S.A. (distributor) in Lima, Peru.

Cyanide is transported to Peru by ship to the Callao Port. Ship unloading operations are performed by the Port Authority, which releases the container by placing it on a truck's platform. At this point, the cyanide becomes responsibility of DuPont. Currently, the cyanide is transported directly to the mine, without the intervention of secondary storage facilities; however, DuPont has prepared a storage procedure in the event a client asks DuPont to keep a stock in Peru. In the case of Mercantil, S. A. the cyanide is supplied in a CIF basis (INCO Terms).

**This audit comprises the transportation operations from the moment the Ocean Carrier delivers the cyanide to the Port facility to its delivery in the client facilities (the mine). DuPont has followed the Cyanide Code principles since 2006 in Peru; however, being this the first certification audit, records were reviewed back to January 2009.**

As previously noted, currently there is only one transportation route operated from Callao Port to the mine with an approximate length of 500 km. Given the infrastructure available in Peru, there are no possible alternative routes.

Cyanide is packaged by the manufacturer (Du Pont USA) in the following way: primary packaging in a poly propylene super-sack filled up to 1 ton. The super-sack is then placed in a polyethylene bag to protect the material from water and humidity; finally the packaged material is placed in a wooden box (package type I). No less than 20 boxes are placed in standard 20-foot shipping containers (the containers); the exact number of boxes is to prevent lateral movement of the boxes within the container. To further prevent movement a block and brace is applied consisting of placing wood beams between the last box and the container's door. Prior to

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shipping, the manufacturer seals the container with a tag with serial number at the production facility to prevent material losses. These seals are only removed at the mine.

DuPont performs every three years a due diligence of the port to ensure that there are acceptable safety measures for the cyanide handling and emergency response. The latest due diligence was performed in October 2009.

DuPont subcontracts Stiglich Transportes S.A. (Stiglich) to transport sodium cyanide in Peru. DuPont provides training to Stiglich's drivers and convoy supervisor (which are redundant with DuPont's convoy leaders), approves the crew used for each transport operation, and audits Stiglich on an annual basis to ensure compliance with its procedures. Additionally, DuPont has trained. Stiglich has its own system to comply with the code and the training received from DuPont is redundant with the provided in house. For cyanide transport, DuQuimica only provides administrative support (coordinates delivery times with the client, issues local bill of lading, and payroll for convoy leader). The technical aspects of cyanide transport are handled from DuPont Chile by Mr. Jean Jacques Covos, Technical Services Manager, who selects, trains, and supervises the convoy leaders; he or one of the trained convoy leaders train the transporter drivers and administrative personnel in their emergency response responsibilities and performs the audits to the transporter.

### **1.2 OVERALL AUDITOR'S FINDING**

This operation is

- in full compliance
- in substantial compliance \*(see below)
- not in compliance

with the International Cyanide Management Code.

\* For cyanide transportation operations seeking Code certification, the Corrective Action Plan to bring an operation in substantial compliance into full compliance must be enclosed with this Summary Audit Report. The plan must be fully implemented within one year of the date of this audit.

Audit Company: ERM Mexico, S. A. de C. V.

Audit Team Leader: Juan Carlos Rangel Lopez E-mail: [juancarlos.rangel@erm.com](mailto:juancarlos.rangel@erm.com)

Names and Signatures of Other Auditors: none

Date(s) of Audit: 20 to 21 July 2010

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

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

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## 2 DUPONT'S ROLE AS CONSIGNER

This operation is

- in full compliance
- in substantial compliance
- not in compliance

with the International Cyanide Management Code.

### **2.1 TRANSPORT: TRANSPORT CYANIDE IN A MANNER THAT MINIMIZES THE POTENTIAL FOR ACCIDENTS AND RELEASES**

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

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 1.1
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

DuPont has the following procedure DUP-SA-Evalu Rutas "Routes Assessment Procedure", dated 21 June 2005. DuPont's route assessment procedure establishes the first step in the route assessment is to describe the route and the following safety criteria must be identified:

- o Dangerous turns
- o Steep slopes
- o Main cities and population density
- o Bridges
- o Slides zones
- o Intersection with rail roads
- o Fog, ice, and snow areas
- o Water bodies
- o Environmentally sensitive areas
- o Areas with high robbery risk
- o Areas where driver could rest
- o Any other conditions that may represent a risk.

It establishes that a physical inspection of the route must be performed by DuPont's representative or by a convoy leader, trained by DuPont for these purposes, from the

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transportation subcontractor. During the inspection, the scheduled and rest stops are selected, as well as the places where the vehicles and drivers can stay overnight, the communication services available, emergency numbers, gas stations, police offices, sensitive areas, and communities are also identified. The areas where accidents are most likely to take place are also identified.

Based on the route inspection, a risk assessment is performed. The assessment is documented in a matrix where the transportation route is divided in sections considering crossings of urban areas, intersections with other roads, and other key points (e.g. mine check point). Each section is assessed for each of the route safety criteria mentioned and, based on these, a risk ranking is used (A for areas where incident risk is high to D where the risk is low). These matrices are also used to develop emergency scenarios (e.g. truck rollover on dry soil conditions, crash with another vehicle, etc.) in the different route sections. Each scenario has specific preventive measures (e.g. establishing maximum speed of 40 km controlled by the convoy leader in slippery sections).

A copy of the matrix is included in transportation procedure and as annex in the Emergency Response Plan. Additionally, a description of the points with a higher risk is included in the transportation procedure. The route assessment procedure also establishes that the route assessments must be updated as necessary and at least once per year by a DuPont representative or someone enabled by DuPont to do so.

The initial assessments were performed by DuPont's Technical Services Manager, Mr. Jean Jacques Covos in 2006.

According to the track changes of the transportation procedures, the route assessments to the different mines were updated from April 2009 to May 2010.

DuPont has the procedure DUP-PE-07 "Sodium Cyanide Ground Transportation to Antamina" (herein after the transportation procedure) latest revision May 2010.

Based on the matrix mentioned in question 1, general preventive measures have been established in the transport procedures including: limiting the transportation activities to day-time only, a minimum 8 hr driver-rest period prior to starting a cyanide transportation operation, mandatory 10 minutes breaks approximately every two hours in pre-selected stop points during cyanide transportation operations, maximum driving journey of 12 hours, all shipments performed in convoys with at least one safety escort vehicle and a convoy leader. The procedure allows the convoy leader to stop the operations (in a pre-selected point) when the route conditions are unsafe (e.g. due to weather conditions).

DuPont requires the transporter to be a Code certified and to follow these procedures. Most of the requirements established in DuPont's procedures are redundant with those implemented by the transporter currently used by DuPont.

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Additionally, the transport procedure establishes that the convoy leader must prepare a report for each transport operation where he must include information on the weather, road, and traffic condition for each day; it must also record delays and the explanation for these. As previously noted, these requirements are redundant with those implemented by the transporter currently used by DuPont.

DuPont organizes at least one forum per year with relevant institutions including:

- The Institute of Civil Defense
- The Health Ministry
- El Callao Port Authority,
- Hospitals along the route
- Fire-fighters departments along the route
- The Energy and Mining department.

Mining companies have been also invited to these forums.

The latest general forums took place on 3 March 2009, 5 May 2009, and 25 and 26 May 2010. According to DuPont, no feedback has been received to date. Attendance lists for these meetings are kept in files. During these forums, DuPont provides information regarding cyanide handling and emergency response and, when ever the audience is mainly composed of the medical community, information regarding toxicology and medical treatment is also provided. A total of 190 persons participated in the mentioned forums.

DuPont distributes on an annual basis (May 2009 and July 2010) updated copies of the sodium cyanide material safety datasheet to the firefighters departments (four departments), and the hospitals (thirteen) that are located along the route. These entities have been invited to the forums previously mentioned.

DuPont has an Evaluation, Selection, and Accreditation of Contractors for the Sodium Cyanide Transport and Storage (DUP-SA-COD-01, revision June 2010). According to this procedure, the contractors must comply with the following requirements, among others:

- To comply with DuPont's Sourcing and Logistic requirements (not related to the Code)
- To have safety standards and procedures
- To have a drugs and alcohol policy
- To have a training program
- To be a Code Signatory (and Certified from October 2010 onwards)
- To have a maintenance program for its equipment

According to the procedures an initial assessment is performed prior to use the contractor services and then an annual audit is performed following DuPont's verification protocol. This protocol consists of a 14 pages checklist which covers, among others, the following points:

- General information
- Frequency of work related and traffic related incidents and accidents

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- Insurance
- Safety management system (MSDS, incident investigation procedures, corrective actions, documents and records control)
- Training program (including a list of 27 topics and records keeping)
- Hiring policies
- Disciplinary policies
- Driver control
- Rewards policies
- Safety leader
- Written work procedures
- Personnel protection equipment
- Hazardous materials management
- Emergency response
- Vehicle inspection
- Travel planning
- Transport equipment maintenance
- Occupational healthy

The initial assessment is always performed by DuPont Technical Services Manager, Mr. Jean Jacques Covos; the annual audit is performed either by Mr. Covos or a person trained by him.

In Peru, DuPont subcontracts Stiglich Transportes S.A. (Stiglich) for the cyanide transport. Stiglich has been audited under the Code requirements by an approved auditor. According to the audit report, Stiglich complies with transport practice 1.1 independent of DuPont. Stiglich certification was published on 27 May 2010.

The 2009 and 2010 DuPont audits to Stiglich were performed by Mr. Antonio Nolte, one of DuPont's convoy leaders (which is redundant with the one provided by Stiglich). According to Mr. Covos records are also reviewed during the audits to support the answers to the checklists. According to the 2009 and 2010 checklist, Stiglich complies with DuPont requirements.

Additionally, DuPont ensures, through field supervision, training to the transporter personnel (redundant with that provided by the transporter), and by approving the crew for each transport operation that by using convoy leaders (contracted by its agent DuQuimica and selected and trained by Mr. Covos) that its procedures are followed by Stiglich. Stiglich uses its own convoy leaders and those provided by DuPont are redundant. Communications with the stakeholders is lead by the Mine (the cyanide owner) with DuPont's support.

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### **2.1.2 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 Transport Practice 1.2
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

This practice is not applicable to DuPont as a consignor. DuPont uses a Code certified transporter.

However, DuPont's transport procedure establishes the following requirements for drivers:

- o To be healthy
- o To have the legally required driving license
- o To be trained in defensive driving
- o To be trained by DuPont in sodium cyanide handling and emergency response.

The procedures also establish that the driver must have at least one rest day per week, must have rested at least 8 hours prior starting the trip, that a 10 minutes break must be taken approximately every two hours, and that the maximum work journey for the driver is 12 hours.

The transportation procedures also establish that the convoy leader must have transport background, to be knowledgeable on basic mechanics, and leadership qualities.

DuPont trains the convoy leaders to ensure they are familiar with DuPont's specific requirements. Additionally, DuPont has provides training in hazardous materials transportation and cyanide transportation to the transporter designated drivers and convoy leaders. The latest training sessions were held 8 May 2009, 7 August 2009, 13 November 2009, 10 February 2010, 19 April 2010, and 14 June 2010.

Attendance lists are kept as training records. The training provided by DuPont to the convoy leader and drivers is redundant with that provided by the transporter.

DuPont, through its Transport Coordinator and its Technical Services Manager, verifies that the drivers have been trained in the previous twelve months and that the trucks are included in the list of vehicles enabled for the cyanide transport operation.

Most of these requirements are redundant with the procedures implemented by the transporter.

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

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 1.3
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

1. *Does the transport company only use equipment designed and maintained to operate within the loads it will be handling?*

This practice is not applicable to DuPont as a consignor. DuPont uses a Code certified transporter.

However; DuPont's transport procedure establishes the characteristics required for vehicles to be used for cyanide transportation including:

- o The be included in a preventive maintenance program
- o Permits required by the local authorities
- o The procedure includes a list of 25 trucks and 20 platforms/chassis that have been approved for use in cyanide transportation operations

The transport procedure establishes that the convoy leader must inspect every truck and platform prior to the transport operation. A checklist, which includes questions about the truck conditions, the driver, the required documents, and truck accessories, is used to document the inspection. A checklist form is filled for each truck in the convoy.

The transport procedure establishes that each platform will be loaded with only one container and that each truck can only haul one platform trailer.

Most of these requirements are redundant with those implemented by the transporter.

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

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 1.4
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

This Practice is not applicable to DuPont as a consignor. DuPont uses a Code certified transporter.

However, the transport procedure establishes that the load cannot be altered during the transportation process. To ensure this, tags are placed in the ocean container's locks at the manufacturing facility. These tags can only be removed at the mine.

The procedures establish:

- Inspections are performed prior the vehicle departs to the port facility for loading (documented through the vehicle inspection checklist)
- Inspections are performed prior to the departure from the port facility (special focus on twist lock) (no records established).
- The trucks and the platforms must be included in a preventive maintenance program
- Operators rest at least 8 hrs prior to trip, should not drive for over 12 consecutive hours, and take a 10 min break approximately every two hours at pre-selected stops points where the risk has been assessed and ranked as low; the convoy leader ensures that these are the only programmed stops.
- Prior to departure, the convoy leader assesses the weather conditions and gets information about political issues on the road; if he deems it necessary he can postpone the trip and this decision is informed to the mine and to DuPont.
- Prior to departure of every shipment and every morning during the transport operation, the drivers are tested for alcohol levels (blow tests documented in a trip log).
- Load shifting within the container is not considered possible as all containers are filled with 20 boxes and block and brace is applied to prevent load movement.
- Container rollovers in different conditions (during the rainy season, crossing a river, in a curve, or crash) are considered and preventive measures are included in the Emergency Response Plan.
- That the transporter cannot divide the shipment or otherwise remove it from the container.
- Placards with cyanide's UN number and poison signs must be placed in the container; this is verified through the vehicle inspection checklist. The convoy leader is required to have additional placards in case the container is missing one or more.

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The containers received in the port are placed on platform trailers hauled by trucks without the need of changing the packaging.

Most of these requirements are redundant those implemented by the transporter.

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

The operation is

#### **THIS PRACTICE DOES NOT APPLY TO THE OPERATION**

- in full compliance with
- in substantial compliance with Transport Practice 1.5
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

As described in Section 1, the scope of this audit was from the moment the ship delivers the cyanide at the Callao port and its ground transportation operations to mines in Peru; therefore, this practice does not apply. Additionally, DuPont forbids transporting cyanide by air means

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

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 1.6
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

DuPont transport procedure establishes that:

- The convoy leader to be provided with a cellular phone and a satellite phone. The convoy leader must also have a cellular phone and a radio.
- To test communication equipment prior to the departure of the convoy and the inspection to be recorded in the vehicle inspection checklist
- The convoy leader must report the progress of the convoy at the pre-selected stop points. The progress report is provided by phone to the transporter base, which informs DuPont and other interested parties of the convoy progress. A tabular report is generated with

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the estimated and actual time of arrival to the selected stop points, which is continuously sent by email to DuPont's Technical Services Manager.

- The bill of lading, the MSDS, and emergency response information must be carried by each driver

DuPont locks and tags at the production facility the cyanide container. These tags are only removed at the mine. Additionally, DuPont provides a transport manifest (similar to a bill of lading) to the transporter that must be receipt stamped by the mine.

Most of these requirements are redundant with those implemented by the transporter procedures.

### **2.2 INTERIM STORAGE: DESIGN, CONSTRUCT AND OPERATE CYANIDE TRANSPORTING DEPOTS AND INTERIM STORAGE SITES TO PREVENT RELEASES AND EXPOSURES.**

#### **2.2.1 Transport Practice 2.1: Store cyanide in a manner that minimizes the potential for accidental releases.**

The operation is:

- in full compliance with
- in substantial compliance with Transport Practice 2.1
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

Although currently DuPont does not operate intermediate storage, DuPont has prepared a storage procedure (DU-SA-COD-02) in the event a client requires them to keep a stock of cyanide in the country.

According to the procedure, the area must have restricted access, have signs:

- Indicating the PPE required,
- Identifying of the material stored,
- Prohibition of open flames
- Prohibition of smoking and food ingestion

The storage procedure establishes that:

- The storage area must be locked and with signs of restricted access.
- DuPont only handles cyanide in solid state.
- Cyanide must be stored separately from acids, oxidizers, flammable materials, lubricants, fuels, food.

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- Cyanide must be stored in roofed areas; additionally, the cyanide packaging includes a polyethylene bag to protect the cyanide from water and humidity.
- Cyanide must be stored in areas with sufficient ventilation.

The storage procedure requires to have the following emergency kit and to inspect it for completeness prior to loading and unloading operations:

- 14 overall tyvek suits
- 8 pairs of leather gloves
- 8 pairs of PVC booths
- 8 safety goggles
- 2 danger tape rolls
- 2 ducting tapes
- Cyanide gas detector
- 40 disposable respirators 8210
- Water analysis kit
- 12 amyl nitrite shots
- 4 Shoves
- 4 safety cones
- 4 sweeps
- 40 polyethylene bags
- 80 kg of calcium carbonate
- 2 empty containers

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### **2.3 EMERGENCY RESPONSE: PROTECT COMMUNITIES AND THE ENVIRONMENT THROUGH THE DEVELOPMENT OF EMERGENCY RESPONSE STRATEGIES AND CAPABILITIES**

#### **2.3.1 Transport Practice 3.1: Prepare detailed emergency response plans for potential cyanide releases.**

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 3.1
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

DuPont has implemented an Emergency Response Plan (DUP-PE-015, dated May 2010). This plan has been agreed with Antamina mine, which provides emergency response team and is responsible for the communication with the media. This is a detailed document of 73 pages that includes, among other information, the emergency response team organization chart, emergency phone directory, communication channels guidelines, emergency scenarios, and instructions to attend specific and general emergency scenarios.

According to their audit report, the transporter has its own emergency response plan that covers the scope of its responsibility as agreed with DuPont and that complies with the Code requirements.

The Emergency Response Plan includes the route assessment matrices mentioned in practice 1.1 which were used to develop emergency scenarios (included in the mine-specific annex), the respective preventive and mitigation measures (also included in the annexes), and emergency response actions (Section 5).

The plan has a detailed (two pages) explanation of the sodium cyanide characteristics (physics). And the plan also detailed (18 pages) toxicity and others properties based on the MSDS. The plan has a detailed (four pages) explanation of the sodium cyanide characteristics and toxicity based on the MSDS. The emergency scenarios, the general emergency response instruction, and the scenario-specific instructions consider the solid state of the cyanide.

Section 2 C of the Emergency Response Plan provides information regarding the packaging and transportation characteristics of the product, the container, and the transportation unit. All emergency scenarios developed are related to ground transportation: crash with another vehicle, vehicle rollover in steep slope or curve, rollover with spill, rollover with hurt persons, and rollover with the product reaching a water body, among other.

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As previously noted the Plan includes in the mine-specific annexes the emergency scenarios developed from the route assessment. It also identifies the areas where the different scenarios are more likely to take place. All the scenarios are in relation with accidents of trucks hauling a platform trailer carrying a 20-ft container, which is the only transportation modality used by DuPont and its subcontractors

The Plan's Section 4 establishes the responsibilities for the members of the response team (the transporter personnel with assistance from DuPont); it also establishes that the external emergency response teams (police department, firefighters, etc) will be used to secure the area, to communicate with the population and evacuate it if required, and to coordinate vehicular traffic in the area. It also includes responsibilities for the mine's emergency response team. However, it recognizes that the mine or other emergency response team (e.g. firefighters which by law are responsible of attending the emergency) may request to control the emergency, in which case, the convoy leader would pass the control of the emergency to them but will remain on site to provide advice and support, if necessary.

### **TRANSPORT PRACTICE 3.2: DESIGNATE APPROPRIATE RESPONSE PERSONNEL AND COMMIT NECESSARY RESOURCES FOR EMERGENCY RESPONSE.**

- in full compliance with
- in substantial compliance with Transport Practice 3.1
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

As mentioned in practice 1.2 the drivers and the convoy leader have received training from DuPont in the emergency response procedures. Additionally, the plan has been agreed with the mines. The convoy leaders have received additional training from DuPont's specialized personnel.

The Plan's Section 4 establishes the responsibilities for the members of the initial response team (convoy leader and drivers), including the roles of the DuPont. It also includes responsibilities for the on-scene commander (from the DuPont), the communications leader (responsible for contact with the authorities and the media).

Section 4.3 has a list of the required emergency response equipment (which is also included as a checklist of section 7.5 of procedure DUP-PA-001). The list includes:

- o 14 overall tyvek suits
- o 8 pairs of leather gloves
- o 8 pairs of PVC booths
- o 8 safety glasses or goggles
- o 8 pairs of impermeable gloves
- o 2 danger tape rolls
- o 2 hand lanterns

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- 1 ducting tape
- Cyanide gas detector
- Water analysis kit
- 40 disposable respirators 8210
- 12 amyl nitrite shots
- 4 Shoves
- 4 safety cones
- 4 sweeps
- 1 emergency light
- 50 polyethylene bags
- 80 kg of calcium carbonate
- 45 kg of sodium hypochlorite
- 2 empty containers

The transport procedure establishes that the emergency equipment must be carried by the convoy leader in the safety escort vehicle. A checklist is used to verify that it is available and it is documented in the convoy leader report.

The Plan's Section 8 establishes that all the training in relation with emergency response is to be provided on an annual basis. The most recent training sessions were held in October 2008 and refreshment was provided in October 2009 and May 2010. This training is redundant with that provided by Stiglich to its personnel.

The Emergency Response Plan establishes that the drivers must help to control the emergency while the mine emergency response team arrives. The convoy leader is responsible for the initial emergency control and communications until the mine's emergency response team arrives, if necessary. This is consistent with the transporter's Emergency response plan; which also complies with the Code requirements.

### **TRANSPORT PRACTICE 3.3: DEVELOP PROCEDURES FOR INTERNAL AND EXTERNAL EMERGENCY NOTIFICATION AND REPORTING.**

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 3.3
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

The Plan's Section 3.A includes a communications flow diagram which can be summarized as follows: the convoy leader must first inform DuQuimica's (DuPont's agent in Peru) Operations Manager, and then the Transport. DuQuimica's Operations Manager informs external emergency response teams, the mine, and DuPont. Section 3.B includes a list of the members of

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the internal response team members (including DuPont's and DuQuimica's) and that of external emergency responders (police, firefighters, hospitals, authorities, etc.). Additionally there register the telephones of the local contacts of the mining company Antamina in the Annex page 12. This is consistent with the transporter's Emergency Response Plan; which also complies with the Code requirements.

The emergency notification and reporting procedures are included within the Emergency Response Plan. The Plan's Section 8 establishes that it must be reviewed whenever modifications are required or, at least, once a year.

**TRANSPORT PRACTICE 3.4: DEVELOP PROCEDURES FOR REMEDIATION OF RELEASES THAT RECOGNIZE THE ADDITIONAL HAZARDS OF CYANIDE TREATMENT CHEMICALS.**

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 3.4
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

Section 5.6 of the Emergency Response Plan establishes the procedure to clean a spill and the decontamination of the area which consist of:

- o isolate the area,
- o sweep the cyanide (it is handled only in dry state),
- o collect the debris in plastic bags or drums,
- o treat the area with calcium carbonate and then with a 5% sodium hypochlorite solution,
- o wait at least 15 min,
- o rinse the area with water, and
- o wait for the area to dry and then remove the barricades.

Section 5.8 establishes that chemicals should not be added in water bodies, and the use of sodium hypochlorite, oxygen peroxide and iron sulfate is limited only to puddles, and artificial water reservoirs. Additionally, it includes instructions for assessing the impact on surface water bodies and to prevent the population to be poisoned by contaminated water. These instructions are part of the emergency response instructions to cyanide spills with contact to water and water bodies.

These procedures were communicated to the different port authorities during the training provided as part of the due diligence process.

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### **TRANSPORT PRACTICE 3.5: PERIODICALLY EVALUATE RESPONSE PROCEDURES AND CAPABILITIES AND REVISE THEM AS NEEDED.**

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 3.5
- not in compliance with

*Summarize the basis for this Finding/Deficiencies Identified:*

The Plan's Section 8 establishes that it must be reviewed whenever modifications are required or, at least, once a year including the name and numbers of the emergency contacts and phone numbers of external responders. According to DuPont representatives, no accidents have taken place. The transport procedure establishes that the convoy leader report must be used to update the assessment of the route. Both the Emergency Response Plan and the Procedure were last updated in May 2010.

The Plan's Section 7.5 establishes that at least one emergency drills must be performed every year one theoretical and one practical. The latest drill organized by DuPont was performed on 18 December 2009. Scenario consisted of one parked truck hit by a third party vehicle on the rear left part of the platform. The impact opens the container's door and one of the boxes is damaged with spillage of 100 kg approximately of product. The driver of the impacted unit is injured and remains inside the truck cabin and there is no information about his physical condition and level of conscience. This drill was performed on the road and a report was prepared by a specialist hired by DuPont.

According to DuPont's program, there would be a drill in August 2010 the exact date was being negotiated to ensure participation of personnel from the mine.

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### 3 PORTS DUE DILIGENCE

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 3.1
- not in compliance with

DuPont has the procedure DuPont-SA-Cod-02 “Assessment, Selection, and Accreditation of Ports for the reception of Cyanide Containers” (Latest revision July 2010, herein after the ports assessment procedure), which requires performing a due diligence of the ports every three years. The aspects to assess during the due diligence are the following:

- Ship mooring
- Tugboat availability and resources
- Security
- Load lifting equipment
- Safety and emergency procedures as well as response capacity
- IMO Class 6 materials storage area
- Containers handling equipment
- Preventive and corrective maintenance programs
- Availability and use of personal protective equipment
- Medical resources
- Truck parking areas
- Supervision by the authorities
- Training plan

The ports assessment procedure establishes that these aspects must be assessed during a port inspection and includes a questionnaire/report format.

According to the reviewed port’s due diligence report, the latest took place in October 2009 and was performed by DuPont’s Technical Services Manager, Mr. Covos. Mr. Covos is also the person responsible of providing cyanide handling and emergency response to the transporters, external emergency responders

According to the reviewed port’s due diligences report, there are sufficient safety measures to prevent releases in the port and no additional measures have been required.

Furthermore, during the port’s due diligence process, DuPont visually inspected the equipment used by the ports for ship unloading and containers handling within the port; according to the visual inspection, these were found in good conditions and adequate for the tasks; however, DuPont had no access to maintenance records.

Additionally, DuPont has agreed with the customs authorities that the containers will not be open at the port for inspection but when they arrive to the mine. This reduces the time the

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cyanide is in the port and prevents the containers getting open by persons without training in cyanide handling.

Finally; the report mentions that the port has its own emergency response plans and arrangements. To ensure the port has personnel trained on cyanide handling and emergency response, DuPont provided training to port's representatives selected by the Port Authority during the due diligence process. As additional measure, Mr. Covos provided his contact details and offered technical support to the port representatives in case of emergency.

#### 4 STIGLICH TRANSPORTES S. A.

The operation is

- in full compliance with
- in substantial compliance with Transport Practice 3.1
- not in compliance with

In Peru, DuPont subcontracts Transportes Stiglich for the cyanide transport. Stiglich has been audited under the Code requirements by an approved auditor. According to the audit report, Stiglich complies with the Code Principles and Practices applicable to transporters independent of DuPont. Stiglich certification was published on 27 May 2010.

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